

July 30, 2021

Manager of Licensing
Nunavut Water Board
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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
June 2021**

The following is the monthly report for June 2021 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 2021, water samples were collected as part of the Surveillance Network Program (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 dates and laboratory identification numbers, as appropriate. Analytical water quality testing results are presented in Tables 2.1 through 2.28. Water volumes consumed for domestic and industrial water purposes are presented in Table 3.1 as well as the volumes of effluent discharged at the Mary River Mine Site and Milne Port in June 2021.

Monitoring Program Results

Water Sampling and Analysis Results

Tables 2.1 through 2.28 provide the analytical results related to the SNP sampling requirements for June 2021. In June 2021, there were five (5) exceedances of the site specific grab sample limit of 30 mg/L for Total Suspended Solids (TSS) and one (1) exceedance of the site specific grab sample limit of 15 mg/L for TSS.

- At the Milne Port surface water monitoring station MP-Q1-02, TSS was 50.0, 990, 121 and 360 mg/L on June 8, June 15, June 24, and June 29, 2021, respectively.
- At the Mine Site surface water monitoring station MQ-C-B, TSS was 92.2 mg/L on June 7, 2021.
- At the Mine Site surface water monitoring station MS-MRY-09, TSS was 16.1 mg/L on June 10, 2021.

The permitted monthly average TSS criteria of 15.0 mg/L was also exceeded at MP-Q1-02 and MQ-C-B during June 2021, with monthly average TSS values of 380.3 mg/L and 30.1 mg/L, respectively. The

elevated levels of TSS in the grab samples contributed to the monthly average exceedances for TSS, and were the result of conditions 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 as necessary in accordance with Baffinland's Surface Water and Aquatic Ecosystem Management Plan. Baffinland continues to employ mitigative and corrective actions as necessary to prevent and address sediment concerns at the Project. Silt fencing and sand bags were deployed at MQ-C-B in response to the elevated turbidity observed during the June 7th sampling event.

MP-Q1-02 is a monitoring station located within the drainage ditch that collects surface water runoff from the Q1 Quarry and is not located within a natural water body. Surface flows from the drainage ditch discharge north of the Q1 Quarry onto the tundra. In response to elevated TSS levels within the drainage ditch, mitigative actions were implemented including the placement of crushed stone at problematic areas on the quarry pad and the installation of sandbags and spring berms within the ditch system, to reduce the amount of sediment available for mobilization and settle sediment from the runoff. Under the Licence, Milne Port surface water monitoring station MP-C-H is used to monitor water quality in the nearest receiving water body. TSS concentrations at MP-C-H during June 2021 were observed to vary between non-detect (<2.0 mg/L) and 3.2 mg/L, confirming minimal impact from MP-Q1-02 surface water runoff.

In addition to the exceedances outlined above, a full suite sample (Group 8) was not collected at Mine Site surface water monitoring stations MS-C-C and MS-C-D during June 2021. The full suite sample collected at the downstream monitoring location MS-C-E on June 13 was compliant with all applicable water quality criteria, suggesting compliant water quality at upstream MS-C-C and MS-C-D locations. In addition, full suite samples were collected at both MS-C-C and MS-C-D on July 4, 2021 and were compliant with all applicable water quality criteria.

Flow and Volume Measurements

Table 3.1 provides a breakdown of volume measurements for June 2021 as required by Part I, Item 9 of the Licence. There were no exceedances of the source specific daily volume withdrawal limits 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.

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Attachments

Attachments – Monthly Water Sampling Results: Table 1.1, Tables 2.1 – 2.28, Table 3.1

Attachments

Monthly Water Sampling Results

Table 1.1: Monitoring Program Water Sampling Summary for June 2021

Monitoring Program Station	Sampling Date	Lab ID Number	Comment
Milne Port			
MP-01 (Sewage Treatment Facility)	2021-06-02 2021-06-15	L2597166-1 L2602461-1	Discharge volume recorded daily.
MP-01A (Polishing Waste Stabilization Pond)	N/A	N/A	No discharge.
MP-01B (Sewage Treatment Facility)	2021-06-02 2021-06-15	L2597169-1 L2602482-1	Discharge volume recorded daily.
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 discharge.
MP-03 (Bulk Fuel Storage Facility Stormwater)	N/A	N/A	No discharge.
MP-04 (Landfarm Facility & Snow Containment Facility)	N/A	N/A	No discharge.
MP-04A (Treated Oily Water from Milne Port Snowdump Facility to Tundra)	N/A	N/A	No discharge.
MP-05 Ore Stockpile Sedimentation Pond (East)	2021-06-26	L2606851-1	Discharge volume recorded daily; June 24 – 30.
MP-06 Ore Stockpile Sedimentation Pond (West)	N/A	N/A	No discharge.
MP-C-A (Downstream of Construction Area)	N/A	N/A	No flow.
MP-C-B (Downstream of Construction Area)	2021-06-01 2021-06-08 2021-06-15 2021-06-24 2021-06-29	L2595282-4 L2600575-4 L2602404-6 L2606493-6 L2608772-4	

Monitoring Program Station	Sampling Date	Lab ID Number	Comment
MP-C-K (Downstream of Construction Area)	2021-06-01 2021-06-08 2021-06-15 2021-06-24 2021-06-29	L2595282-2 L2600575-5 L2602404-5 L2606493-5 L2608772-3	
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-H (Downstream of Construction Area)	2021-06-08 2021-06-15 2021-06-24 2021-06-29	L2600575-1 L2602404-1 L2606493-7 L2608772-1	No flow during other scheduled sampling events in June.
MP-C-J (Downstream of Construction Area)	2021-06-08 2021-06-15 2021-06-24 2021-06-29	L2600575-2 L2602404-4 L2606493-4 L2608772-2	No flow during other scheduled sampling events in June.
MP-Q1-01 (Downstream of Q1 Quarry)	2021-06-01 2021-06-08 2021-06-15 2021-06-24 2021-06-29	L2595282-1 L2600575-7 L2602404-3 L2606493-3 L2608772-7	
MP-Q1-0101 (Field Duplicate of MP-Q1-01)	2021-06-29	L2608772-8	
MP-Q1-02 (Downstream of Q1 Quarry)	2021-06-08 2021-06-15 2021-06-24 2021-06-29	L2600575-6 L2602404-2 L2606493-1 L2608772-5	No flow during other scheduled sampling events in June.
MP-Q1-0201 (Field Duplicate of MP-Q1-02)	2021-06-24	L2606493-2	
Mary River Mine Site			
MS-01 (Sewage Treatment Facility)	2021-06-16	L2603176-1	Discharge volume recorded daily.
MS-01A (Mine Site Polishing Waste Stabilization Pond)	N/A	N/A	No discharge.
MS-01B (Sewage Treatment Facility)	2021-06-16	L2603172-1	Discharge volume recorded daily.

Monitoring Program Station	Sampling Date	Lab ID Number	Comment
MS-02 (Mine Site Maintenance Shop)	N/A	N/A	No discharge.
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 discharge.
MS-MRY-04B (Polishing Waste Stabilization Pond)	N/A	N/A	No discharge.
MS-MRY-04C (Polishing Waste Stabilization Pond)	N/A	N/A	No discharge.
MS-03 (Mine Site Bulk Fuel Storage Facility Stormwater)	N/A	N/A	No discharge.
MS-03B (Mine Site Bulk Fuel Storage Facility Stormwater)	N/A	N/A	No discharge.
MS-04 (Mine Site Fuel Unloading Station Stormwater)	N/A	N/A	No discharge.
MS-05 (Mine Site Landfarm Facility)	N/A	N/A	Not constructed.
MS-06 (Ore Stockpile Pond Stormwater)	2021-06-01	L2595285-1	Discharge volume recorded daily; June 4 - 29.
MS-07 (Run of Mine Ore Stockpile Pond Stormwater)	N/A	N/A	No discharge.
MS-08 (Mine Waste Rock Stockpile Pond)	2021-06-23	L2606206-1	Discharge volume recorded daily; June 25 – 30.
MS-09 (Waste Rock Stockpile East Pond)	N/A	N/A	No discharge.
MS-MRY-6 (Exploration Camp Bulk Fuel Storage Facility Stormwater)	N/A	N/A	No discharge.
MS-MRY-09 (Deposit 1 Surface Water Drainage)	2021-06-10 2021-06-15 2021-06-21 2021-06-28	L2600578-1 L2602902-1 L2605841-5 L2608050-1	
MS-MRY-10 (Deposit 1 Surface Water Drainage)	2021-06-07 2021-06-14 2021-06-21 2021-06-28	L2600491-1 L2602423-1 L2605841-6 L2608050-13	

Monitoring Program Station	Sampling Date	Lab ID Number	Comment
MS-MRY-13A (Downstream Non-Hazardous Landfill)	2021-06-08 2021-06-13 2021-06-21 2021-06-28	L2601055-10 L2602498-10 L2605841-12 L2608050-5	
MS-MRY-13B (Downstream Non-Hazardous Landfill)	2021-06-08 2021-06-21	L2601055-9 L2605841-11	No flow during other scheduled sampling events in June.
MS-C-A (Downstream of Construction and Borrow Areas)	2021-06-08 2021-06-13 2021-06-21 2021-06-29	L2601055-5 L2602498-6 L2605841-13 L2608050-11	
MS-C-A01 (Field Duplicate of MS-C-A)	2021-06-13	L2602498-7	
MS-C-B (Downstream of Construction and Borrow Areas)	2021-06-08 2021-06-13 2021-06-21 2021-06-29	L2601055-6 L2602498-8 L2605841-15 L2608050-15	
MS-C-B01 (Field Duplicate of MS-C-B)	2021-06-08 2021-06-21	L2601055-7 L2605841-16	
MS-C-C (Downstream of Construction and Borrow Areas)	2021-06-01 2021-06-28	L2595911-10 L2608050-9	No flow during other scheduled sampling events in June.
MS-C-D (Downstream of Construction and Borrow Areas)	2021-06-01 2021-06-08 2021-06-28	L2595911-11 L2600576-1 L2608050-8	No flow during other scheduled sampling events in June.
MS-C-D01 (Field Duplicate of MS-C-D)	2021-06-01	L2595911-12	
MS-C-E (Downstream of Construction and Borrow Areas)	2021-06-01 2021-06-08 2021-06-13 2021-06-21 2021-06-28	L2595911-9 L2601055-12 L2602498-3 L2605841-10 L2608050-7	
MS-C-E01 (Field Duplicate of MS-C-E)	2021-06-13	L2602498-4	
MS-C-F (Downstream of Construction and Borrow Areas)	2021-06-08 2021-06-13 2021-06-22 2021-06-29	L2601055-8 L2602498-5 L2605841-1 L2608050-10	
MS-C-G (Downstream of Construction and Borrow Areas)	2021-06-22 2021-06-28	L2605841-2 L2608050-2	No flow during other scheduled sampling events in June.

Monitoring Program Station	Sampling Date	Lab ID Number	Comment
MS-C-H (Downstream of Construction and Borrow Areas)	2021-06-08	L2601055-11	
	2021-06-13	L2602498-9	
	2021-06-21	L2605841-4	
	2021-06-28	L2608050-4	
MQ-C-A (Downstream of QMR2 Quarry)	2021-06-07	L2601055-1	
	2021-06-13	L2602498-1	
	2021-06-21	L2605841-7	
	2021-06-29	L2608050-12	
MQ-C-B (Downstream of QMR2 Quarry)	2021-06-07	L2601055-4	
	2021-06-15	L2601684-1	
	2021-06-21	L2605841-9	
	2021-06-29	L2608050-14	
MQ-C-D (Downstream of QMR2 Quarry)	2021-06-07	L2601055-3	
	2021-06-13	L2602498-2	
	2021-06-21	L2605841-8	
	2021-06-29	L2608050-16	
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	MP-01
	ALS Laboratory Sample ID			L2597166-1	L2602461-1
	Sample Date & Time			2021-06-02 13:10	2021-06-15 13:10
	QA/QC Sample Type			N/A	N/A
	Units	LOR	Criteria ¹		
pH	pH units	0.10	6.0 - 9.5	7.90	7.83
Total Suspended Solids	mg/L	1.0	120	<1.0	<1.0
Ammonia, Total (as N)	mg/L	0.010	-	0.023	0.072
Total Kjeldahl Nitrogen	mg/L	0.050	-	0.920	35.0
Phosphorus, Total	mg/L	0.030	-	8.90	12.5
Fecal Coliforms	CFU/100 mL	-	10,000	0	0
BOD	mg/L	2.0	100	<2.0	<2.0
Oil and Grease, Total	mg/L	2.0/5.0	-	<2.0	<5.0
	-	-	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 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	MP-01B
	ALS Laboratory Sample ID			L2597169-1	L2602482-1
	Sample Date & Time			2021-06-02 13:15	2021-06-15 13:15
	QA/QC Sample Type			N/A	N/A
	Units	LOR	Criteria ¹		
pH	pH units	0.10	6.0 - 9.5	8.43	8.45
Total Suspended Solids	mg/L	1.0	120	3.7	<1.0
Ammonia, Total (as N)	mg/L	0.010	-	0.018	0.038
Total Kjeldahl Nitrogen	mg/L	0.050	-	5.20	0.730
Phosphorus, Total	mg/L	0.030	-	3.61	6.96
Fecal Coliforms	CFU/100 mL	-	10,000	0	0
BOD	mg/L	2.0/3.0	100	<2.0	<3.0
Oil and Grease, Total	mg/L	2.0/5.0	-	<2.0	<5.0
	-	-	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 5: Effluent Quality Discharge Limits for Sewage Treatment Facilities to the Ocean

Table 2.3: Water Quality Results for Water Licence Monitoring Location - MP-05

Analyte	Sample ID			MP-05
	ALS Laboratory Sample ID			L2606851-1
	Sample Date & Time			2021-06-26 7:20
	QA/QC Sample Type			N/A
	Units	LOR	Criteria ¹	
Hardness (as CaCO ₃)	mg/L	0.50	-	349
pH	pH units	0.10	6.0 - 9.5	8.27
Total Suspended Solids	mg/L	2.0	15	4.4
Total Dissolved Solids	mg/L	10	-	613
Turbidity	NTU	0.10	-	14.9
Alkalinity, Total (as CaCO ₃)	mg/L	1.0	-	118
Ammonia, Total (as N)	mg/L	0.0050	-	0.0481
Chloride (Cl)	mg/L	2.5	-	137
Fluoride (F)	mg/L	0.10	-	0.20
Nitrate (as N)	mg/L	0.025	-	3.01
Total Kjeldahl Nitrogen	mg/L	0.050	-	0.434
Phosphorus, Total	mg/L	0.0020	-	0.0145
Sulfate (SO ₄)	mg/L	1.5	-	172
Dissolved Organic Carbon	mg/L	0.50	-	4.46
Total Organic Carbon	mg/L	0.50	-	3.90
Aluminum (Al)-Total	mg/L	0.0030	-	0.150
Arsenic (As)-Total	mg/L	0.00010	0.50	0.00024
Cadmium (Cd)-Total	mg/L	0.0000050	-	<0.0000050
Calcium (Ca)-Total	mg/L	0.050	-	58.9
Copper (Cu)-Total	mg/L	0.00050	0.30	0.00133
Iron (Fe)-Total	mg/L	0.010	-	0.170
Lead (Pb)-Total	mg/L	0.000050	0.20	0.000259
Magnesium (Mg)-Total	mg/L	0.0050	-	45.8
Manganese (Mn)-Total	mg/L	0.00010	-	0.181
Mercury (Hg)-Total	mg/L	0.0000050	-	<0.0000050
Molybdenum (Mo)-Total	mg/L	0.000050	-	0.00510
Nickel (Ni)-Total	mg/L	0.00050	0.50	0.00161
Potassium (K)-Total	mg/L	0.050	-	8.65
Selenium (Se)-Total	mg/L	0.000050	-	0.000363
Sodium (Na)-Total	mg/L	0.050	-	57.2
Thallium (Tl)-Total	mg/L	0.000010	-	0.000015
Uranium (U)-Total	mg/L	0.000010	-	0.119
Zinc (Zn)-Total	mg/L	0.0030	0.50	0.0070
Aluminum (Al)-Dissolved	mg/L	0.0010	-	0.0206
Arsenic (As)-Dissolved	mg/L	0.00010	-	0.00021
Cadmium (Cd)-Dissolved	mg/L	0.0000050	-	<0.0000050
Calcium (Ca)-Dissolved	mg/L	0.050	-	60.3
Copper (Cu)-Dissolved	mg/L	0.00020	-	0.00120
Iron (Fe)-Dissolved	mg/L	0.010	-	<0.010
Lead (Pb)-Dissolved	mg/L	0.000050	-	<0.000050
Magnesium (Mg)-Dissolved	mg/L	0.0050	-	48.1
Manganese (Mn)-Dissolved	mg/L	0.00010	-	0.158
Mercury (Hg)-Dissolved	mg/L	0.0000050	-	<0.0000050
Molybdenum (Mo)-Dissolved	mg/L	0.000050	-	0.00530
Nickel (Ni)-Dissolved	mg/L	0.00050	-	0.00136
Potassium (K)-Dissolved	mg/L	0.050	-	8.90
Selenium (Se)-Dissolved	mg/L	0.000050	-	0.000348
Sodium (Na)-Dissolved	mg/L	0.050	-	58.7
Thallium (Tl)-Dissolved	mg/L	0.000010	-	0.000013
Uranium (U)-Dissolved	mg/L	0.000010	-	0.114
Zinc (Zn)-Dissolved	mg/L	0.0010	-	0.0046
Oil and Grease, Total	mg/L	-	-	-
	-	-	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 2.4: 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	MP-C-B
	ALS Laboratory Sample ID			L2595282-4	L2600575-4	L2602404-6	L2602404-7	L2606493-6	L2608772-4
	Sample Date & Time			2021-06-01 9:05	2021-06-08 9:30	2021-06-15 11:45	2021-06-15 11:45	2021-06-24 10:15	2021-06-29 8:45
	QA/QC Sample Type			N/A	N/A	N/A	Travel Blank	N/A	N/A
	Units	LOR	Criteria ¹						
Conductivity	umhos/cm	1.0	-	472	-	257	<1.0	-	
pH	pH units	0.10	6.0 - 9.5	8.23	8.08	8.11	6.26	8.28	8.30
Total Suspended Solids	mg/L	1.0/2.0	Grab 30, Average 15	12.7	22.3	3.9	<1.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10/20	-	270	220	147	<10	224	278
Turbidity	NTU	0.10	-	33.6	51.0	0.20	0.31	5.10	10.0
Ammonia, Total (as N)	mg/L	0.010	-	0.406	-	0.066	0.013	-	
Nitrate (as N)	mg/L	0.020	-	0.545	-	0.966	<0.020	-	-
Oil and Grease, Total	mg/L	5.0	-	<5.0	-	<5.0	<5.0	-	-
	-	-	No Visible Sheen	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 2.5: 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
	ALS Laboratory Sample ID			L2600575-1	L2602404-1	L2606493-7	L2608772-1
	Sample Date & Time			2021-06-08 7:30	2021-06-15 8:45	2021-06-24 10:40	2021-06-29 6:45
	QA/QC Sample Type			N/A	N/A	N/A	N/A
	Units	LOR	Criteria ¹				
Conductivity	umhos/cm	1.0	-	-	150	-	-
pH	pH units	0.10	6.0 - 9.5	7.92	7.90	8.08	8.09
Total Suspended Solids	mg/L	2.0/1.0	Grab 30, Average 15	3.0	3.2	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	406	82	77	99
Turbidity	NTU	0.10	-	10.0	7.11	1.34	1.98
Ammonia, Total (as N)	mg/L	0.010	-	-	0.041	-	-
Nitrate (as N)	mg/L	0.020	-	-	0.343	-	-
Oil and Grease, Total	mg/L	5.0	-	-	<5.0	-	-
	-	-	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 2.6: Water Quality Results for Water Licence Monitoring Location - MP-C-J

Analyte	Sample ID			MP-C-J	MP-C-J	MP-C-J	MP-C-J	MP-C-J
	ALS Laboratory Sample ID			L2600575-2	L2600575-3	L2602404-4	L2606493-4	L2608772-2
	Sample Date & Time			2021-06-08 8:15	2021-06-08 8:15	2021-06-15 11:05	2021-06-24 9:30	2021-06-29 7:35
	QA/QC Sample Type			N/A	Travel Blank	N/A	N/A	N/A
	Units	LOR	Criteria ¹					
Conductivity	umhos/cm	1.0	-	-	-	466	-	
pH	pH units	0.10	6.0 - 9.5	8.05	5.90	8.22	8.14	8.03
Total Suspended Solids	mg/L	2.0/1.0	Grab 30, Average 15	<2.0	<2.0	2.2	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	263	<10	258	205	196
Turbidity	NTU	0.10	-	2.09	<0.10	1.03	0.96	0.20
Ammonia, Total (as N)	mg/L	0.010	-	-	-	0.013	-	-
Nitrate (as N)	mg/L	0.020	-	-	-	0.230	-	-
Oil and Grease, Total	mg/L	5.0	-	-	-	<5.0	-	-
	-	-	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 2.7: Water Quality Results for Water Licence Monitoring Location - MP-C-K

Analyte	Sample ID			MP-C-K	MP-C-K	MP-C-K	MP-C-K	MP-C-K	MP-C-K
	ALS Laboratory Sample ID			L2595282-2	L2595282-3	L2600575-5	L2602404-5	L2606493-5	L2608772-3
	Sample Date & Time			2021-06-01 8:45	2021-06-01 8:45	2021-06-08 9:45	2021-06-15 11:30	2021-06-24 10:00	2021-06-29 8:30
	QA/QC Sample Type			N/A	Travel Blank	N/A	N/A	N/A	N/A
	Units	LOR	Criteria ¹						
Conductivity	umhos/cm	1.0	-	509	<1.0	-	-	-	
pH	pH units	0.10	6.0 - 9.5	8.25	8.00	8.11	8.17	8.21	8.22
Total Suspended Solids	mg/L	1.0/2.0	Grab 30, Average 15	4.4	<1.0	3.4	<1.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	302	<10	267	269	268	269
Turbidity	NTU	0.10	-	11.6	<0.10	7.52	1.14	0.87	0.92
Ammonia, Total (as N)	mg/L	0.010	-	0.284	<0.010	-	-	-	-
Nitrate (as N)	mg/L	0.020	-	0.544	<0.020	-	-	-	-
Oil and Grease, Total	mg/L	5.0	-	<5.0	<5.0	-	-	-	-
	-	-	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 2.8: 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-Q1-01
	ALS Laboratory Sample ID			L2595282-1	L2600575-7	L2602404-3	L2606493-3	L2608772-7	L2608772-8
	Sample Date & Time			2021-06-01 8:00	2021-06-08 10:45	2021-06-15 10:40	2021-06-24 9:30	2021-06-29 9:35	2021-06-29 9:35
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	Field Duplicate
	Units	LOR	Criteria ¹						
Conductivity	umhos/cm	1.0	-	211	-	-	-	-	-
pH	pH units	0.10	6.0 - 9.5	8.01	7.77	7.74	7.89	7.79	7.83
Total Suspended Solids	mg/L	1.0/2.0	Grab 30, Average 15	2.9	6.8	1.4	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	122	78	63	103	77	104
Turbidity	NTU	0.10	-	16.1	7.56	5.51	2.08	1.95	1.98
Ammonia, Total (as N)	mg/L	0.010	-	0.072	-	-	-		
Nitrate (as N)	mg/L	0.020	-	1.08	-	-	-		
Oil and Grease, Total	mg/L	5.0	-	<5.0	-	-	-	-	-
	-	-	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 2.9: 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	MP-Q1-02
	ALS Laboratory Sample ID			L2600575-6	L2602404-2	L2606493-1	L2606493-2	L2608772-5
	Sample Date & Time			2021-06-08 10:15	2021-06-15 10:10	2021-06-24 8:45	2021-06-24 8:45	2021-06-29 9:10
	QA/QC Sample Type			N/A	N/A	N/A	Field Duplicate	N/A
	Units	LOR	Criteria ¹					
Conductivity	umhos/cm	1.0	-	-	237	-	-	-
pH	pH units	0.10	6.0 - 9.5	7.92	8.12	8.10	8.12	8.08
Total Suspended Solids	mg/L	2.0/5.0	Grab 30, Average 15	50.0	990	121	134	360
Total Dissolved Solids	mg/L	10	-	178	251	210	210	235
Turbidity	NTU	0.10	-	80.9	1,010	133	152	239
Ammonia, Total (as N)	mg/L	0.010	-	-	1.17	-	-	-
Nitrate (as N)	mg/L	0.020	-	-	4.49	-	-	-
Oil and Grease, Total	mg/L	5.0	-	-	<5.0	-	-	-
	-	-	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 2.10: Water Quality Results for Water Licence Monitoring Location - MS-01

Analyte	Sample ID			MS-01
	ALS Laboratory Sample ID			L2603176-1
	Sample Date & Time			2021-06-16 14:45
	QA/QC Sample Type			N/A
	Units	LOR	Criteria ¹	
pH	pH units	0.10	6.0 - 9.5	7.47
Total Suspended Solids	mg/L	2.0	35	<2.0
Ammonia, Total (as N)	mg/L	0.010	4.0	0.129
Total Kjeldahl Nitrogen	mg/L	0.050	-	0.560
Phosphorus, Total	mg/L	0.0060	4.0	1.29
Fecal Coliforms	CFU/100 mL	-	1000	0
BOD	mg/L	2.0	30	<2.0
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

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

Analyte	Sample ID			MS-01B
	ALS Laboratory Sample ID			L2603172-1
	Sample Date & Time			2021-06-16 15:00
	QA/QC Sample Type			N/A
	Units	LOR	Criteria ¹	
pH	pH units	0.10	6.0 - 9.5	8.15
Total Suspended Solids	mg/L	2.0	35	<2.0
Ammonia, Total (as N)	mg/L	0.010		0.114
Total Kjeldahl Nitrogen	mg/L	0.050		0.850
Phosphorus, Total	mg/L	0.0060	4.0	1.46
Fecal Coliforms	CFU/100 mL	-	1,000	-
BOD	mg/L	2.0	30	<2.0
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

Table 2.12: Water Quality Results for Water Licence Monitoring Location - MS-06

Analyte	Sample ID			MS-06
	ALS Laboratory Sample ID			L2595285-1
	Sample Date & Time			2021-06-01 12:00
	QA/QC Sample Type			N/A
	Units	LOR	Criteria ¹	
Hardness (as CaCO ₃)	mg/L	0.50	-	84.1
pH	pH units	0.10	6.0 - 9.5	7.41
Total Suspended Solids	mg/L	1.00	15	1.4
Total Dissolved Solids	mg/L	20	-	261
Turbidity	NTU	0.10	-	7.68
Alkalinity, Total (as CaCO ₃)	mg/L	1.0	-	16.1
Ammonia, Total (as N)	mg/L	0.010	-	0.019
Chloride (Cl)	mg/L	0.50	-	10.7
Fluoride (F)	mg/L	0.020	-	0.045
Nitrate (as N)	mg/L	0.020	-	4.89
Total Kjeldahl Nitrogen	mg/L	0.050	-	0.520
Phosphorus, Total	mg/L	0.0030	-	0.388
Sulfate (SO ₄)	mg/L	0.30	-	136
Dissolved Organic Carbon	mg/L	0.50	-	9.23
Total Organic Carbon	mg/L	0.50	-	7.49
Aluminum (Al)-Total	mg/L	0.0050	-	0.160
Antimony (Sb)-Total	mg/L	0.00010	-	0.00046
Arsenic (As)-Total	mg/L	0.00010	0.50	0.00036
Barium (Ba)-Total	mg/L	0.00010	-	0.00279
Beryllium (Be)-Total	mg/L	0.00010	-	<0.00010
Bismuth (Bi)-Total	mg/L	0.00005	-	0.00131
Boron (B)-Total	mg/L	0.010	-	0.276
Cadmium (Cd)-Total	mg/L	0.000050	-	0.0000998
Calcium (Ca)-Total	mg/L	0.050	-	15.8
Cesium (Cs)-Total	mg/L	0.000010	-	0.000052
Chromium (Cr)-Total	mg/L	0.00050	-	<0.00050
Cobalt (Co)-Total	mg/L	0.00010	-	0.00050
Copper (Cu)-Total	mg/L	0.00050	0.30	0.0126
Iron (Fe)-Total	mg/L	0.010	-	0.078
Lead (Pb)-Total	mg/L	0.000050	0.20	0.000129
Lithium (Li)-Total	mg/L	0.0010	-	0.0054
Magnesium (Mg)-Total	mg/L	0.0050	-	11.1
Manganese (Mn)-Total	mg/L	0.00050	-	0.00804
Mercury (Hg)-Total	mg/L	0.000050	-	<0.000050
Molybdenum (Mo)-Total	mg/L	0.000050	-	0.0021
Nickel (Ni)-Total	mg/L	0.00050	0.50	0.00357
Phosphorus (P)-Total	mg/L	0.050	-	0.432
Potassium (K)-Total	mg/L	0.050	-	16.9
Rubidium (Rb)-Total	mg/L	0.00020	-	0.0176
Selenium (Se)-Total	mg/L	0.000050	-	0.000136
Silicon (Si)-Total	mg/L	0.10	-	0.89
Silver (Ag)-Total	mg/L	0.000050	-	<0.000050
Sodium (Na)-Total	mg/L	0.50	-	149
Strontium (Sr)-Total	mg/L	0.0010	-	0.0153
Sulfur (S)-Total	mg/L	0.50	-	35.9
Tellurium (Te)-Total	mg/L	0.00020	-	<0.00020
Thallium (Tl)-Total	mg/L	0.000010	-	<0.000010
Thorium (Th)-Total	mg/L	0.00010	-	<0.00010
Tin (Sn)-Total	mg/L	0.00010	-	0.00014
Titanium (Ti)-Total	mg/L	0.00050	-	<0.00050
Tungsten (W)-Total	mg/L	0.00010	-	0.00026
Uranium (U)-Total	mg/L	0.000010	-	0.000394
Vanadium (V)-Total	mg/L	0.00050	-	<0.00050
Zinc (Zn)-Total	mg/L	0.0030	0.50	0.0721
Zirconium (Zr)-Total	mg/L	0.00020	-	<0.00020
Aluminum (Al)-Dissolved	mg/L	0.0050	-	0.126
Antimony (Sb)-Dissolved	mg/L	0.00010	-	0.00052
Arsenic (As)-Dissolved	mg/L	0.00010	-	0.00035
Barium (Ba)-Dissolved	mg/L	0.00010	-	0.00288
Beryllium (Be)-Dissolved	mg/L	0.00010	-	<0.00010
Bismuth (Bi)-Dissolved	mg/L	0.000050	-	0.00129
Boron (B)-Dissolved	mg/L	0.010	-	0.255
Cadmium (Cd)-Dissolved	mg/L	0.0000050	-	0.0000972
Calcium (Ca)-Dissolved	mg/L	0.050	-	15.4
Cesium (Cs)-Dissolved	mg/L	0.000010	-	0.000057
Chromium (Cr)-Dissolved	mg/L	0.00050	-	<0.00050
Cobalt (Co)-Dissolved	mg/L	0.00010	-	0.00047
Copper (Cu)-Dissolved	mg/L	0.00020	-	0.0122

Table 2.12: Water Quality Results for Water Licence Monitoring Location - MS-06

Analyte	Sample ID			MS-06
	ALS Laboratory Sample ID			L2595285-1
	Sample Date & Time			2021-06-01 12:00
	QA/QC Sample Type			N/A
	Units	LOR	Criteria ¹	
Iron (Fe)-Dissolved	mg/L	0.010	-	0.063
Lead (Pb)-Dissolved	mg/L	0.000050	-	0.000110
Lithium (Li)-Dissolved	mg/L	0.0010	-	0.0049
Magnesium (Mg)-Dissolved	mg/L	0.0050	-	11.1
Manganese (Mn)-Dissolved	mg/L	0.00050	-	0.0071
Mercury (Hg)-Dissolved	mg/L	0.0000050	-	<0.0000050
Molybdenum (Mo)-Dissolved	mg/L	0.000050	-	0.0021
Nickel (Ni)-Dissolved	mg/L	0.00050	-	0.00351
Phosphorus (P)-Dissolved	mg/L	0.050	-	0.466
Potassium (K)-Dissolved	mg/L	0.050	-	17.2
Rubidium (Rb)-Dissolved	mg/L	0.00020	-	0.0172
Selenium (Se)-Dissolved	mg/L	0.000050	-	0.000146
Silicon (Si)-Dissolved	mg/L	0.050	-	0.841
Silver (Ag)-Dissolved	mg/L	0.000050	-	<0.000050
Sodium (Na)-Dissolved	mg/L	0.50	-	138
Strontium (Sr)-Dissolved	mg/L	0.0010	-	0.0152
Sulfur (S)-Dissolved	mg/L	0.50	-	36.2
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	-	0.00014
Titanium (Ti)-Dissolved	mg/L	0.00030	-	<0.00030
Tungsten (W)-Dissolved	mg/L	0.00010	-	0.00026
Uranium (U)-Dissolved	mg/L	0.000010	-	0.000371
Vanadium (V)-Dissolved	mg/L	0.00050	-	<0.00050
Zinc (Zn)-Dissolved	mg/L	0.0010	-	0.0765
Zirconium (Zr)-Dissolved	mg/L	0.00020	-	<0.00020
Ra-226	Bq/L	0.0054	-	<0.0054
Oil and Grease, Total	mg/L	-	-	-
	-	-	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 2.13: Water Quality Results for Water Licence Monitoring Location - MS-08

Analyte	Sample ID			MS-08
	ALS Laboratory Sample ID			L2606206-1
	Sample Date & Time			2021-06-23 16:20
	QA/QC Sample Type			N/A
	Units	LOR	Criteria ¹	
Conductivity	umhos/cm	1.0	-	551
Hardness (as CaCO ₃)	mg/L	0.50		296
pH	pH units	0.10	6.0 - 9.5	7.65
Total Suspended Solids	mg/L	2.0	15	2.5
Total Dissolved Solids	mg/L	10	-	418
Turbidity	NTU	0.10	-	5.06
Acidity (as CaCO ₃)	mg/L	2.0	-	<2.0
Alkalinity, Total (as CaCO ₃)	mg/L	1.0	-	19.2
Ammonia, Total (as N)	mg/L	0.010	-	0.436
Chloride (Cl)	mg/L	0.50	-	1.35
Fluoride (F)	mg/L	0.020	-	0.059
Nitrate (as N)	mg/L	0.020	-	1.57
Total Kjeldahl Nitrogen	mg/L	0.050	-	0.71
Phosphorus, Total	mg/L	0.0030	-	<0.0030
Sulfate (SO ₄)	mg/L	0.30	-	262
Dissolved Organic Carbon	mg/L	0.50	-	2.09
Total Organic Carbon	mg/L	0.50	-	1.63
Aluminum (Al)-Total	mg/L	0.0050	-	0.1
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	-	0.0013
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	-	<0.010
Cadmium (Cd)-Total	mg/L	0.0000050	-	<0.0000050
Calcium (Ca)-Total	mg/L	0.050	-	19
Cesium (Cs)-Total	mg/L	0.000010	-	0.000014
Chromium (Cr)-Total	mg/L	0.00050	-	<0.00050
Cobalt (Co)-Total	mg/L	0.00010	-	0.0020
Copper (Cu)-Total	mg/L	0.00050	0.30	0.00059
Iron (Fe)-Total	mg/L	0.010	-	0.59
Lead (Pb)-Total	mg/L	0.000050	0.20	0.000122
Lithium (Li)-Total	mg/L	0.0010	-	0.0047
Magnesium (Mg)-Total	mg/L	0.0050	-	57
Manganese (Mn)-Total	mg/L	0.00050	-	0.17
Mercury (Hg)-Total	mg/L	0.0000050	-	<0.0000050
Molybdenum (Mo)-Total	mg/L	0.000050	-	0.000169
Nickel (Ni)-Total	mg/L	0.00050	0.50	0.00205
Phosphorus (P)-Total	mg/L	0.050	-	<0.050
Potassium (K)-Total	mg/L	0.050	-	0.487
Rubidium (Rb)-Total	mg/L	0.00020	-	0.00117
Selenium (Se)-Total	mg/L	0.000050	-	0.000587
Silicon (Si)-Total	mg/L	0.10	-	0.31
Silver (Ag)-Total	mg/L	0.000050	-	<0.000050
Sodium (Na)-Total	mg/L	0.050	-	0.466
Strontium (Sr)-Total	mg/L	0.00100	-	0.0933
Sulfur (S)-Total	mg/L	0.50	-	88.7
Tellurium (Te)-Total	mg/L	0.00020	-	<0.00020
Thallium (Tl)-Total	mg/L	0.000010	-	0.000026
Thorium (Th)-Total	mg/L	0.00010	-	<0.00010
Tin (Sn)-Total	mg/L	0.00010	-	0.00066
Titanium (Ti)-Total	mg/L	0.00500	-	<0.0050
Tungsten (W)-Total	mg/L	0.00010	-	<0.00010
Uranium (U)-Total	mg/L	0.000010	-	0.000099
Vanadium (V)-Total	mg/L	0.00050	-	0.0007
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	0.0050	-	<0.0050
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	-	0.00093
Beryllium (Be)-Dissolved	mg/L	0.00010	-	<0.00010
Bismuth (Bi)-Dissolved	mg/L	0.000050	-	<0.000050
Boron (B)-Dissolved	mg/L	0.010	-	<0.010
Cadmium (Cd)-Dissolved	mg/L	0.0000050	-	<0.0000050

Table 2.13: Water Quality Results for Water Licence Monitoring Location - MS-08

Analyte	Sample ID			MS-08
	ALS Laboratory Sample ID			L2606206-1
	Sample Date & Time			2021-06-23 16:20
	QA/QC Sample Type			N/A
	Units	LOR	Criteria ¹	
Calcium (Ca)-Dissolved	mg/L	0.050	-	20.5
Cesium (Cs)-Dissolved	mg/L	0.000010	-	<0.000010
Chromium (Cr)-Dissolved	mg/L	0.00050	-	<0.00050
Cobalt (Co)-Dissolved	mg/L	0.00010	-	0.00136
Copper (Cu)-Dissolved	mg/L	0.00020	-	<0.00020
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	-	0.005
Magnesium (Mg)-Dissolved	mg/L	0.0050	-	59.3
Manganese (Mn)-Dissolved	mg/L	0.00050	-	0.15
Mercury (Hg)-Dissolved	mg/L	0.0000050	-	<0.0000050
Molybdenum (Mo)-Dissolved	mg/L	0.000050	-	0.00017
Nickel (Ni)-Dissolved	mg/L	0.00050	-	0.00144
Phosphorus (P)-Dissolved	mg/L	0.050	-	<0.050
Potassium (K)-Dissolved	mg/L	0.050	-	0.5
Rubidium (Rb)-Dissolved	mg/L	0.00020	-	0.00099
Selenium (Se)-Dissolved	mg/L	0.000050	-	0.000717
Silicon (Si)-Dissolved	mg/L	0.050	-	0.088
Silver (Ag)-Dissolved	mg/L	0.000050	-	<0.000050
Sodium (Na)-Dissolved	mg/L	0.050	-	0.48
Strontium (Sr)-Dissolved	mg/L	0.00100	-	0.0923
Sulfur (S)-Dissolved	mg/L	0.50	-	92.8
Tellurium (Te)-Dissolved	mg/L	0.00020	-	<0.00020
Thallium (Tl)-Dissolved	mg/L	0.000010	-	0.000026
Thorium (Th)-Dissolved	mg/L	0.00010	-	<0.00010
Tin (Sn)-Dissolved	mg/L	0.00010	-	0.00071
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	-	0.000032
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	0.0096	-	<0.0096
Oil and Grease, Total	mg/L	-	-	-
	-	-	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 2.14: Water Quality Results for Water Licence Monitoring Location - MS-MRY-09

Analyte	Sample ID			MS-MRY-09	MS-MRY-09	MS-MRY-09	MS-MRY-09
	ALS Laboratory Sample ID			L2600578-1	L2602902-1	L2605841-5	L2608050-1
	Sample Date & Time			2021-06-10 7:50	2021-06-15 15:10	2021-06-21 8:25	2021-06-28 9:00
	QA/QC Sample Type			N/A	N/A	N/A	N/A
	Units	LOR	Criteria ¹				
Hardness	mg/L	0.50	-	-	26.5	-	-
pH	pH units	0.10	6.0 - 9.5	7.63	7.70	7.72	7.87
Total Suspended Solids	mg/L	1.0/2.0	15	16.1	6.7	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	43	39	25	33
Turbidity	NTU	0.10	-	1.70	7.08	2.89	2.67
Alkalinity, Total (as CaCO3)	mg/L	1.0	-	-	36.1	-	-
Ammonia, Total (as N)	mg/L	0.010	-	-	<0.010	-	-
Chloride (Cl)	mg/L	0.50	-	-	0.77	-	-
Fluoride (F)	mg/L	0.020	-	-	<0.020	-	-
Nitrate (as N)	mg/L	0.020	-	-	0.053	-	-
Total Kjeldahl Nitrogen	mg/L	0.050	-	-	0.070	-	-
Phosphorus, Total	mg/L	0.0030	-	-	0.0112	-	-
Sulfate (SO4)	mg/L	0.30	-	-	1.22	-	-
Dissolved Organic Carbon	mg/L	0.50	-	-	1.96	-	-
Total Organic Carbon	mg/L	0.50	-	-	1.85	-	-
Aluminum (Al)-Total	mg/L	0.0050	-	-	0.204	-	-
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	0.050	-	-	5.53	-	-
Copper (Cu)-Total	mg/L	0.00050	0.30	-	0.00187	-	-
Iron (Fe)-Total	mg/L	0.010	-	-	0.286	-	-
Lead (Pb)-Total	mg/L	0.000050	0.20	-	0.000262	-	-
Magnesium (Mg)-Total	mg/L	0.0050	-	-	3.27	-	-
Manganese (Mn)-Total	mg/L	0.00050	-	-	0.00527	-	-
Mercury (Hg)-Total	mg/L	0.0000050	-	-	<0.0000050	-	-
Molybdenum (Mo)-Total	mg/L	0.000050	-	-	0.000232	-	-
Nickel (Ni)-Total	mg/L	0.00050	0.50	-	0.00073	-	-
Potassium (K)-Total	mg/L	0.050	-	-	0.904	-	-
Selenium (Se)-Total	mg/L	0.000050	-	-	<0.000050	-	-
Sodium (Na)-Total	mg/L	0.050	-	-	0.322	-	-
Thallium (Tl)-Total	mg/L	0.000010	-	-	0.000013	-	-
Uranium (U)-Total	mg/L	0.000010	-	-	0.000569	-	-
Zinc (Zn)-Total	mg/L	0.0030	0.50	-	<0.0030	-	-
Aluminum (Al)-Dissolved	mg/L	0.0050	-	-	0.0097	-	-
Arsenic (As)-Dissolved	mg/L	0.00010	-	-	<0.00010	-	-
Cadmium (Cd)-Dissolved	mg/L	0.0000050	-	-	<0.0000050	-	-
Calcium (Ca)-Dissolved	mg/L	0.050	-	-	5.15	-	-
Copper (Cu)-Dissolved	mg/L	0.00020	-	-	0.00125	-	-
Iron (Fe)-Dissolved	mg/L	0.010	-	-	0.011	-	-
Lead (Pb)-Dissolved	mg/L	0.000050	-	-	<0.000050	-	-
Magnesium (Mg)-Dissolved	mg/L	0.0050	-	-	3.30	-	-
Manganese (Mn)-Dissolved	mg/L	0.00050	-	-	0.00098	-	-
Mercury (Hg)-Dissolved	mg/L	0.0000050	-	-	<0.0000050	-	-
Molybdenum (Mo)-Dissolved	mg/L	0.000050	-	-	0.000218	-	-
Nickel (Ni)-Dissolved	mg/L	0.00050	-	-	<0.00050	-	-
Potassium (K)-Dissolved	mg/L	0.050	-	-	0.875	-	-
Selenium (Se)-Dissolved	mg/L	0.000050	-	-	<0.000050	-	-
Sodium (Na)-Dissolved	mg/L	0.050	-	-	0.344	-	-
Thallium (Tl)-Dissolved	mg/L	0.000010	-	-	<0.000010	-	-
Uranium (U)-Dissolved	mg/L	0.000010	-	-	0.000403	-	-
Zinc (Zn)-Dissolved	mg/L	0.0010	-	-	<0.0010	-	-
Oil and Grease, Total	mg/L		-	-	-	-	-
	-	-	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 2.15: Water Quality Results for Water Licence Monitoring Location - MS-MRY-10

Analyte	Sample ID			MS-MRY-10	MS-MRY-10	MS-MRY-10	MS-MRY-10
	ALS Laboratory Sample ID			L2600491-1	L2602423-1	L2605841-6	L2608050-13
	Sample Date & Time			2021-06-07 16:00	2021-06-14 12:50	2021-06-21 10:35	2021-06-28 14:40
	QA/QC Sample Type			N/A	N/A	N/A	N/A
	Units	LOR	Criteria ¹				
Hardness	mg/L	0.50	-	-	29.6	-	-
pH	pH units	0.10	6.0 – 9.5	6.95	7.39	8.06	8.21
Total Suspended Solids	mg/L	2.0/1.0	15	<2.0	13.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10/13	-	21	36	130	64
Turbidity	NTU	0.10	-	1.36	6.99	0.29	0.27
Alkalinity, Total (as CaCO3)	mg/L	1.0	-	-	30.6	-	-
Ammonia, Total (as N)	mg/L	0.010	-	-	0.014	-	-
Chloride (Cl)	mg/L	0.50	-	-	2.00	-	-
Fluoride (F)	mg/L	0.020	-	-	<0.020	-	-
Nitrate (as N)	mg/L	0.020	-	-	<0.020	-	-
Total Kjeldahl Nitrogen	mg/L	0.050	-	-	0.190	-	-
Phosphorus, Total	mg/L	0.0030	-	-	0.0149	-	-
Sulfate (SO4)	mg/L	0.30	-	-	2.64	-	-
Dissolved Organic Carbon	mg/L	0.50	-	-	2.76	-	-
Total Organic Carbon	mg/L	0.50	-	-	2.77	-	-
Aluminum (Al)-Total	mg/L	0.0050	-	-	0.290	-	-
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	-	-	0.00637	-	-
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	-	-	<0.010	-	-
Cadmium (Cd)-Total	mg/L	0.0000050	-	-	<0.0000050	-	-
Calcium (Ca)-Total	mg/L	0.050	-	-	5.39	-	-
Cesium (Cs)-Total	mg/L	0.000010	-	-	0.000022	-	-
Chromium (Cr)-Total	mg/L	0.00050	-	-	0.00053	-	-
Cobalt (Co)-Total	mg/L	0.00010	-	-	0.00020	-	-
Copper (Cu)-Total	mg/L	0.00050	0.30	-	0.00092	-	-
Iron (Fe)-Total	mg/L	0.010	-	-	0.404	-	-
Lead (Pb)-Total	mg/L	0.000050	0.20	-	0.000213	-	-
Lithium (Li)-Total	mg/L	0.0010	-	-	<0.0010	-	-
Magnesium (Mg)-Total	mg/L	0.0050	-	-	3.60	-	-
Manganese (Mn)-Total	mg/L	0.00050	-	-	0.00811	-	-
Mercury (Hg)-Total	mg/L	0.0000050	-	-	<0.0000050	-	-
Molybdenum (Mo)-Total	mg/L	0.000050	-	-	0.000162	-	-
Nickel (Ni)-Total	mg/L	0.00050	0.50	-	0.00059	-	-
Phosphorus (P)-Total	mg/L	0.050	-	-	<0.050	-	-
Potassium (K)-Total	mg/L	0.050	-	-	0.958	-	-
Rubidium (Rb)-Total	mg/L	0.00020	-	-	0.00153	-	-
Selenium (Se)-Total	mg/L	0.000050	-	-	<0.000050	-	-
Silicon (Si)-Total	mg/L	0.10	-	-	0.82	-	-
Silver (Ag)-Total	mg/L	0.000050	-	-	<0.000050	-	-
Sodium (Na)-Total	mg/L	0.050	-	-	0.363	-	-
Strontium (Sr)-Total	mg/L	0.0010	-	-	0.0032	-	-
Sulfur (S)-Total	mg/L	0.50	-	-	1.02	-	-
Tellurium (Te)-Total	mg/L	0.00020	-	-	<0.00020	-	-
Thallium (Tl)-Total	mg/L	0.000010	-	-	<0.000010	-	-
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	-	-	0.0149	-	-
Tungsten (W)-Total	mg/L	0.00010	-	-	<0.00010	-	-
Uranium (U)-Total	mg/L	0.000010	-	-	0.000093	-	-
Vanadium (V)-Total	mg/L	0.00050	-	-	0.00063	-	-
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	0.0050	-	-	0.0086	-	-
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	-	-	0.00390	-	-
Beryllium (Be)-Dissolved	mg/L	0.00010	-	-	<0.00010	-	-
Bismuth (Bi)-Dissolved	mg/L	0.000050	-	-	<0.000050	-	-
Boron (B)-Dissolved	mg/L	0.010	-	-	<0.010	-	-
Cadmium (Cd)-Dissolved	mg/L	0.0000050	-	-	<0.0000050	-	-
Calcium (Ca)-Dissolved	mg/L	0.050	-	-	5.71	-	-
Cesium (Cs)-Dissolved	mg/L	0.000010	-	-	<0.000010	-	-
Chromium (Cr)-Dissolved	mg/L	0.00050	-	-	<0.00050	-	-
Cobalt (Co)-Dissolved	mg/L	0.00010	-	-	<0.00010	-	-
Copper (Cu)-Dissolved	mg/L	0.00020	-	-	0.00052	-	-
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	-	-	0.0010	-	-
Magnesium (Mg)-Dissolved	mg/L	0.0050	-	-	3.72	-	-
Manganese (Mn)-Dissolved	mg/L	0.00050	-	-	0.00278	-	-
Mercury (Hg)-Dissolved	mg/L	0.0000050	-	-	<0.0000050	-	-
Molybdenum (Mo)-Dissolved	mg/L	0.000050	-	-	0.000146	-	-

Table 2.15: Water Quality Results for Water Licence Monitoring Location - MS-MRY-10

Analyte	Sample ID			MS-MRY-10	MS-MRY-10	MS-MRY-10	MS-MRY-10
	ALS Laboratory Sample ID			L2600491-1	L2602423-1	L2605841-6	L2608050-13
	Sample Date & Time			2021-06-07 16:00	2021-06-14 12:50	2021-06-21 10:35	2021-06-28 14:40
	QA/QC Sample Type			N/A	N/A	N/A	N/A
	Units	LOR	Criteria ¹				
Nickel (Ni)-Dissolved	mg/L	0.00050	-	-	<0.00050	-	-
Phosphorus (P)-Dissolved	mg/L	0.050	-	-	<0.050	-	-
Potassium (K)-Dissolved	mg/L	0.050	-	-	0.863	-	-
Rubidium (Rb)-Dissolved	mg/L	0.00020	-	-	0.00091	-	-
Selenium (Se)-Dissolved	mg/L	0.000050	-	-	<0.000050	-	-
Silicon (Si)-Dissolved	mg/L	0.050	-	-	0.360	-	-
Silver (Ag)-Dissolved	mg/L	0.000050	-	-	<0.000050	-	-
Sodium (Na)-Dissolved	mg/L	0.050	-	-	0.357	-	-
Strontium (Sr)-Dissolved	mg/L	0.0010	-	-	0.0033	-	-
Sulfur (S)-Dissolved	mg/L	0.50	-	-	0.97	-	-
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	-	-	0.000051	-	-
Vanadium (V)-Dissolved	mg/L	0.00050	-	-	<0.00050	-	-
Zinc (Zn)-Dissolved	mg/L	0.0010	-	-	<0.0010	-	-
Zirconium (Zr)-Dissolved	mg/L	0.00020	-	-	<0.00020	-	-
Oil and Grease, Total	mg/L	-	-	-	-	-	-
	-	-	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 2.16: Water Quality Results for Water Licence Monitoring Location - MS-MRY-13A

Analyte	Sample ID			MS-MRY-13A	MS-MRY-13A	MS-MRY-13A	MS-MRY-13A	MS-MRY-13A
	ALS Laboratory Sample ID			L2601055-10	L2602498-10	L2605841-12	L2608050-5	L2608050-6
	Sample Date & Time			2021-06-08 14:50	2021-06-13 14:50	2021-06-21 15:10	2021-06-28 16:10	2021-06-28 16:10
	QA/QC Sample Type			N/A	N/A	N/A	N/A	Travel Blank
	Units	LOR	Criteria ¹					
Conductivity	umhos/cm	1.0	-	-	125	-	-	-
pH	pH units	0.10	6.0 - 9.5	7.37	7.66	7.93	8.27	6.13
Total Suspended Solids	mg/L	2.0	15	4.6	2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	45	67	312	416	<10
Turbidity	NTU	0.10	-	17.7	8.87	0.27	0.43	<0.10
Alkalinity, Total (as CaCO ₃)	mg/L	1.0	-	-	47.1	-	-	-
Dissolved Organic Carbon	mg/L	0.50	-	-	2.50	-	-	-
Total Organic Carbon	mg/L	0.50	-	-	3.10	-	-	-
Aluminum (Al)-Total	mg/L	0.0050	-	-	0.113	-	-	-
Antimony (Sb)-Total	mg/L	0.00010	-	-	0.00014	-	-	-
Arsenic (As)-Total	mg/L	0.00010	0.50	-	0.00013	-	-	-
Barium (Ba)-Total	mg/L	0.00010	-	-	0.0130	-	-	-
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	-	-	0.271	-	-	-
Cadmium (Cd)-Total	mg/L	0.0000050	-	-	0.0000058	-	-	-
Calcium (Ca)-Total	mg/L	0.050	-	-	11.0	-	-	-
Cesium (Cs)-Total	mg/L	0.000010	-	-	0.000013	-	-	-
Chromium (Cr)-Total	mg/L	0.00050	-	-	<0.00050	-	-	-
Cobalt (Co)-Total	mg/L	0.00010	-	-	0.00017	-	-	-
Copper (Cu)-Total	mg/L	0.00050	0.30	-	0.00132	-	-	-
Iron (Fe)-Total	mg/L	0.010	-	-	0.190	-	-	-
Lead (Pb)-Total	mg/L	0.000050	0.20	-	0.000130	-	-	-
Lithium (Li)-Total	mg/L	0.0010	-	-	0.0027	-	-	-
Magnesium (Mg)-Total	mg/L	0.0050	-	-	6.84	-	-	-
Manganese (Mn)-Total	mg/L	0.00050	-	-	0.00401	-	-	-
Mercury (Hg)-Total	mg/L	0.0000050	-	-	<0.0000050	-	-	-
Molybdenum (Mo)-Total	mg/L	0.000050	-	-	0.000446	-	-	-
Nickel (Ni)-Total	mg/L	0.00050	0.50	-	0.00468	-	-	-
Phosphorus (P)-Total	mg/L	0.050	-	-	<0.050	-	-	-
Potassium (K)-Total	mg/L	0.050	-	-	1.08	-	-	-
Rubidium (Rb)-Total	mg/L	0.00020	-	-	0.00248	-	-	-
Selenium (Se)-Total	mg/L	0.000050	-	-	<0.000050	-	-	-
Silicon (Si)-Total	mg/L	0.10	-	-	0.99	-	-	-
Silver (Ag)-Total	mg/L	0.000050	-	-	<0.000050	-	-	-
Sodium (Na)-Total	mg/L	0.050	-	-	1.93	-	-	-
Strontium (Sr)-Total	mg/L	0.0010	-	-	0.0100	-	-	-
Sulfur (S)-Total	mg/L	0.50	-	-	4.62	-	-	-
Tellurium (Te)-Total	mg/L	0.00020	-	-	<0.00020	-	-	-
Thallium (Tl)-Total	mg/L	0.000010	-	-	0.000013	-	-	-
Thorium (Th)-Total	mg/L	0.00010	-	-	<0.00010	-	-	-

Table 2.16: Water Quality Results for Water Licence Monitoring Location - MS-MRY-13A

Analyte	Sample ID			MS-MRY-13A	MS-MRY-13A	MS-MRY-13A	MS-MRY-13A	MS-MRY-13A
	ALS Laboratory Sample ID			L2601055-10	L2602498-10	L2605841-12	L2608050-5	L2608050-6
	Sample Date & Time			2021-06-08 14:50	2021-06-13 14:50	2021-06-21 15:10	2021-06-28 16:10	2021-06-28 16:10
	QA/QC Sample Type			N/A	N/A	N/A	N/A	Travel Blank
	Units	LOR	Criteria ¹					
Tin (Sn)-Total	mg/L	0.00010	-	-	0.00053	-	-	-
Titanium (Ti)-Total	mg/L	0.00030	-	-	0.00428	-	-	-
Tungsten (W)-Total	mg/L	0.00010	-	-	<0.00010	-	-	-
Uranium (U)-Total	mg/L	0.000010	-	-	0.000107	-	-	-
Vanadium (V)-Total	mg/L	0.00050	-	-	<0.00050	-	-	-
Zinc (Zn)-Total	mg/L	0.0030	0.5	-	0.0110	-	-	-
Zirconium (Zr)-Total	mg/L	0.00020	-	-	<0.00020	-	-	-
Oil and Grease, Total	mg/L	5.0	-	-	<5.0	-	-	-
	-	0.00010	No Visible Sheen	-	No Visible Sheen	-	-	-
Phenols (4AAP)	mg/L	0.0010	-	-	<0.0010	-	-	-
F1 (C6-C10)	ug/L	25	-	-	<25	-	-	-
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	370	-	-	<370	-	-	-

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

Analyte	Sample ID			MS-MRY-13B	MS-MRY-13B
	ALS Laboratory Sample ID			L2601055-9	L2605841-11
	Sample Date & Time			2021-06-08 14:30	2021-06-21 14:25
	QA/QC Sample Type			N/A	N/A
	Units	LOR	Criteria ¹		
Conductivity	umhos/cm	1.0	-	-	861
pH	pH units	0.10	6.0 - 9.5	7.53	8.13
Total Suspended Solids	mg/L	1.0/2.0	15	2.5	3.1
Total Dissolved Solids	mg/L	10	-	71	558
Turbidity	NTU	0.10	-	9.14	2.49
Alkalinity, Total (as CaCO3)	mg/L	1.0	-	-	147
Dissolved Organic Carbon	mg/L	0.50	-	-	6.71
Total Organic Carbon	mg/L	0.50	-	-	5.72
Aluminum (Al)-Total	mg/L	0.050	-	-	<0.050
Antimony (Sb)-Total	mg/L	0.0010	-	-	<0.0010
Arsenic (As)-Total	mg/L	0.0010	0.50	-	<0.0010
Barium (Ba)-Total	mg/L	0.0010	-	-	0.0572
Beryllium (Be)-Total	mg/L	0.0010	-	-	<0.0010
Bismuth (Bi)-Total	mg/L	0.00050	-	-	<0.00050
Boron (B)-Total	mg/L	0.10	-	-	1.66
Cadmium (Cd)-Total	mg/L	0.000050	-	-	<0.000050
Calcium (Ca)-Total	mg/L	0.50	-	-	84.1
Chromium (Cr)-Total	mg/L	0.0050	-	-	<0.0050
Cobalt (Co)-Total	mg/L	0.0010	-	-	<0.0010
Copper (Cu)-Total	mg/L	0.0050	0.30	-	<0.0050
Iron (Fe)-Total	mg/L	0.10	-	-	<0.10
Lead (Pb)-Total	mg/L	0.00050	0.20	-	<0.00050
Lithium (Li)-Total	mg/L	0.010	-	-	<0.010
Magnesium (Mg)-Total	mg/L	0.050	-	-	52.3
Manganese (Mn)-Total	mg/L	0.0050	-	-	<0.0050
Mercury (Hg)-Total	mg/L	0.0000050	-	-	<0.0000050
Molybdenum (Mo)-Total	mg/L	0.00050	-	-	<0.00050
Nickel (Ni)-Total	mg/L	0.0050	0.50	-	0.0131
Potassium (K)-Total	mg/L	0.50	-	-	2.96
Selenium (Se)-Total	mg/L	0.00050	-	-	<0.00050
Silicon (Si)-Total	mg/L	1.0	-	-	2.6
Silver (Ag)-Total	mg/L	0.00050	-	-	<0.00050
Sodium (Na)-Total	mg/L	0.50	-	-	16.5
Strontium (Sr)-Total	mg/L	0.010	-	-	0.091
Thallium (Tl)-Total	mg/L	0.00010	-	-	<0.00010
Tin (Sn)-Total	mg/L	0.0010	-	-	<0.0010
Titanium (Ti)-Total	mg/L	0.0030	-	-	<0.0030
Tungsten (W)-Total	mg/L	0.0010	-	-	<0.0010
Uranium (U)-Total	mg/L	0.00010	-	-	0.00488
Vanadium (V)-Total	mg/L	0.0050	-	-	<0.0050
Zinc (Zn)-Total	mg/L	0.030	0.50	-	<0.030
Zirconium (Zr)-Total	mg/L	0.0020	-	-	<0.0020
Oil and Grease, Total	mg/L	5.0	-	-	<5.0
	-	-	No Visible Sheen	-	No Visible Sheen
Phenols (4AAP)	ug/L	0.0010	-	-	<0.0010
F1 (C6-C10)	ug/L	100	-	-	<25
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	370	-	-	<370

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-C-A

Analyte	Sample ID			MS-C-A	MS-C-A	MS-C-A	MS-C-A	MS-C-A	MS-C-A
	ALS Laboratory Sample ID			L2601055-5	L2602498-6	L2602498-7	L2605841-13	L2605841-14	L2608050-11
	Sample Date & Time			2021-06-08 12:55	2021-06-13 11:25	2021-06-13 11:25	2021-06-21 17:15	2021-06-21 17:15	2021-06-29 12:30
	QA/QC Sample Type			N/A	N/A	Field Duplicate	N/A	Travel Blank	N/A
	Units	LOR	Criteria ¹						
Conductivity	umhos/cm	1.0	-	-	91.2	91.5	-	-	-
pH	pH units	0.10	6.0 - 9.5	7.55	7.74	7.73	7.93	5.91	7.88
Total Suspended Solids	mg/L	1.0	Grab 30, Average 15	3.1	<1.0	<1.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	47	53	38	85	<10	66
Turbidity	NTU	0.10	-	1.45	10.2	10.2	3.37	<0.10	1.95
Ammonia, Total (as N)	mg/L	0.010	-	-	<0.010	<0.010	-	-	-
Nitrate (as N)	mg/L	0.020	-	-	0.084	0.088	-	-	-
Oil and Grease, Total	mg/L	5.0	-	-	<5.0	<5.0	-	-	-
	-	-	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 2.19: 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	MS-C-B	MS-C-B
	ALS Laboratory Sample ID			L2601055-6	L2601055-7	L2602498-8	L2605841-15	L2605841-16	L2608050-15
	Sample Date & Time			2021-06-08 13:20	2021-06-08 13:20	2021-06-13 12:05	2021-06-21 17:45	2021-06-21 17:45	2021-06-29 12:40
	QA/QC Sample Type			N/A	Field Duplicate	N/A	N/A	Field Duplicate	N/A
	Units	LOR	Criteria ¹						
Conductivity	umhos/cm	1.0	-	-	-	87.5	-	-	-
pH	pH units	0.10	6.0 - 9.5	7.58	7.52	7.72	7.89	7.86	7.80
Total Suspended Solids	mg/L	1.0/2.0	Grab 30, Average 15	2.5	2.0	<1.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	44	43	53	61	61	74
Turbidity	NTU	0.10	-	19.4	19.2	10.6	3.86	3.84	2.37
Ammonia, Total (as N)	mg/L	0.010	-	-	-	<0.010	-	-	-
Nitrate (as N)	mg/L	0.020	-	-	-	0.104	-	-	-
Oil and Grease, Total	mg/L	5.0	-	-	-	<5.0	-	-	-
	-	-	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 2.20: Water Quality Results for Water Licence Monitoring Location - MS-C-C

Analyte	Sample ID			MS-C-C	MS-C-C
	ALS Laboratory Sample ID			L2595911-10	L2608050-9
	Sample Date & Time			2021-06-01 9:55	2021-06-28 17:00
	QA/QC Sample Type			N/A	N/A
	Units	LOR	Criteria ¹		
Conductivity	umhos/cm	3.0	-	-	-
pH	pH units	0.10	6.0 - 9.5	7.69	7.83
Total Suspended Solids	mg/L	2.0	Grab 30, Average 15	16.7	2.5
Total Dissolved Solids	mg/L	10	-	298	745
Turbidity	NTU	0.10	-	32.3	2.8
Ammonia, Total (as N)	mg/L	0.010	-	-	-
Nitrate (as N)	mg/L	0.020	-	-	-
Oil and Grease, Total	mg/L	2.0/5.0	-	-	-
	-	-	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-D

Analyte	Sample ID			MS-C-D	MS-C-D	MS-C-D	MS-C-D
	ALS Laboratory Sample ID			L2595911-11	L2595911-12	L2600576-1	L2608050-8
	Sample Date & Time			2021-06-01 9:30	2021-06-01 9:30	2021-06-08 17:10	2021-06-28 16:40
	QA/QC Sample Type			N/A	Field Duplicate	N/A	N/A
	Units	LOR	Criteria ¹				
Conductivity	umhos/cm	3.0	-	-	-	-	-
pH	pH units	0.10	6.0 - 9.5	7.91	7.86	7.99	8.45
Total Suspended Solids	mg/L	2.0	Grab 30, Average 15	12.3	12.4	25.0	4.5
Total Dissolved Solids	mg/L	10	-	183	181	146	561
Turbidity	NTU	0.10	-	64.1	66.5	88.4	13.2
Ammonia, Total (as N)	mg/L	0.010	-	-	-	-	-
Nitrate (as N)	mg/L	0.020	-	-	-	-	-
Oil and Grease, Total	mg/L	2.0/5.0	-	-	-	-	-
	-	-	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 2.22: Water Quality Results for Water Licence Monitoring Location - MS-C-E

Analyte	Sample ID			MS-C-E	MS-C-E	MS-C-E	MS-C-E	MS-C-E	MS-C-E
	ALS Laboratory Sample ID			L2595911-9	L2601055-12	L2602498-3	L2602498-4	L2605841-10	L2608050-7
	Sample Date & Time			2021-06-01 9:15	2021-06-08 16:10	2021-06-13 9:50	2021-06-13 9:50	2021-06-21 13:20	2021-06-28 16:30
	QA/QC Sample Type			N/A	N/A	N/A	Field Duplicate	N/A	N/A
	Units	LOR	Criteria ¹						
Conductivity	umhos/cm	1.0	-	-	-	346	348	-	-
pH	pH units	0.10	6.0 - 9.5	7.67	7.85	7.98	7.98	8.14	8.16
Total Suspended Solids	mg/L	1.0/2.0	Grab 30, Average 15	7.4	7.7	1.3	1.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10/20	-	77	103	204	200	497	487
Turbidity	NTU	0.10	-	21.0	43.6	1.66	1.39	3.14	1.70
Ammonia, Total (as N)	mg/L	0.010	-	-	-	0.013	0.013	-	-
Nitrate (as N)	mg/L	0.020	-	-	-	0.751	0.746	-	-
Oil and Grease, Total	mg/L	5.0	-	-	-	<5.0	<5.0	-	-
	-	-	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 2.23: Water Quality Results for Water Licence Monitoring Location - MS-C-F

Analyte	Sample ID			MS-C-F	MS-C-F	MS-C-F	MS-C-F
	ALS Laboratory Sample ID			L2601055-8	L2602498-5	L2605841-1	L2608050-10
	Sample Date & Time			2021-06-08 13:55	2021-06-13 10:35	2021-06-22 9:20	2021-06-29 13:15
	QA/QC Sample Type			N/A	N/A	N/A	N/A
	Units	LOR	Criteria ¹				
Conductivity	umhos/cm	1.0	-	-	84.8	-	-
pH	pH units	0.10	6.0 - 9.5	7.48	7.68	7.92	8.06
Total Suspended Solids	mg/L	1.0/2.0	Grab 30, Average 15	4.0	3.4	23.5	<2.0
Total Dissolved Solids	mg/L	10	-	47	51	68	96
Turbidity	NTU	0.10	-	32.9	20.2	29.0	12.0
Ammonia, Total (as N)	mg/L	0.010	-	-	0.023	-	-
Nitrate (as N)	mg/L	0.020	-	-	0.060	-	-
Oil and Grease, Total	mg/L	5.0	-	-	<5.0	-	-
	-	-	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-G

Analyte	Sample ID			MS-C-G	MS-C-G	MS-C-G	MS-C-G
	ALS Laboratory Sample ID			L2605841-2	L2605841-3	L2608050-2	L2608050-3
	Sample Date & Time			2021-06-22 9:55	2021-06-21 9:55	2021-06-28 10:55	2021-06-28 10:55
	QA/QC Sample Type			N/A	Travel Blank	N/A	Field Blank
	Units	LOR	Criteria ¹				
Conductivity	umhos/cm	1.0	-	194	1.2	-	-
pH	pH units	0.10	6.0 - 9.5	8.07	5.29	7.9	6.05
Total Suspended Solids	mg/L	1.0/2.0	Grab 30, Average 15	<1.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	97	<10	106	97
Turbidity	NTU	0.10	-	3.17	0.22	1.35	<0.10
Ammonia, Total (as N)	mg/L	0.010	-	0.038	<0.010	-	-
Nitrate (as N)	mg/L	0.020	-	0.478	<0.020	-	-
Oil and Grease, Total	mg/L	5.0	-	<5.0	<5.0	-	-
	-	-	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-H

Analyte	Sample ID			MS-C-H	MS-C-H	MS-C-H	MS-C-H
	ALS Laboratory Sample ID			L2601055-11	L2602498-9	L2605841-4	L2608050-4
	Sample Date & Time			2021-06-08 15:35	2021-06-13 14:50	2021-06-21 10:35	2021-06-28 11:35
	QA/QC Sample Type			N/A	N/A	N/A	N/A
	Units	LOR	Criteria ¹				
Conductivity	umhos/cm	1.0	-	-	67.0	-	-
pH	pH units	0.10	6.0 - 9.5	7.40	7.64	7.88	8.05
Total Suspended Solids	mg/L	1.0/2.02	Grab 30, Average 15	2.0	2.2	<1.0	<2.0
Total Dissolved Solids	mg/L	10	-	27	34	74	96
Turbidity	NTU	0.10	-	10.9	12.0	1.0	0.38
Ammonia, Total (as N)	mg/L	0.010	-	-	0.021	-	-
Nitrate (as N)	mg/L	0.020	-	-	0.268	-	-
Oil and Grease, Total	mg/L	5.0	-	-	<5.0	-	-
	-	-	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 - MQ-C-A

Analyte	Sample ID			MQ-C-A	MQ-C-A	MQ-C-A	MQ-C-A	MQ-C-A
	ALS Laboratory Sample ID			L2601055-1	L2601055-2	L2602498-1	L2605841-7	L2608050-12
	Sample Date & Time			2021-06-07 13:50	2021-06-07 13:50	2021-06-13 8:45	2021-06-21 11:20	2021-06-29 7:45
	QA/QC Sample Type			N/A	Field Blank	N/A	N/A	N/A
	Units	LOR	Criteria ¹					
Conductivity	umhos/cm	1.0	-	-	-	85.2	-	-
pH	pH units	0.10	6.0 - 9.5	7.66	5.81	7.64	7.80	7.94
Total Suspended Solids	mg/L	2.0/1.0	Grab 30, Average 15	3.0	<2.0	<1.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10/13	-	53	<10	38	43	72
Turbidity	NTU	0.10	-	7.92	<0.10	2.39	6.90	0.77
Ammonia, Total (as N)	mg/L	0.010	-	-	-	<0.010	-	-
Nitrate (as N)	mg/L	0.020	-	-	-	<0.020	-	-
Oil and Grease, Total	mg/L	5.0	-	-	-	<5.0	-	-
	-	-	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 2.27: 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			L2601055-4	L2601684-1	L2601684-2	L2605841-9	L2608050-14
	Sample Date & Time			2021-06-07 15:00	2021-06-15 9:20	2021-06-15 9:20	2021-06-21 12:00	2021-06-29 9:00
	QA/QC Sample Type			N/A	N/A	Field Blank	N/A	N/A
	Units	LOR	Criteria ¹					
Conductivity	umhos/cm	1.0	-	-	133	<1.0	-	-
pH	pH units	0.10	6.0 - 9.5	7.65	7.88	5.93	8.17	8.09
Total Suspended Solids	mg/L	1.0/2.0	Grab 30, Average 15	92.2	2.4	<2.0	6.9	19.0
Total Dissolved Solids	mg/L	10	-	84	100	15	113	116
Turbidity	NTU	0.10	-	146	56.6	<0.10	34.4	58.9
Ammonia, Total (as N)	mg/L	0.010	-	-	0.039	<0.010	-	-
Nitrate (as N)	mg/L	0.020	-	-	0.452	<0.020	-	-
Oil and Grease, Total	mg/L	5.0	-	-	<5.0	<5.0	-	-
	-	-	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 2.28: Water Quality Results for Water Licence Monitoring Location - MQ-C-D

Analyte	Sample ID			MQ-C-D	MQ-C-D	MQ-C-D	MQ-C-D
	ALS Laboratory Sample ID			L2601055-3	L2602498-2	L2605841-8	L2608050-16
	Sample Date & Time			2021-06-07 14:25	2021-06-13 9:10	2021-06-21 11:35	2021-06-29 8:00
	QA/QC Sample Type			N/A	N/A	N/A	N/A
	Units	LOR	Criteria ¹				
Conductivity	umhos/cm	1.0	-	-	274	-	-
pH	pH units	0.10	6.0 - 9.5	7.73	7.93	8.02	8.20
Total Suspended Solids	mg/L	1.0/2.0	Grab 30, Average 15	14.9	10.8	10.6	9.3
Total Dissolved Solids	mg/L	10	-	66	172	155	157
Turbidity	NTU	0.10	-	64.1	55.9	34.4	29.3
Ammonia, Total (as N)	mg/L	0.010	-	-	0.037	-	-
Nitrate (as N)	mg/L	0.020	-	-	0.860	-	-
Oil and Grease, Total	mg/L	5.0	-	-	<5.0	-	-
	-	-	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 2021

DATE	Camp Lake Freshwater for Domestic Use - Daily Water MS-MRY-1 (m ³)	Camp Lake Freshwater for Industrial Use - Daily Water MS-MRY-1 (m ³)	Treated Sewage Effluent from MS-01 to Discharge Location #1 (m ³)	Treated Sewage Effluent from MS-01B to Discharge Location #1 (m ³)	Sewage Sludge Removed from Mine Site WWTPs to Incinerator or Disposal Offsite by Backhaul (m ³)	Sewage Sludge Removed from Mine Site WWTP to PWSP at Mine Site (m ³)	Sewage Sludge Removed from Lift Stations to PWSP at Mine Site (m ³)	Km 32 Lake Milne Port Camp Daily Water Use for Domestic Purposes MP-MRY-3 (m ³)	Km 32 Lake Milne Port Camp Fresh Water Use for Industrial Purposes MP-MRY-3 (m ³)	Treated Sewage Effluent from MP-01 to Milne Port (m ³)	Treated Sewage Effluent from MP-01B to Milne Port (m ³)	Sewage or Off-Spec Effluent Removed from Milne Port WWTP to Mine Site WWTP (m ³)	Sewage or Off-Spec Effluent Removed from Milne Port WWTP to PWSP at Mine Site (m ³)	Sewage Sludge Removed from Milne Port WWTP to Incinerator or Disposal Offsite by Backhaul (m ³)	Sewage Sludge Removed from Lift Stations to PWSP at Milne Port (m ³)	Sewage Sludge Removed from Milne Port WWTPs to PWSP at Milne Port (m ³)
1-Jun-21	123.9	7.7	27.0	91.3	0.7	0.0	0.0	78.4	6.0	22.0	14.8	0.0	0.0	0.3	0.0	0.0
2-Jun-21	101.3	6.0	20.0	87.2	0.7	0.0	0.0	69.1	6.0	23.0	15.5	0.0	0.0	0.3	0.0	0.0
3-Jun-21	86.6	8.6	19.0	85.2	0.7	0.0	0.0	62.5	0.0	27.0	22.2	0.0	0.0	0.3	0.0	0.0
4-Jun-21	87.1	5.2	22.0	79.1	0.7	0.0	0.0	78.6	0.0	26.0	16.8	0.0	0.0	0.3	0.0	0.0
5-Jun-21	93.8	14.9	20.0	71.1	0.7	0.0	0.0	37.0	0.0	15.0	14.5	0.0	0.0	0.3	0.0	0.5
6-Jun-21	130.0	10.3	25.0	89.7	0.7	0.0	0.0	72.8	6.0	21.0	15.8	0.0	0.0	0.3	4.3	0.0
7-Jun-21	109.0	0.0	20.0	91.1	0.7	0.0	0.0	81.2	0.0	19.0	15.7	0.0	0.0	0.3	0.0	0.0
8-Jun-21	106.2	25.4	20.0	97.7	0.7	0.0	0.0	59.9	0.0	21.0	19.8	0.0	0.0	0.3	0.0	0.0
9-Jun-21	136.2	0.0	28.0	100.0	0.7	0.0	0.0	56.7	1.5	14.0	19.1	0.0	0.0	0.2	0.0	0.0
10-Jun-21	133.5	7.7	24.0	93.8	0.4	0.0	0.0	70.0	0.0	20.0	19.6	0.0	0.0	0.2	0.0	0.0
11-Jun-21	121.6	5.2	27.0	95.0	0.4	0.0	0.0	77.1	0.0	22.0	20.1	0.0	0.0	0.2	0.0	0.0
12-Jun-21	119.4	2.2	27.0	87.7	0.7	0.0	0.0	69.0	0.0	19.0	19.9	0.0	0.0	0.2	0.0	0.0
13-Jun-21	87.3	0.9	31.0	83.3	0.7	0.0	0.0	77.3	0.0	18.0	21.7	0.0	0.0	0.2	0.0	0.0
14-Jun-21	129.7	7.7	29.0	92.3	0.7	0.0	0.0	68.5	0.0	20.0	18.9	0.0	0.0	0.2	0.0	0.0
15-Jun-21	121.1	4.3	24.0	102.3	0.7	0.0	0.0	65.0	6.0	21.0	21.1	0.0	0.0	0.2	0.0	0.0
16-Jun-21	139.4	8.6	23.0	97.2	0.7	0.0	0.0	73.9	0.0	23.0	24.3	0.0	0.0	0.0	0.0	0.0
17-Jun-21	112.8	0.0	31.0	97.4	0.7	0.0	0.0	90.0	0.0	22.0	26.8	0.0	0.0	0.3	0.0	0.0
18-Jun-21	118.4	0.0	32.0	109.4	0.7	0.0	0.0	74.9	0.0	24.0	22.1	0.0	0.0	0.3	0.0	0.0
19-Jun-21	154.6	0.0	30.0	102.1	0.7	0.0	0.0	66.5	0.0	20.0	21.2	0.0	0.0	1.3	0.0	0.0
20-Jun-21	165.5	0.0	31.0	99.3	0.7	0.0	0.0	58.3	0.0	20.0	15.6	0.0	0.0	0.3	0.0	0.0
21-Jun-21	124.3	18.1	27.0	98.0	0.7	0.0	0.0	53.0	1.5	22.0	22.2	0.0	0.0	1.3	0.0	0.0
22-Jun-21	111.5	6.9	31.0	103.6	0.7	0.0	0.0	82.5	0.0	23.0	20.6	0.0	0.0	0.5	0.0	0.0
23-Jun-21	140.7	4.3	32.0	99.9	0.8	0.0	0.0	54.1	0.0	22.0	28.1	0.0	0.0	1.5	0.0	0.0
24-Jun-21	126.3	12.2	23.0	95.9	0.8	0.0	0.0	57.9	0.0	25.0	22.6	0.0	0.0	0.5	0.0	0.0
25-Jun-21	112.5	0.0	22.0	102.7	0.8	0.0	0.0	42.5	0.0	25.0	21.3	0.0	0.0	1.6	0.0	0.0
26-Jun-21	136.0	1.7	32.0	109.1	0.8	0.0	0.0	38.5	0.0	13.0	21.4	0.0	0.0	0.6	0.0	0.0
27-Jun-21	135.4	4.3	29.0	107.3	0.7	0.0	0.0	51.7	0.0	23.0	23.2	0.0	0.0	1.6	0.0	0.0
28-Jun-21	146.9	6.0	32.0	112.8	0.8	0.0	0.0	39.5	6.0	25.0	18.8	0.0	0.0	0.6	0.0	0.0
29-Jun-21	131.1	34.3	21.0	109.5	0.4	6.0	0.0	47.2	0.0	25.0	13.8	0.0	0.0	1.3	0.0	0.0
30-Jun-21	111.8	17.3	17.0	108.2	0.8	0.0	0.0	64.0	0.0	20.0	21.6	0.0	0.0	0.5	0.0	0.0
Total	3,653.8	219.8	776.0	2,899.2	20.8	6.0	0.0	1,917.6	33.0	640.0	599.0	0.0	0.0	15.9	4.3	0.5

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

Table 3.1: Flow and Volume Measurements - Part I Item 11 - June 2021

DATE	Water Use for Dust Suppression from Authorized Sources (m ³)	Effluent Discharge from Mine Site Crusher Pad Sedimentation Pond (MS-06) (m ³)	Effluent Discharge from Mine Site Waste Rock Stockpile Pond (MS-08) (m ³)	Effluent Discharge from Milne Port Ore Stockpile Sedimentation Pond (East) to Milne Port (MP-05) (m ³)
1-Jun-21	0.0	93.0	0.0	0.0
2-Jun-21	0.0	0.0	0.0	0.0
3-Jun-21	0.0	0.0	0.0	0.0
4-Jun-21	0.0	95.0	0.0	0.0
5-Jun-21	90.8	116.2	0.0	0.0
6-Jun-21	302.8	64.9	0.0	0.0
7-Jun-21	545.1	74.1	0.0	0.0
8-Jun-21	393.7	182.6	0.0	0.0
9-Jun-21	484.5	149.1	0.0	0.0
10-Jun-21	514.8	176.6	0.0	0.0
11-Jun-21	60.6	165.0	0.0	0.0
12-Jun-21	484.5	156.2	0.0	0.0
13-Jun-21	575.4	170.4	0.0	0.0
14-Jun-21	575.4	166.6	0.0	0.0
15-Jun-21	212.0	163.6	0.0	0.0
16-Jun-21	242.3	171.5	0.0	0.0
17-Jun-21	0.0	179.5	0.0	0.0
18-Jun-21	121.1	0.0	0.0	0.0
19-Jun-21	242.3	40.1	0.0	0.0
20-Jun-21	333.1	24.5	0.0	0.0
21-Jun-21	181.7	0.0	0.0	0.0
22-Jun-21	30.3	41.6	0.0	0.0
23-Jun-21	0.0	40.8	0.0	0.0
24-Jun-21	0.0	70.6	0.0	637.1
25-Jun-21	363.4	49.8	3,757.7	485.5
26-Jun-21	272.5	15.9	3,743.7	19.2
27-Jun-21	681.4	43.7	5,678.8	119.6
28-Jun-21	605.7	45.1	4,850.0	0.0
29-Jun-21	514.8	54.0	5,255.8	0.0
30-Jun-21	90.8	0.0	5,705.9	3.9
Total	7,919.1	2,550.3	28,991.9	1,265.2

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