March 28, 2014

Manager of Licensing
Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU X0B 1J0

Water Resources Officer, AANDC
Nunavut District, Nunavut Region
P.O. Box 100
Iqaluit, NU X0A 0H0

RE: Water License 2AM-MRY1325 Monthly SNP Report – February 2014

The following is the monthly report for February 2014 as required under Part I, Items 21 Water License 2AM-MRY1325. Part I, Item 21 of the above referenced Water Licence state:

> *"The Licensee shall submit to the Board, within thirty (30) days following the month being reported, a Monthly Monitoring Report. The Report shall include:*
> a. *All data and information required by this Part and generated by the Monitoring Program in the tables of Schedule I;*
> b. *An assessment of data to identified area of non-compliance with regulated discharge parameters referred to in Part F"*

Monitoring Program

During the month of February 2014, samples were collected at MS-MRY-04, MP-01 and MS-01 as part of the Water Licence Monitoring Program.

Table 1 presents a list of samples/monitoring required under the Water Licenses and the details concerning which water quality samples have been collected along with sample date/lab identification number as appropriate. Analytical water quality testing results received are presented in Table 2. Volumes consumed for domestic water purposes and the volumes of treated sewage effluent and sewage sludge discharged at Mary River Mine Site and Milne Port Camp are presented in attached Table 3.

Monitoring Program Results

A) Water Sampling and Analysis Results

Table 2 provides the analytical results related to the Monitoring Program sampling requirements for February 2014.

B) Flow and Volume Measurements

Table 3 provides a breakdown of volume measurements as requested in Part I, Item 9 of the water license for February 2014.

We hope that the information provided in this monthly report is acceptable and should you have any questions regarding this report please contact Jim Millard at 902-403-1337(cell) / 647-253-0596 ext:6016 (site) or by e-mail at jim.millard@baffinland.com.

Regards,

James Millard, M.Sc., P.Geo.
Senior Environmental Superintendent

Attach: Tables 1, 2 and 3
Cc: Justin Hack, Erik Allain (AANDC), Stephen Bathory QIA

Baffinland

Table 1: Monitoring Program Water Sampling Summary for February 2014

Monitoring Program Station	Sampling Date	Lab ID#	Comment
Milne Port			
MP-01 (Sewage Treatment Facility)	February 4, 2014 February 11, 2014 February 18, 2014 February 25, 2014	1085952, 1085954 1087024, 1087026 1088012, 1088014 1089629, 1089631	Discharge volume reported daily
MP-MRY-3 (Freshwater Intake from Km 32 Lake - Winter)	N/A	N/A	Withdrawal volume Reported Daily
MP-MRY-04 (RBC at Exploration Camp)	N/A	N/A	RBC shut down for season
MP-MRY-07 (Oily Water Treatment for Bladder Farm)	N/A	N/A	Bladder Fuel Storage Facility is the process of being decommissioned
MP-MRY-12 (MRY-12)	N/A	N/A	No flow, frozen conditions
MP-C-A (Downstream of Construction Area)	N/A	N/A	No flow, frozen conditions
MP-C-B (Downstream of Quarry Area)	N/A	N/A	No flow, frozen conditions
MP-C-F (Downstream of Construction Area)	N/A	N/A	No flow, frozen conditions
MP-Q1-01 (Downstream of Q1 Quarry)	N/A	N/A	No flow, frozen conditions
MP-Q1-02 (Downstream of Q1 Quarry)	N/A	N/A	No flow, frozen conditions
Mary River Mine Site			
MS-01 (Sewage Treatment Facility)	February 4, 2014 February 11, 2014 February 18, 2014 February 25, 2014	1085956, 1085958 1087029, 1087033 1088016, 1088018 1086933, 1089636 1089634, 1089637	Discharge volume reported daily
MS-MRY-1 (Freshwater Intake from Camp Lake)	N/A	N/A	Withdrawal volume reported daily
MS-MRY-04 (Exploration Camp RBC)	February 11, 2014	1087031, 1087034	Discharge volume reported daily
MS-MRY-04A (Exploration Camp PWSP)	N/A	N/A	No effluent discharge from this facility
MS-MRY-09 (Bulk Sample Pit)	N/A	N/A	No flow, frozen conditions
MS-MRY-10 (Weathered Ore Bulk Sample Stockpile)	N/A	N/A	No flow, frozen conditions
MS-MRY-11 (Bulk Sample Crusher Stockpile)	N/A	N/A	No flow, frozen conditions
MS-MRY-13A	N/A	N/A	No flow, frozen

Monitoring Program Station	Sampling Date	Lab ID#	Comment
(Downstream Non-Hazardous Landfill)			conditions
MS-MRY-13B (Downstream Non-Hazardous Landfill)	N/A	N/A	No flow, frozen conditions
MS-C-A (Downstream of Construction and Borrow Areas)	N/A	N/A	No flow, frozen conditions
MS-C-B (Downstream of Construction and Borrow Areas)	N/A	N/A	No flow, frozen conditions
MS-C-C (Downstream of Construction and Borrow Areas)	N/A	N/A	No flow, frozen conditions
MS-C-D (Downstream of Construction and Borrow Areas)	N/A	N/A	No flow, frozen conditions
MS-C-E (Downstream of Construction and Borrow Areas)	N/A	N/A	No flow, frozen conditions
MS-C-F (Downstream of Construction and Borrow Areas)	N/A	N/A	No flow, frozen conditions
MQ-C-B (Downstream of QMR2 Quarry)	N/A	N/A	No flow, frozen conditions
MQ-C-D (Downstream of QMR2 Quarry)	N/A	N/A	No flow, frozen conditions
Steensby Port			
Steensby Exploration Camp closed for the season			

Note: The existing RBC (MS-MRY-04) was decommissioned on February 24th, with all prior discharges going to the exploration camp PWSP's (MS-MRY-04a). The new waste water treatment facility (MS-01) began discharging to Location #1 on February 14th.

Table 2. Water Chemistry Results - February 2014						
Sample Number	**Sample ID**	**Date Sampled**	**Parameter Name**	**Result**	**Units**	**Lab**
MILNE PORT						
1085952	*MP-01*	*4-Feb-14*	*Biochemical Oxygen Demand*	5	*mg/L*	*Exova*
1085954	*MP-01*	*4-Feb-14*	*Faecal Coliforms*	0	*ct/100mL*	*Exova*
1085952	*MP-01*	*4-Feb-14*	*Total Kjeldahl Nitrogen*	0.12	*mg/L*	*Exova*
1085952	*MP-01*	*4-Feb-14*	*N-NH3 (Ammonia)*	0.09	*mg/L*	*Exova*
1085952	*MP-01*	*4-Feb-14*	*Oil & Grease - Total*	<1	*mg/L*	*Exova*
1085952	*MP-01*	*4-Feb-14*	*Total Suspended Solids*	6	*mg/L*	*Exova*
1085952	*MP-01*	*4-Feb-14*	*pH*	7.95	*pH units*	*Exova*
1087024	*MP-01*	*11-Feb-14*	*Biochemical Oxygen Demand*	7	*mg/L*	*Exova*
1087026	*MP-01*	*11-Feb-14*	*Faecal Coliforms*	0	*ct/100mL*	*Exova*
1087024	*MP-01*	*11-Feb-14*	*Total Kjeldahl Nitrogen*	1.03	*mg/L*	*Exova*
1087024	*MP-01*	*11-Feb-14*	*N-NH3 (Ammonia)*	0.28	*mg/L*	*Exova*
1087024	*MP-01*	*11-Feb-14*	*Oil & Grease - Total*	<1	*mg/L*	*Exova*
1087024	*MP-01*	*11-Feb-14*	*Total Suspended Solids*	4	*mg/L*	*Exova*
1087024	*MP-01*	*11-Feb-14*	*pH*	7.98	*pH units*	*Exova*
1088012	*MP-01*	*18-Feb-14*	*Biochemical Oxygen Demand*	4	*mg/L*	*Exova*
1088014	*MP-01*	*18-Feb-14*	*Faecal Coliforms*	0	*ct/100mL*	*Exova*
1088012	*MP-01*	*18-Feb-14*	*Total Kjeldahl Nitrogen*	0.84	*mg/L*	*Exova*
1088012	*MP-01*	*18-Feb-14*	*N-NH3 (Ammonia)*	0.14	*mg/L*	*Exova*
1088012	*MP-01*	*18-Feb-14*	*Oil & Grease - Total*	<1	*mg/L*	*Exova*
1088012	*MP-01*	*18-Feb-14*	*Total Suspended Solids*	2	*mg/L*	*Exova*
1088012	*MP-01*	*18-Feb-14*	*pH*	8.05	*pH units*	*Exova*
1089629	*MP-01*	*25-Feb-14*	*Biochemical Oxygen Demand*	*2*	*mg/L*	*Exova*
1089631	*MP-01*	*25-Feb-14*	*Faecal Coliforms*	65	*ct/100mL*	*Exova*
1089629	*MP-01*	*25-Feb-14*	*Total Kjeldahl Nitrogen*	1.32	*mg/L*	*Exova*
1089629	*MP-01*	*25-Feb-14*	*N-NH3 (Ammonia)*	0.16	*mg/L*	*Exova*
1089629	*MP-01*	*25-Feb-14*	*Oil & Grease - Total*	<1	*mg/L*	*Exova*
1089629	*MP-01*	*25-Feb-14*	*Total Suspended Solids*	<2	*mg/L*	*Exova*
1089629	*MP-01*	*25-Feb-14*	*pH*	8.06	*pH units*	*Exova*
MARY RIVER MINE SITE						
1087031	*MS-MRY-04*	*11-Feb-14*	*Biochemical Oxygen Demand*	13	*mg/L*	*Exova*
1087034	*MS-MRY-04*	*11-Feb-14*	*Faecal Coliforms*	40	*ct/100mL*	*Exova*
1087031	*MS-MRY-04*	*11-Feb-14*	*Total Kjeldahl Nitrogen*	14.2	*mg/L*	*Exova*
1087031	*MS-MRY-04*	*11-Feb-14*	*N-NH3 (Ammonia)*	10.9	*mg/L*	*Exova*
1087031	*MS-MRY-04*	*11-Feb-14*	*Oil & Grease - Total*	5	*mg/L*	*Exova*
1087031	*MS-MRY-04*	*11-Feb-14*	*Total Phosphorus*	4.75	*mg/L*	*Exova*
1087031	*MS-MRY-04*	*11-Feb-14*	*Total Suspended Solids*	8	*mg/L*	*Exova*
1087031	*MS-MRY-04*	*11-Feb-14*	*pH*	7.55	*pH units*	*Exova*
1085956	*MS-01*	*4-Feb-14*	*Biochemical Oxygen Demand*	3	*mg/L*	*Exova*
1085958	*MS-01*	*4-Feb-14*	*Faecal Coliforms*	2	*ct/100mL*	*Exova*
1085956	*MS-01*	*4-Feb-14*	*Total Kjeldahl Nitrogen*	0.15	*mg/L*	*Exova*
1085956	*MS-01*	*4-Feb-14*	*N-NH3 (Ammonia)*	0.12	*mg/L*	*Exova*
1085956	*MS-01*	*4-Feb-14*	*Oil & Grease - Total*	<1	*mg/L*	*Exova*
1085956	*MS-01*	*4-Feb-14*	*Total Phosphorus*	0.389	*mg/L*	*Exova*
1085956	*MS-01*	*4-Feb-14*	*Total Suspended Solids*	35	*mg/L*	*Exova*
1085956	*MS-01*	*4-Feb-14*	*pH*	7.72	*pH units*	*Exova*
1087029	*MS-01*	*11-Feb-14*	*Biochemical Oxygen Demand*	3	*mg/L*	*Exova*
1087033	*MS-01*	*11-Feb-14*	*Faecal Coliforms*	0	*ct/100mL*	*Exova*
1087029	*MS-01*	*11-Feb-14*	*Total Kjeldahl Nitrogen*	<0.10	*mg/L*	*Exova*
1087029	*MS-01*	*11-Feb-14*	*N-NH3 (Ammonia)*	0.09	*mg/L*	*Exova*
1087029	*MS-01*	*11-Feb-14*	*Oil & Grease - Total*	<1	*mg/L*	*Exova*
1087029	*MS-01*	*11-Feb-14*	*Total Phosphorus*	0.13	*mg/L*	*Exova*
1087029	*MS-01*	*11-Feb-14*	*Total Suspended Solids*	18	*mg/L*	*Exova*
1087029	*MS-01*	*11-Feb-14*	*pH*	7.80	*pH units*	*Exova*
1088016	*MS-01*	*18-Feb-14*	*Biochemical Oxygen Demand*	5	*mg/L*	*Exova*
1088018	*MS-01*	*18-Feb-14*	*Faecal Coliforms*	0	*ct/100mL*	*Exova*
1088016	*MS-01*	*18-Feb-14*	*Total Kjeldahl Nitrogen*	2.45	*mg/L*	*Exova*
1088016	*MS-01*	*18-Feb-14*	*N-NH3 (Ammonia)*	2.2	*mg/L*	*Exova*
1088016	*MS-01*	*18-Feb-14*	*Oil & Grease - Total*	<1	*mg/L*	*Exova*
1088016	*MS-01*	*18-Feb-14*	*Total Phosphorus*	0.18	*mg/L*	*Exova*
1088016	*MS-01*	*18-Feb-14*	*Total Suspended Solids*	4	*mg/L*	*Exova*
1088016	*MS-01*	*18-Feb-14*	*pH*	7.72	*pH units*	*Exova*
1089633	*MS-01*	*25-Feb-14*	*Biochemical Oxygen Demand*	2	*mg/L*	*Exova*
1089636	*MS-01*	*25-Feb-14*	*Faecal Coliforms*	0	*ct/100mL*	*Exova*
1089633	*MS-01*	*25-Feb-14*	*Total Kjeldahl Nitrogen*	0.32	*mg/L*	*Exova*
1089633	*MS-01*	*25-Feb-14*	*N-NH3 (Ammonia)*	0.31	*mg/L*	*Exova*
1089633	*MS-01*	*25-Feb-14*	*Oil & Grease - Total*	2	*mg/L*	*Exova*
1089633	*MS-01*	*25-Feb-14*	*Total Phosphorus*	0.13	*mg/L*	*Exova*
1089633	*MS-01*	*25-Feb-14*	*Total Suspended Solids*	2	*mg/L*	*Exova*
1089633	*MS-01*	*25-Feb-14*	*pH*	7.78	*pH units*	*Exova*
1089634	*MS-0101*	*25-Feb-14*	*Biochemical Oxygen Demand*	<1	*mg/L*	*Exova*
1089637	*MS-0101*	*25-Feb-14*	*Faecal Coliforms*	0	*ct/100mL*	*Exova*
1089634	*MS-0101*	*25-Feb-14*	*Total Kjeldahl Nitrogen*	0.48	*mg/L*	*Exova*
1089634	*MS-0101*	*25-Feb-14*	*N-NH3 (Ammonia)*	0.4	*mg/L*	*Exova*
1089634	*MS-0101*	*25-Feb-14*	*Oil & Grease - Total*	<1	*mg/L*	*Exova*
1089634	*MS-0101*	*25-Feb-14*	*Total Phosphorus*	0.16	*mg/L*	*Exova*
1089634	*MS-0101*	*25-Feb-14*	*Total Suspended Solids*	4	*mg/L*	*Exova*
1089634	*MS-0101*	*25-Feb-14*	*pH*	7.70	*pH units*	*Exova*

Non -compliances to the Water Licence are indicated by yellow shading. Sample Stations MS -MRY-04 (Mine Site RBC) and MS-01 (Mine Site MBR) showed non-compliance for several parameters at the beginning of February. Up until February 14th the discharge from the WWTFs was not to the receiving environment, but was to the PWSP, a lined and engineered containment pond. In the spring, after melt, the effluent will be resampled and re-treated if necessary prior to discharge to the receiving environment. The RBC was in an upset condition due in part to the fluctuating loadings received during the commissioning of the new sewage treatment plant (MS-01). As of February 14th, effluent from MS-01 is being discharged to Location #1. The RBC was taken offline as of February 24th.

***Note: MS-0101 is a field duplicate of MS-01.*

Table 3: Flow and Volume Measurements-Part I Item 11 - February 2014

DATE	Camp Lake Freshwater Use (Mary River Camp) - Daily Potable Water (m^3) - MRY-1	Camp Lake Daily Freshwater Use for Other Purposes - (m^3) - MRY-1	Camp Lake Daily Freshwater to Milne Inlet Camp - (m^3) - MRY-1	Km 32 Lake Milne Inlet Camp Daily Potable Water (m^3) MRY-3	Km 32 Lake Milne Inlet Camp Fresh Water Use for Other Purposes (m^3) MRY-3	Treated Sewage Effluent (m^3) from WWTF to PWSP at Mary River Camp - MRY-4	Treated Sewage Effluent (m^3) from WWTF to Discharge Location #1	Sewage Sludge Removed (m^3) from Mary River WWTP	Treated Sewage Effluent (m^3) from MP-01 to Milne Inlet	Sewage Sludge Removed (m^3) from Milne Inlet WWTP
1-Feb	87.8	0.0	0.0	15.1	0.0	87.8	0.0	0.0	15.1	0.0
2-Feb	60.9	0.0	0.0	24.6	0.0	60.9	0.0	0.0	24.6	0.0
3-Feb	26.5	0.0	0.0	30.3	0.0	26.5	0.0	0.0	30.3	0.0
4-Feb	35.2	0.0	0.0	30.3	0.0	35.2	0.0	0.0	30.3	0.0
5-Feb	23.1	0.0	0.0	15.1	0.0	23.1	0.0	0.0	15.1	0.0
6-Feb	42.4	0.0	0.0	15.1	0.0	42.4	0.0	0.0	15.1	0.0
7-Feb	34.1	0.0	0.0	30.3	0.0	34.1	0.0	0.0	30.3	0.0
8-Feb	24.2	0.0	0.0	30.3	0.0	24.2	0.0	0.0	30.3	0.0
9-Feb	33.3	0.0	0.0	30.3	0.0	33.3	0.0	0.0	30.3	0.0
10-Feb	18.5	0.0	0.0	15.1	0.0	18.5	0.0	0.0	15.1	0.0
11-Feb	55.6	0.0	0.0	15.1	0.0	55.6	0.0	0.0	15.1	0.0
12-Feb	62.5	0.0	0.0	30.3	0.0	62.5	0.0	0.0	30.3	0.0
13-Feb	20.8	0.0	0.0	15.1	0.0	20.8	0.0	0.0	15.1	0.0
14-Feb	21.6	0.0	0.0	30.3	0.0	0.0	21.6	0.0	30.3	0.0
15-Feb	51.1	0.0	0.0	15.1	0.0	0.0	51.1	0.0	15.1	0.0
16-Feb	20.1	0.0	0.0	30.3	0.0	0.0	20.1	6.8	30.3	0.0
17-Feb	51.1	0.0	0.0	15.1	0.0	0.0	51.1	0.0	15.1	0.0
18-Feb	18.9	0.0	0.0	15.1	0.0	0.0	18.9	0.0	15.1	0.0
19-Feb	35.5	0.0	0.0	15.1	0.0	0.0	35.5	0.0	15.1	0.0
20-Feb	26.9	0.0	0.0	15.1	0.0	0.0	26.9	0.0	15.1	0.0
21-Feb	26.5	0.0	0.0	30.3	0.0	0.0	26.5	0.0	30.3	0.0
22-Feb	48.1	24.6	0.0	15.1	0.0	0.0	48.1	0.0	15.1	0.0
23-Feb	24.6	0.0	0.0	15.1	0.0	0.0	24.6	0.0	15.1	0.0
24-Feb	19.3	21.6	0.0	30.3	0.0	0.0	19.3	0.0	30.3	0.0
25-Feb	64.4	0.0	0.0	30.3	0.0	0.0	64.4	0.0	30.3	0.0
26-Feb	0.0	0.0	0.0	15.1	0.0	0.0	0.0	0.0	15.1	0.0
27-Feb	40.9	0.0	0.0	30.3	0.0	0.0	40.9	0.0	30.3	0.0
28-Feb	12.5	0.0	0.0	30.3	0.0	0.0	12.5	0.0	30.3	0.0
Total	**986.3**	**46.2**	**0.0**	**630.3**	**0.0**	**525.0**	**461.3**	**6.8**	**630.3**	**0.0**

Notes:

WWTP - Waste Water Treatment Plant
PWSP - Polishing Waste Stabilization Pond