



December 30, 2016

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

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

RE: Water Licence 2AM-MRY1325 Monthly SNP Report – November 2016

The following is the monthly report for November 2016 as required under Part I, Item 21 Water Licence 2AM-MRY1325. Part I, Item 21 of the above referenced Water Licence states:

"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 November 2016, water samples were collected as part of the Water Licence Monitoring Program.

Table 1 presents a list of samples/monitoring required under the Water Licences and the details concerning which water quality samples were 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 and industrial water purposes and the volumes of effluent discharged at the Mary River Mine Site and Milne Port Camp are presented in the 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 November 2016.

B) Flow and Volume Measurements

Table 3 provides a breakdown of volume measurements as requested in Part I, Item 9 of the Water Licence for November 2016. 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 William Bowden or Jim Millard at 416-364-8820 ext 6016.

Regards,

William Bowden,
Environmental Superintendent

Reviewed by:

Jim Millard,
Environmental Manager

Attach: Tables 1, 2 and 3

Cc: Erik Allain, Scott Burgess (INAC); Todd Burlingame, Wayne McPhee, Jim Millard, Sylvain Proulx, Robert Gagne (Baffinland); Stephen Bathory (QIA)

Table 1: Monitoring Program Water Sampling Summary for November 2016

Monitoring Program Station	Sampling Date	Lab ID#	Comment
Milne Port			
MP-01 (Sewage Treatment Facility)	1-Nov-16	L185275-1	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	Volume reported daily during discharge
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-04 (Landfarm Facility & Snow Containment Facility)	N/A	N/A	Volume reported daily during discharge
MP-05 (Ore Stockpile Sedimentation Pond (East))	N/A	N/A	Volume reported daily during discharge
MP-06 (Ore Stockpile Sedimentation Pond (West))	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 Construction Area)	N/A	N/A	No flow during the month of November
MP-C-B01 (Downstream of Construction Area)	N/A	N/A	No flow during the month of November
MP-C-D (Downstream of Construction Area)	N/A	N/A	No flow during the month of November
MP-C-E (Downstream of Construction Area)	N/A	N/A	No flow during the month of November
MP-C-F (Downstream of Construction Area)	N/A	N/A	No flow during the month of November
MP-C-H (Downstream of Construction Area)	N/A	N/A	No flow during the month of November
MP-Q1-01 (Downstream of Q1 Quarry)	N/A	N/A	No flow during the month of November
MP-Q1-02 (Downstream of Q1 Quarry)	N/A	N/A	No flow during the month of November
Mary River Mine Site			

Monitoring Program Station	Sampling Date	Lab ID#	Comment
MS-01 (Sewage Treatment Facility)	1-Nov-16	L1852753-1	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-03 (Milne Site Bulk Fuel Storage Facility Stormwater)	N/A	N/A	Volume reported daily during discharge
MS-06 (Ore Stockpile Pond Stormwater)	N/A	N/A	Volume reported daily during discharge
MS-08 (Mine Waste Rock Stockpile pond)	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 during the month of November
MS-MRY-10 (Weathered Ore Bulk Sample Stockpile)	N/A	N/A	No flow during the month of November
MS-MRY-11 (Processing Bulk Sample Stockpile)	N/A	N/A	Area is being retired due to lack of flows
MS-MRY-13A (Downstream Non-Hazardous Landfill)	N/A	N/A	No flow during the month of November
MS-MRY-13B (Downstream Non-Hazardous Landfill)	N/A	N/A	No flow during the month of November
MS-C-A (Downstream of Construction and Borrow Areas)	N/A	N/A	No flow during the month of November
MS-C-B (Downstream of Construction and Borrow Areas)	N/A	N/A	No flow during the month of November
MS-C-C (Downstream of Construction and Borrow Areas)	N/A	N/A	No flow during the month of November
MS-C-D (Downstream of Construction and Borrow Areas)	N/A	N/A	No flow during the month of November
MS-C-E (Downstream of Construction and Borrow Areas)	N/A	N/A	No flow during the month of November
MS-C-F (Downstream of Construction and Borrow Areas)	N/A	N/A	No flow during the month of November
MS-C-G (Downstream of Construction and Borrow Areas)	N/A	N/A	No flow during the month of November

Monitoring Program Station	Sampling Date	Lab ID#	Comment
MS-C-H (Downstream of Construction and Borrow Areas)	N/A	N/A	No flow during the month of November
MQ-C-A (Downstream of QMR2 Quarry)	N/A	N/A	No flow during the month of November
MQ-C-B (Downstream of QMR2 Quarry)	N/A	N/A	No flow during the month of November
MQ-C-D (Downstream of QMR2 Quarry)	N/A	N/A	No flow during the month of November
MQ-C-E (Downstream of D1Q2 Quarry)	N/A	N/A	No flow during the month of November
Steensby Port			
Steensby Exploration Camp is presently not active.			

Table 2. Water Chemistry Results - November 2016						
Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Units	Lab
MILNE PORT SITE						
L1852751-1	MP-01	1-Nov-16	pH	7.06	pH units	ALS
L1852751-1	MP-01	1-Nov-16	Total Suspended Solids	<2.0	mg/L	ALS
L1852751-1	MP-01	1-Nov-16	Ammonia, Total (as N)	0.07	mg/L	ALS
L1852751-1	MP-01	1-Nov-16	Total Phosphorus	12.6	mg/L	ALS
L1852751-1	MP-01	1-Nov-16	Fecal Coliforms	0	CFU/100mL	ALS
L1852751-1	MP-01	1-Nov-16	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1852751-1	MP-01	1-Nov-16	Oil & Grease - Total	<2.0	mg/L	ALS
MARY RIVER MINE SITE						
L1852753-1	MS-01	1-Nov-16	pH	7.35	pH units	ALS
L1852753-1	MS-01	1-Nov-16	Total Suspended Solids	4	mg/L	ALS
L1852753-1	MS-01	1-Nov-16	Ammonia, Total (as N)	0.178	mg/L	ALS
L1852753-1	MS-01	1-Nov-16	Total Phosphorus	1.52	mg/L	ALS
L1852753-1	MS-01	1-Nov-16	Fecal Coliforms	0	CFU/100mL	ALS
L1852753-1	MS-01	1-Nov-16	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1852753-1	MS-01	1-Nov-16	Oil & Grease - Total	<2.0	mg/L	ALS
Notes:						

Table 3: Flow and Volume Measurements-Part I Item 11 - November 2016

DATE	Camp Lake Freshwater Use (Mine Site Camp) - Daily Potable Water (m³) MS-MRY-1	Camp Lake Daily Freshwater Use for Other Purposes - (m³) MS-MRY-1	Water Use for Dust Suppression from Authorized Sources	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	Treated Sewage Effluent (m³) from MS-01 to Discharge Location #1	Sewage Sludge Removed (m³) from Mine Site WWTP to Incinerator	Sewage Sludge Removed (m³) from Lift Stations to PWSP at Mine Site - MS-MRY-4a	Treated Sewage Effluent (m³) from MP-01 to Milne Port	Sewage Sludge Removed (m³) from Milne Port WWTP to Incinerator	Sewage Removed (m³) from Lift Stations to PWSP at Milne Port - MP-01a	Treated Oily Water (m³) from Exploration Camp Bulk Fuel Storage Facility to Tundra (MS-MRY-6)	Treated Oily Water (m³) from Milne Port Landfarm Facility to Tundra (MP-04)	Effluent Discharge (m³) from Mine Site Waste Rock Stockpile Pond (MS-08)	Effluent Discharge (m³) from Mine Site Ore Stockpile Pond (MS-06)	Effluent Discharge from Milne Port East Sedimentation Pond (MP-05)	Effluent Discharge from Milne Port West Sedimentation Pond (MP-06)
1-Nov	46.3	0.0	0.0	34.8	0.0	46.3	0.4	0.0	34.8	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2-Nov	50.5	0.0	0.0	52.2	0.0	50.5	0.3	2.4	52.2	0.2	1.4	0.0	0.0	0.0	0.0	0.0	0.0
3-Nov	52.1	0.0	0.0	34.8	0.0	52.1	0.4	0.0	34.8	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4-Nov	78.6	0.0	0.0	52.2	0.0	78.6	0.4	2.2	52.2	0.3	1.4	0.0	0.0	0.0	0.0	0.0	0.0
5-Nov	72.4	0.0	0.0	17.4	0.0	72.4	0.4	0.0	17.4	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6-Nov	54.9	0.0	0.0	34.8	0.0	54.9	0.4	0.0	34.8	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7-Nov	50.5	0.0	0.0	17.4	0.0	50.5	0.4	3.0	17.4	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8-Nov	50.5	0.0	0.0	34.8	0.0	50.5	0.4	0.0	34.8	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9-Nov	43.9	0.0	0.0	17.4	0.0	43.9	0.4	2.2	17.4	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10-Nov	71.7	0.0	0.0	17.4	0.0	71.7	0.4	0.0	17.4	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11-Nov	70.0	0.0	0.0	17.4	0.0	70.0	0.4	2.4	17.4	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12-Nov	63.5	0.0	0.0	34.8	0.0	63.5	0.4	0.0	34.8	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13-Nov	54.4	0.0	0.0	52.2	0.0	54.4	0.4	0.0	52.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14-Nov	69.2	0.0	0.0	17.4	0.0	69.2	0.4	3.0	17.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15-Nov	98.9	0.0	0.0	34.8	0.0	98.9	0.4	0.0	34.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16-Nov	38.8	0.0	0.0	17.4	0.0	38.8	0.4	2.5	17.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17-Nov	73.0	0.0	0.0	34.8	0.0	73.0	0.4	0.0	34.8	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18-Nov	48.7	0.0	0.0	52.2	0.0	48.7	0.4	2.4	52.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19-Nov	74.1	0.0	0.0	34.8	0.0	74.1	0.4	0.0	34.8	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20-Nov	62.5	0.0	0.0	34.8	0.0	62.5	0.4	3.0	34.8	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21-Nov	79.9	0.0	0.0	0.0	0.0	79.9	0.4	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22-Nov	65.5	0.0	0.0	0.0	0.0	65.5	0.4	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23-Nov	45.3	0.0	0.0	34.8	0.0	45.3	0.5	0.0	34.8	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24-Nov	91.8	0.0	0.0	34.8	0.0	91.8	0.5	0.0	34.8	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25-Nov	58.3	0.0	0.0	52.2	0.0	58.3	0.5	6.7	52.2	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26-Nov	49.3	0.0	0.0	34.8	0.0	49.3	0.5	0.0	34.8	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27-Nov	56.3	0.0	0.0	34.8	0.0	56.3	0.4	0.0	34.8	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28-Nov	50.3	0.0	0.0	34.8	0.0	50.3	0.4	4.5	34.8	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29-Nov	88.9	0.0	0.0	17.4	0.0	88.9	0.5	0.0	17.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30-Nov	56.4	0.0	0.0	52.2	0.0	56.4	0.5	1.2	52.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	1866	0	0	940	0	1866	13	35	940	7	3	0	0	0	0	0	0

Notes:
WWTP - Waste Water Treatment Plant
PWSP - Polishing Waste Stabilization Pond
Volumes estimated by senior WWTP operator through vacuum truck schedule for which lift stations were taken to PWSP MS-MRY-4A