

December 24, 2024

Manager of Licensing  
Nunavut Water Board  
P.O. Box 119  
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Resource Management Officer, CIRNAC  
Nunavut District, Nunavut Region  
P.O. Box 100  
Iqaluit, NU X0A 0H0

**RE: Water Licence 2AM-MRY1325 Monthly Surveillance Network Program (SNP) Report  
November 2024**

The following is the monthly report for November 2024 as required under Part I, Item 21 of the Type 'A' Water Licence 2AM-MRY1325 (the Licence) which 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 identify areas of non-compliance with regulated discharge parameters referred to in Part F"*

**Monitoring Program**

Table 1.1 presents a list of samples/monitoring conducted in November under the Licence at sites with discharge/flowing water conditions and the details concerning the collected water quality samples, including sample dates and laboratory identification numbers. Analytical water quality testing results are presented in Table 2. Table 3.1 presents water volumes consumed for domestic and industrial water purposes as well as select volumes of effluent and waste discharged and/or disposed at the Mary River Mine Site and Milne Port during November 2024.

**Monitoring Program Results**

*Water Sampling and Analysis Results*

Table 2 provides the analytical results related to the Sewage Treatment Plant (STP) facilities. There were no exceedances of applicable water quality criteria observed at STP monitoring stations in November 2024. Due to frozen winter conditions, no other samples were collected during the month of November.

*Flow and Volume Measurements*

Table 3.1 provides a breakdown of volume measurements for November 2024, as required by Part I, Item 9 of the Licence. There were no exceedances of the source specific daily volume withdrawal limits in November 2024.

We trust that the information provided in this monthly report is acceptable. If you have any questions regarding this report, please contact the undersigned.

Prepared by:

A handwritten signature in black ink that reads "Allison Parker".

Allison Parker  
Environmental Specialist

Reviewed by:

A handwritten signature in black ink that reads "Todd Swenson".

Todd Swenson  
Environmental Superintendent

cc: Jeremy Fraser, Omer Pasalic, Sean Noble-Nowdluk (CIRNAC)  
Conor Goddard, Chris Spencer, Amoudla Kootoo (QIA)  
Tim Sewell, Megan Lord-Hoyle, Lou Kamermans, Elisabeth Luther, Francois Gaudreau, Martin Beausejour,  
Connor Devereaux, William BowdenIrniq Lecompte (Baffinland)

### Attachments

Attachments – Table 1.1, Table 2, Table 3.1



**Table 1.1: Monitoring Program  
Water Sampling Summary**

Location	Location Description	Sample Date	Sample Type	Lab Sample ID
MP-01	Sewage Treatment Facility	2024-11-05	P	WT2433232-004
MP-01	Sewage Treatment Facility	2024-11-05	FD	WT2433232-005
MP-01B	Sewage Treatment Facility	2024-11-05	P	WT2433232-001
MP-01B	Sewage Treatment Facility	2024-11-05	FD	WT2433232-002
MS-01	Sewage Treatment Facility	2024-11-05	P	WT2433250-001
MS-01	Sewage Treatment Facility	2024-11-05	FD	WT2433250-002
MS-01B	Sewage Treatment Facility	2024-11-05	P	WT2433250-004
MS-01B	Sewage Treatment Facility	2024-11-05	FD	WT2433250-005

**Notes:**

Sample Types:

P - Permitted Sample

FB - Field Blank

FD - Field Duplicate

TB - Trip Blank

NST - No Sample Taken



Table 2 : Water Quality Results for Water Licence  
Monitoring Location - MP-01

Location Name  Field Sample ID ALS Laboratory Work Order Sample Date Sample Type			MP-01	MP-01
			MP-01_2024-11-05	QV-CC1_2024-11-05
			WT2433232	WT2433232
			2024-11-05	2024-11-05
			P	FD
Analyte	Units	Table Criteria		
pH, Lab	pH units	6.0-9.5	7.81	7.85
Total Suspended Solids	mg/L	120	2.0	1.1
Total Dissolved Solids	mg/L	-	920	876
Turbidity	NTU	-	0.95	0.65
Alkalinity, Total	mg/L	-	74.2	74.0
Ammonia, Total (as N)	mg/L	-	0.0552	0.0635
Total Kjeldahl Nitrogen	mg/L	-	0.783	1.05
Fecal Coliforms	CFU/100mL	10000	< 1	< 1
BOD	mg/L	100	< 2.0	< 2.0
Oil and Grease, Total	mg/L	-	< 5.0	< 5.0
Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen
Phosphorus, Nutrient	mg/L	-	6.08	6.10

Notes:  
Highlight indicate result exceeded applicable criteria.  
Half value used in monthly average when value is less than detection limit.  
pH criteria is a range;6.0-9.5.  
Sample Type:  
P-Permitted  
FD-Field Duplicate  
FB-Field Blank  
TB-Trip Blank



Table 2 : Water Quality Results for Water Licence  
Monitoring Location - MP-01B

Location Name  Field Sample ID ALS Laboratory Work Order Sample Date Sample Type			MP-01B	MP-01B
			MP-01B_2024-11-05	QV-CC2_2024-11-05
			WT2433232	WT2433232
			2024-11-05	2024-11-05
			P	FD
Analyte	Units	Table Criteria		
pH, Lab	pH units	6.0-9.5	8.13	8.07
Total Suspended Solids	mg/L	120	< 1.0	< 1.0
Total Dissolved Solids	mg/L	-	684	654
Turbidity	NTU	-	0.19	0.11
Alkalinity, Total	mg/L	-	107	108
Ammonia, Total (as N)	mg/L	-	0.0219	0.0272
Total Kjeldahl Nitrogen	mg/L	-	1.12	1.04
Fecal Coliforms	CFU/100mL	10000	1	1
BOD	mg/L	100	< 2.0	< 2.0
Oil and Grease, Total	mg/L	-	< 5.0	< 5.0
Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen
Phosphorus, Nutrient	mg/L	-	12.0	12.0

Notes:  
Highlight indicate result exceeded applicable criteria.  
Half value used in monthly average when value is less than detection limit.  
pH criteria is a range;6.0-9.5.  
Sample Type:  
P-Permitted  
FD-Field Duplicate  
FB-Field Blank  
TB-Trip Blank



Table 2 : Water Quality Results for Water Licence  
Monitoring Location - MS-01

Location Name  Field Sample ID ALS Laboratory Work Order Sample Date Sample Type			MS-01	MS-01
			MS-01_2024-11-05	QW-CC1_2024-11-05
			WT2433250	WT2433250
			2024-11-05	2024-11-05
			P	FD
Analyte	Units	Table Criteria		
pH, Lab	pH units	6.0-9.5	8.34	8.24
Total Suspended Solids	mg/L	35	2.9	2.3
Total Dissolved Solids	mg/L	-	3380	3400
Turbidity	NTU	-	1.17	1.34
Alkalinity, Total	mg/L	-	233	227
Ammonia, Total (as N)	mg/L	4.0	0.0470	0.0493
Total Kjeldahl Nitrogen	mg/L	-	3.50	0.322
Fecal Coliforms	CFU/100mL	1000	< 1	1
BOD	mg/L	30	< 2.0	< 2.0
Oil and Grease, Total	mg/L	-	< 5.0	< 5.0
Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen
Phosphorus, Nutrient	mg/L	4.0	0.366	0.366

Notes:  
Highlight indicate result exceeded applicable criteria.  
Half value used in monthly average when value is less than detection limit.  
pH criteria is a range;6.0-9.5.  
Sample Type:  
P-Permitted  
FD-Field Duplicate  
FB-Field Blank  
TB-Trip Blank



Table 2 : Water Quality Results for Water Licence  
Monitoring Location - MS-01B

Location Name  Field Sample ID ALS Laboratory Work Order Sample Date Sample Type			MS-01B	MS-01B
			MS-01B_2024-11-05	QW-CC2_2024-11-05
			WT2433250	WT2433250
			2024-11-05	2024-11-05
			P	FD
Analyte	Units	Table Criteria		
pH, Lab	pH units	6.0-9.5	8.29	8.29
Total Suspended Solids	mg/L	35	1.2	1.0
Total Dissolved Solids	mg/L	-	600	603
Turbidity	NTU	-	0.19	0.18
Alkalinity, Total	mg/L	-	202	202
Ammonia, Total (as N)	mg/L	4.0	0.0291	0.0161
Total Kjeldahl Nitrogen	mg/L	-	0.937	0.890
Fecal Coliforms	CFU/100mL	1000	< 1	< 1
BOD	mg/L	30	< 2.0	< 2.0
Oil and Grease, Total	mg/L	-	< 5.0	< 5.0
Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen
Phosphorus, Nutrient	mg/L	4.0	0.139	0.133

Notes:  
Highlight indicate result exceeded applicable criteria.  
Half value used in monthly average when value is less than detection limit.  
pH criteria is a range;6.0-9.5.  
Sample Type:  
P-Permitted  
FD-Field Duplicate  
FB-Field Blank  
TB-Trip Blank

Table 3.1: Flow and Volume Measurements - Part I Item 11 - November 2024

DATE	Camp Lake Freshwater for Domestic Use - Daily Water MS-MRY-1 (m <sup>3</sup> ) <sup>1</sup>	Camp Lake Freshwater for Industrial Use - Daily Water MS-MRY-1 (m <sup>3</sup> ) <sup>1</sup>	Treated Sewage Effluent from MS-01 to Discharge Location #1 (m <sup>3</sup> )	Treated Sewage Effluent from MS-01B to Discharge Location #1 (m <sup>3</sup> )	Sewage Sludge Removed from Mine Site WWTPs to Incinerator or Disposal Offsite by Backhaul (m <sup>3</sup> )	Sewage Sludge/Off- Spec Effluent Removed from Mine Site WWTPs to PWSP at Mine Site (m <sup>3</sup> )	Sewage Sludge Removed from Lift Stations to PWSP at Mine Site (m <sup>3</sup> )	Km 32 Lake Milne Port Camp Daily Water Use for Domestic Purposes MP- MRY-3 (m <sup>3</sup> )	Km 32 Lake Milne Port Camp Daily Water Use for Industrial Purposes MP- MRY-3 (m <sup>3</sup> )	Treated Sewage Effluent from MP-01 to Milne Inlet (m <sup>3</sup> )	Treated Sewage Effluent from MP-01B to Milne Inlet (m <sup>3</sup> )	Sewage Sludge Removed from Milne Port WWTPs to Incinerator or Disposal Offsite by Backhaul (m <sup>3</sup> )	Sewage Sludge Removed from Lift Stations to PWSP at Milne Port (m <sup>3</sup> )	Sludge Removed from Milne Port WWTPs/WTPs to PWSP at Milne Port (m <sup>3</sup> )
1-Nov-24	153.5	0.0	18.0	135.9	1.9	2.0	0.0	80.6	0.0	54.0	30.0	0.1	0.0	0.0
2-Nov-24	125.3	34.5	14.0	150.3	1.3	0.0	0.0	45.2	0.0	25.0	39.5	0.1	0.0	11.0
3-Nov-24	137.7	7.9	18.0	129.2	1.3	0.0	0.0	52.2	8.0	21.0	35.4	0.1	0.0	0.0
4-Nov-24	129.5	14.3	18.0	131.7	1.7	0.0	0.0	52.0	0.0	19.0	13.7	0.1	0.0	0.0
5-Nov-24	138.6	23.7	18.0	125.4	0.9	0.0	0.0	60.3	0.0	16.0	30.1	0.1	1.0	0.0
6-Nov-24	133.0	11.7	18.0	130.9	0.0	0.0	0.0	53.4	0.0	17.0	30.8	0.0	0.0	0.0
7-Nov-24	98.7	24.4	18.0	137.1	0.9	0.0	4.0	43.0	0.0	19.0	32.1	0.1	0.0	0.0
8-Nov-24	104.3	23.8	18.0	98.8	1.7	0.0	0.0	75.6	0.0	15.0	28.4	0.1	0.0	0.0
9-Nov-24	114.2	17.5	12.0	100.3	1.7	0.0	0.0	80.2	0.0	19.0	23.9	0.1	0.0	0.0
10-Nov-24	83.7	26.1	11.0	114.3	1.7	0.0	0.0	84.6	0.0	17.0	23.6	0.1	0.0	0.0
11-Nov-24	106.8	23.6	13.0	93.3	1.7	0.0	0.0	36.7	0.0	17.0	26.3	0.1	0.0	0.0
12-Nov-24	97.9	18.9	7.0	98.6	1.7	0.0	0.0	60.4	0.0	20.0	20.9	0.1	0.0	0.0
13-Nov-24	100.5	56.3	10.0	108.7	0.9	0.0	0.0	61.2	0.0	15.0	31.7	0.1	0.0	0.0
14-Nov-24	100.5	18.8	17.0	98.2	0.9	0.0	0.0	40.5	0.0	21.0	30.6	0.0	0.0	9.0
15-Nov-24	94.2	15.2	7.0	88.7	1.7	0.0	0.0	52.6	3.0	16.0	16.1	0.1	0.0	0.0
16-Nov-24	103.6	11.4	16.0	96.4	1.8	0.0	0.0	48.0	0.0	18.0	20.0	0.0	0.0	0.0
17-Nov-24	98.0	12.4	10.0	99.0	1.7	0.0	0.0	46.6	0.0	17.0	33.9	0.0	0.0	0.0
18-Nov-24	79.8	28.5	5.0	86.4	1.7	0.0	0.0	52.3	0.0	16.0	27.6	0.0	0.0	0.0
19-Nov-24	104.0	26.6	14.0	96.2	0.9	0.0	0.0	43.9	0.0	19.0	21.6	0.0	0.0	0.0
20-Nov-24	88.8	14.3	18.0	100.4	1.7	0.0	0.0	51.1	0.0	24.0	26.1	0.1	0.0	0.0
21-Nov-24	109.7	19.7	3.0	100.1	0.9	0.0	0.0	44.1	0.0	13.0	36.2	0.0	0.0	0.0
22-Nov-24	116.2	20.0	11.0	107.2	1.7	0.0	0.0	56.9	0.0	23.0	22.2	0.0	0.0	0.0
23-Nov-24	114.4	10.6	12.0	112.7	0.9	0.0	0.0	43.7	0.0	14.0	22.1	0.1	0.0	0.0
24-Nov-24	137.8	20.0	13.0	116.3	1.7	0.0	0.0	48.3	0.0	19.0	35.1	0.0	0.0	0.0
25-Nov-24	143.1	18.0	10.0	131.6	0.9	0.0	0.0	29.9	0.0	16.0	17.7	0.0	0.0	0.0
26-Nov-24	127.0	8.6	17.0	142.6	2.1	6.0	0.0	54.6	0.0	21.0	27.1	0.0	0.0	0.0
27-Nov-24	118.5	17.4	6.0	121.0	0.0	0.0	0.0	51.9	0.0	18.0	21.4	0.0	0.0	0.0
28-Nov-24	132.2	2.3	11.0	123.9	0.4	0.0	0.0	43.2	0.0	20.0	18.5	0.0	0.0	0.0
29-Nov-24	99.9	2.3	17.0	117.2	1.1	3.0	0.0	40.9	0.0	18.0	28.1	0.0	0.0	6.0
30-Nov-24	115.2	0.0	12.0	102.8	0.9	0.0	0.0	33.3	0.0	18.0	16.0	0.1	0.0	0.0
Total	3,406.8	528.6	392.0	3,395.2	37.9	11.0	4.0	1,567.3	11.0	585.0	787.0	1.5	1.0	26.0

**Notes:**  
WWTP - Waste Water Treatment Plant  
PWSP - Polishing Waste Stabilization Pond  
<sup>1</sup> Tracking may be influenced by reported data to the Pi data system; variances between reported domestic and industrial values have potential to occur.  
However, total daily withdrawal is not influenced by the tracking methodology.