



March 28, 2017

Manager of Licensing
Nunavut Water Board
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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 – February 2017

The following is the monthly report for February 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 February 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/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 February 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 February 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 Allan Knight, Laura Taylor or William Bowden at 416-364-8820 ext 6016.

Regards,

Reviewed by:

Allan Knight,
Environmental Superintendent

William Bowden,
Environmental Superintendent

Attach: Tables 1, 2 and 3

Cc: Erik Allain, Jonathon Mesher, Sarah Forte (INAC); Todd Burlingame, Wayne McPhee, Sylvain Proulx, Robert Gagne, (Baffinland); Stephen Bathory (QIA)

Table 1: Monitoring Program Water Sampling Summary for February 2017

Monitoring Program Station	Sampling Date	Lab ID#	Comment
Milne Port			
MP-01 (Sewage Treatment Facility)	7-Feb-17 28-Feb-17	L1888655-1 L1896436-1	Discharge volume reported daily
MP-0101 (Duplicate of MP-01)	7-Feb-17	L1888655-2	Duplicate of MP-01
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 February
MP-C-B01 (Downstream of Construction Area)	N/A	N/A	No flow during the month of February
MP-C-D (Downstream of Construction Area)	N/A	N/A	No flow during the month of February
MP-C-E (Downstream of Construction Area)	N/A	N/A	No flow during the month of February
MP-C-F (Downstream of Construction Area)	N/A	N/A	No flow during the month of February
MP-C-H (Downstream of Construction Area)	N/A	N/A	No flow during the month of February
MP-Q1-01 (Downstream of Q1 Quarry)	N/A	N/A	No flow during the month of February

Monitoring Program Station	Sampling Date	Lab ID#	Comment
MP-Q1-02 (Downstream of Q1 Quarry)	N/A	N/A	No flow during the month of February
Mary River Mine Site			
MS-01 (Sewage Treatment Facility)	7-Feb-17	L1888660-1	Discharge volume reported daily
MS-0101 (Duplicate of MS-01)	7-Feb-17	L1888660-3	Duplicate of MS-01
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 February
MS-MRY-10 (Weathered Ore Bulk Sample Stockpile)	N/A	N/A	No flow during the month of February
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 February
MS-MRY-13B (Downstream Non-Hazardous Landfill)	N/A	N/A	No flow during the month of February
MS-C-A (Downstream of Construction and Borrow Areas)	N/A	N/A	No flow during the month of February
MS-C-B (Downstream of Construction and Borrow Areas)	N/A	N/A	No flow during the month of February
MS-C-C (Downstream of Construction and Borrow Areas)	N/A	N/A	No flow during the month of February
MS-C-D (Downstream of Construction and Borrow Areas)	N/A	N/A	No flow during the month of February
MS-C-E (Downstream of Construction and Borrow Areas)	N/A	N/A	No flow during the month of February
MS-C-F (Downstream of Construction and Borrow Areas)	N/A	N/A	No flow during the month of February

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

Table 2. Water Chemistry Results - February 2017						
Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Units	Lab
MILNE PORT SITE						
L1888655-1	MP-01	7-Feb-17	pH	7.67	pH units	ALS
L1888655-1	MP-01	7-Feb-17	Total Suspended Solids	<2.0	mg/L	ALS
L1888655-1	MP-01	7-Feb-17	Ammonia, Total (as N)	0.072	mg/L	ALS
L1888655-1	MP-01	7-Feb-17	Total Phosphorus	9.77	mg/L	ALS
L1888655-1	MP-01	7-Feb-17	Fecal Coliforms	0	CFU/100mL	ALS
L1888655-1	MP-01	7-Feb-17	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1888655-1	MP-01	7-Feb-17	Oil & Grease - Total	<2.0	mg/L	ALS
L1888655-2	MP-0101	7-Feb-17	pH	7.69	pH units	ALS
L1888655-2	MP-0101	7-Feb-17	Total Suspended Solids	<2.0	mg/L	ALS
L1888655-2	MP-0101	7-Feb-17	Ammonia, Total (as N)	0.075	mg/L	ALS
L1888655-2	MP-0101	7-Feb-17	Total Phosphorus	9.57	mg/L	ALS
L1888655-2	MP-0101	7-Feb-17	Fecal Coliforms	0	CFU/100mL	ALS
L1888655-2	MP-0101	7-Feb-17	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1888655-2	MP-0101	7-Feb-17	Oil & Grease - Total	<2.0	mg/L	ALS
L1896436-1	WWTP DISCHARGE VAC	28-Feb-17	pH	7.76	pH units	ALS
L1896436-1	WWTP DISCHARGE VAC	28-Feb-17	Total Suspended Solids	2.2	mg/L	ALS
L1896436-1	WWTP DISCHARGE VAC	28-Feb-17	Ammonia, Total (as N)	<0.020	mg/L	ALS
L1896436-1	WWTP DISCHARGE VAC	28-Feb-17	Total Phosphorus	9.88	mg/L	ALS
L1896436-1	WWTP DISCHARGE VAC	28-Feb-17	Fecal Coliforms (See Note 1)	50000	CFU/100mL	ALS
L1896436-1	WWTP DISCHARGE VAC	28-Feb-17	Biochemical Oxygen Demand	3.7	mg/L	ALS
L1896436-1	WWTP DISCHARGE VAC	28-Feb-17	Oil & Grease - Total	<2.0	mg/L	ALS
MARY RIVER MINE SITE						
L1888660-1	MS-01	7-Feb-17	pH	7.74	pH units	ALS
L1888660-1	MS-01	7-Feb-17	Total Suspended Solids	<2.0	mg/L	ALS
L1888660-1	MS-01	7-Feb-17	Ammonia, Total (as N)	0.065	mg/L	ALS
L1888660-1	MS-01	7-Feb-17	Total Phosphorus	1.55	mg/L	ALS
L1888660-1	MS-01	7-Feb-17	Fecal Coliforms	1	CFU/100mL	ALS
L1888660-1	MS-01	7-Feb-17	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1888660-1	MS-01	7-Feb-17	Oil & Grease - Total	<2.0	mg/L	ALS
L1888660-3	MS-0101	7-Feb-17	pH	7.75	pH units	ALS
L1888660-3	MS-0101	7-Feb-17	Total Suspended Solids	<2.0	mg/L	ALS
L1888660-3	MS-0101	7-Feb-17	Ammonia, Total (as N)	0.064	mg/L	ALS
L1888660-3	MS-0101	7-Feb-17	Total Phosphorus	1.54	mg/L	ALS
L1888660-3	MS-0101	7-Feb-17	Fecal Coliforms	5	CFU/100mL	ALS
L1888660-3	MS-0101	7-Feb-17	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1888660-3	MS-0101	7-Feb-17	Oil & Grease - Total	<2.0	mg/L	ALS

Notes:

Bold and yellow highlighted indicate exceedance of the Water License water quality criteria

1. Grab sampling WWTP DISCHARGE VAC dated February 28, 2017 exceeded effluent quality discharge limits for sewage treatment facilities to the ocean. Reported to the spill line; NT-NU 17-068

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

DATE	Camp Lake Freshwater Use (Mine Site Camp) Daily Potable Water (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 Mine Site WWTP to PWSP at Mine Site - MS- MRY-4a	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
1-Feb	33.8	44.6	33.8	0.4	0.0	0.0	44.6	0.3	0.0
2-Feb	87.7	20.0	87.7	0.5	0.0	0.0	20.0	0.3	0.0
3-Feb	57.9	39.7	57.9	0.5	0.0	0.0	39.7	0.3	0.0
4-Feb	77.2	36.2	77.2	0.5	0.0	0.0	36.2	0.3	0.0
5-Feb	27.9	28.3	27.9	0.3	0.0	0.0	28.3	0.3	0.0
6-Feb	89.4	31.9	89.4	0.5	0.0	0.0	31.9	0.3	0.0
7-Feb	53.7	37.8	53.7	0.4	0.0	0.0	37.8	0.3	0.0
8-Feb	62.6	31.8	62.6	0.5	0.0	0.0	31.8	0.3	0.0
9-Feb	63.6	35.3	63.6	0.5	0.0	0.0	35.3	0.3	0.0
10-Feb	63.6	36.3	63.6	0.4	0.0	0.0	36.3	0.3	0.0
11-Feb	46.4	25.6	46.4	0.5	0.0	0.0	25.6	0.3	0.0
12-Feb	60.3	30.1	60.3	0.5	0.0	0.0	30.1	0.3	0.0
13-Feb	54.3	34.2	54.3	0.5	0.0	0.0	34.2	0.3	0.0
14-Feb	84.5	32.9	84.5	0.5	0.0	0.0	32.9	0.3	0.0
15-Feb	66.8	34.6	66.8	0.5	0.0	0.0	34.6	0.0	0.0
16-Feb	63.9	36.7	63.9	0.5	0.0	0.0	36.7	0.3	0.0
17-Feb	63.7	44.6	63.7	0.5	0.0	0.0	44.6	0.2	0.0
18-Feb	64.0	24.3	64.0	0.5	0.0	0.0	24.3	0.3	0.0
19-Feb	49.3	31.4	49.3	0.5	0.0	0.0	31.4	0.3	0.0
20-Feb	70.7	28.0	70.7	0.5	0.0	0.0	28.0	0.3	0.0
21-Feb	64.2	39.8	64.2	0.5	0.0	0.0	39.8	0.3	0.0
22-Feb	39.3	34.5	39.3	0.5	0.0	0.0	34.5	0.3	0.0
23-Feb	66.6	31.8	66.6	0.5	0.0	0.0	31.8	0.3	0.0
24-Feb	39.1	35.6	39.1	0.5	0.0	0.0	35.6	0.3	0.0
25-Feb	62.8	23.2	62.8	0.5	0.0	0.0	23.2	0.3	0.0
26-Feb	53.2	43.4	53.2	0.5	0.0	0.0	43.4	0.3	0.0
27-Feb	52.7	20.6	52.7	0.5	0.0	0.0	20.6	0.3	0.0
28-Feb	80.2	55.9	80.2	0.5	0.0	0.0	55.9	0.3	0.0
Total	1699.1	948.9	1699.1	13.4	0.0	0.0	948.9	7.2	0.0

Notes:

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