



March 29, 2018

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 – February 2018**

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The following is the monthly report for February 2018 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 2018, 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/laboratory 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 2018.

**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 2018.

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,

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

Connor Devereaux  
Environmental Superintendent

Reviewed by:

Timothy Ray Sewell  
Head of Health, Safety and Environment

Attach: Tables 1, 2 and 3

Cc: Erik Allain, Jonathon Mesher, Ian Parsons (INAC); William Napier, Megan Lord-Hoyle, Timothy Ray Sewell, Sylvain Proulx, Gerald Rogers, Francois Gaudrau (Baffinland); Stephen Bathory (QIA)

**Table 1: Monitoring Program Water Sampling Summary for February 2018**

<b>Monitoring Program Station</b>	<b>Sampling Date</b>	<b>Lab ID#</b>	<b>Comment</b>
<b>Milne Port</b>			
MP-01 (Sewage Treatment Facility)	February 6, 2018	L2054248-1	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 February
MP-C-B01 (Downstream of Construction Area)	N/A	N/A	No flow during month of February
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 February
MP-C-H (Downstream of Construction Area)	N/A	N/A	No flow during month of February
MP-Q1-01 (Downstream of Q1 Quarry)	N/A	N/A	No flow during month of February
MP-Q1-02 (Downstream of Q1 Quarry)	N/A	N/A	No flow during month of February

Mary River Mine Site			
MS-01 (Sewage Treatment Facility)	February 6, 2018	L2054390-1	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 February
MS-MRY-10 (Weathered Ore Bulk Sample Stockpile)	N/A	N/A	No flow during 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 month of February
MS-MRY-13B (Downstream Non-Hazardous Landfill)	N/A	N/A	No flow during month of February
MS-C-A (Downstream of Construction and Borrow Areas)	N/A	N/A	No flow during month of February
MS-C-B (Downstream of Construction and Borrow Areas)	N/A	N/A	No flow during month of February
MS-C-C (Downstream of Construction and Borrow Areas)	N/A	N/A	No flow during month of February
MS-C-D (Downstream of Construction and Borrow Areas)	N/A	N/A	No flow during month of February
MS-C-E (Downstream of Construction and Borrow Areas)	N/A	N/A	No flow during month of February
MS-C-F (Downstream of Construction and Borrow Areas)	N/A	N/A	No flow during month of February
MS-C-G (Downstream of Construction and Borrow Areas)	N/A	N/A	No flow during month of February
MS-C-H (Downstream of Construction and Borrow Areas)	N/A	N/A	No flow during month of February

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MQ-C-A (Downstream of QMR2 Quarry)	N/A	N/A	No flow during month of February
MQ-C-B (Downstream of QMR2 Quarry)	N/A	N/A	No flow during month of February
MQ-C-D (Downstream of QMR2 Quarry)	N/A	N/A	No flow during month of February
<b>Steensby Port</b>			
Steensby Exploration Camp is presently not active.	N/A	N/A	

**TABLE 2 - WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-01**

Analyte	Sample ID			MP-01
	ALS Laboratory Sample ID			L2054248-1
	Sample Date & Time			2/6/2018 2:45:00 PM
	QA/QC Sample Type			N/A
	Units	LOR	Water Licence Criteria <sup>1</sup>	
pH	pH units	0.1	6.0 - 9.5	7.48
Total Suspended Solids	mg/L	2	<120	<2.0
Alkalinity, Total (as CaCO3)	mg/L	10	-	76
Ammonia, Total (as N)	mg/L	0.02	-	0.188
Total Kjeldahl Nitrogen	mg/L	0.15	-	2.01
Phosphorus, Total	mg/L	0.003	-	11.6
Fecal Coliforms	CFU/100mL	0	10,000	1
BOD	mg/L	2	100	<2.0
COD	mg/L	10	-	43
Oil and Grease, Total	mg/L	2	No Visible Sheen	<2.0

**Notes:**

Grey and bold highlight indicate results that exceeded the applicable water quality criteria.

<sup>1</sup>Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 5: Effluent Quality Discharge Limits for Sewage Treatment Facilities to the Ocean

**TABLE 2 - WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-01**

Analyte	Sample ID			MS-01
	ALS Laboratory Sample ID			L2054390-1
	Sample Date & Time			2/6/2018 3:00:00 PM
	QA/QC Sample Type			N/A
	Units	LOR	Water Licence Criteria <sup>1</sup>	
pH	pH units	0.1	6.0 - 9.5	7.72
Total Suspended Solids	mg/L	2	35	<2.0
Alkalinity, Total (as CaCO <sub>3</sub> )	mg/L	10	-	124
Ammonia, Total (as N)	mg/L	0.02	4	0.623
Total Kjeldahl Nitrogen	mg/L	0.15	-	5.55
Phosphorus, Total	mg/L	0.003	4	0.743
Fecal Coliforms	CFU/100mL	0	1,000	1
BOD	mg/L	2	30	<2.0
COD	mg/L	10	-	52
Oil and Grease, Total	mg/L	2	No Visible Sheen	<2.0

**Notes:**

Grey and bold highlight indicate results that exceeded the applicable water quality criteria.

<sup>1</sup>Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 5: Effluent Quality Discharge Limits for Sewage Treatment Facilities to the Ocean

Table 3: Flow and Volume Measurements-Part I Item 11 - February 2018

DATE	Camp Lake Freshwater Use (Mine Site Camp) - Daily Potable Water (m³) MS-MRY-1	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	Km 32 Lake Milne Port Camp Daily Potable Water (m³) MP-MRY-3	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	Km 32 Lake Milne Port Camp Fresh Water Use for Other Purposes (m³) MP-MRY-3
1-Feb	82.8	82.8	0.5	0.0	0.0	35.5	35.5	0.3	0.0	0.0
2-Feb	78.3	78.3	0.5	0.0	0.0	38.6	38.6	0.3	0.0	0.0
3-Feb	77.8	77.8	0.5	0.0	0.0	36.8	36.8	0.3	0.0	0.0
4-Feb	79.6	79.6	0.5	0.0	0.0	36.5	36.5	0.3	0.0	0.0
5-Feb	30.5	30.5	0.5	0.0	0.0	37.8	37.8	0.3	0.0	0.0
6-Feb	91.2	91.2	0.5	0.0	0.0	38.7	38.7	0.3	0.0	0.0
7-Feb	97.7	97.7	0.5	0.0	0.0	35.4	35.4	0.3	0.0	0.0
8-Feb	114.1	114.1	0.0	0.0	0.0	42.9	42.9	0.3	0.0	0.0
9-Feb	41.4	41.4	0.5	6.0	0.0	31.3	31.3	0.3	0.0	0.0
10-Feb	85.5	85.5	0.5	0.0	0.0	25.8	25.8	0.3	0.0	0.0
11-Feb	81.9	81.9	0.5	0.0	0.0	33.3	33.3	0.3	0.0	0.0
12-Feb	69.5	69.5	0.0	0.0	0.0	34.5	34.5	0.3	22.7	0.0
13-Feb	81.8	81.8	0.3	0.0	0.0	62.4	62.4	0.0	22.7	0.0
14-Feb	106.7	106.7	0.3	0.0	6.0	71.8	71.8	0.0	11.4	0.0
15-Feb	98.1	98.1	0.4	0.0	0.0	44.2	44.2	0.2	0.0	0.0
16-Feb	165.2	165.2	0.3	0.0	0.0	26.1	26.1	0.5	0.0	0.0
17-Feb	126.6	126.6	0.3	0.0	0.0	40.2	40.2	0.4	0.0	0.0
18-Feb	148.7	148.7	0.0	0.0	0.0	32.7	32.7	0.5	0.0	0.0
19-Feb	100.2	100.2	0.0	0.0	0.0	44.6	44.6	0.5	0.0	0.0
20-Feb	149.4	149.4	0.0	0.0	0.0	24.9	24.9	0.4	0.0	0.0
21-Feb	127.6	127.6	0.0	0.0	0.0	39.0	39.0	0.5	0.0	0.0
22-Feb	145.4	145.4	0.0	0.0	0.0	38.1	38.1	0.5	0.0	0.0
23-Feb	87.8	87.8	0.0	0.0	0.0	37.6	37.6	0.5	0.0	0.0
24-Feb	130.5	130.5	0.0	0.0	0.0	33.6	33.6	0.3	0.0	0.0
25-Feb	73.0	73.0	0.0	0.0	0.0	40.7	40.7	0.5	0.0	0.0
26-Feb	90.0	90.0	0.0	0.0	0.0	28.1	28.1	0.5	0.0	0.0
27-Feb	97.7	97.7	0.0	0.0	0.0	31.6	31.6	0.0	0.0	0.0
28-Feb	60.1	60.1	0.0	5.0	0.0	40.1	40.1	0.3	0.0	0.0
<b>Total</b>	<b>2719.0</b>	<b>2719.0</b>	<b>6.7</b>	<b>11.0</b>	<b>6.0</b>	<b>1062.7</b>	<b>1062.7</b>	<b>9.6</b>	<b>56.8</b>	<b>0.0</b>

Notes:

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