



May 29, 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 – April 2014

The following is the monthly report for April 2014 as required under Part I, Item 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 April 2014, samples were collected at 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 April 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 April 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,

A handwritten signature in black ink, appearing to read "J. Millard".

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

Attach: Tables 1, 2 and 3

Cc: Justin Hack, Erik Allain (AANDC), Stephen Bathory QIA

Table 1: Monitoring Program Water Sampling Summary for April 2014

Monitoring Program Station	Sampling Date	Lab ID#	Comment
Milne Port			
MP-01 (Sewage Treatment Facility)	April 1, 2014 April 8, 2014 April 15, 2014 April 22, 2014 April 29, 2014	1095407, 1095409 1096485, 1096499 1097758, 1097761 1098762, 1098767 1100012, 1100015	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)	April 1, 2014 April 9, 2014 April 15, 2014 April 22, 2014 April 29, 2014	1095412, 1095414 1096918, 1096921 1097776, 1097782 1098755, 1098757 1100017, 1100029	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)	N/A	N/A	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

Monitoring Program Station	Sampling Date	Lab ID#	Comment
MS-MRY-11 (Bulk Sample Crusher Stockpile)	N/A	N/A	No flow, frozen conditions
MS-MRY-13A (Downstream Non-Hazardous Landfill)	N/A	N/A	No flow, frozen 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			

Table 2. Water Chemistry Results - April 2014

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Units	Lab
MILNE PORT						
1095407	MP-01	1-Apr-14	Biochemical Oxygen Demand	4	mg/L	Exova
1095409	MP-01	1-Apr-14	Faecal Coliforms	83000	ct/100mL	Exova
1095407	MP-01	1-Apr-14	Total Kjeldahl Nitrogen	1.74	mg/L	Exova
1095407	MP-01	1-Apr-14	N-NH3 (Ammonia)	0.12	mg/L	Exova
1095407	MP-01	1-Apr-14	Oil & Grease - Total	<1	mg/L	Exova
1095407	MP-01	1-Apr-14	Total Suspended Solids	13	mg/L	Exova
1095407	MP-01	1-Apr-14	pH	7.79	pH units	Exova
1096485	MP-01	8-Apr-14	Biochemical Oxygen Demand	3	mg/L	Exova
1096499	MP-01	8-Apr-14	Faecal Coliforms	270	ct/100mL	Exova
1096485	MP-01	8-Apr-14	Total Kjeldahl Nitrogen	1.48	mg/L	Exova
1096485	MP-01	8-Apr-14	N-NH3 (Ammonia)	0.37	mg/L	Exova
1096485	MP-01	8-Apr-14	Oil & Grease - Total	<1	mg/L	Exova
1096485	MP-01	8-Apr-14	Total Suspended Solids	12	mg/L	Exova
1096485	MP-01	8-Apr-14	pH	7.88	pH units	Exova
1097758	MP-01	15-Apr-14	Biochemical Oxygen Demand	2	mg/L	Exova
1097761	MP-01	15-Apr-14	Faecal Coliforms	23	ct/100mL	Exova
1097758	MP-01	15-Apr-14	Total Kjeldahl Nitrogen	0.34	mg/L	Exova
1097758	MP-01	15-Apr-14	N-NH3 (Ammonia)	0.09	mg/L	Exova
1097758	MP-01	15-Apr-14	Oil & Grease - Total	<1	mg/L	Exova
1097758	MP-01	15-Apr-14	Total Suspended Solids	14	mg/L	Exova
1097758	MP-01	15-Apr-14	pH	8.00	pH units	Exova
1098762	MP-01	22-Apr-14	Biochemical Oxygen Demand	<1	mg/L	Exova
1098767	MP-01	22-Apr-14	Faecal Coliforms	0	ct/100mL	Exova
1098762	MP-01	22-Apr-14	Total Kjeldahl Nitrogen	1.32	mg/L	Exova
1098762	MP-01	22-Apr-14	N-NH3 (Ammonia)	1.16	mg/L	Exova
1098762	MP-01	22-Apr-14	Oil & Grease - Total	<1	mg/L	Exova
1098762	MP-01	22-Apr-14	Total Suspended Solids	5	mg/L	Exova
1098762	MP-01	22-Apr-14	pH	7.59	pH units	Exova
1100012	MP-01	29-Apr-14	Biochemical Oxygen Demand	<1	mg/L	Exova
1100015	MP-01	29-Apr-14	Faecal Coliforms	9	ct/100mL	Exova
1100012	MP-01	29-Apr-14	Total Kjeldahl Nitrogen	0.84	mg/L	Exova
1100012	MP-01	29-Apr-14	N-NH3 (Ammonia)	0.18	mg/L	Exova
1100012	MP-01	29-Apr-14	Oil & Grease - Total	3	mg/L	Exova
1100012	MP-01	29-Apr-14	Total Suspended Solids	2	mg/L	Exova
1100012	MP-01	29-Apr-14	pH	7.77	pH units	Exova
MARY RIVER MINE SITE						
1095412	MS-01	1-Apr-14	Biochemical Oxygen Demand	<1	mg/L	Exova
1095414	MS-01	1-Apr-14	Faecal Coliforms	0	ct/100mL	Exova
1095412	MS-01	1-Apr-14	Total Kjeldahl Nitrogen	1.00	mg/L	Exova
1095412	MS-01	1-Apr-14	N-NH3 (Ammonia)	0.29	mg/L	Exova
1095412	MS-01	1-Apr-14	Oil & Grease - Total	<1	mg/L	Exova
1095412	MS-01	1-Apr-14	Total Phosphorus	0.49	mg/L	Exova
1095412	MS-01	1-Apr-14	Total Suspended Solids	5	mg/L	Exova
1095412	MS-01	1-Apr-14	pH	7.51	pH units	Exova
1096918	MS-01	9-Apr-14	Biochemical Oxygen Demand	2	mg/L	Exova
1096921	MS-01	9-Apr-14	Faecal Coliforms	62	ct/100mL	Exova
1096918	MS-01	9-Apr-14	Total Kjeldahl Nitrogen	0.70	mg/L	Exova
1096918	MS-01	9-Apr-14	N-NH3 (Ammonia)	0.11	mg/L	Exova
1096918	MS-01	9-Apr-14	Oil & Grease - Total	<1	mg/L	Exova
1096918	MS-01	9-Apr-14	Total Phosphorus	0.31	mg/L	Exova
1096918	MS-01	9-Apr-14	Total Suspended Solids	2	mg/L	Exova
1096918	MS-01	9-Apr-14	pH	7.88	pH units	Exova
1097776	MS-01	15-Apr-14	Biochemical Oxygen Demand	<1	mg/L	Exova
1097782	MS-01	15-Apr-14	Faecal Coliforms	0	ct/100mL	Exova
1097776	MS-01	15-Apr-14	Total Kjeldahl Nitrogen	3.46	mg/L	Exova
1097776	MS-01	15-Apr-14	N-NH3 (Ammonia)	0.16	mg/L	Exova
1097776	MS-01	15-Apr-14	Oil & Grease - Total	<1	mg/L	Exova
1097776	MS-01	15-Apr-14	Total Phosphorus	0.29	mg/L	Exova
1097776	MS-01	15-Apr-14	Total Suspended Solids	3	mg/L	Exova
1097776	MS-01	15-Apr-14	pH	7.59	pH units	Exova
1098755	MS-01	22-Apr-14	Biochemical Oxygen Demand	<1	mg/L	Exova
1098575	MS-01	22-Apr-14	Faecal Coliforms	0	ct/100mL	Exova
1098755	MS-01	22-Apr-14	Total Kjeldahl Nitrogen	2.2	mg/L	Exova
1098755	MS-01	22-Apr-14	N-NH3 (Ammonia)	1.53	mg/L	Exova
1098755	MS-01	22-Apr-14	Oil & Grease - Total	<1	mg/L	Exova
1098755	MS-01	22-Apr-14	Total Phosphorus	0.24	mg/L	Exova
1098755	MS-01	22-Apr-14	Total Suspended Solids	6	mg/L	Exova
1098755	MS-01	22-Apr-14	pH	7.28	pH units	Exova
1100017	MS-01	29-Apr-14	Biochemical Oxygen Demand	<1	mg/L	Exova
1100029	MS-01	29-Apr-14	Faecal Coliforms	0	ct/100mL	Exova
1100017	MS-01	29-Apr-14	Total Kjeldahl Nitrogen	1.01	mg/L	Exova
1100017	MS-01	29-Apr-14	N-NH3 (Ammonia)	0.31	mg/L	Exova
1100017	MS-01	29-Apr-14	Oil & Grease - Total	<1	mg/L	Exova
1100017	MS-01	29-Apr-14	Total Phosphorus	0.18	mg/L	Exova
1100017	MS-01	29-Apr-14	Total Suspended Solids	<2	mg/L	Exova
1100017	MS-01	29-Apr-14	pH	6.79	pH units	Exova

Yellow shading denotes short term regulatory exceedance. Exceedance originated from maintenance activities on filter membranes.

*Note: April 25 samples were misdirected in shipment and the microbiological samples expired.

Table 3: Flow and Volume Measurements-Part I Item 11 - April 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	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 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-Apr	36.8	0.0	15.1	0.0	36.8	0.0	15.1	0.0
2-Apr	70.4	0.0	45.4	0.0	70.4	0.0	45.4	0.0
3-Apr	0.0	0.0	45.4	0.0	0.0	1.0	45.4	0.0
4-Apr	56.8	0.0	30.3	0.0	56.8	0.0	30.3	0.5
5-Apr	39.4	0.0	15.1	0.0	39.4	0.0	15.1	0.0
6-Apr	45.8	0.0	15.1	0.0	45.8	0.0	15.1	0.0
7-Apr	45.4	0.0	30.3	0.0	45.4	0.0	30.3	0.0
8-Apr	23.1	0.0	30.3	0.0	23.1	0.0	30.3	0.0
9-Apr	44.7	0.0	30.3	0.0	44.7	0.5	30.3	0.8
10-Apr	43.9	0.0	15.1	0.0	43.9	0.0	15.1	0.0
11-Apr	20.8	0.0	30.3	0.0	20.8	0.0	30.3	0.0
12-Apr	60.2	0.0	45.4	0.0	60.2	0.0	45.4	0.5
13-Apr	40.1	0.0	30.3	0.0	40.1	1.0	30.3	0.0
14-Apr	31.8	0.0	30.3	0.0	31.8	0.0	30.3	0.0
15-Apr	40.9	0.0	30.3	0.0	40.9	0.0	30.3	0.0
16-Apr	41.3	0.0	30.3	0.0	41.3	0.0	30.3	0.0
17-Apr	36.3	0.0	30.3	0.0	36.3	1.0	30.3	0.0
18-Apr	36.3	0.0	30.3	0.0	36.3	0.0	30.3	0.0
19-Apr	37.5	0.0	30.3	0.0	37.5	0.0	30.3	0.0
20-Apr	59.1	0.0	30.3	0.0	59.1	1.0	30.3	0.0
21-Apr	48.1	0.0	30.3	0.0	48.1	0.0	30.3	0.0
22-Apr	36.7	0.0	30.3	0.0	36.7	0.0	30.3	0.0
23-Apr	32.6	0.0	30.3	0.0	32.6	0.0	30.3	0.0
24-Apr	28.0	0.0	30.3	0.0	28.0	1.0	30.3	0.0
25-Apr	37.1	0.0	15.1	0.0	37.1	0.0	15.1	0.0
26-Apr	33.3	0.0	30.3	0.0	33.3	0.0	30.3	0.0
27-Apr	22.3	0.0	30.3	0.0	22.3	0.0	30.3	0.25
28-Apr	42.0	0.0	30.3	0.0	42.0	1.0	30.3	0.0
29-Apr	25.0	0.0	30.3	0.0	25.0	0.0	30.3	0.0
30-Apr	24.2	0.0	30.3	0.0	24.2	0.5	30.3	0.0
Total	1139.8	0.0	878.2	0.0	1139.8	7.0	878.2	2.1

Notes:

WWTP - Waste Water Treatment Plant

PWSP - Polishing Waste Stabilization Pond