

July 31, 2020

Manager of Licensing
Nunavut Water Board
P.O. Box 119
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Water Resources 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
June 2020**

The following is the monthly report for June 2020 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

During the month of June 2020, water samples were collected as part of the Water Licence SNP.

Table 1.1 presents a list of samples/monitoring required under the Licence 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 Tables 2.1 – 2.29. Water volumes consumed for domestic and industrial water purposes and the volumes of effluent discharged at the Mary River Mine Site and Milne Port are presented in Table 3.1.

Monitoring Program Results

Water Sampling and Analysis Results

Tables 2.1 – 2.29 provide the analytical results related to the SNP sampling requirements for June 2020. There were a total of nine (9) exceedances of site specific grab sample criteria, and four (4) exceedances of the monthly average.

Two (2) parameter exceedances were associated with effluent discharge from the Mine Site Sewage Treatment Plant (STP), in sample MS-01B collected on June 9, 2020; pH and ammonia were measured at 5.34 pH units and 14.9 mg/L, respectively, exceeding the permitted discharge criteria for pH and ammonia of 6.0 – 9.5 pH units and 4.0 mg/L, respectively. It is suspected that the high pH and ammonia result is due to sampling error or external laboratory error.

At the time the sample was collected, the STP was functioning as designed. Internal water chemistry analysis collected prior to the collection of the sample confirmed the plant was operating within design specifications; internal pH and ammonia measurements of 7.23 pH units and 0.06 mg/L, respectively, were

recorded at 09:00 hours on June 9, 2020. Following receipt of the external laboratory analytical results on June 18, 2020, the accuracy of the water quality meters at STP MS-01B was verified by comparing measured pH and ammonia from an effluent sample to results measured using water quality meters from STP MS-01. On June 23, 2020 an additional effluent sample was collected for external analysis. The external laboratory results for the sample collected on June 23, 2020 indicate pH and ammonia levels of 8.17 pH units and 0.20 mg/L, respectively; confirming the STP is functioning as designed. The analytical results for the June 23, 2020 MS-01B sample are included in Table 2.1 – 2.29.

There were seven (7) exceedances of the site specific grab sample limit of 30 mg/L for Total Suspended Solids (TSS):

- On June 1, 2020, TSS was measured at 38.5 mg/L at Milne Port surface discharge monitoring station MP-C-H.
- On June 5, 2020, TSS was measured at 84.4 mg/L, 72.2 mg/L, 35.0 mg/L, and 327 mg/L at Mine Site surface discharge monitoring stations MS-C-C, MS-C-D, MS-C-E, and MQ-C-B, respectively.
- On June 22, 2020, TSS was measured at 57.0 mg/L at Milne Port surface discharge monitoring station MP-Q1-02.
- On June 30, 2020, TSS was measured at 150 mg/L at Mine Site surface discharge monitoring station MQ-C-B.

The permitted monthly average TSS criteria of 15.0 mg/L was exceeded at four (4) locations as follows: concentrations of TSS at 25.4 mg/L, 22.7 mg/L, 23.1 mg/L, and 100.7 mg/L for locations MP-Q1-02, MS-C-C, MS-C-D, and MQ-C-B, respectively. The elevated grab samples contributed to the exceedances of the monthly average concentrations for TSS, and were the result of circumstances associated with annual freshet conditions which typically occur from mid-May to June 30. In preparation for freshet and in response to sediment concerns and/or exceedances, corrective and mitigative actions were implemented across the Project site as necessary in accordance with Baffinland's Surface Water and Aquatic Ecosystem Management Plan.

Flow and Volume Measurements

Table 3.1 provides a breakdown of volume measurements for June 2020 as required by Part I, Item 9 of the Licence. There were no exceedances of the source specific daily volume withdrawal limits for domestic and industrial use in June.

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

Prepared by:

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

Aaron MacDonell
Environmental Superintendent

Reviewed by:

A handwritten signature in black ink, appearing to read "C. Murray".

Christopher Murray
Environmental & Regulatory Compliance Manager

cc: Justin Hack, Jeremy Fraser (CIRNAC)
Jared Ottenhof, Chris Spencer (QIA)
Tim Sewell, Megan Lorde-Hoyle, Lou Kamermans, Shawn Stevens, Christopher Murray, Connor Devereaux,
Tayfun Eldem, Francois Gaudreau, Brian Marshall, Amanda McKenzie, Allison Parker (Baffinland)

Attachments

Attachments – Monthly Water Sampling Results: Table 1.1, Tables 2.1 – 2.29, Table 3.1

Attachments

Monthly Water Sampling Results

Table 1.1: Monitoring Program Water Sampling Summary for June 2020

Monitoring Program Station	Sampling Date	Lab ID Number	Comment
Milne Port			
MP-01 (Sewage Treatment Facility)	06/09/2020	L2459428-1	Volume reported daily during discharge
MP-01A (Polishing Waste Stabilization Pond)	N/A	N/A	No flow
MP-01B (Sewage Treatment Facility)	06/09/2020	L2459427-1	Volume reported daily during discharge
MP-MRY-2 (Freshwater Intake at Phillips Creek)	N/A	N/A	No water withdrawal
MP-MRY-3 (Freshwater Intake from Km 32 Lake)	N/A	N/A	Withdrawal volume recorded daily
MP-02 (Milne Port Maintenance Shop)	N/A	N/A	No flow
MP-03 (Bulk Fuel Storage Facility Stormwater)	06/27/2020	L2468252-1	Discharge from June 21 - June 30
MP-04 (Landfarm Facility & Snow Containment Facility)	N/A	N/A	No flow
MP-05 Ore Stockpile Sedimentation Pond (East)	N/A	N/A	No flow
MP-06 Ore Stockpile Sedimentation Pond (West)	06/23/2020	L2466563-1	Discharge on June 23
MP-C-A (Downstream of Construction Area)	N/A	N/A	No flow
MP-C-B (Downstream of Construction Area)	06/01/2020 06/08/2020 06/15/2020 06/22/2020 06/29/2020	L2454616-1 L2459408-1 L2461573-1 L2466718-2 L2467735-2	
MP-C-B01 (Downstream of Construction Area)	06/01/2020 06/08/2020 06/15/2020 06/22/2020 06/29/2020	L2454616-2 L2459408-2 L2461573-2 L2466718-3 L2467735-3	
MP-C-B0101 (Field Duplicate of MP-C-B01)	06/08/2020	L2459408-6	
MP-C-C (Downstream of Construction Area)	N/A	N/A	No flow

Monitoring Program Station	Sampling Date	Lab ID Number	Comment
MP-C-D (Downstream of Construction Area)	N/A	N/A	No flow
MP-C-E (Downstream of Construction Area)	N/A	N/A	No flow
MP-C-F (Downstream of Construction Area)	N/A	N/A	No flow
MP-C-G (Downstream of Construction Area)	N/A	N/A	No flow
MP-C-H (Downstream of Construction Area)	06/01/2020 06/08/2020 06/15/2020 06/22/2020 06/29/2020	L2454616-3 L2459408-3 L2461573-3 L2466718-1 L2467735-1	
MP-C-J (Downstream of Construction Area)	06/01/2020 06/08/2020 06/22/2020 06/29/2020	L2454615-1 L2457745-1 L2466718-4 L2467735-4	
MP-C-J01 (Field Duplicate of MP-C-J)	06/01/2020	L2454615-2	
MP-Q1-01 (Downstream of Q1 Quarry)	06/01/2020 06/09/2020 06/15/2020 06/22/2020 06/29/2020	L2454616-4 L2459408-5 L2461573-5 L2466718-7 L2467735-5	
MP-Q1-0101 (Field Duplicate of MP-Q1-01)	06/29/2020	L2467735-6	
MP-Q1-02 (Downstream of Q1 Quarry)	06/15/2020	L2461573-4	
Mary River Mine Site			
MS-01 (Sewage Treatment Facility)	06/09/2020	L2459438-1	Discharge volume reported daily
MS-01A (Mine Site Polishing Waste Stabilization Pond)	N/A	N/A	No flow
MS-01B (Sewage Treatment Facility)	06/09/2020	L2459469-1	Discharge volume reported daily
MS-02 (Mine Site Maintenance Shop)	N/A	N/A	No flow
MS-MRY-1 (Freshwater Intake Camp Lake)	N/A	N/A	Withdrawal volume recorded daily
MS-MRY-04A (Polishing Waste Stabilization Pond)	N/A	N/A	No flow

Monitoring Program Station	Sampling Date	Lab ID Number	Comment
MS-MRY-04B (Polishing Waste Stabilization Pond)	06/16/2020	L2465602-1	Discharge from June 16 to June 20
MS-MRY-04C (Polishing Waste Stabilization Pond)	N/A	N/A	No flow
MS-03 (Milne Site Bulk Fuel Storage Facility Stormwater)	N/A	N/A	No flow
MS-04 (Mine Site Fuel Unloading Station Stormwater)	N/A	N/A	No flow
MS-05 (Mine Site Landfarm Facility)	N/A	N/A	Not constructed
MS-06 (Ore Stockpile Pond Stormwater)	N/A	N/A	No flow
MS-07 (Run of Mine Ore Stockpile Pond Stormwater)	N/A	N/A	Not constructed
MS-08 (Mine Waste Rock Stockpile Pond)	06/28/2020	L2467079-1	Discharge from June 28-30
MS-09 (Waste Rock Stockpile East Pond)	N/A	N/A	No flow
MS-MRY-6 (Exploration Camp Bladder Farm Stormwater)	N/A	N/A	No flow
MS-MRY-09 (Deposit 1 Surface Water Drainage)	06/10/2020 06/18/2020 06/23/2020	L2459150-1 L2463019-1 L2466533-1	
MS-MRY-0901 (Field Duplicate of MS-MRY-09)	06/10/2020	L2459150-2	
MS-MRY-10 (Deposit 1 Surface Water Drainage)	06/18/2020 06/24/2020	L2463019-2 L2467027-1	
MS-MRY-13A (Downstream Non-Hazardous Landfill)	06/05/2020 06/13/2020 06/22/2020 06/30/2020	L2457153-4 L2460443-8 L2466533-10 L2468308-3	
MS-MRY-13A01 (Field Duplicate of MS-MRY-13)	06/05/2020	L2457153-5	
MS-MRY-13B (Downstream Non-Hazardous Landfill)	06/22/2020 06/30/2020	L2466533-11 L2468308-1	
MS-MRY-13B01 (Field Duplicate of MS-MRY-13B)	06/30/2020	L2468308-2	

Monitoring Program Station	Sampling Date	Lab ID Number	Comment
MS-C-A (Downstream of Construction and Borrow Areas)	06/13/2020 06/22/2020 06/30/2020	L2460443-15 L2466533-13 L2468308-10	
MS-C-A01 (Field Duplicate of MS-C-A)	06/22/2020	L2466533-14	
MS-C-B (Downstream of Construction and Borrow Areas)	06/05/2020 06/13/2020 06/22/2020 06/30/2020	L2457153-9 L2460443-14 L2466533-15 L2468308-11	
MS-C-C (Downstream of Construction and Borrow Areas)	06/05/2020 06/13/2020 06/22/2020 06/30/2020	L2457153-8 L2460443-7 L2466533-6 L2468308-9	
MS-C-D (Downstream of Construction and Borrow Areas)	06/05/2020 06/13/2020 06/22/2020 06/30/2020	L2457153-7 L2460443-6 L2466533-8 L2468308-8	
MS-C-E (Downstream of Construction and Borrow Areas)	06/05/2020 06/13/2020 06/22/2020 06/30/2020	L2457153-6 L2460443-4 L2466533-3 L2468308-7	
MS-C-E01 (Field Duplicate of MS-C-E)	06/13/2020	L2460443-5	
MS-C-F (Downstream of Construction and Borrow Areas)	06/13/2020 06/22/2020 06/30/2020	L2460443-12 L2466533-12 L2468308-12	
MS-C-G (Downstream of Construction and Borrow Areas)	06/13/2020 06/22/2020 06/30/2020	L2460443-9 L2466533-9 L2468308-4	
MS-C-H (Downstream of Construction and Borrow Areas)	06/05/2020 06/13/2020 06/22/2020 06/30/2020	L2457153-10 L2460443-10 L2466533-5 L2468308-5	
MS-C-H01 (Field Duplicate of MS-C-H)	06/13/2020 06/22/2020 06/30/2020	L2460443-11 L2466533-4 L2468308-6	
MQ-C-A (Downstream of QMR2 Quarry)	06/05/2020 06/13/2020 06/22/2020 06/30/2020	L2457153-1 L2460443-1 L2466533-2 L2468308-13	
MQ-C-A03 (Travel Blank of MQ-C-A)	06/05/2020	L2457153-2	

Monitoring Program Station	Sampling Date	Lab ID Number	Comment
MQ-C-B (Downstream of QMR2 Quarry)	06/05/2020	L2457153-3	
	06/13/2020	L2460443-3	
	06/22/2020	L2466533-16	
	06/24/2020	L2467027-2	
	06/30/2020	L2468308-15	
MQ-C-D (Downstream of QMR2 Quarry)	06/13/2020	L2460443-2	
	06/22/2020	L2466533-7	
	06/30/2020	L2468308-14	
Steensby Port			
Steensby Exploration Camp is presently inactive.	N/A	N/A	N/A

Table 2.1: Water Quality Results for Water Licence Monitoring Location - MP-01

Analyte	Sample ID			MP-01
	ALS Laboratory Sample ID			L2459428-1
	Sample Date & Time			06/09/2020 13:15
	QA/QC Sample Type			N/A
	Units	LOR	Criteria ¹	
pH	pH units	0.10	6.0 - 9.5	7.75
Total Suspended Solids	mg/L	2.0	120	<2.0
Ammonia, Total (as N)	mg/L	0.010	-	0.110
Total Kjeldahl Nitrogen	mg/L	0.15	-	0.96
Phosphorus, Total	mg/L	0.030	-	9.03
Fecal Coliforms	CFU/100 mL	0	10,000	0
BOD	mg/L	2.0	100	<2.0
Oil and Grease, Total	mg/L	2.0	-	<2.0
	-	-	No Visible Sheen	No Visible Sheen
Toxicity	-	-	Not Acutely Toxic	-

Notes:

Bold highlight indicates result that exceeded the applicable water quality criteria.

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

Table 2.2: Water Quality Results for Water Licence Monitoring Location - MP-01B

Analyte	Sample ID			MP-01B
	ALS Laboratory Sample ID			L2459427-1
	Sample Date & Time			06/09/2020 13:30
	QA/QC Sample Type			N/A
	Units	LOR	Criteria ¹	
pH	pH units	0.10	6.0 - 9.5	7.27
Total Suspended Solids	mg/L	2.0	120	<2.0
Ammonia, Total (as N)	mg/L	0.010	-	0.374
Total Kjeldahl Nitrogen	mg/L	0.15	-	0.89
Phosphorus, Total	mg/L	0.015	-	2.61
Fecal Coliforms	CFU/100 mL	0	10,000	30
BOD	mg/L	2.0	100	4.7
Oil and Grease, Total	mg/L	2.0	-	<2.0
	-	-	No Visible Sheen	No Visible Sheen
Toxicity	-	-	Not Acutely Toxic	-

Notes:

Bold highlight indicates result that exceeded the applicable water quality criteria.

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

Table 2.3: Water Quality Results for Water Licence Monitoring Location - MP-03

Analyte	Sample ID			MP-03
	ALS Laboratory Sample ID			L2468252-1
	Sample Date & Time			06/27/2020 15:35
	QA/QC Sample Type			N/A
	Units	LOR	Criteria ¹	
pH	pH units	0.10	6.0 - 9.5	8.04
Total Suspended Solids	mg/L	1.0	-	<1.0
Total Dissolved Solids	mg/L	20	-	200
Turbidity	NTU	0.10	-	0.91
Ammonia, Total (as N)	mg/L	0.025	-	0.596
Phosphorus, Total	mg/L	0.0020	-	0.0046
Arsenic (As)-Total	mg/L	0.00010	-	0.00029
Copper (Cu)-Total	mg/L	0.00050	-	0.00058
Lead (Pb)-Total	mg/L	0.000050	0.001	0.000056
Nickel (Ni)-Total	mg/L	0.00050	-	<0.00050
Zinc (Zn)-Total	mg/L	0.0030	-	<0.0030
Oil and Grease, Total	mg/L	5.0	15.0	<5.0
	-	-	No Visible Sheen	No Visible Sheen
Benzene	mg/L	0.00050	0.370	<0.00050
Ethylbenzene	mg/L	0.00050	0.090	<0.00050
Methyl t-butyl ether (MTBE)	mg/L	0.00050	-	<0.00050
Styrene	mg/L	0.00050	-	<0.00050
Toluene	mg/L	0.00045	0.002	<0.00045
ortho-Xylene	mg/L	0.00050	-	<0.00050
meta- & para-Xylene	mg/L	0.00050	-	<0.00050
Xylenes	mg/L	0.00075	-	<0.00075
F1 (C6-C10)	mg/L	0.10	-	<0.10
F1-BTEX	mg/L	0.10	-	<0.10
F2 (C10-C16)	mg/L	0.30	-	<0.30
F3 (C16-C34)	mg/L	0.30	-	<0.30
F4 (C34-C50)	mg/L	0.30	-	<0.30

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

¹Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 8: Effluent Quality Discharge Limits for the Bulk Fuel Storage Facilities.

Table 2.4: Water Quality Results for Water Licence Monitoring Location - MP-06

Analyte	Sample ID			MP-06
	ALS Laboratory Sample ID			L2466563-1
	Sample Date & Time			06/23/2020 13:50
	QA/QC Sample Type			N/A
	Units	LOR	Criteria ¹	
Hardness (as CaCO ₃)	mg/L	0.50	-	465
pH	pH units	0.10	6.0 - 9.5	8.00
Total Suspended Solids	mg/L	2.0	Grab 30, Average 15	<2.0
Total Dissolved Solids	mg/L	20	-	720
Turbidity	NTU	0.10	-	1.65
Alkalinity, Total (as CaCO ₃)	mg/L	10	-	76
Ammonia, Total (as N)	mg/L	0.020	-	0.367
Chloride (Cl)	mg/L	2.5	-	140
Fluoride (F)	mg/L	0.10	-	0.14
Nitrate (as N)	mg/L	0.10	-	2.91
Total Kjeldahl Nitrogen	mg/L	0.15	-	1.03
Phosphorus, Total	mg/L	0.0030	-	0.0049
Sulfate (SO ₄)	mg/L	1.5	-	318
Dissolved Organic Carbon	mg/L	0.50	-	3.84
Total Organic Carbon	mg/L	0.50	-	4.35
Aluminum (Al)-Total	mg/L	0.0050	-	0.0192
Arsenic (As)-Total	mg/L	0.00010	0.50	0.00018
Cadmium (Cd)-Total	mg/L	0.0000050	-	0.0000082
Calcium (Ca)-Total	mg/L	0.50	-	59.1
Copper (Cu)-Total	mg/L	0.0010	0.30	0.0010
Iron (Fe)-Total	mg/L	0.010	-	0.021
Lead (Pb)-Total	mg/L	0.000050	0.20	<0.000050
Magnesium (Mg)-Total	mg/L	0.050	-	76.6
Manganese (Mn)-Total	mg/L	0.00050	-	1.22
Mercury (Hg)-Total	mg/L	0.0000050	-	<0.0000050
Molybdenum (Mo)-Total	mg/L	0.000050	-	0.00433
Nickel (Ni)-Total	mg/L	0.00050	0.50	0.00705
Potassium (K)-Total	mg/L	0.050	-	8.19
Selenium (Se)-Total	mg/L	0.000050	-	0.000607
Sodium (Na)-Total	mg/L	0.050	-	57.1
Thallium (Tl)-Total	mg/L	0.000010	-	0.000021
Uranium (U)-Total	mg/L	0.000010	-	0.0372
Zinc (Zn)-Total	mg/L	0.0030	0.50	0.0245
Aluminum (Al)-Dissolved	mg/L	0.0050	-	0.0068
Arsenic (As)-Dissolved	mg/L	0.00010	-	0.00017
Cadmium (Cd)-Dissolved	mg/L	0.000010	-	0.000012
Calcium (Ca)-Dissolved	mg/L	0.050	-	59.0
Copper (Cu)-Dissolved	mg/L	0.00020	-	0.00079
Iron (Fe)-Dissolved	mg/L	0.010	-	<0.010
Lead (Pb)-Dissolved	mg/L	0.000050	-	<0.000050
Magnesium (Mg)-Dissolved	mg/L	0.050	-	77.0
Manganese (Mn)-Dissolved	mg/L	0.00050	-	1.21
Mercury (Hg)-Dissolved	mg/L	0.0000050	-	0.0000058
Molybdenum (Mo)-Dissolved	mg/L	0.000050	-	0.00431
Nickel (Ni)-Dissolved	mg/L	0.00050	-	0.00673
Potassium (K)-Dissolved	mg/L	0.050	-	8.60
Selenium (Se)-Dissolved	mg/L	0.000050	-	0.000714
Sodium (Na)-Dissolved	mg/L	0.50	-	58.3
Thallium (Tl)-Dissolved	mg/L	0.000010	-	0.000021
Uranium (U)-Dissolved	mg/L	0.000010	-	0.0371
Zinc (Zn)-Dissolved	mg/L	0.0010	-	0.0029
Oil and Grease, Total	mg/L	2.0	-	-
	-	-	No Visible Sheen	No Visible Sheen
Toxicity	-	-	Not Acutely Toxic	Not Acutely Toxic

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

¹Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10: Effluent Quality Discharge Limits for Open Pit, Stockpiles, and Sedimentation Ponds

Table 2.5: Water Quality Results for Water Licence Monitoring Location - MP-C-B

Analyte	Sample ID			MP-C-B	MP-C-B	MP-C-B	MP-C-B	MP-C-B
	ALS Laboratory Sample ID			L2454616-1	L2459408-1	L2461573-1	L2466718-2	L2467735-2
	Sample Date & Time			06/01/2020 09:40	06/08/2020 09:40	06/15/2020 15:10	06/22/2020 09:55	06/29/2020 10:50
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A
	Units	LOR	Criteria ¹					
Conductivity	umhos/cm	3.0	-	-	476	-	-	-
pH	pH units	0.10	6.0 - 9.5	8.07	8.16	8.21	8.21	8.30
Total Suspended Solids	mg/L	2.0	Grab 30, Average 15	7.9	3.3	3.7	2.9	2.0
Total Dissolved Solids	mg/L	10	-	200	266	190	242	275
Turbidity	NTU	0.10	-	19.8	6.97	10.9	11.9	4.63
Ammonia, Total (as N)	mg/L	0.010	-	-	0.192	-	-	-
Nitrate (as N)	mg/L	0.020	-	-	1.01	-	-	-
Oil and Grease, Total	mg/L	2.0	-	-	<2.0	-	-	-
	-	-	No Visible Sheen	-	No Visible Sheen	-	-	-

Notes:

Bold highlight indicates result that exceeded the applicable water quality criteria.

¹Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project.

Table 2.6: Water Quality Results for Water Licence Monitoring Location - MP-C-B01

Analyte	Sample ID			MP-C-B01	MP-C-B01	MP-C-B0101	MP-C-B01	MP-C-B01	MP-C-B01
	ALS Laboratory Sample ID			L2454616-2	L2459408-2	L2459408-6	L2461573-2	L2466718-3	L2467735-3
	Sample Date & Time			06/01/2020 10:10	06/08/2020 09:55	06/08/2020 0:9:55	06/15/2020 15:25	06/22/2020 10:05	06/29/2020 11:00
	QA/QC Sample Type			N/A	N/A	Field Duplicate	N/A	N/A	N/A
	Units	LOR	Criteria ¹						
Conductivity	umhos/cm	3.0	-	-	707	705	-	-	-
pH	pH units	0.10	6.0 - 9.5	8.08	8.16	8.17	8.23	8.25	8.28
Total Suspended Solids	mg/L	2.0	Grab 30, Average 15	4.1	2.3	3.3	2.9	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	294	409	402	260	359	339
Turbidity	NTU	0.10	-	7.76	4.67	4.60	3.71	0.86	1.08
Ammonia, Total (as N)	mg/L	0.010	-	-	0.061	0.052	-	-	-
Nitrate (as N)	mg/L	0.020	-	-	1.18	1.20	-	-	-
Oil and Grease, Total	mg/L	2.0	-	-	<2.0	<2.0	-	-	-
	-	-	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	-	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
¹Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project.

Table 2.7: Water Quality Results for Water Licence Monitoring Location - MP-C-H

Analyte	Sample ID			MP-C-H	MP-C-H	MP-C-H	MP-C-H	MP-C-H
	ALS Laboratory Sample ID			L2454616-3	L2459408-3	L2461573-3	L2466718-1	L2467735-1
	Sample Date & Time			06/01/2020 08:35	06/08/2020 08:40	06/15/2020 14:45	06/22/2020 09:30	06/29/2020 10:25
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A
	Units	LOR	Criteria ¹					
Conductivity	umhos/cm	3.0	-	-	314	-	-	-
pH	pH units	0.10	6.0 - 9.5	8.01	7.95	7.94	8.05	8.17
Total Suspended Solids	mg/L	2.0	Grab 30, Average 15	38.5	4.8	<2.0	<2.0	2.6
Total Dissolved Solids	mg/L	10	-	158	164	66	91	95
Turbidity	NTU	0.10	-	76.7	9.37	1.15	0.61	2.83
Ammonia, Total (as N)	mg/L	0.010	-	-	0.083	-	-	-
Nitrate (as N)	mg/L	0.020	-	-	0.582	-	-	-
Oil and Grease, Total	mg/L	2.0	-	-	<2.0	-	-	-
	-	-	No Visible Sheen	-	No Visible Sheen	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

¹Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project.

Table 2.8: Water Quality Results for Water Licence Monitoring Location - MP-C-J

Analyte	Sample ID			MP-C-J	MP-C-J01	MP-C-J	MP-C-J	MP-C-J
	ALS Laboratory Sample ID			L2454615-1	L2454615-2	L2457745-1	L2466718-4	L2467735-4
	Sample Date & Time			06/01/2020 10:25	06/01/2020 10:25	06/08/2020 13:15	06/22/2020 10:20	06/29/2020 11:05
	QA/QC Sample Type			N/A	Field Duplicate	N/A	N/A	N/A
	Units	LOR	Criteria ¹					
Conductivity	umhos/cm	3.0	-	-	-	-	403	-
pH	pH units	0.10	6.0 - 9.5	7.98	7.97	8.15	8.36	8.28
Total Suspended Solids	mg/L	2.0	Grab 30, Average 15	4.2	4.2	2.9	<2.0	3.2
Total Dissolved Solids	mg/L	10	-	200	190	247	215	209
Turbidity	NTU	0.10	-	5.88	5.89	2.49	0.53	0.54
Ammonia, Total (as N)	mg/L	0.010	-	-	-	-	<0.010	-
Nitrate (as N)	mg/L	0.020	-	-	-	-	0.030	-
Oil and Grease, Total	mg/L	2.0	-	-	-	-	<2.0	-
	-	-	No Visible Sheen	-	-	-	No Visible Sheen	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
¹Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project.

Table 2.9: Water Quality Results for Water Licence Monitoring Location - MP-Q1-01

Analyte	Sample ID			MP-Q1-01	MP-Q1-01	MP-Q1-01	MP-Q1-01	MP-Q1-01	MP-Q1-0101
	ALS Laboratory Sample ID			L2454616-4	L2459408-5	L2461573-5	L2466718-7	L2467735-5	L2467735-6
	Sample Date & Time			06/01/2020 11:30	06/09/2020 9:15	06/15/2020 17:00	06/22/2020 12:10	06/29/2020 11:50	06/29/2020 11:50
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	Field Duplicate
	Units	LOR	Criteria ¹						
Conductivity	umhos/cm	3.0	-	-	147	-	-	-	-
pH	pH units	0.10	6.0 - 9.5	7.97	7.97	7.96	8.05	7.91	7.95
Total Suspended Solids	mg/L	2.0	Grab 30, Average 15	16.7	13.0	15.8	<2.0	3.3	5.1
Total Dissolved Solids	mg/L	10	-	122	99	72	119	107	107
Turbidity	NTU	0.10	-	37.9	39.1	15.2	2.87	2.92	2.78
Ammonia, Total (as N)	mg/L	0.010	-	-	0.162	-	-	-	-
Nitrate (as N)	mg/L	0.020	-	-	0.596	-	-	-	-
Oil and Grease, Total	mg/L	2.0	-	-	<2.0	-	-	-	-
	-	-	No Visible Sheen	-	No visible sheen	-	-	-	-
Acute Toxicity	-	-	Not Acutely Toxic	-	Not Acutely Toxic	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

¹Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project.

Table 2.10: Water Quality Results for Water Licence Monitoring Location - MP-Q1-02

Analyte	Sample ID			MP-Q1-02	MP-Q1-02	MP-Q1-02	MP-Q1-02
	ALS Laboratory Sample ID			L2459408-4	L2461573-4	L2466718-9	L2467735-7
	Sample Date & Time			06/09/2020 8:45	06/15/2020 17:20	06/22/2020 11:40	06/29/2020 13:40
	QA/QC Sample Type			N/A	N/A	N/A	N/A
	Units	LOR	Criteria ¹				
Conductivity	umhos/cm	3.0	-	191	-	-	-
pH	pH units	0.10	6.0 - 9.5	7.99	8.04	8.11	8.04
Total Suspended Solids ²	mg/L	2.0	Grab 30, Average 15	16.7	19.5	57.0	8.3
Total Dissolved Solids	mg/L	10	-	126	154	290	248
Turbidity	NTU	0.10	-	50.7	25.1	99.8	14.6
Ammonia, Total (as N)	mg/L	0.010	-	0.179	-	-	-
Nitrate (as N)	mg/L	0.020	-	1.54	-	-	-
Oil and Grease, Total	mg/L	2.0	-	<2.0	-	-	-
	-	-	No Visible Sheen	No Visible Sheen	-	-	-
Acute Toxicity	-	-	Not acutely toxic	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

¹Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project.

² Monthly average TSS concentration of 25.4 mg/L.

Table 2.11: Water Quality Results for Water Licence Monitoring Location - MS-01

Analyte	Sample ID			MS-01
	ALS Laboratory Sample ID			L2459438-1
	Sample Date & Time			06/09/2020 15:00
	QA/QC Sample Type			N/A
	Units	LOR	Criteria ¹	
pH	pH units	0.10	6.0 - 9.5	7.65
Total Suspended Solids	mg/L	2.0	35	2.8
Ammonia, Total (as N)	mg/L	0.010	4.0	0.135
Total Kjeldahl Nitrogen	mg/L	0.15	-	0.34
Phosphorus, Total	mg/L	0.0060	4.0	1.43
Fecal Coliforms	CFU/100 mL	0	1000	0
BOD	mg/L	2.0	30	<2.0
Oil and Grease, Total	mg/L	2.0	-	<2.0
	-	-	No Visible Sheen	No Visible Sheen
Toxicity	-	-	Not Acutely Toxic	-

Notes:

Bold highlight indicates result that exceeded the applicable water quality criteria.

¹Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 4: Effluent Quality Discharge Limits for Sewage Treatment Facilities to Freshwater Receiving Environment.

Table 2.12: Water Quality Results for Water Licence Monitoring Location - MS-01B

Analyte	Sample ID			MS-01B	MS-01B
	ALS Laboratory Sample ID			L2459469-1	L2466572-1
	Sample Date & Time			06/09/2020 14:50	06/23/2020 14:50
	QA/QC Sample Type			N/A	N/A
	Units	LOR	Criteria ¹		
pH	pH units	0.10	6.0 - 9.5	5.34	8.17
Total Suspended Solids	mg/L	2.0	35	<2.0	<2.0
Ammonia, Total (as N)	mg/L	1.0	4.0	14.9	0.20
Total Kjeldahl Nitrogen	mg/L	0.30	-	13.4	0.20
Phosphorus, Total	mg/L	0.0030	4.0	0.184	1.59
Fecal Coliforms	CFU/100 mL	0	1000	0	0
BOD	mg/L	2.0	30	<2.0	<2.0
Oil and Grease, Total	mg/L	2.0	-	<2.0	<2.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen
Toxicity	-	-	Not Acutely Toxic	-	-

Notes:

Bold highlight indicates result that exceeded the applicable water quality criteria.

1 Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 4: Effluent Quality Discharge Limits for Sewage Treatment Facilities to Freshwater Receiving Environment.

Table 2.13: Water Quality Results for Water Licence Monitoring Location - MS-MRY-04B

Analyte	Sample ID			MS-MRY-04B
	ALS Laboratory Sample ID			L2465602-1 ²
	Sample Date & Time			06/16/2020 15:45
	QA/QC Sample Type			N/A
	Units	LOR	Criteria ¹	
pH	pH units	0.10	6.0 - 9.5	7.14
Total Suspended Solids	mg/L	2.0	35	20.5
Total Dissolved Solids	mg/L	10	-	103
Turbidity	NTU	0.10	-	8.40
Ammonia, Total (as N)	mg/L	0.025	4.0	1.74
Total Kjeldahl Nitrogen	mg/L	-	-	-
Phosphorus, Total	mg/L	0.020	-	0.444
Fecal Coliforms	CFU/100 mL	-	1000	-
BOD	mg/L	-	30	-
Oil and Grease, Total	mg/L	5.0	-	<5.0
	-	-	No Visible Sheen	No Visible Sheen
Toxicity	-	-	Not Acutely Toxic	-

Notes:

Bold highlight indicates result that exceeded the applicable water quality criteria.

¹Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 4: Effluent Quality Discharge Limits for Sewage Treatment Facilities to Freshwater Receiving Environment.

² Laboratory analysis for Toxicity, Total Kjeldahl Nitrogen, Fecal Coliforms, and BOD was requested as per Water Licence Schedule I Group 2 and Group 3 Monitoring Group Parameters but was not conducted as part of external laboratory analysis. Sample shipment was delayed in reaching the laboratory due to logistical weather issues with the flight which resulted in these samples exceeding laboratory hold times.

Table 2.14: Water Quality Results for Water Licence Monitoring Location - MS-08

Analyte	Sample ID			MS-08	MS-08
	ALS Laboratory Sample ID			L2467079-1	L2468306-1
	Sample Date & Time			06/28/20 10:15	06/30/20 16:35
	QA/QC Sample Type			N/A	N/A
	Units	LOR	Criteria ¹		
Conductivity	umhos/cm	2.0	-	473	-
Hardness (as CaCO3)	mg/L	0.50	-	225	-
pH	pH units	0.10	6.0 - 9.5	7.16	7.20
Total Suspended Solids	mg/L	2.0	15.0	3.9	<2.0
Total Dissolved Solids	mg/L	10	-	343	348
Turbidity	NTU	0.10	-	4.67	2.96
Acidity (as CaCO3)	mg/L	2.0	-	2.9	-
Alkalinity, Total (as CaCO3)	mg/L	1.0	-	10.6	-
Ammonia, Total (as N)	mg/L	0.025	-	0.609	-
Chloride (Cl)	mg/L	0.50	-	3.54	-
Fluoride (F)	mg/L	0.020	-	0.053	-
Nitrate (as N)	mg/L	0.0050	-	3.85	-
Total Kjeldahl Nitrogen	mg/L	0.050	-	0.965	-
Phosphorus, Total	mg/L	0.0020	-	<0.0020	-
Sulfate (SO4)	mg/L	0.30	-	200	-
Dissolved Organic Carbon	mg/L	0.50	-	1.59	-
Total Organic Carbon	mg/L	0.50	-	1.27	-
Aluminum (Al)-Total	mg/L	0.0030	-	0.0853	-
Antimony (Sb)-Total	mg/L	0.00010	-	<0.00010	-
Arsenic (As)-Total	mg/L	0.00010	0.50	<0.00010	-
Barium (Ba)-Total	mg/L	0.00010	-	0.00934	-
Beryllium (Be)-Total	mg/L	0.00010	-	<0.00010	-
Bismuth (Bi)-Total	mg/L	0.000050	-	<0.000050	-
Boron (B)-Total	mg/L	0.010	-	0.012	-
Cadmium (Cd)-Total	mg/L	0.0000050	-	0.0000375	-
Calcium (Ca)-Total	mg/L	0.050	-	18.1	-
Cesium (Cs)-Total	mg/L	0.000010	-	0.000013	-
Chromium (Cr)-Total	mg/L	0.00010	-	0.00016	-
Cobalt (Co)-Total	mg/L	0.00010	-	0.0149	-
Copper (Cu)-Total	mg/L	0.00050	0.30	0.00151	-
Iron (Fe)-Total	mg/L	0.010	-	0.178	-
Lead (Pb)-Total	mg/L	0.000050	0.20	0.000151	-
Lithium (Li)-Total	mg/L	0.0010	-	0.006	-
Magnesium (Mg)-Total	mg/L	0.0050	-	45.7	-
Manganese (Mn)-Total	mg/L	0.00010	-	0.962	-
Mercury (Hg)-Total	mg/L	0.0000050	-	<0.0000050	-
Molybdenum (Mo)-Total	mg/L	0.000050	-	0.00129	-
Nickel (Ni)-Total	mg/L	0.00050	0.50	0.0203	-
Phosphorus (P)-Total	mg/L	0.050	-	<0.050	-
Potassium (K)-Total	mg/L	0.050	-	2.98	-
Rubidium (Rb)-Total	mg/L	0.00020	-	0.00257	-
Selenium (Se)-Total	mg/L	0.000050	-	0.000926	-
Silicon (Si)-Total	mg/L	0.10	-	0.79	-
Silver (Ag)-Total	mg/L	0.000010	-	<0.000010	-
Sodium (Na)-Total	mg/L	0.050	-	1.39	-
Strontium (Sr)-Total	mg/L	0.00020	-	0.0354	-
Sulfur (S)-Total	mg/L	0.50	-	74.5	-
Tellurium (Te)-Total	mg/L	0.00020	-	<0.00020	-
Thallium (Tl)-Total	mg/L	0.000010	-	0.000011	-
Thorium (Th)-Total	mg/L	0.00010	-	<0.00010	-
Tin (Sn)-Total	mg/L	0.00010	-	<0.00010	-
Titanium (Ti)-Total	mg/L	0.00030	-	0.00386	-
Tungsten (W)-Total	mg/L	0.00010	-	<0.00010	-
Uranium (U)-Total	mg/L	0.000010	-	0.000525	-
Vanadium (V)-Total	mg/L	0.00050	-	<0.00050	-
Zinc (Zn)-Total	mg/L	0.0030	0.50	<0.0030	-
Zirconium (Zr)-Total	mg/L	0.00020	-	<0.00020	-
Aluminum (Al)-Dissolved	mg/L	0.0010	-	0.0036	-
Antimony (Sb)-Dissolved	mg/L	0.00010	-	<0.00010	-
Arsenic (As)-Dissolved	mg/L	0.00010	-	<0.00010	-
Barium (Ba)-Dissolved	mg/L	0.00010	-	0.00833	-
Beryllium (Be)-Dissolved	mg/L	0.00010	-	<0.00010	-
Bismuth (Bi)-Dissolved	mg/L	0.00005	-	<0.000050	-
Boron (B)-Dissolved	mg/L	0.010	-	0.012	-
Cadmium (Cd)-Dissolved	mg/L	0.0000050	-	0.0000337	-
Calcium (Ca)-Dissolved	mg/L	0.050	-	18.9	-
Cesium (Cs)-Dissolved	mg/L	0.000010	-	<0.000010	-

Table 2.14: Water Quality Results for Water Licence Monitoring Location - MS-08

Analyte	Sample ID			MS-08	MS-08
	ALS Laboratory Sample ID			L2467079-1	L2468306-1
	Sample Date & Time			06/28/20 10:15	06/30/20 16:35
	QA/QC Sample Type			N/A	N/A
	Units	LOR	Criteria ¹		
Chromium (Cr)-Dissolved	mg/L	0.00010	-	<0.00010	-
Cobalt (Co)-Dissolved	mg/L	0.00010	-	0.0141	-
Copper (Cu)-Dissolved	mg/L	0.00020	-	0.00106	-
Iron (Fe)-Dissolved	mg/L	0.010	-	<0.010	-
Lead (Pb)-Dissolved	mg/L	0.000050	-	<0.000050	-
Lithium (Li)-Dissolved	mg/L	0.0010	-	0.0059	-
Magnesium (Mg)-Dissolved	mg/L	0.0050	-	43.3	-
Manganese (Mn)-Dissolved	mg/L	0.00010	-	0.907	-
Mercury (Hg)-Dissolved	mg/L	0.0000050	-	<0.0000050	-
Molybdenum (Mo)-Dissolved	mg/L	0.000050	-	0.00121	-
Nickel (Ni)-Dissolved	mg/L	0.00050	-	0.0190	-
Phosphorus (P)-Dissolved	mg/L	0.050	-	<0.050	-
Potassium (K)-Dissolved	mg/L	0.050	-	2.78	-
Rubidium (Rb)-Dissolved	mg/L	0.00020	-	0.00221	-
Selenium (Se)-Dissolved	mg/L	0.000050	-	0.000863	-
Silicon (Si)-Dissolved	mg/L	0.050	-	0.641	-
Silver (Ag)-Dissolved	mg/L	0.000010	-	<0.000010	-
Sodium (Na)-Dissolved	mg/L	0.050	-	1.41	-
Strontium (Sr)-Dissolved	mg/L	0.00020	-	0.034	-
Sulfur (S)-Dissolved	mg/L	0.50	-	68.7	-
Tellurium (Te)-Dissolved	mg/L	0.00020	-	<0.00020	-
Thallium (Tl)-Dissolved	mg/L	0.000010	-	<0.000010	-
Thorium (Th)-Dissolved	mg/L	0.00010	-	<0.00010	-
Tin (Sn)-Dissolved	mg/L	0.00010	-	<0.00010	-
Titanium (Ti)-Dissolved	mg/L	0.00030	-	<0.00030	-
Tungsten (W)-Dissolved	mg/L	0.00010	-	<0.00010	-
Uranium (U)-Dissolved	mg/L	0.000010	-	0.000391	-
Vanadium (V)-Dissolved	mg/L	0.00050	-	<0.00050	-
Zinc (Zn)-Dissolved	mg/L	0.0010	-	0.0022	-
Zirconium (Zr)-Dissolved	mg/L	0.00020	-	<0.00020	-
Ra-226	Bq/L	0.0070	-	<0.0070	-
Oil and Grease, Total	mg/L	2.0	-	-	-
	-	-	No Visible Sheen	No Visible Sheen	-
Acute Toxicity	-	-	Not Acutely Toxic	No Acutely Toxic	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
¹Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10: Effluent Quality Discharge Limits for Open Pit, Stockpiles and Sedimentation Ponds

Table 2.15: Water Quality Results for Water Licence Monitoring Location - MS-MRY-09

Analyte	Sample ID			MS-MRY-09	MS-MRY-0901
	ALS Laboratory Sample ID			L2459150-1	L2459150-2
	Sample Date & Time			06/10/2020 09:30	06/10/2020 09:30
	QA/QC Sample Type			N/A	N/A
	Units	LOR	Criteria ¹		
Hardness	mg/L	0.50	-	10.4	10.4
pH	pH units	0.10	6.0 - 9.5	7.25	7.10
Total Suspended Solids	mg/L	2.0	15.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	18	<10
Turbidity	NTU	0.10	-	5.40	5.32
Alkalinity, Total (as CaCO ₃)	mg/L	10	-	<10	<10
Ammonia, Total (as N)	mg/L	0.010	-	<0.010	<0.010
Chloride (Cl)	mg/L	0.50	-	0.67	0.67
Fluoride (F)	mg/L	0.020	-	<0.020	<0.020
Nitrate (as N)	mg/L	0.020	-	0.083	0.055
Total Kjeldahl Nitrogen	mg/L	0.15	-	0.22	<0.15
Phosphorus, Total	mg/L	0.0030	-	<0.0030	<0.0030
Sulfate (SO ₄)	mg/L	0.30	-	0.99	1.00
Dissolved Organic Carbon	mg/L	0.50	-	2.07	2.44
Total Organic Carbon	mg/L	0.50	-	3.64	3.79
Aluminum (Al)-Total	mg/L	0.0050	-	0.0606	0.0649
Arsenic (As)-Total	mg/L	0.00010	0.50	<0.00010	<0.00010
Cadmium (Cd)-Total	mg/L	0.0000050	-	0.0000071	0.0000067
Calcium (Ca)-Total	mg/L	0.50	-	1.92	1.94
Copper (Cu)-Total	mg/L	0.0010	0.30	0.0012	0.0011
Iron (Fe)-Total	mg/L	0.010	-	0.096	0.108
Lead (Pb)-Total	mg/L	0.000050	0.20	0.000081	0.000076
Magnesium (Mg)-Total	mg/L	0.050	-	1.33	1.33
Manganese (Mn)-Total	mg/L	0.00050	-	0.00317	0.00316
Mercury (Hg)-Total	mg/L	0.0000050	-	0.0000071	<0.0000050
Molybdenum (Mo)-Total	mg/L	0.000050	-	0.000116	0.000116
Nickel (Ni)-Total	mg/L	0.00050	0.50	0.00054	<0.00050
Potassium (K)-Total	mg/L	0.050	-	0.582	0.572
Selenium (Se)-Total	mg/L	0.000050	-	<0.000050	<0.000050
Sodium (Na)-Total	mg/L	0.050	-	0.293	0.289
Thallium (Tl)-Total	mg/L	0.000010	-	<0.000010	<0.000010
Uranium (U)-Total	mg/L	0.000010	-	0.000155	0.000158
Zinc (Zn)-Total	mg/L	0.0030	0.50	<0.0030	<0.0030
Aluminum (Al)-Dissolved	mg/L	0.0050	-	0.0172	0.0199
Arsenic (As)-Dissolved	mg/L	0.00010	-	<0.00010	<0.00010
Cadmium (Cd)-Dissolved	mg/L	0.000010	-	<0.000010	<0.000010
Calcium (Ca)-Dissolved	mg/L	0.050	-	2.03	2.01
Copper (Cu)-Dissolved	mg/L	0.00020	-	0.00103	0.00098
Iron (Fe)-Dissolved	mg/L	0.010	-	0.020	0.024
Lead (Pb)-Dissolved	mg/L	0.000050	-	<0.000050	<0.000050
Magnesium (Mg)-Dissolved	mg/L	0.050	-	1.30	1.30
Manganese (Mn)-Dissolved	mg/L	0.00050	-	0.00177	0.00182
Mercury (Hg)-Dissolved	mg/L	0.0000050	-	<0.0000050	<0.0000050
Molybdenum (Mo)-Dissolved	mg/L	0.000050	-	0.000115	0.000115
Nickel (Ni)-Dissolved	mg/L	0.00050	-	<0.00050	<0.00050
Potassium (K)-Dissolved	mg/L	0.050	-	0.564	0.556
Selenium (Se)-Dissolved	mg/L	0.000050	-	<0.000050	<0.000050
Sodium (Na)-Dissolved	mg/L	0.50	-	<0.50	<0.50
Thallium (Tl)-Dissolved	mg/L	0.000010	-	<0.000010	<0.000010
Uranium (U)-Dissolved	mg/L	0.000010	-	0.000117	0.000114
Zinc (Zn)-Dissolved	mg/L	0.0010	-	0.0024	<0.0010
Oil and Grease, Total	mg/L	2.0	-	-	-
	-	-	No Visible Sheen	No Visible Sheen	-
Acute Toxicity	-	-	Not Acutely Toxic	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

¹Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10: Effluent Quality Discharge Limits for Open Pit, Stockpiles, and Sedimentation Ponds

Table 2.15: Water Quality Results for Water Licence Monitoring Location - MS-MRY-09

Analyte	Sample ID			MS-MRY-09	MS-MRY-09
	ALS Laboratory Sample ID			L2463019-1	L2466533-1
	Sample Date & Time			06/18/2020 10:10	06/23/2020 13:35
	QA/QC Sample Type			N/A	N/A
	Units	LOR	Criteria ¹		
Hardness	mg/L	0.50	-	-	39.3
pH	pH units	0.10	6.0 - 9.5	7.45	7.67
Total Suspended Solids	mg/L	2.0	15.0	2.5	<2.0
Total Dissolved Solids	mg/L	10	-	66	34
Turbidity	NTU	0.10	-	1.38	1.31
Alkalinity, Total (as CaCO ₃)	mg/L	10	-	-	37
Ammonia, Total (as N)	mg/L	0.010	-	-	<0.010
Chloride (Cl)	mg/L	0.50	-	-	1.18
Fluoride (F)	mg/L	0.020	-	-	<0.020
Nitrate (as N)	mg/L	0.020	-	-	0.035
Total Kjeldahl Nitrogen	mg/L	0.15	-	-	0.32
Phosphorus, Total	mg/L	0.0030	-	-	0.0045
Sulfate (SO ₄)	mg/L	0.30	-	-	2.01
Dissolved Organic Carbon	mg/L	0.50	-	-	2.60
Total Organic Carbon	mg/L	0.50	-	-	2.53
Aluminum (Al)-Total	mg/L	0.0050	-	-	0.0586
Arsenic (As)-Total	mg/L	0.00010	0.50	-	<0.00010
Cadmium (Cd)-Total	mg/L	0.0000050	-	-	0.0000065
Calcium (Ca)-Total	mg/L	0.50	-	-	7.99
Copper (Cu)-Total	mg/L	0.0010	0.30	-	0.0016
Iron (Fe)-Total	mg/L	0.010	-	-	0.074
Lead (Pb)-Total	mg/L	0.000050	0.20	-	0.000086
Magnesium (Mg)-Total	mg/L	0.050	-	-	4.88
Manganese (Mn)-Total	mg/L	0.00050	-	-	0.00157
Mercury (Hg)-Total	mg/L	0.0000050	-	-	<0.0000050
Molybdenum (Mo)-Total	mg/L	0.000050	-	-	0.000285
Nickel (Ni)-Total	mg/L	0.00050	0.50	-	<0.00050
Potassium (K)-Total	mg/L	0.050	-	-	1.02
Selenium (Se)-Total	mg/L	0.000050	-	-	<0.000050
Sodium (Na)-Total	mg/L	0.050	-	-	0.408
Thallium (Tl)-Total	mg/L	0.000010	-	-	0.000015
Uranium (U)-Total	mg/L	0.000010	-	-	0.000649
Zinc (Zn)-Total	mg/L	0.0030	0.50	-	<0.0030
Aluminum (Al)-Dissolved	mg/L	0.0050	-	-	0.0086
Arsenic (As)-Dissolved	mg/L	0.00010	-	-	<0.00010
Cadmium (Cd)-Dissolved	mg/L	0.000010	-	-	<0.000010
Calcium (Ca)-Dissolved	mg/L	0.050	-	-	7.64
Copper (Cu)-Dissolved	mg/L	0.00020	-	-	0.00144
Iron (Fe)-Dissolved	mg/L	0.010	-	-	<0.010
Lead (Pb)-Dissolved	mg/L	0.000050	-	-	<0.000050
Magnesium (Mg)-Dissolved	mg/L	0.050	-	-	4.92
Manganese (Mn)-Dissolved	mg/L	0.00050	-	-	<0.00050
Mercury (Hg)-Dissolved	mg/L	0.0000050	-	-	<0.0000050
Molybdenum (Mo)-Dissolved	mg/L	0.000050	-	-	0.000268
Nickel (Ni)-Dissolved	mg/L	0.00050	-	-	<0.00050
Potassium (K)-Dissolved	mg/L	0.050	-	-	0.994
Selenium (Se)-Dissolved	mg/L	0.000050	-	-	<0.000050
Sodium (Na)-Dissolved	mg/L	0.50	-	-	<0.50
Thallium (Tl)-Dissolved	mg/L	0.000010	-	-	<0.000010
Uranium (U)-Dissolved	mg/L	0.000010	-	-	0.000553
Zinc (Zn)-Dissolved	mg/L	0.0010	-	-	<0.0010
Oil and Grease, Total	mg/L	2.0	-	-	-
	-	-	No Visible Sheen	-	-
Acute Toxicity	-	-	Not Acutely Toxic	-	Not Acutely Toxic

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

¹Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10: Effluent Quality Discharge Limits for Open Pit, Stockpiles, and Sedimentation Ponds

Table 2.16: Water Quality Results for Water Licence Monitoring Location - MS-MRY-10

Analyte	Sample ID			MS-MRY-10	MS-MRY-10
	ALS Laboratory Sample ID			L2463019-2	L2467027-1
	Sample Date & Time			06/18/2020 15:10	06/24/2020 10:55
	QA/QC Sample Type			N/A	N/A
	Units	LOR	Criteria ¹		
Hardness	mg/L	0.50	-	-	81.2
pH	pH units	0.10	6.0 - 9.5	7.66	7.87
Total Suspended Solids	mg/L	2.0	15.0	4.9	<2.0
Total Dissolved Solids	mg/L	13	-	57	93
Turbidity	NTU	0.10	-	4.25	0.27
Alkalinity, Total (as CaCO3)	mg/L	10	-	-	73
Ammonia, Total (as N)	mg/L	0.010	-	-	<0.010
Chloride (Cl)	mg/L	0.50	-	-	2.95
Fluoride (F)	mg/L	0.020	-	-	0.026
Nitrate (as N)	mg/L	0.020	-	-	0.068
Total Kjeldahl Nitrogen	mg/L	0.15	-	-	<0.15
Phosphorus, Total	mg/L	0.0030	-	-	0.0063
Sulfate (SO4)	mg/L	0.30	-	-	4.17
Dissolved Organic Carbon	mg/L	0.50	-	-	1.70
Total Organic Carbon	mg/L	0.50	-	-	3.20
Aluminum (Al)-Total	mg/L	0.0050	-	-	0.0123
Arsenic (As)-Total	mg/L	0.00010	0.50	-	<0.00010
Cadmium (Cd)-Total	mg/L	0.0000050	-	-	<0.0000050
Calcium (Ca)-Total	mg/L	0.50	-	-	16.7
Copper (Cu)-Total	mg/L	0.0010	0.30	-	0.0011
Iron (Fe)-Total	mg/L	0.010	-	-	0.013
Lead (Pb)-Total	mg/L	0.000050	0.20	-	<0.000050
Magnesium (Mg)-Total	mg/L	0.050	-	-	9.22
Manganese (Mn)-Total	mg/L	0.00050	-	-	0.00058
Mercury (Hg)-Total	mg/L	0.0000050	-	-	<0.0000050
Molybdenum (Mo)-Total	mg/L	0.000050	-	-	0.000258
Nickel (Ni)-Total	mg/L	0.00050	0.50	-	0.00058
Potassium (K)-Total	mg/L	0.050	-	-	1.27
Selenium (Se)-Total	mg/L	0.000050	-	-	<0.000050
Sodium (Na)-Total	mg/L	0.050	-	-	1.02
Thallium (Tl)-Total	mg/L	0.000010	-	-	<0.000010
Uranium (U)-Total	mg/L	0.000010	-	-	0.000563
Zinc (Zn)-Total	mg/L	0.0030	0.50	-	<0.0030
Aluminum (Al)-Dissolved	mg/L	0.0050	-	-	0.0113
Arsenic (As)-Dissolved	mg/L	0.00010	-	-	<0.00010
Cadmium (Cd)-Dissolved	mg/L	0.000010	-	-	<0.000010
Calcium (Ca)-Dissolved	mg/L	0.050	-	-	16.7
Copper (Cu)-Dissolved	mg/L	0.00020	-	-	0.00104
Iron (Fe)-Dissolved	mg/L	0.010	-	-	0.012
Lead (Pb)-Dissolved	mg/L	0.000050	-	-	<0.000050
Magnesium (Mg)-Dissolved	mg/L	0.050	-	-	9.59
Manganese (Mn)-Dissolved	mg/L	0.00050	-	-	0.00062
Mercury (Hg)-Dissolved	mg/L	0.0000050	-	-	<0.0000050
Molybdenum (Mo)-Dissolved	mg/L	0.000050	-	-	0.000296
Nickel (Ni)-Dissolved	mg/L	0.000500	-	-	0.00054
Potassium (K)-Dissolved	mg/L	0.050	-	-	1.33
Selenium (Se)-Dissolved	mg/L	0.000050	-	-	<0.000050
Sodium (Na)-Dissolved	mg/L	0.50	-	-	1.02
Thallium (Tl)-Dissolved	mg/L	0.000010	-	-	<0.000010
Uranium (U)-Dissolved	mg/L	0.000010	-	-	0.000564
Zinc (Zn)-Dissolved	mg/L	0.0010	-	-	0.0028
Oil and Grease, Total	mg/L	2.0	-	-	-
	-	-	No Visible Sheen	-	No Visible Sheen
Acute Toxicity	-	-	Not Acutely Toxic	-	Not Acutely Toxic

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
¹Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10: Effluent Quality Discharge Limits for Open Pit, Stockpiles, and Sedimentation Ponds.

Table 2.17: Water Quality Results for Water Licence Monitoring Location - MS-MRY-13A

Analyte	Sample ID			MS-MRY-13A	MS-MRY-13A01
	ALS Laboratory Sample ID			L2457153-4	L2457153-5
	Sample Date & Time			06/05/2020 10:35	06/05/2020 10:35
	QA/QC Sample Type			N/A	Field Duplicate
	Units	LOR	Criteria ¹		
Conductivity	umhos/cm	3.0	-	-	-
pH	pH units	0.10	6.0 - 9.5	7.66	7.67
Total Suspended Solids	mg/L	2.0	15.0	<2.0	2.1
Total Dissolved Solids	mg/L	13	-	85	75
Turbidity	NTU	0.10	-	22.6	22.8
Alkalinity, Total (as CaCO ₃)	mg/L	10	-	-	-
Dissolved Organic Carbon	mg/L	0.50	-	-	-
Total Organic Carbon	mg/L	0.50	-	-	-
Aluminum (Al)-Total	mg/L	0.0050	-	-	-
Antimony (Sb)-Total	mg/L	0.00010	-	-	-
Arsenic (As)-Total	mg/L	0.00010	0.50	-	-
Barium (Ba)-Total	mg/L	0.00010	-	-	-
Beryllium (Be)-Total	mg/L	0.00010	-	-	-
Bismuth (Bi)-Total	mg/L	0.000050	-	-	-
Boron (B)-Total	mg/L	0.010	-	-	-
Cadmium (Cd)-Total	mg/L	0.0000050	-	-	-
Calcium (Ca)-Total	mg/L	0.050	-	-	-
Chromium (Cr)-Total	mg/L	0.00050	-	-	-
Cobalt (Co)-Total	mg/L	0.00010	-	-	-
Copper (Cu)-Total	mg/L	0.00050	0.30	-	-
Iron (Fe)-Total	mg/L	0.010	-	-	-
Lead (Pb)-Total	mg/L	0.000050	0.20	-	-
Lithium (Li)-Total	mg/L	0.0010	-	-	-
Magnesium (Mg)-Total	mg/L	0.0050	-	-	-
Manganese (Mn)-Total	mg/L	0.00050	-	-	-
Mercury (Hg)-Total	mg/L	0.0000050	-	-	-
Molybdenum (Mo)-Total	mg/L	0.000050	-	-	-
Nickel (Ni)-Total	mg/L	0.00050	0.50	-	-
Potassium (K)-Total	mg/L	0.050	-	-	-
Selenium (Se)-Total	mg/L	0.000050	-	-	-
Silicon (Si)-Total	mg/L	0.10	-	-	-
Silver (Ag)-Total	mg/L	0.000050	-	-	-
Sodium (Na)-Total	mg/L	0.050	-	-	-
Strontium (Sr)-Total	mg/L	0.0010	-	-	-
Thallium (Tl)-Total	mg/L	0.000010	-	-	-
Tin (Sn)-Total	mg/L	0.00010	-	-	-
Titanium (Ti)-Total	mg/L	0.00030	-	-	-
Tungsten (W)-Total	mg/L	0.00010	-	-	-
Uranium (U)-Total	mg/L	0.000010	-	-	-
Vanadium (V)-Total	mg/L	0.00050	-	-	-
Zinc (Zn)-Total	mg/L	0.0030	0.50	-	-
Zirconium (Zr)-Total	mg/L	0.00020	-	-	-
Oil and Grease, Total	mg/L	2.0	-	-	-
	-	-	No Visible Sheen	-	-
Phenols (4AAP)	mg/L	0.0010	-	-	-
F1 (C6-C10)	ug/L	100	-	-	-
F2 (C10-C16)	ug/L	100	-	-	-
F3 (C16-C34)	ug/L	250	-	-	-
F4 (C34-C50)	ug/L	250	-	-	-
Total Hydrocarbons (C6-C50)	ug/L	380	-	-	-
Chrom. to baseline at nC50	-	-	-	-	-
2-Bromobenzotrifluoride	%	-	-	-	-
3,4-Dichlorotoluene	%	-	-	-	-

Notes:
Grey and bold highlight indicate results that exceeded the applicable water quality criteria.
¹Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 7: Effluent Quality Discharge Limits for the Landfill Facilities.

Table 2.17: Water Quality Results for Water Licence Monitoring Location - MS-MRY-13A

Analyte	Sample ID			MS-MRY-13A	MS-MRY-13A
	ALS Laboratory Sample ID			L2460443-8	L2466533-10
	Sample Date & Time			06/13/2020 11:30	06/22/2020 16:55
	QA/QC Sample Type			N/A	N/A
	Units	LOR	Criteria ¹		
Conductivity	umhos/cm	3.0	-	-	1500
pH	pH units	0.10	6.0 - 9.5	7.40	7.75
Total Suspended Solids	mg/L	2.0	15.0	<2.0	<2.0
Total Dissolved Solids	mg/L	13	-	400	1120
Turbidity	NTU	0.10	-	1.71	0.49
Alkalinity, Total (as CaCO ₃)	mg/L	10	-	-	127
Dissolved Organic Carbon	mg/L	0.50	-	-	9.72
Total Organic Carbon	mg/L	0.50	-	-	10.5
Aluminum (Al)-Total	mg/L	0.0050	-	-	<0.050
Antimony (Sb)-Total	mg/L	0.00010	-	-	<0.0010
Arsenic (As)-Total	mg/L	0.00010	0.50	-	<0.0010
Barium (Ba)-Total	mg/L	0.00010	-	-	0.129
Beryllium (Be)-Total	mg/L	0.00010	-	-	<0.0010
Bismuth (Bi)-Total	mg/L	0.000050	-	-	<0.00050
Boron (B)-Total	mg/L	0.010	-	-	2.37
Cadmium (Cd)-Total	mg/L	0.0000050	-	-	0.000055
Calcium (Ca)-Total	mg/L	0.050	-	-	219
Chromium (Cr)-Total	mg/L	0.00050	-	-	<0.0050
Cobalt (Co)-Total	mg/L	0.00010	-	-	<0.0010
Copper (Cu)-Total	mg/L	0.00050	0.30	-	<0.0050
Iron (Fe)-Total	mg/L	0.010	-	-	<0.10
Lead (Pb)-Total	mg/L	0.000050	0.20	-	<0.00050
Lithium (Li)-Total	mg/L	0.0010	-	-	0.015
Magnesium (Mg)-Total	mg/L	0.0050	-	-	64.9
Manganese (Mn)-Total	mg/L	0.00050	-	-	<0.0050
Mercury (Hg)-Total	mg/L	0.0000050	-	-	<0.0000050
Molybdenum (Mo)-Total	mg/L	0.000050	-	-	0.00500
Nickel (Ni)-Total	mg/L	0.00050	0.50	-	0.0227
Potassium (K)-Total	mg/L	0.050	-	-	11.3
Selenium (Se)-Total	mg/L	0.000050	-	-	<0.00050
Silicon (Si)-Total	mg/L	0.10	-	-	2.9
Silver (Ag)-Total	mg/L	0.000050	-	-	<0.00050
Sodium (Na)-Total	mg/L	0.050	-	-	21.1
Strontium (Sr)-Total	mg/L	0.0010	-	-	0.451
Thallium (Tl)-Total	mg/L	0.000010	-	-	<0.00010
Tin (Sn)-Total	mg/L	0.00010	-	-	<0.0010
Titanium (Ti)-Total	mg/L	0.00030	-	-	<0.0030
Tungsten (W)-Total	mg/L	0.00010	-	-	<0.0010
Uranium (U)-Total	mg/L	0.000010	-	-	0.00674
Vanadium (V)-Total	mg/L	0.00050	-	-	<0.0050
Zinc (Zn)-Total	mg/L	0.0030	0.50	-	0.037
Zirconium (Zr)-Total	mg/L	0.00020	-	-	<0.0020
Oil and Grease, Total	mg/L	2.0	-	-	<2.0
	-	-	No Visible Sheen	-	No Visible Sheen
Phenols (4AAP)	mg/L	0.0010	-	-	0.0021
F1 (C6-C10)	ug/L	100	-	-	<100
F2 (C10-C16)	ug/L	100	-	-	<100
F3 (C16-C34)	ug/L	250	-	-	<250
F4 (C34-C50)	ug/L	250	-	-	<250
Total Hydrocarbons (C6-C50)	ug/L	380	-	-	<380
Chrom. to baseline at nC50	-	-	-	-	YES
2-Bromobenzotrifluoride	%	-	-	-	57.5
3,4-Dichlorotoluene	%	-	-	-	94.4

Notes:
Grey and bold highlight indicate results that exceeded the applicable water quality criteria.
¹Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 7: Effluent Quality Discharge Limits for the Landfill Facilities.

Table 2.17: Water Quality Results for Water Licence Monitoring Location - MS-MRY-13A

Analyte	Sample ID			MS-MRY-13A
	ALS Laboratory Sample ID			L2468308-3
	Sample Date & Time			06/30/2020 09:10
	QA/QC Sample Type			N/A
	Units	LOR	Criteria ¹	
Conductivity	umhos/cm	3.0	-	-
pH	pH units	0.10	6.0 - 9.5	7.69
Total Suspended Solids	mg/L	2.0	15.0	<2.0
Total Dissolved Solids	mg/L	13	-	762
Turbidity	NTU	0.10	-	0.15
Alkalinity, Total (as CaCO ₃)	mg/L	10	-	-
Dissolved Organic Carbon	mg/L	0.50	-	-
Total Organic Carbon	mg/L	0.50	-	-
Aluminum (Al)-Total	mg/L	0.0050	-	-
Antimony (Sb)-Total	mg/L	0.00010	-	-
Arsenic (As)-Total	mg/L	0.00010	0.50	-
Barium (Ba)-Total	mg/L	0.00010	-	-
Beryllium (Be)-Total	mg/L	0.00010	-	-
Bismuth (Bi)-Total	mg/L	0.000050	-	-
Boron (B)-Total	mg/L	0.010	-	-
Cadmium (Cd)-Total	mg/L	0.0000050	-	-
Calcium (Ca)-Total	mg/L	0.050	-	-
Chromium (Cr)-Total	mg/L	0.00050	-	-
Cobalt (Co)-Total	mg/L	0.00010	-	-
Copper (Cu)-Total	mg/L	0.00050	0.30	-
Iron (Fe)-Total	mg/L	0.010	-	-
Lead (Pb)-Total	mg/L	0.000050	0.20	-
Lithium (Li)-Total	mg/L	0.0010	-	-
Magnesium (Mg)-Total	mg/L	0.0050	-	-
Manganese (Mn)-Total	mg/L	0.00050	-	-
Mercury (Hg)-Total	mg/L	0.0000050	-	-
Molybdenum (Mo)-Total	mg/L	0.000050	-	-
Nickel (Ni)-Total	mg/L	0.00050	0.50	-
Potassium (K)-Total	mg/L	0.050	-	-
Selenium (Se)-Total	mg/L	0.000050	-	-
Silicon (Si)-Total	mg/L	0.10	-	-
Silver (Ag)-Total	mg/L	0.000050	-	-
Sodium (Na)-Total	mg/L	0.050	-	-
Strontium (Sr)-Total	mg/L	0.0010	-	-
Thallium (Tl)-Total	mg/L	0.000010	-	-
Tin (Sn)-Total	mg/L	0.00010	-	-
Titanium (Ti)-Total	mg/L	0.00030	-	-
Tungsten (W)-Total	mg/L	0.00010	-	-
Uranium (U)-Total	mg/L	0.000010	-	-
Vanadium (V)-Total	mg/L	0.00050	-	-
Zinc (Zn)-Total	mg/L	0.0030	0.50	-
Zirconium (Zr)-Total	mg/L	0.00020	-	-
Oil and Grease, Total	mg/L	2.0	-	-
	-	-	No Visible Sheen	-
Phenols (4AAP)	mg/L	0.0010	-	-
F1 (C6-C10)	ug/L	100	-	-
F2 (C10-C16)	ug/L	100	-	-
F3 (C16-C34)	ug/L	250	-	-
F4 (C34-C50)	ug/L	250	-	-
Total Hydrocarbons (C6-C50)	ug/L	380	-	-
Chrom. to baseline at nC50	-	-	-	-
2-Bromobenzotrifluoride	%	-	-	-
3,4-Dichlorotoluene	%	-	-	-

Notes:
Grey and bold highlight indicate results that exceeded the applicable water quality criteria.
¹Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 7: Effluent Quality Discharge Limits for the Landfill Facilities.

Table 2.18: Water Quality Results for Water Licence Monitoring Location - MS-MRY-13B

Analyte	Sample ID			MS-MRY-13B	MS-MRY-13B
	ALS Laboratory Sample ID			L2466533-11	L2468308-1
	Sample Date & Time			06/22/2020 17:30	06/30/2020 08:45
	QA/QC Sample Type			N/A	N/A
	Units	LOR	Criteria ¹		
Conductivity	umhos/cm	3.0	-	1220	-
pH	pH units	0.10	6.0 - 9.5	7.94	7.76
Total Suspended Solids	mg/L	2.0	15.0	<2.0	<2.0
Total Dissolved Solids	mg/L	13	-	902	400
Turbidity	NTU	0.10	-	0.15	1.17
Alkalinity, Total (as CaCO ₃)	mg/L	10	-	114	-
Dissolved Organic Carbon	mg/L	0.50	-	6.84	-
Total Organic Carbon	mg/L	0.50	-	7.31	-
Aluminum (Al)-Total	mg/L	0.0050	-	<0.050	-
Antimony (Sb)-Total	mg/L	0.00010	-	<0.0010	-
Arsenic (As)-Total	mg/L	0.00010	0.50	<0.0010	-
Barium (Ba)-Total	mg/L	0.00010	-	0.109	-
Beryllium (Be)-Total	mg/L	0.00010	-	<0.0010	-
Bismuth (Bi)-Total	mg/L	0.000050	-	<0.00050	-
Boron (B)-Total	mg/L	0.010	-	1.84	-
Cadmium (Cd)-Total	mg/L	0.0000050	-	<0.000050	-
Calcium (Ca)-Total	mg/L	0.050	-	162	-
Chromium (Cr)-Total	mg/L	0.00050	-	<0.0050	-
Cobalt (Co)-Total	mg/L	0.00010	-	<0.0010	-
Copper (Cu)-Total	mg/L	0.00050	0.30	<0.0050	-
Iron (Fe)-Total	mg/L	0.010	-	<0.10	-
Lead (Pb)-Total	mg/L	0.000050	0.20	<0.00050	-
Lithium (Li)-Total	mg/L	0.0010	-	0.014	-
Magnesium (Mg)-Total	mg/L	0.0050	-	63.2	-
Manganese (Mn)-Total	mg/L	0.00050	-	<0.0050	-
Mercury (Hg)-Total	mg/L	0.0000050	-	<0.0000050	-
Molybdenum (Mo)-Total	mg/L	0.000050	-	0.00220	-
Nickel (Ni)-Total	mg/L	0.00050	0.50	0.0169	-
Potassium (K)-Total	mg/L	0.050	-	7.51	-
Selenium (Se)-Total	mg/L	0.000050	-	<0.00050	-
Silicon (Si)-Total	mg/L	0.10	-	2.9	-
Silver (Ag)-Total	mg/L	0.000050	-	<0.00050	-
Sodium (Na)-Total	mg/L	0.050	-	18.0	-
Strontium (Sr)-Total	mg/L	0.0010	-	0.274	-
Thallium (Tl)-Total	mg/L	0.000010	-	<0.00010	-
Tin (Sn)-Total	mg/L	0.00010	-	<0.0010	-
Titanium (Ti)-Total	mg/L	0.00030	-	<0.0030	-
Tungsten (W)-Total	mg/L	0.00010	-	<0.0010	-
Uranium (U)-Total	mg/L	0.000010	-	0.00443	-
Vanadium (V)-Total	mg/L	0.00050	-	<0.0050	-
Zinc (Zn)-Total	mg/L	0.0030	0.50	<0.030	-
Zirconium (Zr)-Total	mg/L	0.00020	-	<0.0020	-
Oil and Grease, Total	mg/L	2.0	-	<2.0	-
	-	-	No Visible Sheen	No Visible Sheen	-
Phenols (4AAP)	ug/L	0.0010	-	0.0017	-
F1 (C6-C10)	ug/L	100	-	<100	-
F2 (C10-C16)	ug/L	100	-	<100	-
F3 (C16-C34)	ug/L	250	-	<250	-
F4 (C34-C50)	ug/L	250	-	<250	-
Total Hydrocarbons (C6-C50)	ug/L	380	-	<380	-
Chrom. to baseline at nC50	-	-	-	YES	-
2-Bromobenzotrifluoride	%	-	-	54.7	-
3,4-Dichlorotoluene	%	-	-	84.9	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

¹Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 7: Effluent Quality Discharge Limits for the Landfill Facilities.

Table 2.18: Water Quality Results for Water Licence Monitoring Location - MS-MR

Analyte	Sample ID			MS-MRY-13B01
	ALS Laboratory Sample ID			L2468308-2
	Sample Date & Time			06/30/2020 08:45
	QA/QC Sample Type			Field Duplicate
	Units	LOR	Criteria ¹	
Conductivity	umhos/cm	3.0	-	-
pH	pH units	0.10	6.0 - 9.5	7.80
Total Suspended Solids	mg/L	2.0	15.0	<2.0
Total Dissolved Soilds	mg/L	13	-	545
Turbidity	NTU	0.10	-	0.53
Alkalinity, Total (as CaCO3)	mg/L	10	-	-
Dissolved Organic Carbon	mg/L	0.50	-	-
Total Organic Carbon	mg/L	0.50	-	-
Aluminum (Al)-Total	mg/L	0.0050	-	-
Antimony (Sb)-Total	mg/L	0.00010	-	-
Arsenic (As)-Total	mg/L	0.00010	0.50	-
Barium (Ba)-Total	mg/L	0.00010	-	-
Beryllium (Be)-Total	mg/L	0.00010	-	-
Bismuth (Bi)-Total	mg/L	0.000050	-	-
Boron (B)-Total	mg/L	0.010	-	-
Cadmium (Cd)-Total	mg/L	0.0000050	-	-
Calcium (Ca)-Total	mg/L	0.050	-	-
Chromium (Cr)-Total	mg/L	0.00050	-	-
Cobalt (Co)-Total	mg/L	0.00010	-	-
Copper (Cu)-Total	mg/L	0.00050	0.30	-
Iron (Fe)-Total	mg/L	0.010	-	-
Lead (Pb)-Total	mg/L	0.000050	0.20	-
Lithium (Li)-Total	mg/L	0.0010	-	-
Magnesium (Mg)-Total	mg/L	0.0050	-	-
Manganese (Mn)-Total	mg/L	0.00050	-	-
Mercury (Hg)-Total	mg/L	0.0000050	-	-
Molybdenum (Mo)-Total	mg/L	0.000050	-	-
Nickel (Ni)-Total	mg/L	0.00050	0.50	-
Potassium (K)-Total	mg/L	0.050	-	-
Selenium (Se)-Total	mg/L	0.000050	-	-
Silicon (Si)-Total	mg/L	0.10	-	-
Silver (Ag)-Total	mg/L	0.000050	-	-
Sodium (Na)-Total	mg/L	0.050	-	-
Strontium (Sr)-Total	mg/L	0.0010	-	-
Thallium (Tl)-Total	mg/L	0.000010	-	-
Tin (Sn)-Total	mg/L	0.00010	-	-
Titanium (Ti)-Total	mg/L	0.00030	-	-
Tungsten (W)-Total	mg/L	0.00010	-	-
Uranium (U)-Total	mg/L	0.000010	-	-
Vanadium (V)-Total	mg/L	0.00050	-	-
Zinc (Zn)-Total	mg/L	0.0030	0.50	-
Zirconium (Zr)-Total	mg/L	0.00020	-	-
Oil and Grease, Total	mg/L	2.0	-	-
	-	-	No Visible Sheen	-
Phenols (4AAP)	ug/L	0.0010	-	-
F1 (C6-C10)	ug/L	100	-	-
F2 (C10-C16)	ug/L	100	-	-
F3 (C16-C34)	ug/L	250	-	-
F4 (C34-C50)	ug/L	250	-	-
Total Hydrocarbons (C6-C50)	ug/L	380	-	-
Chrom. to baseline at nC50	-	-	-	-
2-Bromobenzotrifluoride	%	-	-	-
3,4-Dichlorotoluene	%	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

¹Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 7: Effluent Quality Discharge Limits for the Landfill Facilities.

Table 2.19: Water Quality Results for Water Licence Monitoring Location - MS-C-A

Analyte	Sample ID			MS-C-A	MS-C-A	MS-C-A01	MS-C-A
	ALS Laboratory Sample ID			L2460443-15	L2466533-13	L2466533-14	L2468308-10
	Sample Date & Time			06/13/2020 13:35	06/22/2020 15:30	06/22/2020 15:30	06/30/2020 11:40
	QA/QC Sample Type			N/A	N/A	N/A	N/A
	Units	LOR	Criteria ¹				
Conductivity	umhos/cm		-	-	140	140	-
pH	pH units	0.10	6.0 - 9.5	7.57	7.82	7.82	7.82
Total Suspended Solids	mg/L	2.0	Grab 30, Average 15	12.3	2.9	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	91	105	59	76
Turbidity	NTU	0.10	-	46.3	25.3	26.4	9.75
Ammonia, Total (as N)	mg/L		-	-	0.013	<0.010	-
Nitrate (as N)	mg/L		-	-	4.23	0.458	-
Oil and Grease, Total	mg/L	2.0	-	-	<2.0	<2.0	-
	-	-	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
¹Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project.

Table 2.20: Water Quality Results for Water Licence Monitoring Location - MS-C-B

Analyte	Sample ID			MS-C-B	MS-C-B	MS-C-B	MS-C-B
	ALS Laboratory Sample ID			L2457153-9	L2460443-14	L2466533-15	L2468308-11
	Sample Date & Time			06/05/2020 13:45	06/13/2020 13:45	06/22/2020 16:25	06/30/2020 12:20
	QA/QC Sample Type			N/A	N/A	N/A	N/A
	Units	LOR	Criteria ¹				
Conductivity	umhos/cm		-	-	-	145	-
pH	pH units	0.10	6.0 - 9.5	7.47	7.61	7.79	7.81
Total Suspended Solids	mg/L	2.0	Grab 30, Average 15	2.1	9.9	7.6	<2.0
Total Dissolved Solids	mg/L	10	-	70	95	87	86
Turbidity	NTU	0.10	-	14.7	42.9	24.8	10.2
Ammonia, Total (as N)	mg/L		-	-	-	<0.010	-
Nitrate (as N)	mg/L		-	-	-	0.381	-
Oil and Grease, Total	mg/L	2.0	-	-	-	<2.0	-
	-	-	No Visible Sheen	-	-	No Visible Sheen	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

¹Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project.

Table 2.21: Water Quality Results for Water Licence Monitoring Location - MS-C-C

Analyte	Sample ID			MS-C-C	MS-C-C	MS-C-C	MS-C-C
	ALS Laboratory Sample ID			L2457153-8	L2460443-7	L2466533-6	L2468308-9
	Sample Date & Time			06/05/2020 11:45	06/13/2020 11:00	06/22/2020 13:45	06/30/2020 11:10
	QA/QC Sample Type			N/A	N/A	N/A	N/A
	Units	LOR	Criteria ¹				
Conductivity	umhos/cm		-	-	-	917	-
pH	pH units	0.10	6.0 - 9.5	7.83	7.68	7.88	7.87
Total Suspended Solids ²	mg/L	2.0	Grab 30, Average 15	84.8	2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	257	448	618	604
Turbidity	NTU	0.10	-	165	3.75	2.16	1.42
Ammonia, Total (as N)	mg/L		-	-	-	0.022	-
Nitrate (as N)	mg/L		-	-	-	5.62	-
Oil and Grease, Total	mg/L	2.0	-	-	-	<2.0	-
	-	-	No Visible Sheen	-	-	No Visible Sheen	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
¹Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project.

² Monthly average TSS concentration of 22.7 mg/L.

Table 2.22: Water Quality Results for Water Licence Monitoring Location - MS-C-D

Analyte	Sample ID			MS-C-D	MS-C-D	MS-C-D	MS-C-D
	ALS Laboratory Sample ID			L2457153-7	L2460443-6	L2466533-8	L2468308-8
	Sample Date & Time			06/05/2020 11:25	06/13/2020 10:50	06/22/2020 13:20	06/30/2020 11:00
	QA/QC Sample Type			N/A	N/A	N/A	N/A
	Units	LOR	Criteria ¹				
Conductivity	umhos/cm		-	-	-	556	-
pH	pH units	0.10	6.0 - 9.5	7.86	8.04	8.00	8.20
Total Suspended Solids ²	mg/L	2.0	Grab 30, Average 15	72.8	11.5	4.9	3.4
Total Dissolved Solids	mg/L	10	-	313	224	364	443
Turbidity	NTU	0.10	-	161	40.3	11.3	4.53
Ammonia, Total (as N)	mg/L		-	-	-	0.291	-
Nitrate (as N)	mg/L		-	-	-	1.98	-
Oil and Grease, Total	mg/L	2.0	-	-	-	<2.0	-
	-	-	No Visible Sheen	-	-	No Visible Sheen	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
¹Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project.

² Monthly average TSS concentration of 23.1 mg/L.

Table 2.23: Water Quality Results for Water Licence Monitoring Location - MS-C-E

Analyte	Sample ID			MS-C-E	MS-C-E	MS-C-E01	MS-C-E	MS-C-E
	ALS Laboratory Sample ID			L2457153-6	L2460443-4	L2460443-5	L2466533-3	L2468308-7
	Sample Date & Time			06/05/2020 11:15	06/13/2020 10:45	06/13/2020 10:45	06/22/2020 13:50	06/30/2020 10:50
	QA/QC Sample Type			N/A	N/A	Field Duplicate	N/A	N/A
	Units	LOR	Criteria ¹					
Conductivity	umhos/cm	3.0	-	-	-	-	601	-
pH	pH units	0.10	6.0 - 9.5	7.83	7.90	7.91	8.01	7.99
Total Suspended Solids	mg/L	2.0	Grab 30, Average 15	35.0	2.1	<2.0	6.5	<2.0
Total Dissolved Solids	mg/L	10	-	238	171	169	400	459
Turbidity	NTU	0.10	-	111	5.09	5.03	2.00	0.89
Ammonia, Total (as N)	mg/L	0.010	-	-	-	-	0.017	-
Nitrate (as N)	mg/L	0.020	-	-	-	-	1.85	-
Oil and Grease, Total	mg/L	2.0	-	-	-	-	<2.0	-
	-	-	No Visible Sheen	-	-	-	No Visible Sheen	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
¹Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project.

Table 2.24: Water Quality Results for Water Licence Monitoring Location - MS-C-F

Analyte	Sample ID			MS-C-F	MS-C-F	MS-C-F
	ALS Laboratory Sample ID			L2460443-12	L2466533-12	L2468308-12
	Sample Date & Time			06/13/2020 14:30	06/22/2020 15:00	06/30/2020 12:50
	QA/QC Sample Type			N/A	N/A	N/A
	Units	LOR	Criteria ¹			
Conductivity	umhos/cm		-	-	147	-
pH	pH units	0.10	6.0 - 9.5	7.52	7.77	7.87
Total Suspended Solids	mg/L	2.0	Grab 30, Average 15	18.8	5.0	3.4
Total Dissolved Solids	mg/L	10	-	96	121	99
Turbidity	NTU	0.10	-	46.7	65.5	21.2
Ammonia, Total (as N)	mg/L		-	-	0.028	-
Nitrate (as N)	mg/L		-	-	5.88	-
Oil and Grease, Total	mg/L	2.0	-	-	<2.0	-
	-	-	No Visible Sheen	-	No Visible Sheen	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
¹Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project.

Table 2.25: Water Quality Results for Water Licence Monitoring Location - MS-C-G

Analyte	Sample ID			MS-C-G	MS-C-G	MS-C-G
	ALS Laboratory Sample ID			L2460443-9	L2466533-9	L2468308-4
	Sample Date & Time			06/13/2020 12:00	06/22/2020 16:20	06/30/2020 9:40
	QA/QC Sample Type			N/A	N/A	N/A
	Units	LOR	Criteria ¹			
Conductivity	umhos/cm	3	-	-	96.0	-
pH	pH units	0.10	6.0 - 9.5	7.47	7.71	7.79
Total Suspended Solids	mg/L	2.0	Grab 30, Average 15	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	53	71	73
Turbidity	NTU	0.10	-	10.5	1.89	0.68
Ammonia, Total (as N)	mg/L	0.02	-	-	0.020	-
Nitrate (as N)	mg/L	0.02	-	-	0.204	-
Oil and Grease, Total	mg/L	2.0	-	-	<2.0	-
	-	-	No Visible Sheen	-	No Visible Sheen	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
¹Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project

Table 2.26: Water Quality Results for Water Licence Monitoring Location - MS-C-H

Analyte	Sample ID			MS-C-H	MS-C-H	MS-C-H01	MS-C-H	MS-C-H01	MS-C-H	MS-C-H01
	ALS Laboratory Sample ID			L2457153-10	L2460443-10	L2460443-11	L2466533-5	L2466533-4	L2468308-5	L2468308-6
	Sample Date & Time			06/05/2020 14:40	06/13/2020 12:20	06/13/2020 12:20	06/22/2020 15:15	06/22/2020 15:15	06/30/2020 10:10	06/30/2020 10:10
	QA/QC Sample Type			N/A	N/A	Field Duplicate	N/A	Field Duplicate	N/A	Field Duplicate
	Units	LOR	Criteria ¹							
Conductivity	umhos/cm		-	-	-	-	122	122	-	-
pH	pH units	0.10	6.0 - 9.5	7.39	7.59	7.63	7.77	7.81	7.92	7.91
Total Suspended Solids	mg/L	2.0	Grab 30, Average 15	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	31	65	79	78	76	72	70
Turbidity	NTU	0.10	-	16.2	6.16	6.42	0.98	1.11	0.98	1.00
Ammonia, Total (as N)	mg/L		-	-	-	-	<0.010	0.011	-	-
Nitrate (as N)	mg/L		-	-	-	-	0.082	0.089	-	-
Oil and Grease, Total	mg/L	2.0	-	-	-	-	<2.0	<2.0	-	-
	-	-	No Visible Sheen	-	-	-	No Visible Sheen	No Visible Sheen	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
¹Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project.

Table 2.27: Water Quality Results for Water Licence Monitoring Location - MQ-C-A

Analyte	Sample ID			MQ-C-A	MQ-C-A	MQ-C-A	MQ-C-A
	ALS Laboratory Sample ID			L2457153-1	L2460443-1	L2466533-2	L2468308-13
	Sample Date & Time			06/05/2020 08:40	06/13/2020 08:40	06/22/2020 09:30	06/30/2020 15:00
	QA/QC Sample Type			N/A	N/A	N/A	N/A
	Units	LOR	Criteria ¹				
Conductivity	umhos/cm		-	-	-	184	-
pH	pH units	0.10	6.0 - 9.5	7.57	7.93	8.09	8.17
Total Suspended Solids	mg/L	2.0	Grab 30, Average 15	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	72	87	107	132
Turbidity	NTU	0.10	-	7.15	1.46	0.29	0.23
Ammonia, Total (as N)	mg/L		-	-	-	<0.010	-
Nitrate (as N)	mg/L		-	-	-	0.026	-
Oil and Grease, Total	mg/L	2.0	-	-	-	<2.0	-
	-	-	No Visible Sheen	-	-	No Visible Sheen	-
Acute Toxicity	-	-	Not Acutely Toxic	-	-	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
¹Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project.

Table 2.28: Water Quality Results for Water Licence Monitoring Location - MQ-C-B

Analyte	Sample ID			MQ-C-B	MQ-C-B	MQ-C-B	MQ-C-B	MQ-C-B
	ALS Laboratory Sample ID			L2457153-3	L2460443-3	L2466533-16	L2467027-2	L2468308-15
	Sample Date & Time			06/05/2020 09:00	06/13/2020 10:20	06/22/2020 11:20	06/24/2020 13:55	06/30/2020 15:45
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A
	Units	LOR	Criteria ¹					
Conductivity	umhos/cm		-	-	-	205	239	-
pH	pH units	0.10	6.0 - 9.5	7.81	7.75	7.82	7.89	8.06
Total Suspended Solids ²	mg/L	2.0	Grab 30, Average 15	327	12.4	7.8	6.3	150
Total Dissolved Solids	mg/L	10	-	231	93	143	141	176
Turbidity	NTU	0.10	-	495	37.9	37.1	18.3	111
Ammonia, Total (as N)	mg/L		-	-	-	0.218	0.220	-
Nitrate (as N)	mg/L		-	-	-	0.381	1.86	-
Oil and Grease, Total	mg/L	2.0	-	-	-	<2.0	<2.0	-
	-	-	No Visible Sheen	-	-	No Visible Sheen	No Visible Sheen	-
Acute Toxicity	-	-	Not Acutely Toxic	-	-	-	Not Acutely Toxic	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

¹Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project.

²Monthly average TSS concentration of 100.7 mg/L.

Table 2.29: Water Quality Results for Water Licence Monitoring Location - MQ-C-D

Analyte	Sample ID			MQ-C-D	MQ-C-D	MQ-C-D
	ALS Laboratory Sample ID			L2460443-2	L2466533-7	L2468308-14
	Sample Date & Time			06/13/2020 09:00	06/22/2020 10:05	06/30/2020 15:10
	QA/QC Sample Type			N/A	N/A	N/A
	Units	LOR	Criteria ¹			
Conductivity	umhos/cm	3	-	-	228	-
pH	pH units	0.10	6.0 - 9.5	7.71	8.03	8.03
Total Suspended Solids	mg/L	2.0	Grab 30, Average 15	22.3	3.5	8.5
Total Dissolved Solids	mg/L	10	-	105	159	136
Turbidity	NTU	0.10	-	55.1	24.0	18.1
Ammonia, Total (as N)	mg/L	0.02	-	-	0.083	-
Nitrate (as N)	mg/L	0.02	-	-	1.24	-
Oil and Grease, Total	mg/L	2.0	-	-	<2.0	-
	-	-	No Visible Sheen	-	No Visible Sheen	-
Acute Toxicity	-	-	Not Acutely Toxic	-	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
¹Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project.



Table 3.1: Flow and Volume Measurements-Part I Item 11 - June 2020

DATE	Camp Lake Freshwater for Domestic Use - Daily Water (m ³) MS-MRY-1	Camp Lake Freshwater for Industrial Use - Daily Water (m ³) MS-MRY-1	Treated Sewage Effluent (m ³) from MS-01 to Discharge Location #1	Treated Sewage Effluent (m ³) from MS-01B to Discharge Location #1	Sewage Sludge Removed (m ³) from Mine Site WWTPs to Incinerator for Disposal Offsite (Backhaul)	Sewage Sludge Removed (m ³) from Mine Site WWTP to PWSP at Mine Site	Sewage Sludge Removed (m ³) from Lift Stations to PWSP at Mine Site	Km 32 Lake Milne Port Camp Daily Water (m ³) MP-MRY-3	Km 32 Lake Milne Port Camp Fresh Water Use for Industrial Purposes (m ³) MP-MRY-3	Treated Sewage Effluent (m ³) from MP-01 to Milne Port	Treated Sewage Effluent (m ³) from MP-01B to Milne Port	Sewage Sludge Removed (m ³) from Milne Port WWTP to Incinerator for Disposal Offsite (Backhaul)	Sewage Sludge Removed (m ³) from Lift Stations to PWSP at Milne Port	Sewage Sludge Removed (m ³) from Milne Port WWTP to PWSP at Milne Port	Water Use for Dust Suppression from Authorized Sources	Effluent Discharge (m ³) from Mine Site Waste Rock Stockpile Pond (MS-08)
1-Jun-20	100.5	11.3	33.0	72.6	0.8	0.0	0.0	86.2	0.0	55.0	0.0	0.0	5,680.0	5.7	0.0	0.0
2-Jun-20	109.7	14.8	33.0	72.6	0.8	0.0	0.0	57.3	0.0	70.0	0.0	0.0	0.0	0.0	90.8	0.0
3-Jun-20	118.0	0.9	29.0	76.3	0.8	0.0	0.0	40.5	0.0	63.0	0.0	0.0	0.0	0.0	30.3	0.0
4-Jun-20	105.0	8.0	33.0	69.9	0.7	0.0	0.0	56.4	0.0	60.0	0.0	0.0	0.0	0.0	424.0	0.0
5-Jun-20	116.8	23.8	33.0	86.4	0.8	0.0	0.0	54.8	0.0	71.0	6.9	0.0	0.0	0.0	1143.2	0.0
6-Jun-20	117.0	6.5	33.0	126.5	0.8	0.0	0.0	94.2	0.0	67.0	12.0	0.3	0.0	0.0	492.1	0.0
7-Jun-20	129.9	50.4	33.0	127.5	0.8	0.0	0.0	74.5	0.0	70.0	8.6	0.3	0.0	0.0	878.7	0.0
8-Jun-20	90.1	6.5	31.0	86.0	0.8	0.0	0.0	87.3	0.0	69.0	20.3	0.5	0.0	0.0	461.8	0.0
9-Jun-20	103.9	19.1	33.0	84.5	0.8	0.0	0.0	78.3	0.0	70.0	20.0	0.3	0.0	0.0	446.7	0.0
10-Jun-20	102.8	10.3	33.0	84.9	1.0	0.0	0.0	91.7	0.0	53.0	27.0	0.3	0.0	0.0	302.8	0.0
11-Jun-20	125.1	7.2	33.0	85.2	1.0	0.0	0.0	104.9	0.0	55.0	24.0	0.0	0.0	0.0	242.3	0.0
12-Jun-20	108.9	0.0	27.0	89.6	0.8	0.0	0.0	96.8	0.0	52.0	19.0	0.4	0.0	1.3	333.1	0.0
13-Jun-20	123.6	6.9	23.0	84.1	0.8	0.0	0.0	79.4	1.0	61.0	25.0	0.2	0.0	0.0	863.1	0.0
14-Jun-20	144.8	5.3	30.0	82.6	0.8	0.0	0.0	70.3	0.0	52.0	23.0	3.2	0.0	0.0	1120.5	0.0
15-Jun-20	112.0	21.1	33.0	79.4	0.8	0.0	0.0	82.4	6.0	46.0	27.0	2.2	0.0	0.0	575.4	0.0
16-Jun-20	117.1	12.1	34.0	100.8	0.8	0.0	0.0	70.7	0.0	52.0	27.0	0.2	0.0	0.0	696.5	0.0
17-Jun-20	130.4	9.5	34.0	102.3	0.8	0.0	0.0	60.9	0.0	44.0	23.0	2.2	0.0	0.0	726.8	0.0
18-Jun-20	100.9	12.6	33.0	91.8	0.8	0.0	0.0	65.6	0.0	45.0	24.1	2.0	0.0	0.0	575.4	0.0
19-Jun-20	122.4	16.7	30.0	76.0	0.8	0.0	0.0	40.7	3.0	50.0	30.7	2.2	0.0	0.0	363.4	0.0
20-Jun-20	66.2	14.2	36.0	75.3	0.8	0.0	0.0	57.4	0.0	42.0	15.0	2.0	0.0	0.0	15.1	0.0
21-Jun-20	179.8	8.6	34.0	74.3	0.8	0.0	0.0	78.7	0.0	50.0	24.0	1.4	0.0	0.0	0.0	0.0
22-Jun-20	116.1	4.3	30.0	72.6	0.8	0.0	0.0	61.2	0.0	60.0	24.0	3.6	0.0	10.0	121.1	0.0
23-Jun-20	77.2	6.9	33.0	70.2	0.8	0.0	0.0	84.6	3.0	42.0	27.8	0.0	0.0	0.0	60.6	0.0
24-Jun-20	125.1	14.3	38.0	85.5	0.8	0.0	0.0	41.4	0.0	48.0	15.7	0.0	0.0	0.0	121.1	0.0
25-Jun-20	126.5	0.0	33.0	84.2	0.8	0.0	0.0	49.7	0.0	51.0	24.0	2.0	0.0	0.0	181.7	0.0
26-Jun-20	113.9	0.0	31.0	71.5	0.9	0.0	0.0	73.0	0.0	53.0	24.0	0.5	0.0	0.0	0.0	0.0
27-Jun-20	139.4	4.3	31.0	101.3	1.0	0.0	0.0	70.8	0.0	52.0	27.2	1.7	0.0	0.0	0.0	0.0
28-Jun-20	133.2	2.6	36.0	105.9	1.0	0.0	0.0	51.1	0.0	49.0	30.0	2.0	0.0	0.0	0.0	0.0
29-Jun-20	129.5	1.7	42.0	69.3	1.2	0.0	0.0	68.8	0.0	51.0	35.0	2.2	0.0	0.0	0.0	1464.0
30-Jun-20	106.2	12.0	28.0	72.8	1.6	0.0	0.0	48.3	0.0	50.0	26.0	1.7	0.0	0.0	30.3	2688.0
Total	3,491.8	312.0	973.0	2,561.9	25.5	0.0	0.0	2,077.8	13.0	1,653.0	590.4	31.4	5,680.0	16.9	10296.8	4152.0

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

DATE	Effluent Discharge (m ³) from Milne Port Ore Stockpile Sedimentation Pond (West) to Milne Port (MP-06)	Treated Sewage Effluent (m ³) from PWSP to Sheardown Lake (MS-MRY-4B)	Effluent Discharge (m ³) from Milne Port Bulk Fuel Tank farm Facility to Milne Port (MP-03)
1-Jun-20	0.0	0.0	0.0
2-Jun-20	0.0	0.0	0.0
3-Jun-20	0.0	0.0	0.0
4-Jun-20	0.0	0.0	0.0
5-Jun-20	0.0	0.0	0.0
6-Jun-20	0.0	0.0	0.0
7-Jun-20	0.0	0.0	0.0
8-Jun-20	0.0	0.0	0.0
9-Jun-20	0.0	0.0	0.0
10-Jun-20	0.0	0.0	0.0
11-Jun-20	0.0	0.0	0.0
12-Jun-20	0.0	0.0	0.0
13-Jun-20	0.0	0.0	0.0
14-Jun-20	0.0	0.0	0.0
15-Jun-20	0.0	0.0	0.0
16-Jun-20	0.0	0.0	0.0
17-Jun-20	0.0	364.5	0.0
18-Jun-20	0.0	370.4	0.0
19-Jun-20	0.0	732.9	0.0
20-Jun-20	0.0	53.0	0.0
21-Jun-20	0.0	0.0	39.0
22-Jun-20	0.0	0.0	94.0
23-Jun-20	631.2	0.0	93.4
24-Jun-20	0.0	0.0	80.0
25-Jun-20	0.0	0.0	65.7
26-Jun-20	0.0	0.0	111.9
27-Jun-20	0.0	0.0	73.7
28-Jun-20	0.0	0.0	77.6
29-Jun-20	0.0	0.0	94.3
30-Jun-20	0.0	0.0	74.2
Total	631.2	1520.8	803.8