



November 30, 2017

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 – October 2017

The following is the monthly report for October 2017 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 October 2017, 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/labratory 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 October 2017.

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 October 2017. 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 myself at ext 6016 or William Bowden at 416-364-8820 ext 6016.

Regards,

Reviewed by:

A handwritten signature in black ink, appearing to read 'Connor Devereaux'.

Connor Devereaux
Environmental Superintendent

Timothy Ray Sewell
Head of Health, Safety and Environment

Attach: Tables 1, 2 and 3

Cc: Erik Allain, Jonathon Mesher, Sarah Forte (INAC); Todd Burlingame, Megan Lord-Hoyle, Timothy Ray Sewell, Sylvain Proulx, Gerald Rogers (Baffinland); Stephen Bathory (QIA)

Table 1: Monitoring Program Water Sampling Summary for October 2017

Monitoring Program Station	Sampling Date	Lab ID#	Comment
Milne Port			
MP-01 (Sewage Treatment Facility)	October 17, 2017 October 17, 2017 October 17, 2017	L2009586-1 L2009586-3 L2009586-4	Discharge volume reported daily
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 month of October
MP-C-B01 (Downstream of Construction Area)	N/A	N/A	No flow during month of October
MP-C-D (Downstream of Construction Area)	N/A	N/A	No flow, location is being retired due to lack of flow.
MP-C-E (Downstream of Construction Area)	N/A	N/A	No flow, location is being retired due to lack of flow.
MP-C-F (Downstream of Construction Area)	N/A	N/A	No flow during month of October
MP-C-H (Downstream of Construction Area)	N/A	N/A	No flow during month of October
MP-Q1-01 (Downstream of Q1 Quarry)	N/A	N/A	No flow during month of October
MP-Q1-02 (Downstream of Q1 Quarry)	N/A	N/A	No flow during month of October

Mary River Mine Site			
MS-01 (Sewage Treatment Facility)	October 24, 2017 October 24, 2017 October 24, 2017	L2013415-1 L2013415-3 L2013415-4	Discharge volume reported daily
MS-MRY-1 (Freshwater Intake Camp Lake)	N/A	N/A	Withdrawal volume reported daily
MS-MRY-04a	N/A	N/A	
MS-MRY-04b	N/A	N/A	
MS-MRY-04c	N/A	N/A	
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 month of October
MS-MRY-10 (Weathered Ore Bulk Sample Stockpile)	N/A	N/A	No flow during month of October
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 month of October
MS-MRY-13B (Downstream Non-Hazardous Landfill)	N/A	N/A	No flow during month of October
MS-C-A (Downstream of Construction and Borrow Areas)	N/A	N/A	No flow during month of October
MS-C-B (Downstream of Construction and Borrow Areas)	N/A	N/A	No flow during month of October
MS-C-C (Downstream of Construction and Borrow Areas)	N/A	N/A	No flow during month of October
MS-C-D (Downstream of Construction and Borrow Areas)	N/A	N/A	No flow during month of October
MS-C-E (Downstream of Construction and Borrow Areas)	N/A	N/A	No flow during month of October
MS-C-F (Downstream of Construction and Borrow Areas)	N/A	N/A	No flow during month of October
MS-C-G (Downstream of Construction and Borrow Areas)	N/A	N/A	No flow during month of October

MS-C-H (Downstream of Construction and Borrow Areas)	N/A	N/A	No flow during month of October
MQ-C-A (Downstream of QMR2 Quarry)	N/A	N/A	No flow during month of October
MQ-C-B (Downstream of QMR2 Quarry)	N/A	N/A	No flow during month of October
MQ-C-D (Downstream of QMR2 Quarry)	N/A	N/A	No flow during month of October
Steensby Port			
Steensby Exploration Camp is presently not active.			

Table 2. Water Chemistry Results - October 2017

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Units	Lab
MILNE PORT SITE						
L2009586-1	MP-01	17-Oct-17	pH	7.51	pH units	ALS
L2009586-1	MP-01	17-Oct-17	Total Suspended Solids	13.2	mg/L	ALS
L2009586-1	MP-01	17-Oct-17	Alkalinity, Total (asCaCO3)	79	mg/L	ALS
L2009586-1	MP-01	17-Oct-17	Ammonia, Total (as N)	0.114	mg/L	ALS
L2009586-1	MP-01	17-Oct-17	Phosphorus, Total	8.16	mg/L	ALS
L2009586-1	MP-01	17-Oct-17	Fecal Coliforms	0	CFU/100mL	ALS
L2009586-1	MP-01	17-Oct-17	BOD	<2.0	mg/L	ALS
L2009586-1	MP-01	17-Oct-17	Oil and Grease, Total	<2.0	mg/L	ALS
L2009586-3	MP-0101	17-Oct-17	pH	7.46	pH units	ALS
L2009586-3	MP-0101	17-Oct-17	Total Suspended Solids	37	mg/L	ALS
L2009586-3	MP-0101	17-Oct-17	Alkalinity, Total (asCaCO3)	80	mg/L	ALS
L2009586-3	MP-0101	17-Oct-17	Ammonia, Total (as N)	0.199	mg/L	ALS
L2009586-3	MP-0101	17-Oct-17	Phosphorus, Total	8.29	mg/L	ALS
L2009586-3	MP-0101	17-Oct-17	Fecal Coliforms	1	CFU/100mL	ALS
L2009586-3	MP-0101	17-Oct-17	BOD	<2.0	mg/L	ALS
L2009586-3	MP-0101	17-Oct-17	Oil and Grease, Total	<2.0	mg/L	ALS
L2009586-4	MP-0103	17-Oct-17	pH	6.07	pH units	ALS
L2009586-4	MP-0103	17-Oct-17	Total Suspended Solids	4.2	mg/L	ALS
L2009586-4	MP-0103	17-Oct-17	Alkalinity, Total (asCaCO3)	<10	mg/L	ALS
L2009586-4	MP-0103	17-Oct-17	Ammonia, Total (as N)	<0.020	mg/L	ALS
L2009586-4	MP-0103	17-Oct-17	Phosphorus, Total	<0.0030	mg/L	ALS
L2009586-4	MP-0103	17-Oct-17	Fecal Coliforms	0	CFU/100mL	ALS
L2009586-4	MP-0103	17-Oct-17	BOD	<2.0	mg/L	ALS
L2009586-4	MP-0103	17-Oct-17	Oil and Grease, Total	<2.0	mg/L	ALS
MARY RIVER MINE SITE						
L2013415-1	MS-01	24-Oct-17	pH	7.46	pH units	ALS
L2013415-1	MS-01	24-Oct-17	Total Suspended Solids	2.2	mg/L	ALS
L2013415-1	MS-01	24-Oct-17	Alkalinity, Total (asCaCO3)	50	mg/L	ALS
L2013415-1	MS-01	24-Oct-17	Ammonia, Total (as N)	0.151	mg/L	ALS
L2013415-1	MS-01	24-Oct-17	Phosphorus, Total	0.741	mg/L	ALS
L2013415-1	MS-01	24-Oct-17	Fecal Coliforms	0.741	CFU/100mL	ALS
L2013415-1	MS-01	24-Oct-17	BOD	<2.0	mg/L	ALS
L2013415-1	MS-01	24-Oct-17	Oil and Grease, Total	<2.0	mg/L	ALS
L2013415-4	MS-0101	24-Oct-17	pH	7.43	pH units	ALS
L2013415-4	MS-0101	24-Oct-17	Total Suspended Solids	<2.0	mg/L	ALS
L2013415-4	MS-0101	24-Oct-17	Alkalinity, Total (asCaCO3)	51	mg/L	ALS
L2013415-4	MS-0101	24-Oct-17	Ammonia, Total (as N)	0.145	mg/L	ALS
L2013415-4	MS-0101	24-Oct-17	Phosphorus, Total	0.743	mg/L	ALS
L2013415-4	MS-0101	24-Oct-17	Fecal Coliforms	0	CFU/100mL	ALS
L2013415-4	MS-0101	24-Oct-17	BOD	<2.0	mg/L	ALS
L2013415-4	MS-0101	24-Oct-17	Oil and Grease, Total	<2.0	mg/L	ALS
L2013415-3	MS-0103	24-Oct-17	pH	6.29	pH units	ALS
L2013415-3	MS-0103	24-Oct-17	Total Suspended Solids	<2.0	mg/L	ALS
L2013415-3	MS-0103	24-Oct-17	Alkalinity, Total (asCaCO3)	<10	mg/L	ALS
L2013415-3	MS-0103	24-Oct-17	Ammonia, Total (as N)	<0.020	mg/L	ALS
L2013415-3	MS-0103	24-Oct-17	Phosphorus, Total	<0.0030	mg/L	ALS
L2013415-3	MS-0103	24-Oct-17	Fecal Coliforms	0	CFU/100mL	ALS
L2013415-3	MS-0103	24-Oct-17	BOD	<2.0	mg/L	ALS
L2013415-3	MS-0103	24-Oct-17	Oil and Grease, Total	<2.0	mg/L	ALS
Notes:						

Table 3: Flow and Volume Measurements-Part I Item 11 - October 2017

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	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 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 Sludge Removed (m³) from Milne Port WWTP to PWSP at Milne Port - MP-01a	Sewage Removed (m³) from Lift Stations to PWSP at Milne Port - MP-01a
1-Oct	53.9	0.0	44.4	53.9	0.4	0.0	44.4	0.4	0.0	0.0
2-Oct	100.2	0.0	48.8	100.2	0.4	0.0	48.8	0.4	0.0	0.0
3-Oct	71.5	0.0	53.1	71.5	0.5	45.4	53.1	0.4	0.0	0.0
4-Oct	66.8	0.0	48.5	66.8	0.4	0.0	48.5	0.4	0.0	0.0
5-Oct	78.2	0.0	51.8	78.2	0.5	0.0	51.8	0.4	0.0	0.0
6-Oct	82.0	0.0	48.7	82.0	0.5	0.0	48.7	0.5	0.0	0.0
7-Oct	70.2	0.0	48.4	70.2	0.5	0.0	48.4	0.5	0.0	45.5
8-Oct	69.8	0.0	48.6	69.8	0.4	0.0	48.6	0.0	0.0	54.0
9-Oct	76.8	0.0	49.4	76.8	0.5	0.0	49.4	0.3	1420.0	34.0
10-Oct	63.3	0.0	58.5	63.3	0.5	0.0	58.5	0.0	0.0	0.0
11-Oct	80.3	0.0	64.8	80.3	0.5	0.0	64.8	0.2	0.0	0.0
12-Oct	91.8	0.0	38.9	91.8	0.5	0.0	38.9	0.4	0.0	0.0
13-Oct	63.9	0.0	43.6	63.9	0.5	0.0	43.6	0.5	0.0	0.0
14-Oct	91.5	0.0	49.4	91.5	0.5	0.0	49.4	0.3	0.0	0.0
15-Oct	75.3	0.0	50.3	75.3	0.5	0.0	50.3	0.4	0.0	0.0
16-Oct	102.2	20.4	53.1	122.6	0.5	0.0	53.1	0.4	0.0	0.0
17-Oct	78.0	0.0	51.5	78.0	0.5	0.0	51.5	0.3	0.0	0.0
18-Oct	67.7	0.0	50.1	67.7	0.5	0.0	50.1	0.0	0.0	0.0
19-Oct	82.3	0.0	50.1	82.3	0.5	0.0	50.1	0.4	0.0	0.0
20-Oct	78.5	0.0	50.1	78.5	0.5	0.0	50.1	0.4	0.0	0.0
21-Oct	62.6	0.0	42.8	62.6	0.5	0.0	42.8	0.4	0.0	0.0
22-Oct	63.6	0.0	38.7	63.6	0.4	0.0	38.7	0.2	0.0	0.0
23-Oct	49.8	0.0	40.9	49.8	0.5	0.0	40.9	0.6	0.0	0.0
24-Oct	71.6	0.0	42.4	71.6	0.5	0.0	42.4	0.4	0.0	0.0
25-Oct	85.5	0.0	38.1	85.5	0.5	0.0	38.1	0.4	0.0	0.0
26-Oct	80.5	0.0	31.7	80.5	0.6	0.0	31.7	0.0	0.0	0.0
27-Oct	101.8	0.0	47.3	101.8	0.6	0.0	47.3	0.4	0.0	0.0
28-Oct	65.4	0.0	42.6	65.4	0.6	0.0	42.6	0.4	0.0	0.0
29-Oct	67.3	0.0	41.0	67.3	0.6	0.0	41.0	0.4	0.0	0.0
30-Oct	75.5	0.0	37.1	75.5	0.5	0.0	37.1	0.4	0.0	0.0
31-Oct	46.7	0.0	35.6	46.7	0.5	0.0	35.6	0.4	0.0	0.0
Total	2314.8	20.4	1440.2	2335.1	15.4	45.4	1440.2	10.6	1420.0	133.5

Notes:

WWTP - Waste Water Treatment Plant

PWSP - Polishing Waste Stabilization Pond

Camp Lake Daily Freshwater Use for Other Purposes on October 16 (20.4 m³) went to the Fire Suppression System.