



February 27, 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 – January 2015

The following is the monthly report for January 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 January 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 January 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 January 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 January 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 Allan Knight or Trevor Myers at 647-253-0596 ext: 6010 or Jim Millard at ext: 6016.

Regards,

Allan Knight, B.Sc.
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 January 2015

Monitoring Program Station	Sampling Date	Lab ID#	Comment
Milne Port			
MP-01 (Sewage Treatment Facility)	January 1, 2015 January 14, 2015 January 28, 2015	L1563394-1 L1566671-1 L1571635-1	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)	January 1, 2015 January 14, 2015 January 28, 2015	L1563393-1 L1566627-1 L1571631-1	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 - January 2015

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Units	Lab
MILNE PORT SITE						
L1563394-1	MP-01	1-Jan-15	pH	7.65	pH units	ALS
L1563394-1	MP-01	1-Jan-15	Total Suspended Solids	2.4	mg/L	ALS
L1563394-1	MP-01	1-Jan-15	N-NH3 (Ammonia)	0.321	mg/L	ALS
L1563394-1	MP-01	1-Jan-15	Total Kjeldahl Nitrogen	1.62	mg/L	ALS
L1563394-1	MP-01	1-Jan-15	Total Phosphorus	9.99	mg/L	ALS
L1563394-1	MP-01	1-Jan-15	Faecal Coliforms	0	ct/100mL	ALS
L1563394-1	MP-01	1-Jan-15	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1563394-1	MP-01	1-Jan-15	Oil & Grease - Total	<6.0	mg/L	ALS
L1566671-1	MP-01	14-Jan-15	pH	7.66	pH units	ALS
L1566671-1	MP-01	14-Jan-15	Total Suspended Solids	6.8	mg/L	ALS
L1566671-1	MP-01	14-Jan-15	N-NH3 (Ammonia)	1.79	mg/L	ALS
L1566671-1	MP-01	14-Jan-15	Total Kjeldahl Nitrogen	1.61	mg/L	ALS
L1566671-1	MP-01	14-Jan-15	Total Phosphorus	11.3	mg/L	ALS
L1566671-1	MP-01	14-Jan-15	Faecal Coliforms	0	ct/100mL	ALS
L1566671-1	MP-01	14-Jan-15	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1566671-1	MP-01	14-Jan-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1571635-1	MP-01	28-Jan-15	pH	7.49	pH units	ALS
L1571635-1	MP-01	28-Jan-15	Total Suspended Solids	<2.0	mg/L	ALS
L1571635-1	MP-01	28-Jan-15	N-NH3 (Ammonia)	0.244	mg/L	ALS
L1571635-1	MP-01	28-Jan-15	Total Kjeldahl Nitrogen	0.57	mg/L	ALS
L1571635-1	MP-01	28-Jan-15	Total Phosphorus	12.3	mg/L	ALS
L1571635-1	MP-01	28-Jan-15	Faecal Coliforms	0	ct/100mL	ALS
L1571635-1	MP-01	28-Jan-15	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1571635-1	MP-01	28-Jan-15	Oil & Grease - Total	<6.0	mg/L	ALS
MARY RIVER MINE SITE						
L1563393-1	MS-01	1-Jan-15	pH	7.33	pH units	ALS
L1563393-1	MS-01	1-Jan-15	Total Suspended Solids	5.2	mg/L	ALS
L1563393-1	MS-01	1-Jan-15	N-NH3 (Ammonia)	0.38	mg/L	ALS
L1563393-1	MS-01	1-Jan-15	Total Kjeldahl Nitrogen	1.93	mg/L	ALS
L1563393-1	MS-01	1-Jan-15	Total Phosphorus	0.376	mg/L	ALS
L1563393-1	MS-01	1-Jan-15	Faecal Coliforms	8	ct/100mL	ALS
L1563393-1	MS-01	1-Jan-15	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1563393-1	MS-01	1-Jan-15	Oil & Grease - Total	<6.0	mg/L	ALS
L1566627-1	MS-01	14-Jan-15	pH	7.18	pH units	ALS
L1566627-1	MS-01	14-Jan-15	Total Suspended Solids	12.4	mg/L	ALS
L1566627-1	MS-01	14-Jan-15	N-NH3 (Ammonia)	0.66	mg/L	ALS
L1566627-1	MS-01	14-Jan-15	Total Kjeldahl Nitrogen	2.18	mg/L	ALS
L1566627-1	MS-01	14-Jan-15	Total Phosphorus	0.737	mg/L	ALS
L1566627-1	MS-01	14-Jan-15	Faecal Coliforms	1	ct/100mL	ALS
L1566627-1	MS-01	14-Jan-15	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1566627-1	MS-01	14-Jan-15	Oil & Grease - Total	<6.0	mg/L	ALS
L1571631-1	MS-01	28-Jan-15	pH	6.77	pH units	ALS
L1571631-1	MS-01	28-Jan-15	Total Suspended Solids	2.8	mg/L	ALS
L1571631-1	MS-01	28-Jan-15	N-NH3 (Ammonia)	0.13	mg/L	ALS
L1571631-1	MS-01	28-Jan-15	Total Kjeldahl Nitrogen	1.21	mg/L	ALS
L1571631-1	MS-01	28-Jan-15	Total Phosphorus	0.212	mg/L	ALS
L1571631-1	MS-01	28-Jan-15	Faecal Coliforms	0	ct/100mL	ALS
L1571631-1	MS-01	28-Jan-15	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1571631-1	MS-01	28-Jan-15	Oil & Grease - Total	<6.0	mg/L	ALS

Table 3: Flow and Volume Measurements-Part I Item 11 - January 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-Jan	23.1	15.1	23.1	0.5	15.1	0.0
2-Jan	41.9	30.3	41.9	0.5	30.3	0.5
3-Jan	42.1	15.1	42.1	0.0	15.1	0.0
4-Jan	42.1	30.3	42.1	0.5	30.3	0.0
5-Jan	30.6	15.1	30.6	0.5	15.1	0.0
6-Jan	30.6	15.1	30.6	0.5	15.1	0.5
7-Jan	36.7	15.1	36.7	0.0	15.1	0.0
8-Jan	51.8	15.1	51.8	0.5	15.1	0.0
9-Jan	46.1	45.4	46.1	0.5	45.4	0.0
10-Jan	64.7	30.3	64.7	0.5	30.3	0.0
11-Jan	38.5	15.1	38.5	0.5	15.1	0.0
12-Jan	46.7	30.3	46.7	0.5	30.3	0.0
13-Jan	46.3	30.3	46.3	0.5	30.3	0.0
14-Jan	46.2	15.1	46.2	0.5	15.1	0.0
15-Jan	34.2	15.1	34.2	0.5	15.1	0.0
16-Jan	38.1	45.4	38.1	0.5	45.4	0.0
17-Jan	38.1	15.1	38.1	0.5	15.1	0.0
18-Jan	38.1	15.1	38.1	0.0	15.1	0.0
19-Jan	30.8	0.0	30.8	0.5	0.0	0.0
20-Jan	45.8	15.1	45.8	0.5	15.1	0.0
21-Jan	45.3	45.4	45.3	0.5	45.4	0.0
22-Jan	38.3	30.3	38.3	0.5	30.3	0.0
23-Jan	38.3	30.3	38.3	0.0	30.3	0.0
24-Jan	36.2	0.0	36.2	0.8	0.0	0.5
25-Jan	32.1	45.4	32.1	0.0	45.4	0.0
26-Jan	96.1	30.3	96.1	0.0	30.3	0.0
27-Jan	38.4	30.3	38.4	0.0	30.3	0.0
28-Jan	46.1	45.4	46.1	0.8	45.4	0.0
29-Jan	35.6	30.5	35.6	0.0	30.5	0.0
30-Jan	36.1	45.4	36.1	0.0	45.4	0.0
31-Jan	64.1	30.3	64.1	0.0	30.3	0.5
Total	1319.1	787.6	1319.1	11.0	787.6	2.0

Notes:

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