



April 30, 2015

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 – March 2015

The following is the monthly report for March 2015 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 March 2015, 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 March 2015.

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 March 2015.

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 March 2015. Daily flow data for runoff and seepage sites are being collected and will be provided in the annual report.

We hope that the information provided in this monthly report is acceptable and should you have any questions regarding this report please contact Trevor Myers or Allan Knight at 647-253-0596 ext: 6010 or Jim Millard at ext: 6016.

Prepared by:

A handwritten signature in dark ink, appearing to read "Trevor Myers", written over a light blue horizontal line.

Trevor Myers, B.A.(Hon.), M.Sc.
Environmental Superintendent

Reviewed by:

James Millard, M.Sc., P.Geo.
Environmental Manager

Attach: Tables 1, 2 and 3

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

Table 1: Monitoring Program Water Sampling Summary for March 2015

Monitoring Program Station	Sampling Date	Lab ID#	Comment
Milne Port			
MP-01 (Sewage Treatment Facility)	March 11, 2015 March 25, 2015 March 25, 2015	L1586005-1 L1591514-1 L1591514-3	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)	March 11, 2015 March 25, 2015 March 25, 2015	L1586000-1 L1591181-1 L1591181-3	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
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

Monitoring Program Station	Sampling Date	Lab ID#	Comment
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 - March 2015

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Units	Lab
MILNE PORT SITE						
L1586005-1	MP-01	11-Mar-15	pH	-	pH units	ALS
L1586005-1	MP-01	11-Mar-15	Total Suspended Solids	2.8	mg/L	ALS
L1586005-1	MP-01	11-Mar-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1586005-1	MP-01	11-Mar-15	Total Kjeldahl Nitrogen	<0.15	mg/L	ALS
L1586005-1	MP-01	11-Mar-15	Total Phosphorus	11.5	mg/L	ALS
L1586005-1	MP-01	11-Mar-15	Faecal Coliforms	14	ct/100mL	ALS
L1586005-1	MP-01	11-Mar-15	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1586005-1	MP-01	11-Mar-15	Oil & Grease - Total	<6.0	mg/L	ALS
L1591514-1	MP-01	25-Mar-15	pH	7.76	pH units	ALS
L1591514-1	MP-01	25-Mar-15	Total Suspended Solids	3	mg/L	ALS
L1591514-1	MP-01	25-Mar-15	N-NH3 (Ammonia)	0.113	mg/L	ALS
L1591514-1	MP-01	25-Mar-15	Total Kjeldahl Nitrogen	0.69	mg/L	ALS
L1591514-1	MP-01	25-Mar-15	Total Phosphorus	15.1	mg/L	ALS
L1591514-1	MP-01	25-Mar-15	Faecal Coliforms	4	ct/100mL	ALS
L1591514-1	MP-01	25-Mar-15	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1591514-1	MP-01	25-Mar-15	Oil & Grease - Total	<6.0	mg/L	ALS
L1591514-3	MP-0101	25-Mar-15	pH	7.61	pH units	ALS
L1591514-3	MP-0101	25-Mar-15	Total Suspended Solids	5.5	mg/L	ALS
L1591514-3	MP-0101	25-Mar-15	N-NH3 (Ammonia)	0.061	mg/L	ALS
L1591514-3	MP-0101	25-Mar-15	Total Kjeldahl Nitrogen	0.2	mg/L	ALS
L1591514-3	MP-0101	25-Mar-15	Total Phosphorus	14.1	mg/L	ALS
L1591514-3	MP-0101	25-Mar-15	Faecal Coliforms	5	ct/100mL	ALS
L1591514-3	MP-0101	25-Mar-15	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1591514-3	MP-0101	25-Mar-15	Oil & Grease - Total	<4.0	mg/L	ALS
MARY RIVER MINE SITE						
L1586000-1	MS-01	11-Mar-15	pH	7.2	pH units	ALS
L1586000-1	MS-01	11-Mar-15	Total Suspended Solids	2.8	mg/L	ALS
L1586000-1	MS-01	11-Mar-15	N-NH3 (Ammonia)	0.25	mg/L	ALS
L1586000-1	MS-01	11-Mar-15	Total Kjeldahl Nitrogen	5.81	mg/L	ALS
L1586000-1	MS-01	11-Mar-15	Total Phosphorus	0.517	mg/L	ALS
L1586000-1	MS-01	11-Mar-15	Faecal Coliforms	0	ct/100mL	ALS
L1586000-1	MS-01	11-Mar-15	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1586000-1	MS-01	11-Mar-15	Oil & Grease - Total	<6.0	mg/L	ALS
L1591181-1	MS-01	25-Mar-15	pH	7.23	pH units	ALS
L1591181-1	MS-01	25-Mar-15	Total Suspended Solids	4.5	mg/L	ALS
L1591181-1	MS-01	25-Mar-15	N-NH3 (Ammonia)	0.312	mg/L	ALS
L1591181-1	MS-01	25-Mar-15	Total Kjeldahl Nitrogen	1.08	mg/L	ALS
L1591181-1	MS-01	25-Mar-15	Total Phosphorus	0.16	mg/L	ALS
L1591181-1	MS-01	25-Mar-15	Faecal Coliforms	0	ct/100mL	ALS
L1591181-1	MS-01	25-Mar-15	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1591181-1	MS-01	25-Mar-15	Oil & Grease - Total	<6.0 *	mg/L	ALS
L1591181-3	MS-0101	25-Mar-15	pH	7.41	pH units	ALS
L1591181-3	MS-0101	25-Mar-15	Total Suspended Solids	<2.0	mg/L	ALS
L1591181-3	MS-0101	25-Mar-15	N-NH3 (Ammonia)	0.329	mg/L	ALS
L1591181-3	MS-0101	25-Mar-15	Total Kjeldahl Nitrogen	0.6	mg/L	ALS
L1591181-3	MS-0101	25-Mar-15	Total Phosphorus	0.169	mg/L	ALS
L1591181-3	MS-0101	25-Mar-15	Faecal Coliforms	0	ct/100mL	ALS
L1591181-3	MS-0101	25-Mar-15	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1591181-3	MS-0101	25-Mar-15	Oil & Grease - Total	<6.0 *	mg/L	ALS

Notes: MP-0101 and MS-0101 are field duplicate samples for QA/QC purposes.

Table 3: Flow and Volume Measurements-Part I Item 11 - March 2015

DATE	Camp Lake Freshwater Use (Mine Site Camp) Daily Potable Water (m3) - MRY- 1	Km 32 Lake Milne Port Camp Daily Potable Water (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-Mar	38.6	23.2	38.6	0.3	23.2	0.0
2-Mar	36.1	13.9	36.1	0.0	13.9	0.0
3-Mar	34.9	23.8	34.9	0.8	23.8	0.3
4-Mar	36.7	27.0	36.7	0.8	27.0	0.3
5-Mar	35.1	18.9	35.1	0.0	18.9	0.0
6-Mar	32.1	13.9	32.1	0.3	13.9	0.5
7-Mar	38.8	14.7	38.8	0.3	14.7	0.0
8-Mar	46.3	24.8	46.3	0.3	24.8	0.3
9-Mar	27.2	36.8	27.2	0.3	36.8	0.0
10-Mar	64.3	19.1	64.3	0.3	19.1	0.3
11-Mar	32.6	22.0	32.6	0.3	22.0	0.3
12-Mar	37.1	26.5	37.1	0.3	26.5	0.0
13-Mar	46.3	30.7	46.3	0.3	30.7	0.0
14-Mar	42.8	21.8	42.8	0.3	21.8	0.3
15-Mar	36.9	18.0	36.9	0.3	18.0	0.0
16-Mar	38.8	22.2	38.8	0.3	22.2	0.3
17-Mar	38.5	22.3	38.5	0.3	22.3	0.0
18-Mar	39.4	22.2	39.4	0.3	22.2	0.0
19-Mar	128.5	21.0	128.5	0.3	21.0	0.3
20-Mar	46.0	22.0	46.0	0.3	22.0	0.0
21-Mar	38.8	14.1	38.8	0.3	14.1	0.3
22-Mar	50.1	33.2	50.1	0.3	33.2	0.0
23-Mar	39.0	28.8	39.0	0.3	28.8	0.0
24-Mar	49.1	28.5	49.1	0.0	28.5	0.3
25-Mar	30.3	28.6	30.3	0.8	28.6	0.0
26-Mar	38.3	20.3	38.3	0.3	20.3	0.0
27-Mar	84.0	22.8	84.0	0.3	22.8	0.3
28-Mar	30.5	22.0	30.5	0.0	22.0	0.3
29-Mar	37.1	16.8	37.1	0.0	16.8	0.3
30-Mar	48.5	27.4	48.5	0.0	27.4	0.3
31-Mar	53.9	30.7	53.9	0.0	30.7	0.3
Total	1376.6	718.0	1376.6	7.5	718.0	4.7

Notes:

WWTP - Waste Water Treatment Plant

PWSP - Polishing Waste Stabilization Pond