



November 30, 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 – October 2014

The following is the monthly report for October 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 October 2014, samples were collected at MP-01 and MS-01 as part of the Water Licence Monitoring Program.

Due to frozen conditions, samples were not collected downstream of construction areas and quarry monitoring locations at the Mine Site (MS-C and MQ-C sites) and Milne Port (MP-C and MP-Q1 sites) as part of the Aquatics Effects and Monitoring Program under Schedule I of Water Licence 2AM-MRY1325 in October 2014.

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 October 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 October 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 October 2014

Monitoring Program Station	Sampling Date	Lab ID#	Comment
Milne Port			
MP-01 (Sewage Treatment Facility)	October 7, 2014 October 14, 2014 October 21, 2014 October 28, 2014	1138805, 1138807 1139978, 1139980 L1536059-1 L1538778-1, L1538778-3	Discharge volume reported daily
MP-01A (Milne Port PWSP)	N/A	N/A	Volume Reported Daily during discharge
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	Facility Inactive
MP-03 (Bulk Fuel Storage Facility Stormwater)	N/A	N/A	Volume Reported Daily during discharge
MP-MRY-12 (Bulk Sample Stockpile Area Seepage)	N/A	N/A	No flow, location is being retired due to lack of flow.
MP-C-A (Downstream of Construction Area)	N/A	N/A	No flow, location is being retired due to lack of flow.
MP-C-B (Downstream of Quarry Area)	N/A	N/A	No flow, frozen conditions
MP-C-B01 (Downstream of Quarry Area)	N/A	N/A	No flow, frozen conditions
MP-C-B0101 (Duplicate of MP-C-B01)	N/A	N/A	No flow, frozen conditions
MP-C-H (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)	October 7, 2014 October 14, 2014 October 21, 2014 October 29, 2014	1138812, 1138818 1139965, 1139970 L1536029-1 L1538741-1	Discharge volume reported daily
MS-0101 (Duplicate of MS-01)	October 7, 2014 October 14, 2014	1138815, 1138820 1139967, 1139972	Discharge volume reported daily
MS-0102 (Field Blank of MS-01)	October 7, 2014 October 14, 2014	1138816, 1138821 1139968, 1139973	Discharge volume reported daily
MS-0101 (Travel Blank of MS-01)	October 7, 2014 October 14, 2014	1138817, 1138822 1139969, 1139974	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	Facility Inactive

Monitoring Program Station	Sampling Date	Lab ID#	Comment
MS-MRY-04A (Exploration Camp PWSP #1)	N/A	N/A	Volume Reported Daily during discharge
MS-03 (Milne Site Bulk Fuel Storage Facility Stormwater)	N/A	N/A	Volume Reported Daily during discharge
MS-MRY-6 (Exploration Camp Bladder Farm Stormwater)	N/A	N/A	Volume Reported Daily during discharge
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 (Processing Bulk Sample 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
MS-C-G (Downstream of Construction and Borrow Areas)	N/A	N/A	No flow, frozen conditions
MS-C-H (Downstream of Construction and Borrow Areas)	N/A	N/A	No flow, frozen conditions
MQ-C-A (Downstream of QMR2 Quarry)	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 - October 2014

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Units	Lab
MILNE PORT						
1138805	MP-01	7-Oct-14	Faecal Coliforms	0	ct/100mL	Exova
1138807	MP-01	7-Oct-14	pH	7.41	pH units	Exova
1138807	MP-01	7-Oct-14	Total Suspended Solids	<2	mg/L	Exova
1138807	MP-01	7-Oct-14	Biochemical Oxygen Demand	<1	mg/L	Exova
1138807	MP-01	7-Oct-14	N-NH3 (Ammonia)	0.09	mg/L	Exova
1138807	MP-01	7-Oct-14	Total Kjeldahl Nitrogen	1.57	mg/L	Exova
1138807	MP-01	7-Oct-14	Total Phosphorus	7.43	mg/L	Exova
1138807	MP-01	7-Oct-14	Oil & Grease - Total	1	mg/L	Exova
1139978	MP-01	14-Oct-14	Faecal Coliforms	0	ct/100mL	Exova
1139980	MP-01	14-Oct-14	pH	7.62	pH units	Exova
1139980	MP-01	14-Oct-14	Total Suspended Solids	<2	mg/L	Exova
1139980	MP-01	14-Oct-14	Biochemical Oxygen Demand	<1	mg/L	Exova
1139980	MP-01	14-Oct-14	N-NH3 (Ammonia)	0.26	mg/L	Exova
1139980	MP-01	14-Oct-14	Total Kjeldahl Nitrogen	1.49	mg/L	Exova
1139980	MP-01	14-Oct-14	Total Phosphorus	11.6	mg/L	Exova
1139980	MP-01	14-Oct-14	Oil & Grease - Total	1	mg/L	Exova
L1536059-1	MP-01	21-Oct-14	pH	7.36	pH units	ALS
L1536059-1	MP-01	21-Oct-14	Total Suspended Solids	<2.0	mg/L	ALS
L1536059-1	MP-01	21-Oct-14	N-NH3 (Ammonia)	0.323	mg/L	ALS
L1536059-1	MP-01	21-Oct-14	Total Kjeldahl Nitrogen	0.39	mg/L	ALS
L1536059-1	MP-01	21-Oct-14	Total Phosphorus	13.7	mg/L	ALS
L1536059-1	MP-01	21-Oct-14	Faecal Coliforms	-	ct/100mL	ALS
L1536059-1	MP-01	21-Oct-14	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1536059-1	MP-01	21-Oct-14	Oil & Grease - Total	<2.0	mg/L	ALS
L1538778-1	MP-01	28-Oct-14	pH	7.59	pH units	ALS
L1538778-1	MP-01	28-Oct-14	Total Suspended Solids	<2.0	mg/L	ALS
L1538778-1	MP-01	28-Oct-14	N-NH3 (Ammonia)	0.072	mg/L	ALS
L1538778-1	MP-01	28-Oct-14	Total Kjeldahl Nitrogen	0.29	mg/L	ALS
L1538778-1	MP-01	28-Oct-14	Total Phosphorus	16.5	mg/L	ALS
L1538778-3	MP-01	28-Oct-14	Faecal Coliforms	0	ct/100mL	ALS
L1538778-1	MP-01	28-Oct-14	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1538778-1	MP-01	28-Oct-14	Oil & Grease - Total	<2.0	mg/L	ALS
MARY RIVER MINE SITE						
1138818	MS-01	7-Oct-14	Faecal Coliforms	0	ct/100mL	Exova
1138812	MS-01	7-Oct-14	pH	7.27	pH units	Exova
1138812	MS-01	7-Oct-14	Total Suspended Solids	<2	mg/L	Exova
1138812	MS-01	7-Oct-14	Biochemical Oxygen Demand	1	mg/L	Exova
1138812	MS-01	7-Oct-14	N-NH3 (Ammonia)	0.52	mg/L	Exova
1138812	MS-01	7-Oct-14	Total Kjeldahl Nitrogen	0.82	mg/L	Exova
1138812	MS-01	7-Oct-14	Total Phosphorus	0.21	mg/L	Exova
1138812	MS-01	7-Oct-14	Oil & Grease - Total	<1	mg/L	Exova
1139965	MS-01	14-Oct-14	Faecal Coliforms	0	ct/100mL	Exova
1139970	MS-01	14-Oct-14	pH	7.48	pH units	Exova
1139970	MS-01	14-Oct-14	Total Suspended Solids	<2	mg/L	Exova
1139970	MS-01	14-Oct-14	Biochemical Oxygen Demand	<1	mg/L	Exova
1139970	MS-01	14-Oct-14	N-NH3 (Ammonia)	0.38	mg/L	Exova
1139970	MS-01	14-Oct-14	Total Kjeldahl Nitrogen	1.2	mg/L	Exova
1139970	MS-01	14-Oct-14	Total Phosphorus	0	mg/L	Exova
1139970	MS-01	14-Oct-14	Oil & Grease - Total	<1	mg/L	Exova
L1536029-1	MS-01	21-Oct-14	pH	7.09	pH units	ALS
L1536029-1	MS-01	21-Oct-14	Total Suspended Solids	3	mg/L	ALS
L1536029-1	MS-01	21-Oct-14	N-NH3 (Ammonia)	0.31	mg/L	ALS
L1536029-1	MS-01	21-Oct-14	Total Kjeldahl Nitrogen	0.73	mg/L	ALS
L1536029-1	MS-01	21-Oct-14	Total Phosphorus	0.434	mg/L	ALS
L1536029-1	MS-01	21-Oct-14	Faecal Coliforms	0	ct/100mL	ALS
L1536029-1	MS-01	21-Oct-14	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1536029-1	MS-01	21-Oct-14	Oil & Grease - Total	<2.0	mg/L	ALS
L1538741-1	MS-01	29-Oct-14	pH	7.26	pH units	ALS
L1538741-1	MS-01	29-Oct-14	Total Suspended Solids	<2.0	mg/L	ALS
L1538741-1	MS-01	29-Oct-14	N-NH3 (Ammonia)	0.556	mg/L	ALS
L1538741-1	MS-01	29-Oct-14	Total Kjeldahl Nitrogen	1.33	mg/L	ALS
L1538741-1	MS-01	29-Oct-14	Total Phosphorus	0.66	mg/L	ALS
L1538741-1	MS-01	29-Oct-14	Faecal Coliforms	1	ct/100mL	ALS
L1538741-1	MS-01	29-Oct-14	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1538741-1	MS-01	29-Oct-14	Oil & Grease - Total	<2.0	mg/L	ALS
1138820	MS-0101	7-Oct-14	Faecal Coliforms	0	ct/100mL	Exova
1138815	MS-0101	7-Oct-14	pH	7.18	pH units	Exova
1138815	MS-0101	7-Oct-14	Total Suspended Solids	2.00	mg/L	Exova
1138815	MS-0101	7-Oct-14	Biochemical Oxygen Demand	<1	mg/L	Exova
1138815	MS-0101	7-Oct-14	N-NH3 (Ammonia)	0.46	mg/L	Exova
1138815	MS-0101	7-Oct-14	Total Kjeldahl Nitrogen	0.98	mg/L	Exova
1138815	MS-0101	7-Oct-14	Total Phosphorus	0.22	mg/L	Exova
1138815	MS-0101	7-Oct-14	Oil & Grease - Total	<1	mg/L	Exova
1139967	MS-0101	14-Oct-14	Faecal Coliforms	0	ct/100mL	Exova

1139972	MS-0101	14-Oct-14	pH	7.35	pH units	Exova
1139972	MS-0101	14-Oct-14	Total Suspended Solids	2.00	mg/L	Exova
1139972	MS-0101	14-Oct-14	Biochemical Oxygen Demand	<1	mg/L	Exova
1139972	MS-0101	14-Oct-14	N-NH3 (Ammonia)	0.32	mg/L	Exova
1139972	MS-0101	14-Oct-14	Total Kjeldahl Nitrogen	1.6	mg/L	Exova
1139972	MS-0101	14-Oct-14	Total Phosphorus	0.42	mg/L	Exova
1139972	MS-0101	14-Oct-14	Oil & Grease - Total	<1	mg/L	Exova
1138821	MS-0102	7-Oct-14	Faecal Coliforms	0	ct/100mL	Exova
1138816	MS-0102	7-Oct-14	pH	6.00	pH units	Exova
1138816	MS-0102	7-Oct-14	Total Suspended Solids	<2	mg/L	Exova
1138816	MS-0102	7-Oct-14	Biochemical Oxygen Demand	<1	mg/L	Exova
1138816	MS-0102	7-Oct-14	N-NH3 (Ammonia)	0.09	mg/L	Exova
1138816	MS-0102	7-Oct-14	Total Kjeldahl Nitrogen	0.25	mg/L	Exova
1138816	MS-0102	7-Oct-14	Total Phosphorus	<0.003	mg/L	Exova
1138816	MS-0102	7-Oct-14	Oil & Grease - Total	<1	mg/L	Exova
1139968	MS-0102	14-Oct-14	Faecal Coliforms	0	ct/100mL	Exova
1139973	MS-0102	14-Oct-14	pH	6.00	pH units	Exova
1139973	MS-0102	14-Oct-14	Total Suspended Solids	<2	mg/L	Exova
1139973	MS-0102	14-Oct-14	Biochemical Oxygen Demand	<1	mg/L	Exova
1139973	MS-0102	14-Oct-14	N-NH3 (Ammonia)	0.04	mg/L	Exova
1139973	MS-0102	14-Oct-14	Total Kjeldahl Nitrogen	<0.10	mg/L	Exova
1139973	MS-0102	14-Oct-14	Total Phosphorus	<0.003	mg/L	Exova
1139973	MS-0102	14-Oct-14	Oil & Grease - Total	<1	mg/L	Exova
1138822	MS-0103	7-Oct-14	Faecal Coliforms	0	ct/100mL	Exova
1138817	MS-0103	7-Oct-14	pH	5.77	pH units	Exova
1138817	MS-0103	7-Oct-14	Total Suspended Solids	<2	mg/L	Exova
1138817	MS-0103	7-Oct-14	Biochemical Oxygen Demand	<1	mg/L	Exova
1138817	MS-0103	7-Oct-14	N-NH3 (Ammonia)	0.11	mg/L	Exova
1138817	MS-0103	7-Oct-14	Total Kjeldahl Nitrogen	0.22	mg/L	Exova
1138817	MS-0103	7-Oct-14	Total Phosphorus	<0.003	mg/L	Exova
1138817	MS-0103	7-Oct-14	Oil & Grease - Total	<1	mg/L	Exova
1139969	MS-0103	14-Oct-14	Faecal Coliforms	0	ct/100mL	Exova
1139974	MS-0103	14-Oct-14	pH	5.87	pH units	Exova
1139974	MS-0103	14-Oct-14	Total Suspended Solids	<2	mg/L	Exova
1139974	MS-0103	14-Oct-14	Biochemical Oxygen Demand	<1	mg/L	Exova
1139974	MS-0103	14-Oct-14	N-NH3 (Ammonia)	0.14	mg/L	Exova
1139974	MS-0103	14-Oct-14	Total Kjeldahl Nitrogen	0.12	mg/L	Exova
1139974	MS-0103	14-Oct-14	Total Phosphorus	<0.003	mg/L	Exova
1139974	MS-0103	14-Oct-14	Oil & Grease - Total	<1	mg/L	Exova

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

DATE	Camp Lake Freshwater Use (Mine Site Camp) - Daily Potable Water (m3) - MRY-1	Camp Lake Daily Freshwater Use for Other Purposes - (m³) - MRY-1	Km 32 Lake Milne Port Camp Daily Potable Water (m3) MP-MRY-3	Km 32 Lake Milne Port Camp Fresh Water Use for Other Purposes (m3) MP-MRY-3	Milne Pond Fresh Water Use for Construction Purposes (m3) MP-MRY-3	Treated Sewage Effluent (m³) from MS-01 to Discharge Location #1	Sewage Sludge Removed (m3) from Mine Site WWTP	Treated Sewage Effluent (m3) from MP-01 to Milne Port	Sewage Sludge Removed (m3) from Milne Port WWTP
1-Oct	10.4	0.0	60.6	0.0	31.0	10.4	0.5	60.6	0.2
2-Oct	8.5	0.0	45.4	0.0	31.0	8.5	0.5	45.4	0.0
3-Oct	50.5	0.0	60.6	0.0	31.0	50.5	0.5	60.6	0.0
4-Oct	32.0	0.0	75.7	0.0	31.0	32.0	0.0	75.7	0.4
5-Oct	50.2	0.0	75.7	0.0	31.0	50.2	0.5	75.7	0.0
6-Oct	42.9	6.2	45.4	0.0	31.0	42.9	0.0	45.4	0.0
7-Oct	67.9	0.0	60.6	0.0	31.0	67.9	0.0	60.6	0.4
8-Oct	47.8	0.0	45.4	0.0	62.1	47.8	0.8	45.4	0.3
9-Oct	57.7	0.0	45.4	0.0	62.1	57.7	0.0	45.4	0.2
10-Oct	54.5	0.0	15.1	0.0	0.0	54.5	0.0	15.1	0.3
11-Oct	58.8	0.0	45.4	0.0	31.0	58.8	0.0	45.4	0.2
12-Oct	44.8	0.0	45.4	0.0	0.0	44.8	0.0	45.4	0.2
13-Oct	33.2	0.0	60.6	0.0	0.0	33.2	0.8	60.6	0.2
14-Oct	41.8	27.6	60.6	0.0	0.0	41.8	0.0	60.6	0.2
15-Oct	47.8	0.0	30.3	0.0	0.0	47.8	0.5	30.3	0.0
16-Oct	58.0	0.0	45.4	0.0	0.0	58.0	0.0	45.4	0.0
17-Oct	46.8	0.0	45.4	0.0	0.0	46.8	0.5	45.4	0.3
18-Oct	68.1	0.0	60.6	0.0	31.0	68.1	0.5	60.6	0.2
19-Oct	46.3	0.0	45.4	0.0	0.0	46.3	0.5	45.4	0.4
20-Oct	44.7	0.0	15.1	0.0	0.0	44.7	0.5	15.1	0.2
21-Oct	45.1	0.0	45.4	0.0	31.0	45.1	0.5	45.4	0.4
22-Oct	47.0	0.0	37.9	7.6	0.0	47.0	0.5	37.9	0.5
23-Oct	58.8	0.0	45.4	0.0	0.0	58.8	0.5	45.4	0.4
24-Oct	53.7	0.0	60.6	0.0	0.0	53.7	0.5	60.6	0.2
25-Oct	47.7	0.0	60.6	0.0	0.0	47.7	0.5	60.6	0.1
26-Oct	36.0	0.0	60.6	0.0	0.0	36.0	0.5	60.6	0.1
27-Oct	49.8	0.0	60.6	0.0	0.0	49.8	0.5	60.6	0.0
28-Oct	48.5	0.0	60.6	0.0	0.0	48.5	0.5	60.6	0.1
29-Oct	30.9	0.0	60.6	0.0	0.0	30.9	0.5	60.6	0.2
30-Oct	43.8	0.0	60.6	0.0	31.0	43.8	0.5	60.6	0.0
31-Oct	83.7	0.0	60.6	7.6	0.0	83.7	0.5	60.6	0.5
Total	1457.7	33.8	1597.4	15.1	465.6	1457.7	11.5	1597.4	6.7

Notes:

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