

April 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 – March 2017

The following is the monthly report for March 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 March 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 March 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 March 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 Laura Taylor or William Bowden at 416-364-8820 ext 6016.

Regards.

Connor Devereaux,

**Environmental Coorindator** 

Come Danny

Reviewed by:

Laura Taylor,

**Environmental Superintendent** 

Attach: Tables 1, 2 and 3

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

Eric Steinmetzer (Baffinland); Stephen Bathory (QIA)

**Table 1: Monitoring Program Water Sampling Summary for March 2017** 

Monitoring Program Station	Sampling Date Lab ID#		Comment		
Milne Port					
MP-01 (Sewage Treatment Facility)	7-Mar-17 21-Mar-17	L1898972-3 L1904338-1	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 March		
MP-C-B01 (Downstream of Construction Area)	N/A	N/A	No flow during the month of March		
MP-C-D (Downstream of Construction Area)	N/A	N/A	No flow during the month of March		
MP-C-E (Downstream of Construction Area)	N/A	N/A	No flow during the month of March		
MP-C-F (Downstream of Construction Area)	N/A	N/A	No flow during the month of March		
MP-C-H (Downstream of Construction Area)	N/A	N/A	No flow during the month of March		
MP-Q1-01 (Downstream of Q1 Quarry)	N/A	N/A	No flow during the month of March		
MP-Q1-02 (Downstream of Q1 Quarry)	N/A	N/A	No flow during the month of March		

Monitoring Program Station	Sampling Date Lab ID#		Comment
Mary River Mine Site			
MS-01 (Sewage Treatment Facility)	7-Mar-17	L1898963-1	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 March
MS-MRY-10 (Weathered Ore Bulk Sample Stockpile)	N/A	N/A	No flow during the month of March
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 March
MS-MRY-13B (Downstream Non-Hazardous Landfill)	N/A	N/A	No flow during the month of March
MS-C-Á (Downstream of Construction and Borrow Areas)	N/A	N/A	No flow during the month of March
MS-C-B (Downstream of Construction and Borrow Areas)	N/A	N/A	No flow during the month of March
MS-C-C (Downstream of Construction and Borrow Areas)	N/A	N/A	No flow during the month of March
MS-C-D (Downstream of Construction and Borrow Areas)	N/A	N/A	No flow during the month of March
MS-C-E (Downstream of Construction and Borrow Areas)	N/A	N/A	No flow during the month of March
MS-C-F (Downstream of Construction and Borrow Areas)	N/A	N/A	No flow during the month of March
MS-C-G (Downstream of Construction and Borrow Areas)	N/A	N/A	No flow during the month of March

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 March				
MQ-C-A (Downstream of QMR2 Quarry)	N/A	N/A	No flow during the month of March				
MQ-C-B (Downstream of QMR2 Quarry)	N/A	N/A	No flow during the month of March				
MQ-C-D (Downstream of QMR2 Quarry)	N/A	N/A	No flow during the month of March				
MQ-C-E (Downstream of D1Q2 Quarry)	N/A	N/A	No flow during the month of March				
Steensby Port							
Steensby Exploration Camp is presently not active.							

Table 2. Water Chemistry Results - March 2017								
Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Units	Lab		
MILNE PORT SITE				*				
L1898972-3	MP-01-Truck	7-Mar-17	pН	7.64	pH units	ALS		
L1898972-3	MP-01-Truck	7-Mar-17	Total Suspended Solids	<2.0	mg/L	ALS		
L1898972-3	MP-01-Truck	7-Mar-17	Ammonia, Total (as N)	0.039	mg/L	ALS		
L1898972-3	MP-01-Truck	7-Mar-17	Total Phosphorus	8.25	mg/L	ALS		
L1898972-3	MP-01-Truck	7-Mar-17	Fecal Coliforms	0	CFU/100mL	ALS		
L1898972-3	MP-01-Truck	7-Mar-17	Biochemical Oxygen Demand	<2.0	mg/L	ALS		
L1898972-3	MP-01-Truck	7-Mar-17	Oil & Grease - Total	<2.0	mg/L	ALS		
L1904338-1	MP-01-Truck	21-Mar-17	pН	7.74	pH units	ALS		
L1904338-1	MP-01-Truck	21-Mar-17	Total Suspended Solids	<2.0	mg/L	ALS		
L1904338-1	MP-01-Truck	21-Mar-17	Ammonia, Total (as N)	0.103	mg/L	ALS		
L1904338-1	MP-01-Truck	21-Mar-17	Total Phosphorus	9.22	mg/L	ALS		
L1904338-1	MP-01-Truck	21-Mar-17	Fecal Coliforms	20	CFU/100mL	ALS		
L1904338-1	MP-01-Truck	21-Mar-17	Biochemical Oxygen Demand	<2.0	mg/L	ALS		
L1904338-1	MP-01-Truck	21-Mar-17	Oil & Grease - Total	<2.0	mg/L	ALS		
MARY RIVER MINE SI	TE							
L1898963-1	MS-01	7-Mar-17	pН	7.71	pH units	ALS		
L1898963-1	MS-01	7-Mar-17	Total Suspended Solids	2.4	mg/L	ALS		
L1898963-1	MS-01	7-Mar-17	Ammonia, Total (as N)	0.075	mg/L	ALS		
L1898963-1	MS-01	7-Mar-17	Total Phosphorus	0.995	mg/L	ALS		
L1898963-1	MS-01	7-Mar-17	Fecal Coliforms	1	CFU/100mL	ALS		
L1898963-1	MS-01	7-Mar-17	Biochemical Oxygen Demand	<2.0	mg/L	ALS		
L1898963-1	MS-01	7-Mar-17	Oil & Grease - Total	ALS				

Notes:

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Table 3: Flow and Volume Measurements-Part I Item 11 - March 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 Slte - 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-Mar	77.8	0.0	77.8	0.5	0.0	0.0	0.0	0.3	0.0	0.0
2-Mar	55.8	60.6	55.8	0.5	0.0	0.0	60.6	0.2	0.0	0.0
3-Mar	50.0	15.1	50.0	0.5	0.0	0.0	15.1	0.2	0.0	0.0
4-Mar	67.5	30.3	67.5	0.5	0.0	0.0	30.3	0.2	0.0	0.0
5-Mar	101.6	60.6	101.6	0.5	0.0	0.0	60.6	0.3	0.0	0.0
6-Mar	58.2	0.0	58.2	0.5	0.0	0.0	0.0	0.3	0.0	0.0
7-Mar	39.2	15.1	39.2	0.5	0.0	0.0	15.1	0.3	0.0	0.0
8-Mar	82.0	15.1	82.0	0.5	0.0	0.0	15.1	0.3	0.0	0.0
9-Mar	55.4	52.2	55.4	0.5	0.0	0.0	52.2	0.3	0.0	0.0
10-Mar	46.8	34.8	46.8	0.5	0.0	0.0	34.8	0.3	0.0	0.0
11-Mar	92.2	52.2	92.2	0.5	0.0	0.0	52.2	0.3	0.0	0.0
12-Mar	38.2	34.8	38.2	0.5	0.0	0.0	34.8	0.2	0.0	0.0
13-Mar	60.4	0.0	60.4	0.5	0.0	0.0	0.0	0.3	0.0	0.0
14-Mar	83.0	52.2	83.0	0.5	0.0	0.0	52.2	0.2	0.0	0.0
15-Mar	27.1	17.4	27.1	0.5	0.0	0.0	17.4	0.0	0.0	0.0
16-Mar	78.9	34.8	78.9	0.5	0.0	0.0	34.8	0.3	0.0	0.0
17-Mar	51.4	52.2	51.4	0.5	0.0	0.0	52.2	0.3	0.0	0.0
18-Mar	56.0	34.8	56.0	0.5	0.0	0.0	34.8	0.3	0.0	0.0
19-Mar	51.8	17.4	51.8	0.5	0.0	0.0	17.4	0.3	0.0	0.0
20-Mar	31.1	89.0	31.1	0.5	0.0	0.0	89.0	0.3	0.0	0.0
21-Mar	81.3	69.7	81.3	0.5	0.0	0.0	69.7	0.3	0.0	0.0
22-Mar	59.2	69.7	59.2	0.5	0.0	0.0	69.7	0.3	0.0	0.0
23-Mar	56.8	17.4	56.8	0.5	0.0	0.0	17.4	0.3	0.0	0.0
24-Mar	63.8	34.8	63.8	0.4	0.0	0.0	34.8	0.3	0.0	0.0
25-Mar	56.5	34.8	56.5	0.4	0.0	0.0	34.8	0.3	0.0	0.0
26-Mar	74.6	69.7	74.6	0.5	0.0	0.0	69.7	0.3	11.4	0.0
27-Mar	43.5	17.4	43.5	0.5	0.0	0.0	17.4	0.3	0.0	0.0
28-Mar	70.5	17.4	70.5	0.5	0.0	0.0	17.4	0.0	0.0	0.0
29-Mar	62.7	52.2	62.7	0.5	0.0	0.0	52.2	0.3	0.0	0.0
30-Mar	65.7	52.2	65.7	0.5	0.0	0.0	52.2	0.3	0.0	0.0
31-Mar	49.1	17.4	49.1	0.5	0.0	0.0	17.4	0.2	0.0	0.0
Total	1888	1122	1888	15	0	0	1122	8	11	0

Notes:

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