

August 30, 2022

Manager of Licensing
Nunavut Water Board
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Resource Management Officer, CIRNAC
Nunavut District, Nunavut Region
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**RE: Water Licence 2AM-MRY1325 Monthly Surveillance Network Program (SNP) Report
July 2022**

The following is the monthly report for July 2022 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 July 2022, 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 2.31. Table 3.1 presents water volumes consumed for domestic and industrial water purposes as well as select volumes of effluent and waste discharged and/or disposed at the Mary River Mine Site and Milne Port during July 2022.

Monitoring Program Results

Water Sampling and Analysis Results

Tables 2.1 through 2.31 provide the analytical results related to the SNP sampling requirements. There were no exceedances of applicable water quality criteria observed at monitoring stations during July 2022.

Total Petroleum Hydrocarbons (TPH) was not analyzed at Mine Site Bulk Fuel Storage Facility Stormwater discharge monitoring station MS-03B during the discharge in July 2022. An incorrect bottle set was used when the scheduled discharge sample was collected during the initiation of discharge on July 10. A second sampling event was subsequently completed on July 13 for the remaining parameters; however, the requested analysis was miscommunicated to the external third-party laboratory and TPH was not included in the laboratory analysis for the July 13 sample. Discharge from the facility was completed on July 13 and, therefore, a resample was unable to be collected.

A full suite sample (Group 8) was not collected at Milne Port surface water monitoring station MP-C-B during July 2022. The sample was scheduled to be collected on July 5 during the first planned sampling event of the month; however, was rescheduled to the following week due to logistical constraints. The sample subsequently could not be collected due to no flow conditions at MP-C-B which continued for the duration of July. MS-C-B currently remains dry; a full suite sample will be collected at MP-C-B if flowing conditions resume prior to freeze up conditions at the location.

At the Mine Site surface water monitoring station MS-C-D, only one (1) sample could be collected during July due to dry conditions during the remainder of the scheduled weekly sampling events. Total Suspended Solids (TSS) in the sample, collected on July 7, was measured at 22.4 mg/L; exceeding the permitted monthly average TSS criteria of 15 mg/L but compliant with the monitoring station's TSS grab sample criteria of 30 mg/L.

Flow and Volume Measurements

Table 3.1 provides a breakdown of volume measurements for July 2022 as required by Part I, Item 9 of the Licence. There were five (5) exceedances of the site specific daily water use withdraw limits for domestic use at Camp Lake in July (July 6, July 7, July 15, July 22 and July 23), however; the combined daily limit for domestic and industrial water use was not exceeded. There were no exceedances of the site specific daily water withdrawal limits for industrial use in July.

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 – 2.31, Table 3.1

Attachments

Monthly Water Sampling Results

Table 1.1: Monitoring Program Water Sampling Summary for July 2022

Monitoring Program Station	Sampling Date	Lab ID Number	Comment
Milne Port			
MP-01 (Sewage Treatment Facility)	2022-07-05	L2720802-1	Discharge volume recorded daily.
MP-0102 (Field Blank of MP-01)	2022-07-05	L2720802-4	
MP-01A (Polishing Waste Stabilization Pond)	N/A	N/A	No discharge.
MP-01B (Sewage Treatment Facility)	2022-07-05	L2720800-1	Discharge volume recorded daily.
MP-01B02 (Field Blank of MP-01B)	2022-07-05	L2720800-3	
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)	2022-07-02	L2721021-1	Discharge volume recorded daily.
MP-0301 (Field Duplicate of MP-03)	2022-07-02	L2721021-2	
MP-04 (Treated Oily Water from Milne Port Landfarm Facility to Tundra)	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)	2022-07-13	L2722584-1	Discharge volume recorded daily.
MP-0501 (Field Duplicate of MP-05)	2022-07-13	L2722584-2	
MP-06 Ore Stockpile Sedimentation Pond (West)	2022-07-14	L2722582-1	Discharge volume recorded daily.
MP-0601 (Field Duplicate of MP-06)	2022-07-14	L2722582-2	
MP-C-A (Downstream of Construction Area)	N/A	N/A	No flow.

Monitoring Program Station	Sampling Date	Lab ID Number	Comment
MP-C-B (Downstream of Construction Area)	2022-07-05	L2723073-8	No flow during other scheduled sampling events in July.
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)	2022-07-05 2022-07-12 2022-07-19 2022-07-26	L2723073-6 L2722585-4 L2724101-4 L2724929-1	
MP-C-J (Downstream of Construction Area)	2022-07-05 2022-07-12 2022-07-19 2022-07-26	L2723073-4 L2722585-3 L2724101-6 L2724929-4	
QD-BT2 (Travel Blank of MP-C-J)	2022-07-05	L2723073-7	
MP-C-K (Downstream of Construction Area)	2022-07-05 2022-07-12 2022-07-19 2022-07-26	L2723073-5 L2722585-2 L2724101-5 L2724929-2	
QD-CC2 (Field Duplicate of MP-C-K)	2022-07-12 2022-07-26	L2722585-1 L2724929-3	
MP-Q1-01 (Downstream of Q1 Quarry)	2022-07-05 2022-07-12 2022-07-19 2022-07-26	L2723073-1 L2722585-5 L2724101-3 L2724929-5	
MP-Q1-02 (Downstream of Q1 Quarry)	2022-07-05 2022-07-12 2022-07-19 2022-07-26	L2723073-3 L2722585-6 L2724101-1 L2724929-6	
QP-CC2 (Field Duplicate of MP-Q1-02)	2022-07-19	L2724101-2	
Mary River Mine Site			
MS-01 (Sewage Treatment Facility)	2022-07-05	L2720791-1	Discharge volume recorded daily.
MS-0102 (Field Blank of MS-01)	2022-07-05	L2720791-3	

Monitoring Program Station	Sampling Date	Lab ID Number	Comment
MS-01A (Mine Site Polishing Waste Stabilization Pond)	N/A	N/A	Facility not constructed.
MS-01B (Sewage Treatment Facility)	2022-07-02	L2720782-1	Discharge volume recorded daily.
MS-01B02 (Field Blank of MS-01B)	2022-07-02	L2720782-3	
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)	2022-07-10 2022-07-13	L2722755-1 L2722755-2	Discharge volume recorded daily,
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)	N/A	N/A	No discharge.
MS-07 (Run of Mine Ore Stockpile Pond Stormwater)	2022-07-18	L2723437-1	Discharge volume recorded daily.
MS-08 (Mine Waste Rock Stockpile Pond)	2022-07-12	L2722590-1	Discharge volume recorded daily.
MS-09 (Waste Rock Stockpile East Pond)	N/A	N/A	No discharge.
MS-10 (SDLT-1 Pond Ore Stockpile Stormwater)	N/A	N/A	No discharge.

Monitoring Program Station	Sampling Date	Lab ID Number	Comment
MS-11 (KM105 Pond Stormwater)	2022-07-05	L2720319-1	
MS-12 (Weatherhaven Camp Stormwater)	N/A	N/A	Facility not constructed.
MS-13 (Explosives Magazine Pond)	N/A	N/A	Facility not constructed.
MS-14 (Quarry QMR2 Pond/Sump)	N/A	N/A	Facility not constructed.
MS-MRY-6 (Exploration Camp Bulk Fuel Storage Facility Stormwater)	N/A	N/A	No Discharge.
MS-MRY-09 (Deposit 1 Surface Water Drainage)	2022-07-05 2022-07-12 2022-07-18 2022-07-26	L2721012-13 L2722588-10 L2723440-8 L2725223-7	
MS-MRY-0903 (Travel Blank of MS-MRY-09)	2022-07-05	L2721012-14	
MS-MRY-10 (Deposit 1 Surface Water Drainage)	N/A	N/A	No flow.
MS-MRY-13A (Downstream Non-Hazardous Landfill)	2022-07-04 2022-07-11 2022-07-18 2022-07-27	L2721012-3 L2722588-4 L2723440-9 L2725223-10	
MS-MRY-13A01 (Field Duplicate of MS-MRY-13A)	2022-07-18	L2723440-10	
MS-MRY-13B (Downstream Non-Hazardous Landfill)	2022-07-18 2022-07-27	L2723440-11 L2725223-9	No flow during other scheduled sampling events in July.
MS-C-A (Downstream of Construction and Borrow Areas)	2022-07-04 2022-07-11 2022-07-18 2022-07-25	L2721012-10 L2722588-3 L2723440-1 L2725223-6	
MS-C-A02 (Field Blank of MS-C-A)	2022-07-11	L2722588-7	
MS-C-B (Downstream of Construction and Borrow Areas)	2022-07-04 2022-07-11 2022-07-18 2022-07-27	L2721012-11 L2722588-5 L2723440-2 L2725223-11	

Monitoring Program Station	Sampling Date	Lab ID Number	Comment
MS-C-C (Downstream of Construction and Borrow Areas)	2022-07-04 2022-07-11 2022-07-18 2022-07-25	L2721012-7 L2722588-8 L2723440-3 L2725223-6	
MS-C-D (Downstream of Construction and Borrow Areas)	2022-07-25	L2724930-5	No flow during other scheduled sampling events in July.
MS-C-E (Downstream of Construction and Borrow Areas)	2022-07-04 2022-07-12 2022-07-18 2022-07-25	L2721012-6 L2722588-9 L2723440-4 L2725223-4	
MS-C-F (Downstream of Construction and Borrow Areas)	2022-07-04 2022-07-11 2022-07-18 2022-07-27	L2721012-2 L2722588-6 L2723440-5 L2725223-13	
MS-C-F01 (Field Duplicate of MS-C-F)	2022-07-27	L2725223-12	
MS-C-G (Downstream of Construction and Borrow Areas)	2022-07-04 2022-07-11 2022-07-18 2022-07-27	L2721012-1 L2722588-1 L2723440-6 L2725223-8	
MS-C-H (Downstream of Construction and Borrow Areas)	2022-07-04 2022-07-11 2022-07-18	L2721012-2 L2722588-2 L2723440-7	No flow during other scheduled sampling events in July.
MS-C-H01 (Field Duplicate of MS-C-H)	2022-07-11	L2722588-14	
MQ-C-A (Downstream of QMR2 Quarry)	2022-07-04 2022-07-12	L2721012-4 L2722588-12	No flow during other scheduled sampling events in July.
MQ-C-B (Downstream of QMR2 Quarry)	2022-07-04 2022-07-12 2022-07-19 2022-07-25	L2721012-9 L2722588-11 L2723440-12 L2725223-2	
MQ-C-B01 (Field Duplicate of MQ-C-B)	2022-07-04	L2721012-8	
MQ-C-B03 (Travel Blank of MQ-C-B)	2022-07-25	L2725223-3	

Monitoring Program Station	Sampling Date	Lab ID Number	Comment
MQ-C-D (Downstream of QMR2 Quarry)	2022-07-04	L2721012-5	
	2022-07-12	L2722588-13	
	2022-07-19	L2723440-13	
	2022-07-25	L2725223-1	
MQ-C-D02 (Field Blank for MQ-C-D)	2022-07-19	L2723440-14	
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	MP-01
	ALS Laboratory Sample ID			L2720802-1	L2720802-4
	Sample Date & Time			2022-07-05 13:10	2022-07-05 13:10
	QA/QC Sample Type			N/A	Field Blank
	Units	LOR	Criteria ¹		
pH	pH units	0.10	6.0 - 9.5	7.72	5.69
Total Suspended Solids	mg/L	1.0	120	<1.0	<1.0
Ammonia, Total (as N)	mg/L	0.010	-	0.052	<0.010
Total Kjeldahl Nitrogen	mg/L	0.050	-	1.14	<0.050
Phosphorus, Total	mg/L	0.060	-	12.3	<0.0030
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	5.0/10.0	-	<5.0	<10
	-	-	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.

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	MP-01B
	ALS Laboratory Sample ID			L2720800-1	L2720800-3
	Sample Date & Time			2022-07-05 14:00	2022-07-05 14:15
	QA/QC Sample Type			N/A	Field Blank
	Units	LOR	Criteria ¹		
pH	pH units	0.10	6.0 - 9.5	7.61	6.23
Total Suspended Solids	mg/L	1.0	120	<1.0	<1.0
Ammonia, Total (as N)	mg/L	0.010	-	0.013	<0.010
Total Kjeldahl Nitrogen	mg/L	0.50	-	4.04	0.066
Phosphorus, Total	mg/L	0.030	-	7.38	0.0052
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	5.0	-	<5.0	<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-03

Analyte	Sample ID			MP-03	MP-03
	ALS Laboratory Sample ID			L2721021-1	L2721021-2
	Sample Date & Time			2022-07-02 13:20	2022-07-02 13:35
	QA/QC Sample Type			N/A	Field Duplicate
	Units	LOR	Criteria ¹		
pH	pH units	0.10	6.0 - 9.5	8.29	8.32
Total Suspended Solids	mg/L	2.0	-	11.6	12.2
Total Dissolved Solids	mg/L	10	-	209	205
Total Ammonia (as N)	mg/L	0.025	-	<0.010	0.237
Total Phosphorus	mg/L	0.0020	-	<0.0030	<0.0030
Arsenic (As)-Total	mg/L	0.0001	-	0.00030	0.00032
Copper (Cu)-Total	mg/L	0.0005	-	0.00179	0.00179
Total Lead (Pb)	mg/L	0.000050	0.001	0.000988	0.000957
Nickel (Ni)-Total	mg/L	0.00050	-	0.00064	0.00063
Zinc (Zn)-Total	mg/L	0.0030	-	0.007200	0.007
Oil and Grease, Total	mg/L	5.0	15.0	<5.0	<5.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen
Benzene	ug/L	0.50	370	<0.50	<0.50
Ethylbenzene	ug/L	0.50	90	<0.50	<0.50
Toluene	ug/L	0.50	2.0	<0.50	<0.50
F1 (C6-C10)	ug/L	100	-	<25	<25
F1-BTEX	ug/L	100	-	<25	<25
F2 (C10-C16)	ug/L	100	-	380	320
F3 (C16-C34)	ug/L	250	-	<250	<250
F4 (C34-C50)	ug/L	250	-	<250	<250
Total Hydrocarbons (C6-C50)	ug/L	380	-	380	<370

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-05

Analyte	Sample ID			MP-05	MP-05
	ALS Laboratory Sample ID			L2722584-1	L2722584-2
	Sample Date & Time			2022-07-13 16:15	2022-07-13 16:15
	QA/QC Sample Type			N/A	Field Duplicate
	Units	LOR	Criteria ¹		
Hardness (as CaCO ₃)	mg/L	0.5	-	187	180
pH	pH units	0.1	6.0 - 9.5	8.5	8.47
Total Suspended Solids	mg/L	1	15	<1.0	<1.0
Total Dissolved Solids	mg/L	20	-	221	228
Turbidity	NTU	0.1	-	3.6	3.54
Alkalinity, Total (as CaCO ₃)	mg/L	1	-	118	118
Ammonia, Total (as N)	mg/L	0.01	-	0.034	0.032
Chloride (Cl)	mg/L	0.5	-	37.7	37.7
Fluoride (F)	mg/L	0.0	-	0.153	0.152
Nitrate (as N)	mg/L	0.0	-	1.74	1.74
Total Kjeldahl Nitrogen	mg/L	0.1	-	0.397	0.404
Phosphorus, Total	mg/L	0.003	-	0.0042	0.0205
Sulfate (SO ₄)	mg/L	0.3	-	34.4	34.3
Dissolved Organic Carbon	mg/L	0.5	-	3.85	4.15
Total Organic Carbon	mg/L	0.5	-	3.88	3.77
Aluminum (Al)-Total	mg/L	0.01	-	0.127	0.127
Arsenic (As)-Total	mg/L	0.0001	0.50	0.0002	0.0002
Cadmium (Cd)-Total	mg/L	0.000005	-	<0.0000050	<0.0000050
Calcium (Ca)-Total	mg/L	0.05	-	46.8	46.4
Copper (Cu)-Total	mg/L	0.0005	0.30	0.00144	0.0015
Iron (Fe)-Total	mg/L	0.01	-	0.11	0.117
Lead (Pb)-Total	mg/L	0.00005	0.20	0.000202	0.000208
Magnesium (Mg)-Total	mg/L	0.005	-	16.8	16.9
Manganese (Mn)-Total	mg/L	0.001	-	0.042	0.0427
Mercury (Hg)-Total	mg/L	0.000005	-	<0.0000050	<0.0000050
Molybdenum (Mo)-Total	mg/L	0.000050	-	0.00472	0.0048
Nickel (Ni)-Total	mg/L	0.0005	0.50	0.00085	0.00083
Potassium (K)-Total	mg/L	0.05	-	4.89	5.03
Selenium (Se)-Total	mg/L	0.00005	-	0.000107	0.0001
Sodium (Na)-Total	mg/L	0.05	-	14	14.3
Thallium (Tl)-Total	mg/L	0.00001	-	0.000014	0.000014
Uranium (U)-Total	mg/L	0.00001	-	0.112	0.115
Zinc (Zn)-Total	mg/L	0.003	0.50	0.0049	0.0051
Aluminum (Al)-Dissolved	mg/L	0.005	-	0.0328	0.0308
Arsenic (As)-Dissolved	mg/L	0.0001	-	0.00018	0.00016
Cadmium (Cd)-Dissolved	mg/L	0.000005	-	<0.0000050	<0.0000050
Calcium (Ca)-Dissolved	mg/L	0.05	-	48.1	45.4
Copper (Cu)-Dissolved	mg/L	0.0002	-	0.0014	0.00137
Iron (Fe)-Dissolved	mg/L	0.01	-	0.01	0.012
Lead (Pb)-Dissolved	mg/L	0.00005	-	<0.000050	0.000054
Magnesium (Mg)-Dissolved	mg/L	0.005	-	16.3	16.2
Manganese (Mn)-Dissolved	mg/L	0.001	-	0.0348	0.034
Mercury (Hg)-Dissolved	mg/L	0.000005	-	<0.0000050	<0.0000050
Molybdenum (Mo)-Dissolved	mg/L	0.00005	-	0.00473	0.00465
Nickel (Ni)-Dissolved	mg/L	0.0005	-	0.0006	0.00061
Potassium (K)-Dissolved	mg/L	0.050	-	4.73	4.65
Selenium (Se)-Dissolved	mg/L	0.00005	-	0.000105	0.000107
Sodium (Na)-Dissolved	mg/L	0.05	-	14.9	14.6
Thallium (Tl)-Dissolved	mg/L	0.00001	-	0.000012	0.000011
Uranium (U)-Dissolved	mg/L	0.00001	-	0.115	0.114
Zinc (Zn)-Dissolved	mg/L	0.001	-	0.0049	0.0046
Oil and Grease, Total	mg/L	-	-	-	-
	-	-	No Visible Sheen	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-06

Analyte	Sample ID			MP-06	MP-06
	ALS Laboratory Sample ID			L2722582-1	L2722582-2
	Sample Date & Time			2022-07-14 8:15	2022-07-14 8:15
	QA/QC Sample Type			N/A	Field Duplicate
	Units	LOR	Criteria ¹		
Hardness (as CaCO ₃)	mg/L	0.50	-	380	381
pH	pH units	0.10	6.0 - 9.5	8.41	8.37
Total Suspended Solids	mg/L	1.0	15	1.6	1.3
Total Dissolved Solids	mg/L	20	-	602	613
Turbidity	NTU	0.10	-	2.7	3.13
Alkalinity, Total (as CaCO ₃)	mg/L	1.0	-	114	113
Ammonia, Total (as N)	mg/L	0.020	-	0.957	0.978
Chloride (Cl)	mg/L	0.50	-	109	110
Fluoride (F)	mg/L	0.020	-	0.215	0.208
Nitrate (as N)	mg/L	0.020	-	3.97	3.98
Total Kjeldahl Nitrogen	mg/L	0.050	-	1.4	1.44
Phosphorus, Total	mg/L	0.0030	-	0.0049	0.0051
Sulfate (SO ₄)	mg/L	0.30	-	219	219
Dissolved Organic Carbon	mg/L	0.50	-	3.5	3.29
Total Organic Carbon	mg/L	0.50	-	4.11	3.64
Aluminum (Al)-Total	mg/L	0.0050	-	0.0285	0.0265
Arsenic (As)-Total	mg/L	0.00010	0.50	0.00023	0.00025
Cadmium (Cd)-Total	mg/L	0.0000050	-	<0.0000050	<0.0000050
Calcium (Ca)-Total	mg/L	0.050	-	71.2	72.8
Copper (Cu)-Total	mg/L	0.00050	0.30	<0.00050	0.00052
Iron (Fe)-Total	mg/L	0.010	-	0.053	0.048
Lead (Pb)-Total	mg/L	0.000050	0.20	<0.000050	<0.000050
Magnesium (Mg)-Total	mg/L	0.0050	-	52.6	51.7
Manganese (Mn)-Total	mg/L	0.00050	-	0.0615	0.0639
Mercury (Hg)-Total	mg/L	0.0000050	-	<0.0000050	<0.0000050
Molybdenum (Mo)-Total	mg/L	0.000050	-	0.00575	0.00584
Nickel (Ni)-Total	mg/L	0.00050	0.50	0.00143	0.00145
Potassium (K)-Total	mg/L	0.050	-	11.1	10.8
Selenium (Se)-Total	mg/L	0.000050	-	0.000651	0.000635
Sodium (Na)-Total	mg/L	0.050	-	64.3	63.2
Thallium (Tl)-Total	mg/L	0.000010	-	0.000085	0.000083
Uranium (U)-Total	mg/L	0.000010	-	0.188	0.194
Zinc (Zn)-Total	mg/L	0.0030	0.50	<0.0030	<0.0030
Aluminum (Al)-Dissolved	mg/L	0.0050	-	0.0063	0.0065
Arsenic (As)-Dissolved	mg/L	0.00010	-	0.0002	0.00019
Cadmium (Cd)-Dissolved	mg/L	0.000005	-	<0.0000050	<0.0000050
Calcium (Ca)-Dissolved	mg/L	0.050	-	69.3	69.3
Copper (Cu)-Dissolved	mg/L	0.00020	-	0.00038	0.00042
Iron (Fe)-Dissolved	mg/L	0.010	-	<0.010	<0.010
Lead (Pb)-Dissolved	mg/L	0.000050	-	<0.000050	<0.000050
Magnesium (Mg)-Dissolved	mg/L	0.0050	-	50.2	50.4
Manganese (Mn)-Dissolved	mg/L	0.00050	-	0.0141	0.016
Mercury (Hg)-Dissolved	mg/L	0.0000050	-	<0.0000050	<0.0000050
Molybdenum (Mo)-Dissolved	mg/L	0.000050	-	0.00564	0.00553
Nickel (Ni)-Dissolved	mg/L	0.00050	-	0.00116	0.00114
Potassium (K)-Dissolved	mg/L	0.050	-	10.6	10.6
Selenium (Se)-Dissolved	mg/L	0.000050	-	0.000652	0.000671
Sodium (Na)-Dissolved	mg/L	0.050	-	63.3	64.2
Thallium (Tl)-Dissolved	mg/L	0.000010	-	0.000091	0.000085
Uranium (U)-Dissolved	mg/L	0.000010	-	0.183	0.185
Zinc (Zn)-Dissolved	mg/L	0.0010	-	<0.0010	0.0012
Oil and Grease, Total	mg/L		-	-	-
	-	-	No Visible Sheen	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 2.6: Water Quality Results for Water Licence Monitoring Location - MP-C-B

Analyte	Sample ID			MP-C-B
	ALS Laboratory Sample ID			L2723073-8
	Sample Date & Time			2022-07-05 11:55
	QA/QC Sample Type			N/A
	Units	LOR	Criteria ¹	
Conductivity	umhos/cm	1.0	-	-
pH	pH units	0.10	6.0 - 9.5	8.43
Total Suspended Solids	mg/L	1.0	Grab 30, Average 15	1.1
Total Dissolved Solids	mg/L	10.0/20.0	-	199
Turbidity	NTU	0.10	-	2.35
Ammonia, Total (as N)	mg/L	0.010/0.020	-	-
Nitrate (as N)	mg/L	0.020	-	-
Oil and Grease, Total	mg/L	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 2.7: 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
	ALS Laboratory Sample ID			L2723073-6	L2722585-4	L2724101-4	L2724929-1
	Sample Date & Time			2022-07-05 16:50	2022-07-12 9:50	2022-07-19 10:00	2022-07-26 7:15
	QA/QC Sample Type			N/A	N/A	N/A	N/A
	Units	LOR	Criteria ¹				
Conductivity	umhos/cm	1.0	-	-	261	-	-
pH	pH units	0.10	6.0 - 9.5	8.29	8.41	8.17	8.17
Total Suspended Solids	mg/L	2.0	Grab 30, Average 15	<1.0	<1.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10.0/20.0	-	81	136	141	175
Turbidity	NTU	0.10	-	0.47	0.22	0.39	0.21
Ammonia, Total (as N)	mg/L	0.010	-	-	<0.010	-	-
Nitrate (as N)	mg/L	0.020	-	-	0.161	-	-
Oil and Grease, Total	mg/L	5.0	-	-	<5.0	-	-
	-	-	No Visible Sheen	No Visible Sheen	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 2.8: 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			L2723073-4	L2723073-7	L2722585-3	L2724101-6	L2724929-4
	Sample Date & Time			2022-07-05 11:20	2022-07-05 11:20	2022-07-12 8:45	2022-07-19 11:10	2022-07-26 8:30
	QA/QC Sample Type			N/A	Travel Blank	N/A	N/A	N/A
	Units	LOR	Criteria ¹					
Conductivity	umhos/cm	1.0	-	-	-	554	-	-
pH	pH units	0.10	6.0 - 9.5	8.58	5.81	8.52	7.83	7.80
Total Suspended Solids	mg/L	2.0	Grab 30, Average 15	<1.0	<1.0	<1.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10.0/20.0	-	219	<10	280	280	289
Turbidity	NTU	0.10	-	0.43	<0.10	<0.10	0.49	0.40
Ammonia, Total (as N)	mg/L	0.010	-	-	-	0.012	-	-
Nitrate (as N)	mg/L	0.020	-	-	-	0.154	-	-
Oil and Grease, Total	mg/L	5.0	-	-	-	<5.0	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	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 2.9: 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			L2723073-5	L2722585-2	L2722585-1	L2724101-5	L2724929-2	L2724929-3
	Sample Date & Time			2022-07-05 11:40	2022-07-12 8:05	2022-07-12 8:05	2022-07-19 10:45	2022-07-26 8:10	2022-07-26 8:10
	QA/QC Sample Type			N/A	N/A	Field Duplicate	N/A	N/A	Field Duplicate
	Units	LOR	Criteria ¹						
Conductivity	umhos/cm	1.0	-	-	551	551	-	-	-
pH	pH units	0.10	6.0 - 9.5	8.47	8.42	8.45	8.06	7.99	8.00
Total Suspended Solids	mg/L	2.0	Grab 30, Average 15	<1.0	<1.0	<1.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10.0 / 20.0	-	218	285	276	336	379	360
Turbidity	NTU	0.10	-	1.02	0.58	0.63	0.73	0.69	0.76
Ammonia, Total (as N)	mg/L	0.01/0.10	-	-	2.44	2.42	-	-	-
Nitrate (as N)	mg/L	0.020	-	-	2.45	2.45	-	-	-
Oil and Grease, Total	mg/L	5.0	-	-	<5.0	<5.0	-	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	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 2.10: 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
	ALS Laboratory Sample ID			L2723073-1	L2722585-5	L2724101-3	L2724929-5
	Sample Date & Time			2022-07-05 8:50	2022-07-12 10:40	2022-07-19 9:20	2022-07-26 8:50
	QA/QC Sample Type			N/A	N/A	N/A	N/A
	Units	LOR	Criteria ¹				
Conductivity	umhos/cm	1.0	-	-	181	-	-
pH	pH units	0.10	6.0 - 9.5	8.25	8.2	7.9	7.95
Total Suspended Solids	mg/L	2.0	Grab 30, Average 15	2.1	3.9	<2.0	<2.0
Total Dissolved Solids	mg/L	10.0/20.0	-	175	99	90	120
Turbidity	NTU	0.10	-	6.21	3.89	4.08	3.07
Ammonia, Total (as N)	mg/L	0.010	-	-	<0.010	-	-
Nitrate (as N)	mg/L	0.020	-	-	0.47	-	-
Oil and Grease, Total	mg/L	5.0	-	-	<5.0	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	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 2.11: 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			L2723073-3	L2722585-6	L2724101-1	L2724101-2	L2724929-6
	Sample Date & Time			2022-07-05 9:20	2022-07-12 13:15	2022-07-19 8:55	2022-07-19 8:55	2022-07-26 9:20
	QA/QC Sample Type			N/A	N/A	N/A	Field Duplicate	N/A
	Units	LOR	Criteria ¹					
Conductivity	umhos/cm	1.0	-	-	344	-	-	-
pH	pH units	0.10	6.0 - 9.5	8.19	8.32	7.97	7.97	7.87
Total Suspended Solids	mg/L	2.0	Grab 30, Average 15	<1.0	<1.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10.0/13.0	-	84	203	251	271	305
Turbidity	NTU	0.10	-	2.78	1.60	2.42	2.46	1.26
Ammonia, Total (as N)	mg/L	0.010	-	-	1.30	-	-	-
Nitrate (as N)	mg/L	0.020	-	-	7.42	-	-	-
Oil and Grease, Total	mg/L	5.0	-	-	<5.0	-	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	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

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

Analyte	Sample ID			MS-01	MS-0102
	ALS Laboratory Sample ID			L2720791-1	L2720791-3
	Sample Date & Time			2022-07-05 14:45	2022-07-05 14:45
	QA/QC Sample Type			N/A	Field Blank
	Units	LOR	Criteria ¹		
pH	pH units	0.10	6.0 - 9.5	7.74	5.76
Total Suspended Solids	mg/L	1.0	35	7.8	<1.0
Ammonia, Total (as N)	mg/L	0.010	4.0	0.1	<0.010
Total Kjeldahl Nitrogen	mg/L	0.050	-	0.904	<0.050
Phosphorus, Total	mg/L	0.0030	4.0	0.8	<0.0030
Fecal Coliforms	CFU/100 mL	0.0	1,000	2	0
BOD	mg/L	2.0	30	<2.0	<2.0
Oil and Grease, Total	mg/L	5.0	-	<5.0	<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 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-01B

Analyte	Sample ID			MS-01B	MS-01B02
	ALS Laboratory Sample ID			L2720782-1	L2720782-3
	Sample Date & Time			2022-07-02 15:00	2022-07-02 15:00
	QA/QC Sample Type			N/A	Field Blank
	Units	LOR	Criteria ¹		
pH	pH units	0.10	6.0 - 9.5	7.93	5.67
Total Suspended Solids	mg/L	1.0	35	2.0	<1.0
Ammonia, Total (as N)	mg/L	0.010	4.0	0.112	<0.010
Total Kjeldahl Nitrogen	mg/L	0.050	-	1.24	0.090
Phosphorus, Total	mg/L	0.0030	4.0	0.684	<0.0030
Fecal Coliforms	CFU/100 mL	0.0	1,000	25	0
BOD	mg/L	2.0	30	<2.0	<2.0
Oil and Grease, Total	mg/L	5.0	-	<5.0	<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.

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

Table 2.14: Water Quality Results for Water Licence Monitoring Location - MS-03B

Analyte	Sample ID			MS-03B	MS-03B
	ALS Laboratory Sample ID			L2722755-1	L2722755-2
	Sample Date & Time			2022-07-10 21:05	2022-07-13 21:05
	QA/QC Sample Type			N/A	N/A
	Units	LOR	Criteria ¹		
pH	pH units	0.10	6.0 - 9.5	8.28	-
Total Suspended Solids	mg/L	1.0	-	<1.0	-
Total Dissolved Solids	mg/L	20	-	133	-
Turbidity	NTU	0.10	-	0.93	-
Lead (Pb)-Total	mg/L	0.00050	0.001	<0.00050	-
Oil and Grease, Total	mg/L	5.0	15	<5.0	-
	-	-	No Visible Sheen	No Visible Sheen	-
Benzene	ug/L	0.5	370	-	<0.50
Ethylbenzene	ug/L	0.5	90	-	<0.50
Toluene	ug/L	0.5	2.0	-	<0.50
o-Xylene	ug/L	0.5	-	-	<0.50
m+p-Xylenes	ug/L	1	-	-	<1.0
Xylenes (Total)	ug/L	1.1	-	-	<1.1
4-Bromofluorobenzene	%	Surrogate	-	-	104
1,4-Difluorobenzene	%	Surrogate	-	-	101.3
F1 (C6-C10)	ug/L	100	-	-	<100
F1-BTEX	ug/L	100	-	-	<100
F2 (C10-C16)	mg/L	-	-	-	-
F3 (C16-C34)	mg/L	-	-	-	-
F4 (C34-C50)	mg/L	-	-	-	-
Total Hydrocarbons (C6-C50)	mg/L	-	-	-	-

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 2.15: Water Quality Results for Water Licence Monitoring Location - MS-07

Analyte	Sample ID			MS-07
	ALS Laboratory Sample ID			L2723437-1
	Sample Date & Time			2022-07-18 12:30
	QA/QC Sample Type			N/A
	Units	LOR	Criteria ¹	
Hardness (as CaCO3)	mg/L	0.50		89.2
pH	pH units	0.10	6.0 - 9.5	8.01
Total Suspended Solids	mg/L	2.0	15	<2.0
Total Dissolved Solids	mg/L	10	-	113
Turbidity	NTU	0.10	-	3.29
Alkalinity, Total (as CaCO3)	mg/L	1.0	-	47.9
Ammonia, Total (as N)	mg/L	0.010	-	0.013
Chloride (Cl)	mg/L	0.50	-	3.54
Fluoride (F)	mg/L	0.020	-	0.117
Nitrate (as N)	mg/L	0.020	-	2.05
Total Kjeldahl Nitrogen	mg/L	0.050	-	0.53
Phosphorus, Total	mg/L	0.0030	-	0.0064
Sulfate (SO4)	mg/L	0.30	-	45.6
Dissolved Organic Carbon	mg/L	0.50	-	1.95
Total Organic Carbon	mg/L	0.50	-	1.77
Aluminum (Al)-Total	mg/L	0.0050	-	0.148
Arsenic (As)-Total	mg/L	0.00010	0.50	0.00012
Cadmium (Cd)-Total	mg/L	0.0000050	-	0.0000112
Calcium (Ca)-Total	mg/L	0.050	-	13.3
Copper (Cu)-Total	mg/L	0.00050	0.30	0.0011
Iron (Fe)-Total	mg/L	0.010	-	0.203
Lead (Pb)-Total	mg/L	0.000050	0.20	0.0036
Magnesium (Mg)-Total	mg/L	0.0050	-	12.7
Manganese (Mn)-Total	mg/L	0.00050	-	0.00468
Mercury (Hg)-Total	mg/L	0.0000050	-	<0.0000050
Molybdenum (Mo)-Total	mg/L	0.000050	-	0.00775
Nickel (Ni)-Total	mg/L	0.00050	0.50	<0.00050
Potassium (K)-Total	mg/L	0.050	-	7.14
Selenium (Se)-Total	mg/L	0.000050	-	0.00035
Sodium (Na)-Total	mg/L	0.050	-	2.08
Thallium (Tl)-Total	mg/L	0.000010	-	<0.000010
Uranium (U)-Total	mg/L	0.000010	-	0.00162
Zinc (Zn)-Total	mg/L	0.0030	0.50	<0.0030
Aluminum (Al)-Dissolved	mg/L	0.0050	-	0.0361
Arsenic (As)-Dissolved	mg/L	0.00010	-	<0.00010
Cadmium (Cd)-Dissolved	mg/L	0.0000050	-	0.0000071
Calcium (Ca)-Dissolved	mg/L	0.050	-	13.9
Copper (Cu)-Dissolved	mg/L	0.00020	-	0.00035
Iron (Fe)-Dissolved	mg/L	0.010	-	0.012
Lead (Pb)-Dissolved	mg/L	0.000050	-	0.000551
Magnesium (Mg)-Dissolved	mg/L	0.0050	-	13.2
Manganese (Mn)-Dissolved	mg/L	0.00050	-	0.00139
Mercury (Hg)-Dissolved	mg/L	0.0000050	-	<0.0000050
Molybdenum (Mo)-Dissolved	mg/L	0.000050	-	0.00672
Nickel (Ni)-Dissolved	mg/L	0.00050	-	<0.00050
Potassium (K)-Dissolved	mg/L	0.050	-	7.09
Selenium (Se)-Dissolved	mg/L	0.000050	-	0.000346
Sodium (Na)-Dissolved	mg/L	0.050	-	1.98
Thallium (Tl)-Dissolved	mg/L	0.000010	-	<0.000010
Uranium (U)-Dissolved	mg/L	0.000010	-	0.00153
Zinc (Zn)-Dissolved	mg/L	0.0010	-	<0.0010
Oil and Grease	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-08

Analyte	Sample ID			MS-08
	ALS Laboratory Sample ID			L2722590-1
	Sample Date & Time			2022-07-12 8:45
	QA/QC Sample Type			N/A
	Units	LOR	Criteria ¹	
Hardness (as CaCO ₃)	mg/L	0.50	-	225
pH	pH units	0.10	6.0 - 9.5	7.43
Total Suspended Solids	mg/L	2.0	15	3.4
Total Dissolved Solids	mg/L	10	-	340
Turbidity	NTU	0.10	-	5.62
Alkalinity, Total (as CaCO ₃)	mg/L	1.0	-	12.9
Ammonia, Total (as N)	mg/L	0.010	-	0.55
Chloride (Cl)	mg/L	0.50	-	1.95
Fluoride (F)	mg/L	0.020	-	0.045
Nitrate (as N)	mg/L	0.020	-	3.35
Total Kjeldahl Nitrogen	mg/L	0.050	-	1.01
Phosphorus, Total	mg/L	0.0030	-	0.004
Sulfate (SO ₄)	mg/L	0.30	-	191
Dissolved Organic Carbon	mg/L	0.50	-	1.16
Total Organic Carbon	mg/L	0.50	-	1.16
Aluminum (Al)-Total	mg/L	0.0050	-	0.225
Arsenic (As)-Total	mg/L	0.00010	0.50	<0.00010
Cadmium (Cd)-Total	mg/L	0.0000050	-	0.0000195
Calcium (Ca)-Total	mg/L	0.050	-	17
Copper (Cu)-Total	mg/L	0.00050	0.30	0.00121
Iron (Fe)-Total	mg/L	0.010	-	0.406
Lead (Pb)-Total	mg/L	0.000050	0.20	0.000136
Magnesium (Mg)-Total	mg/L	0.0050	-	45.6
Manganese (Mn)-Total	mg/L	0.00050	-	0.727
Mercury (Hg)-Total	mg/L	0.0000050	-	<0.0000050
Molybdenum (Mo)-Total	mg/L	0.000050	-	0.00155
Nickel (Ni)-Total	mg/L	0.00050	0.50	0.01
Potassium (K)-Total	mg/L	0.050	-	2.27
Selenium (Se)-Total	mg/L	0.000050	-	0.00132
Sodium (Na)-Total	mg/L	0.050	-	0.944
Thallium (Tl)-Total	mg/L	0.000010	-	0.000027
Uranium (U)-Total	mg/L	0.000010	-	0.000297
Zinc (Zn)-Total	mg/L	0.0030	0.50	<0.0030
Aluminum (Al)-Dissolved	mg/L	0.0050	-	0.0068
Arsenic (As)-Dissolved	mg/L	0.00010	-	<0.00010
Cadmium (Cd)-Dissolved	mg/L	0.0000050	-	0.0000202
Calcium (Ca)-Dissolved	mg/L	0.050	-	17.6
Copper (Cu)-Dissolved	mg/L	0.00020	-	0.00053
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	-	44
Manganese (Mn)-Dissolved	mg/L	0.00050	-	0.68
Mercury (Hg)-Dissolved	mg/L	0.0000050	-	<0.0000050
Molybdenum (Mo)-Dissolved	mg/L	0.000050	-	0.00152
Nickel (Ni)-Dissolved	mg/L	0.00050	-	0.00939
Potassium (K)-Dissolved	mg/L	0.050	-	2.26
Selenium (Se)-Dissolved	mg/L	0.000050	-	0.00147
Sodium (Na)-Dissolved	mg/L	0.050	-	0.954
Thallium (Tl)-Dissolved	mg/L	0.000010	-	0.000024
Uranium (U)-Dissolved	mg/L	0.000010	-	0.000174
Zinc (Zn)-Dissolved	mg/L	0.0010	-	0.0015
Oil and Grease	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 2.17: Water Quality Results for Water Licence Monitoring Location - MS-11

Analyte	Sample ID			MS-11
	ALS Laboratory Sample ID			L2720319-1
	Sample Date & Time			2022-07-05 12:20
	QA/QC Sample Type			N/A
	Units	LOR	Criteria ¹	
Hardness (as CaCO ₃)	mg/L	0.50	-	124
pH	pH units	0.10	6.0 - 9.5	7.19
Total Suspended Solids	mg/L	3.0	15	4.7
Total Dissolved Solids	mg/L	10.0	-	203
Turbidity	NTU	0.10	-	13.4
Alkalinity, Total (as CaCO ₃)	mg/L	1.0	-	27.3
Ammonia, Total (as N)	mg/L	0.5	-	0.15
Chloride (Cl)	mg/L	0.02	-	47
Fluoride (F)	mg/L	0.02	-	0.073
Nitrate (as N)	mg/L	0.05	-	0.662
Total Kjeldahl Nitrogen	mg/L	0.003	-	0.278
Phosphorus, Total	mg/L	0.3	-	0.0047
Sulfate (SO ₄)	mg/L	n/a	-	38.1
Dissolved Organic Carbon	mg/L	0.5	-	1.26
Total Organic Carbon	mg/L	0.5	-	1.04
Aluminum (Al)-Total	mg/L	0.005	-	0.211
Arsenic (As)-Total	mg/L	0.0001	0.50	<0.00010
Cadmium (Cd)-Total	mg/L	0.000005	-	0.000099
Calcium (Ca)-Total	mg/L	0.05	-	29.7
Copper (Cu)-Total	mg/L	0.0005	0.30	0.00112
Iron (Fe)-Total	mg/L	0.01	-	0.707
Lead (Pb)-Total	mg/L	0.00005	0.20	0.000575
Magnesium (Mg)-Total	mg/L	0.005	-	11.7
Manganese (Mn)-Total	mg/L	0.0005	-	0.0783
Mercury (Hg)-Total	mg/L	0.000005	-	<0.0000050
Molybdenum (Mo)-Total	mg/L	0.00005	-	0.0034
Nickel (Ni)-Total	mg/L	0.0005	0.50	0.00197
Potassium (K)-Total	mg/L	0.05	-	4.22
Selenium (Se)-Total	mg/L	0.00005	-	0.000156
Sodium (Na)-Total	mg/L	0.05	-	1.8
Thallium (Tl)-Total	mg/L	0.00001	-	0.000013
Uranium (U)-Total	mg/L	0.00001	-	0.00114
Zinc (Zn)-Total	mg/L	0.003	0.50	0.0048
Aluminum (Al)-Dissolved	mg/L	0.0050	-	<0.0050
Arsenic (As)-Dissolved	mg/L	0.00010	-	<0.00010
Cadmium (Cd)-Dissolved	mg/L	0.0000050	-	0.0000914
Calcium (Ca)-Dissolved	mg/L	0.050	-	29.5
Copper (Cu)-Dissolved	mg/L	0.00020	-	0.00042
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	-	12.2
Manganese (Mn)-Dissolved	mg/L	0.00050	-	0.0756
Mercury (Hg)-Dissolved	mg/L	0.0000050	-	<0.0000050
Molybdenum (Mo)-Dissolved	mg/L	0.000050	-	0.00325
Nickel (Ni)-Dissolved	mg/L	0.00050	-	0.00153
Potassium (K)-Dissolved	mg/L	0.050	-	4.28
Selenium (Se)-Dissolved	mg/L	0.000050	-	0.000163
Sodium (Na)-Dissolved	mg/L	0.050	-	1.84
Thallium (Tl)-Dissolved	mg/L	0.000010	-	0.000011
Uranium (U)-Dissolved	mg/L	0.000010	-	0.000344
Zinc (Zn)-Dissolved	mg/L	0.0010	-	0.0032
Oil and Grease	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 2.18: Water Quality Results for Water Licence Monitoring Location - MS-MRY-09

Analyte	Sample ID			MS-MRY-09	MS-MRY-0903	MS-MRY-09	MS-MRY-09	MS-MRY-09
	ALS Laboratory Sample ID			L2721012-13	L2721012-14	L2722588-10	L2723440-8	L2725223-7
	Sample Date & Time			2022-07-05 8:55	2022-07-05 8:55	2022-07-12 7:55	2022-07-18 16:20	2022-07-26 10:30
	QA/QC Sample Type			N/A	Travel Blank	N/A	N/A	N/A
	Units	LOR	Criteria ¹					
Hardness	mg/L	0.50	-	-	-	33.7	-	-
pH	pH units	0.10	6.0 - 9.5	8.01	5.92	7.87	7.74	7.86
Total Suspended Solids	mg/L	2.0	15	<3.0	<3.0	<1.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	43	<10	33	38	48
Turbidity	NTU	0.10	-	0.67	<0.10	0.97	1.36	0.49
Alkalinity, Total (as CaCO3)	mg/L	1.0	-	-	-	32.8	-	-
Ammonia, Total (as N)	mg/L	0.010	-	-	-	<0.010	-	-
Chloride (Cl)	mg/L	0.50	-	-	-	<0.50	-	-
Fluoride (F)	mg/L	0.020	-	-	-	<0.020	-	-
Nitrate (as N)	mg/L	0.020	-	-	-	0.108	-	-
Total Kjeldahl Nitrogen	mg/L	0.050	-	-	-	0.06	-	-
Phosphorus, Total	mg/L	0.0030	-	-	-	<0.050	-	-
Sulfate (SO4)	mg/L	0.30	-	-	-	1.36	-	-
Dissolved Organic Carbon	mg/L	0.50	-	-	-	1.3	-	-
Total Organic Carbon	mg/L	0.50	-	-	-	1.31	-	-
Aluminum (Al)-Total	mg/L	0.0050	-	-	-	0.0388	-	-
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	-	-	-	6.21	-	-
Copper (Cu)-Total	mg/L	0.00050	0.30	-	-	0.00174	-	-
Iron (Fe)-Total	mg/L	0.010	-	-	-	0.049	-	-
Lead (Pb)-Total	mg/L	0.000050	0.20	-	-	0.000058	-	-
Magnesium (Mg)-Total	mg/L	0.0050	-	-	-	4.09	-	-
Manganese (Mn)-Total	mg/L	0.00050	-	-	-	0.00096	-	-
Mercury (Hg)-Total	mg/L	0.0000050	-	-	-	<0.0000050	-	-
Molybdenum (Mo)-Total	mg/L	0.000050	-	-	-	0.000598	-	-
Nickel (Ni)-Total	mg/L	0.00050	0.50	-	-	<0.00050	-	-
Potassium (K)-Total	mg/L	0.050	-	-	-	1.35	-	-
Selenium (Se)-Total	mg/L	0.000050	-	-	-	<0.000050	-	-
Sodium (Na)-Total	mg/L	0.050	-	-	-	0.375	-	-
Thallium (Tl)-Total	mg/L	0.000010	-	-	-	0.000011	-	-
Uranium (U)-Total	mg/L	0.00001	-	-	-	0.000583	-	-
Zinc (Zn)-Total	mg/L	0.0030	0.50	-	-	<0.0030	-	-
Aluminum (Al)-Dissolved	mg/L	0.0050	-	-	-	0.0081	-	-
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	-	-	-	6.81	-	-
Copper (Cu)-Dissolved	mg/L	0.00020	-	-	-	0.0016	-	-
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	-	-	-	4.05	-	-
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	-	-	-	0.000568	-	-
Nickel (Ni)-Dissolved	mg/L	0.00050	-	-	-	<0.00050	-	-
Potassium (K)-Dissolved	mg/L	0.050	-	-	-	1.36	-	-
Selenium (Se)-Dissolved	mg/L	0.000050	-	-	-	<0.000050	-	-
Sodium (Na)-Dissolved	mg/L	0.050	-	-	-	0.401	-	-
Thallium (Tl)-Dissolved	mg/L	0.000010	-	-	-	<0.000010	-	-
Uranium (U)-Dissolved	mg/L	0.000010	-	-	-	0.00057	-	-
Zinc (Zn)-Dissolved	mg/L	0.0010	-	-	-	<0.0010	-	-
Oil and Grease, Total	mg/L		-	-	-	-	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	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

Table 2.19: 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-13A01	MS-MRY-13A
	ALS Laboratory Sample ID			L2721012-3	L2722588-4	L2723440-9	L2723440-10	L2725223-10
	Sample Date & Time			2022-07-04 11:40	2022-07-11 11:40	2022-07-18 9:05	2022-07-18 9:05	2022-07-27 11:40
	QA/QC Sample Type			N/A	N/A	N/A	Field Duplicate	N/A
	Units	LOR	Criteria ¹					
Conductivity	umhos/cm	1.0	-	-	570	-		-
pH	pH units	0.10	6.0 - 9.5	8.4	8.26	8.05	8.06	8.12
Total Suspended Solids	mg/L	2.0	15	<3.0	<1.0	<2.0	<2.0	2.0
Total Dissolved Solids	mg/L	10	-	294.0	345	533	536	775
Turbidity	NTU	0.10	-	0.3	0.28	0.46	0.48	0.59
Alkalinity, Total (as CaCO ₃)	mg/L	1.0	-	-	160	-	-	-
Dissolved Organic Carbon	mg/L	0.50	-	-	6.16	-	-	-
Total Organic Carbon	mg/L	0.50	-	-	5.78	-	-	-
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	-	-	0.03920	-	-	-
Cadmium (Cd)-Total	mg/L	0.0000050	-	-	<0.000050	-	-	-
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	-	-	0.0180	-	-	-
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	-	-	0.000650	-	-	-
Nickel (Ni)-Total	mg/L	0.00050	0.50	-	0.01250	-	-	-
Selenium (Se)-Total	mg/L	0.000050	-	-	<0.00050	-	-	-
Strontium (Sr)-Total	mg/L	0.0010	-	-	0.0450	-	-	-
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	-	-	-
Uranium (U)-Total	mg/L	0.000010	-	-	0.003080	-	-	-
Vanadium (V)-Total	mg/L	0.00050	-	-	<0.0050	-	-	-
Zinc (Zn)-Total	mg/L	0.0030	0.5	-	<0.030	-	-	-
Oil and Grease, Total	mg/L	5.0	-	-	<5.0	-	-	-
	-	0.00010	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	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

Table 2.20: Water Quality Results for Water Licence Monitoring Location - MS-MRY-13B

Analyte	Sample ID			MS-MRY-13B	MS-MRY-13B
	ALS Laboratory Sample ID			L2723440-11	L2725223-9
	Sample Date & Time			2022-07-18 8:45	2022-07-27 11:20
	QA/QC Sample Type			N/A	N/A
	Units	LOR	Criteria ¹		
Conductivity	umhos/cm	1.0	-	907	-
pH	pH units	0.10	6.0 - 9.5	8.16	8.21
Total Suspended Solids	mg/L	2.0	15	10.3	2.3
Total Dissolved Solids	mg/L	10	-	584	614
Turbidity	NTU	0.10	-	3.77	0.42
Alkalinity, Total (as CaCO3)	mg/L	1.0	-	178	-
Dissolved Organic Carbon	mg/L	0.50	-	7.03	-
Total Organic Carbon	mg/L	0.50	-	6.28	-
Aluminum (Al)-Total	mg/L	0.005	-	<0.050	-
Antimony (Sb)-Total	mg/L	0.0001	-	<0.0010	-
Arsenic (As)-Total	mg/L	0.0001	0.50	<0.0010	-
Barium (Ba)-Total	mg/L	0.0001	-	0.05	-
Cadmium (Cd)-Total	mg/L	0.000005	-	<0.000050	-
Chromium (Cr)-Total	mg/L	0.0005	-	<0.0050	-
Cobalt (Co)-Total	mg/L	0.0001	-	<0.0010	-
Copper (Cu)-Total	mg/L	0.0005	0.30	<0.0050	-
Iron (Fe)-Total	mg/L	0.01	-	<0.10	-
Lead (Pb)-Total	mg/L	0.00005	0.20	<0.00050	-
Lithium (Li)-Total	mg/L	0.001	-	0.04	-
Manganese (Mn)-Total	mg/L	0.0005	-	<0.0050	-
Mercury (Hg)-Total	mg/L	0.0000050	-	<0.0000050	-
Molybdenum (Mo)-Total	mg/L	0.00005	-	0.00	-
Nickel (Ni)-Total	mg/L	0.0005	0.50	0.01	-
Selenium (Se)-Total	mg/L	0.00005	-	<0.00050	-
Strontium (Sr)-Total	mg/L	0.001	-	0.11	-
Thallium (Tl)-Total	mg/L	0.00001	-	<0.00010	-
Tin (Sn)-Total	mg/L	0.0001	-	<0.0010	-
Titanium (Ti)-Total	mg/L	0.0003	-	<0.0030	-
Uranium (U)-Total	mg/L	0.00001	-	0.01	-
Vanadium (V)-Total	mg/L	0.0005	-	<0.0050	-
Zinc (Zn)-Total	mg/L	0.003	0.50	<0.030	-
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	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 2.21: Water Quality Results for Water Licence Monitoring Location - MS-C-A

Analyte	Sample ID			MS-C-A	MS-C-A	MS-C-A02	MS-C-A	MS-C-A
	ALS Laboratory Sample ID			L2721012-10	L2722588-3	L2722588-7	L2723440-1	L2725223-6
	Sample Date & Time			2022-07-04 13:50	2022-07-11 11:30	2022-07-11 15:20	2022-07-18 10:30	2022-07-25 16:40
	QA/QC Sample Type			N/A	N/A	Field Blank	N/A	N/A
	Units	LOR	Criteria ¹					
Conductivity	umhos/cm	1.0	-	-	247	1	-	-
pH	pH units	0.10	6.0 - 9.5	8.1	8.05	5.69	7.74	7.79
Total Suspended Solids	mg/L	2.0	Grab 30, Average 15	<3.0	<1.0	<1.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	126.0	147	<10	250	313
Turbidity	NTU	0.10	-	2.0	1.02	<0.10	0.79	0.37
Ammonia, Total (as N)	mg/L	0.010	-	-	<0.010	<0.010	-	-
Nitrate (as N)	mg/L	0.020	-	-	0.470	<0.020	-	-
Oil and Grease, Total	mg/L	5.0	-	-	<5.0	<5.0	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	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 (ZAM-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-B

Analyte	Sample ID			MS-C-B	MS-C-B	MS-C-B	MS-C-B
	ALS Laboratory Sample ID			L2721012-11	L2722588-5	L2723440-2	L2725223-11
	Sample Date & Time			2022-07-04 14:25	2022-07-11 14:00	2022-07-18 10:50	2022-07-27 12:30
	QA/QC Sample Type			N/A	N/A	N/A	N/A
	Units	LOR	Criteria ¹				
Conductivity	umhos/cm	1.0	-	-	258	-	-
pH	pH units	0.10	6.0 - 9.5	7.99	7.9	7.63	7.65
Total Suspended Solids	mg/L	2.0	Grab 30, Average 15	<3.0	<1.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	124	161	258	318
Turbidity	NTU	0.10	-	2.02	0.94	1.02	0.51
Ammonia, Total (as N)	mg/L	0.010	-	-	<0.010	-	-
Nitrate (as N)	mg/L	0.020	-	-	0.517	-	-
Oil and Grease, Total	mg/L	5.0	-	-	<5.0	-	-
	-	-	No Visible Sheen	No Visible Sheen	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-C

Analyte	Sample ID			MS-C-C	MS-C-C	MS-C-C	MS-C-C
	ALS Laboratory Sample ID			L2721012-7	L2722588-8	L2723440-3	L2725223-6
	Sample Date & Time			2022-07-04 12:25	2022-07-11 15:05	2022-07-18 9:45	2022-07-25 16:05
	QA/QC Sample Type			N/A	N/A	N/A	N/A
	Units	LOR	Criteria ¹				
Conductivity	umhos/cm	3.0	-	-	843	-	-
pH	pH units	0.10	6.0 - 9.5	8.37	8.17	7.93	8.0
Total Suspended Solids	mg/L	2.0	Grab 30, Average 15	9.1	<1.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	469	531	564	570
Turbidity	NTU	0.10	-	7.11	2.38	2.76	1.61
Ammonia, Total (as N)	mg/L	0.010	-	-	0.017	-	-
Nitrate (as N)	mg/L	0.020	-	-	2.88	-	-
Oil and Grease, Total	mg/L	2.0/5.0	-	-	<5.0	-	-
	-	-	No Visible Sheen	No Visible Sheen	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 2.24: Water Quality Results for Water Licence Monitoring Location - MS-C-D

Analyte	Sample ID			MS-C-D
	ALS Laboratory Sample ID			L2724930-5
	Sample Date & Time			2022-07-25 15:45
	QA/QC Sample Type			N/A
	Units	LOR	Criteria ¹	
Conductivity	umhos/cm	3.0	-	742
pH	pH units	0.10	6.0 - 9.5	8.49
Total Suspended Solids	mg/L	2.0	Grab 30, Average 15	22.4
Ammonia, Total (as N)	mg/L	0.010	-	0.018
Nitrate (as N)	mg/L	0.020	-	1.90
Oil and Grease, Total	mg/L	2.0/5.0	-	<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-E

Analyte	Sample ID			MS-C-E	MS-C-E	MS-C-E	MS-C-E
	ALS Laboratory Sample ID			L2721012-6	L2722588-9	L2723440-4	L2725223-4
	Sample Date & Time			2022-07-04 12:05	2022-07-12 9:00	2022-07-18 9:25	2022-07-25 15:35
	QA/QC Sample Type			N/A	N/A	N/A	N/A
	Units	LOR	Criteria ¹				
Conductivity	umhos/cm	1.0	-	-	929	-	-
pH	pH units	0.10	6.0 - 9.5	8.44	8.33	7.96	8.03
Total Suspended Solids	mg/L	2.0	Grab 30, Average 15	5.9	2.0	2.5	<2.0
Total Dissolved Solids	mg/L	10/20	-	483	575	590	556
Turbidity	NTU	0.10	-	4.17	1.9	2.55	1.50
Ammonia, Total (as N)	mg/L	0.010	-	-	0.02	-	-
Nitrate (as N)	mg/L	0.020	-	-	2.44	-	-
Oil and Grease, Total	mg/L	5.0	-	-	<5.0	-	-
	-	-	No Visible Sheen	No Visible Sheen	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 2.26: 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	MS-C-F01
	ALS Laboratory Sample ID			L2721012-12	L2722588-6	L2723440-5	L2725223-13	L2725223-12
	Sample Date & Time			2022-07-04 14:45	2022-07-11 14:35	2022-07-18 11:20	2022-07-27 13:00	2022-07-27 13:00
	QA/QC Sample Type			N/A	N/A	N/A	N/A	Field Duplicate
	Units	LOR	Criteria ¹					
Conductivity	umhos/cm	1.0	-	-	325	-	-	-
pH	pH units	0.10	6.0 - 9.5	7.82	7.77	7.78	7.98	7.99
Total Suspended Solids	mg/L	2.0	Grab 30, Average 15	<3.0	1.8	3.2	2.6	2.8
Total Dissolved Solids	mg/L	10	-	137	224	336	468	462
Turbidity	NTU	0.10	-	12.2	3.43	8.54	2.76	2.53
Ammonia, Total (as N)	mg/L	0.010	-	-	0.039	-	-	-
Nitrate (as N)	mg/L	0.020	-	-	0.685	-	-	-
Oil and Grease, Total	mg/L	5.0	-	-	<5.0	-	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	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 - MS-C-G

Analyte	Sample ID			MS-C-G	MS-C-G	MS-C-G	MS-C-G
	ALS Laboratory Sample ID			L2721012-1	L2722588-1	L2723440-6	L2725223-8
	Sample Date & Time			2022-07-04 8:40	2022-07-11 9:35	2022-07-18 7:50	2022-07-27 10:10
	QA/QC Sample Type			N/A	N/A	N/A	N/A
	Units	LOR	Criteria ¹				
Conductivity	umhos/cm	1.0	-	-	213	-	-
pH	pH units	0.10	6.0 - 9.5	8.1	8.25	7.66	7.56
Total Suspended Solids	mg/L	2.0	Grab 30, Average 15	<3.0	<1.0	2.7	<2.0
Total Dissolved Solids	mg/L	10	-	90.0	109	128	208
Turbidity	NTU	0.10	-	0.3	<0.10	0.27	<0.10
Ammonia, Total (as N)	mg/L	0.010	-	-	<0.010	-	-
Nitrate (as N)	mg/L	0.020	-	-	3.34	-	-
Oil and Grease, Total	mg/L	5.0	-	-	<5.0	-	-
	-	-	No Visible Sheen	No Visible Sheen	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 2.28: 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
	ALS Laboratory Sample ID			L2721012-2	L2722588-2	L2722588-14	L2723440-7
	Sample Date & Time			2022-07-04 9:10	2022-07-11 10:20	2022-07-11 10:20	2022-07-18 8:15
	QA/QC Sample Type			N/A	N/A	Field Duplicate	N/A
	Units	LOR	Criteria ¹				
Conductivity	umhos/cm	1.0	-	-	199	198	-
pH	pH units	0.10	6.0 - 9.5	8.2	8.17	8.35	7.69
Total Suspended Solids	mg/L	2.0	Grab 30, Average 15	<3.0	<1.0	<1.0	2.3
Total Dissolved Solids	mg/L	10	-	88.0	94	88	127
Turbidity	NTU	0.10	-	1.0	0.37	0.36	0.54
Ammonia, Total (as N)	mg/L	0.050	-	-	0.027	0.036	-
Nitrate (as N)	mg/L	0.020	-	-	0.833	0.828	-
Oil and Grease, Total	mg/L	5.0	-	-	<5.0	<5.0	-
	-	-	No Visible Sheen	No Visible Sheen	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 (ZAM-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 2.29: Water Quality Results for Water Licence Monitoring Location - MQ-C-A

Analyte	Sample ID			MQ-C-A	MQ-C-A
	ALS Laboratory Sample ID			L2721012-4	L2722588-12
	Sample Date & Time			2022-07-04 11:45	2022-07-12 10:00
	QA/QC Sample Type			N/A	N/A
	Units	LOR	Criteria ¹		
Conductivity	umhos/cm	1.0	-	-	199
pH	pH units	0.10	6.0 - 9.5	8.2	8.31
Total Suspended Solids	mg/L	2.0	Grab 30, Average 15	<3.0	2.5
Total Dissolved Solids	mg/L	10	-	58.0	102
Turbidity	NTU	0.10	-	5.9	1.08
Ammonia, Total (as N)	mg/L	0.010	-	-	<0.010
Nitrate (as N)	mg/L	0.020	-	-	0.046
Oil and Grease, Total	mg/L	5.0	-	-	<5.0
	-	-	No Visible Sheen	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 2.30: Water Quality Results for Water Licence Monitoring Location - MQ-C-B

Analyte	Sample ID			MQ-C-B	MQ-C-B01	MQ-C-B	MQ-C-B	MQ-C-B	MQ-C-B03
	ALS Laboratory Sample ID			L2721012-9	L2721012-8	L2722588-11	L2723440-12	L2725223-2	L2725223-3
	Sample Date & Time			2022-07-04 12:30	2022-07-04 12:30	2022-07-12 9:25	2022-07-19 8:30	2022-07-25 14:55	2022-07-25 14:55
	QA/QC Sample Type			N/A	Field Duplicate	N/A	N/A	N/A	Travel Blank
	Units	LOR	Criteria ¹						
Conductivity	umhos/cm	1.0	-	-	-	405	-	-	-
pH	pH units	0.10	6.0 - 9.5	8.4	8.4	8.42	8.02	8.18	6.42
Total Suspended Solids	mg/L	2.0	Grab 30, Average 15	5.0	4.7	4.3	3.7	4.3	<2.0
Total Dissolved Solids	mg/L	10	-	169.0	170.0	236	271	306	10
Turbidity	NTU	0.10	-	35.0	34.9	34.8	27.8	11.2	<0.10
Ammonia, Total (as N)	mg/L	0.010	-	-	-	<0.010	-	-	-
Nitrate (as N)	mg/L	0.020	-	-	-	2.66	-	-	-
Oil and Grease, Total	mg/L	5.0	-	-	-	<5.0	-	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	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 (ZAM-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 2.31: 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-D02	MQ-C-D
	ALS Laboratory Sample ID			L2721012-5	L2722588-13	L2723440-13	L2723440-14	L2725223-1
	Sample Date & Time			2022-07-04 12:05	2022-07-12 10:15	2022-07-19 8:00	2022-07-19 8:00	7/25/2022 14:20
	QA/QC Sample Type			N/A	N/A	N/A	Field Blank	N/A
	Units	LOR	Criteria ¹					
Conductivity	umhos/cm	1.0	-	-	222	-	-	-
pH	pH units	0.10	6.0 - 9.5	8.2	8.35	8.08	6.14	7.71
Total Suspended Solids	mg/L	2.0	Grab 30, Average 15	3.8	3.7	2.8	<2.0	22.5
Total Dissolved Solids	mg/L	10	-	88.0	112	123	<10	134
Turbidity	NTU	0.10	-	14.4	7.96	4.72	<0.10	10.7
Ammonia, Total (as N)	mg/L	0.010	-	-	<0.010	-	-	-
Nitrate (as N)	mg/L	0.020	-	-	0.033	-	-	-
Oil and Grease, Total	mg/L	5.0	-	-	<5.0	-	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	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

Table 3.1: Flow and Volume Measurements - Part I Item 11 - July 2022

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/Off-Spec Effluent Removed from Mine Site WWTPs 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 Daily Water Use for Industrial Purposes MP- MRY-3 (m ³)	Treated Sewage Effluent from MP- 01 to Milne Inlet (m ³)	Treated Sewage Effluent from MP- 01B to Milne Inlet (m ³)	Sewage Sludge Removed from Milne Port WWTPs to Incinerator or Disposal Offsite by Backhaul (m ³)	Sewage Sludge Removed from Lift Stations to PWSP at Milne Port (m ³)
1-Jul-22	138.2	7.6	25.0	110.1	1.5	0.0	0.0	41.8	0.0	17.0	28.4	1.3	0.0
2-Jul-22	123.9	4.6	35.0	105.4	1.6	0.0	0.0	69.7	0.0	20.0	30.3	1.3	0.0
3-Jul-22	153.4	2.8	32.0	127.5	1.1	0.0	0.0	46.1	0.0	18.0	34.7	1.3	0.0
4-Jul-22	122.5	4.1	29.0	118.7	0.5	0.0	0.0	37.6	0.0	17.0	29.8	1.3	0.0
5-Jul-22	136.0	8.6	34.0	119.3	0.8	0.0	0.0	53.2	1.0	20.0	32.6	1.0	0.0
6-Jul-22	208.0	5.4	34.0	116.2	1.1	0.0	0.0	81.4	0.0	19.0	21.6	1.3	0.0
7-Jul-22	296.9	3.3	30.0	111.8	0.5	0.0	0.0	77.8	4.0	20.0	24.9	1.0	0.0
8-Jul-22	149.9	4.3	33.0	106.8	0.3	0.0	0.0	46.0	0.0	25.0	35.5	1.0	0.0
9-Jul-22	153.0	7.1	31.0	111.2	0.5	0.0	0.0	69.5	0.0	25.0	37.9	1.3	0.0
10-Jul-22	195.7	17.2	37.0	117.9	0.3	0.0	0.0	88.6	0.0	23.0	28.4	1.3	0.0
11-Jul-22	157.4	7.3	37.0	109.9	0.4	0.0	0.0	56.4	2.0	18.0	35.0	1.0	0.0
12-Jul-22	118.2	3.6	22.0	114.5	0.3	0.0	0.0	46.0	0.0	18.0	43.7	1.3	0.0
13-Jul-22	53.5	5.6	32.0	113.1	0.3	0.0	0.0	54.7	0.0	22.0	35.3	1.3	0.0
14-Jul-22	129.8	8.6	32.0	120.1	1.6	0.0	0.0	61.5	0.0	24.0	14.5	1.0	0.0
15-Jul-22	267.3	4.1	32.0	124.7	1.5	0.0	0.0	59.2	2.0	22.0	39.0	1.0	0.0
16-Jul-22	88.9	10.3	32.0	129.4	1.4	0.0	0.0	40.3	0.0	15.0	20.9	1.3	0.0
17-Jul-22	122.9	6.9	32.0	126.5	1.5	0.0	0.0	58.3	0.0	16.0	34.2	1.0	0.0
18-Jul-22	101.9	4.5	31.0	127.3	1.5	0.0	0.0	88.3	0.0	37.0	44.1	1.0	0.0
19-Jul-22	98.3	5.8	31.0	132.2	1.5	0.0	0.0	62.4	16.0	41.0	32.4	1.0	0.0
20-Jul-22	137.9	7.9	29.0	132.3	1.2	0.0	0.0	66.9	7.0	24.0	41.0	1.0	0.0
21-Jul-22	202.7	5.2	32.0	124.3	0.9	0.0	0.0	54.6	25.0	13.0	41.5	1.0	0.0
22-Jul-22	250.5	4.6	32.0	132.2	0.9	0.0	0.0	48.7	18.0	23.0	31.8	1.3	0.0
23-Jul-22	206.4	10.1	34.0	141.1	1.0	0.0	0.0	61.2	14.0	24.0	33.2	1.3	0.0
24-Jul-22	127.2	8.3	36.0	157.7	1.0	0.0	0.0	59.8	10.0	19.0	45.0	1.3	0.0
25-Jul-22	137.8	8.9	32.0	143.8	1.1	0.0	0.0	61.5	16.0	19.0	33.5	1.0	0.0
26-Jul-22	192.9	12.9	32.0	137.6	1.1	0.0	0.0	53.9	9.0	19.0	34.9	1.3	0.0
27-Jul-22	164.9	11.4	30.0	116.5	1.3	0.0	0.0	76.2	10.0	29.0	33.3	0.0	0.0
28-Jul-22	133.1	8.0	32.0	117.5	1.2	0.0	0.0	60.0	0.0	29.0	29.8	1.3	0.0
29-Jul-22	157.9	12.0	32.0	138.4	1.3	0.0	0.0	41.0	34.0	31.0	51.6	1.3	0.0
30-Jul-22	131.2	4.3	32.0	119.2	1.3	0.0	0.0	64.6	11.0	18.0	23.3	1.3	0.0
31-Jul-22	120.1	6.9	32.0	117.8	1.3	0.0	0.0	52.5	0.0	15.0	35.9	1.3	0.0
Total	4,778.1	222.0	986.0	3,821.0	31.2	0.0	0.0	1,839.7	179.0	680.0	1,038.1	35.0	0.0

Notes:

WWTP - Waste Water Treatment Plant

PWSP - Polishing Waste Stabilization Pond

Table 3.1: Flow and Volume Measurements - Part I Item 11 - July 2022

DATE	Sludge Removed from Milne Port WWTPs/WTPs to PWSP at Milne Port (m ³)	Water Use for Dust Suppression from Authorized Sources (m ³) ¹	Treated Sewage Effluent from PWSP MP-01A to Milne Inlet (MP-01A) (m ³)	Effluent Discharge from Mine Site Crusher Pad Sedimentation Pond (MS-06) (m ³)	Effluent Discharge from Mine Site Run of Mine Ore Stockpile Pond Stormwater (MS-07) (m ³)	Effluent Discharge from Mine Site Waste Rock Stockpile Pond (MS-08) (m ³)	Effluent Discharge from KM105 Surface Water Management Pond (MS-11) (m ³)	Effluent Discharge from Milne Port Ore Stockpile Sedimentation Pond (East) to Milne Inlet (MP-05) (m ³)	Effluent Discharge from Milne Port Ore Stockpile Sedimentation Pond (West) to Milne Inlet (MP-06) (m ³)	Treated Sewage Effluent from PWSP to Sheardown Lake (MS-MRY-4B) (m ³)	Treated Oily Water from Exploration Camp Bulk Fuel Storage Facility to Tundra (MS-MRY-6) (m ³)	Treated Oily Water from Milne Port Snowdump Facility to Tundra (MP-04A) (m ³)	Effluent Discharge from Milne Port Bulk Fuel Tank Farm Facility to Milne Inlet (MP-03) (m ³)
1-Jul-22	0.0	333.1	0.0	0.0	0.0	2,698.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2-Jul-22	0.0	302.8	0.0	0.0	0.0	2,166.0	0.0	0.0	0.0	0.0	0.0	0.0	189.0
3-Jul-22	0.0	90.8	0.0	0.0	0.0	4,477.0	15,382.0	0.0	0.0	0.0	0.0	0.0	189.0
4-Jul-22	0.0	242.3	0.0	0.0	0.0	4,287.0	2,668.6	0.0	0.0	0.0	0.0	0.0	189.0
5-Jul-22	0.0	363.4	0.0	0.0	0.0	5,651.3	27,651.9	0.0	0.0	0.0	0.0	0.0	189.0
6-Jul-22	0.0	272.5	0.0	0.0	0.0	5,719.7	19,588.5	245.2	0.0	0.0	0.0	0.0	189.0
7-Jul-22	0.0	333.1	0.0	0.0	0.0	6,201.0	7,946.8	64.9	0.0	0.0	0.0	0.0	155.1
8-Jul-22	0.0	333.1	0.0	0.0	0.0	5,527.4	0.0	436.9	2.6	0.0	0.0	0.0	155.1
9-Jul-22	0.0	121.1	0.0	0.0	0.0	5,921.2	0.0	0.0	0.0	0.0	0.0	0.0	155.1
10-Jul-22	0.0	151.4	0.0	0.0	0.0	5,744.7	0.0	16.1	0.0	0.0	0.0	0.0	0.0
11-Jul-22	0.0	30.3	0.0	0.0	0.0	5,725.6	0.0	264.4	10.8	0.0	0.0	0.0	0.0
12-Jul-22	0.0	30.3	0.0	0.0	0.0	5,710.2	9,140.9	0.0	0.0	0.0	0.0	0.0	0.0
13-Jul-22	0.0	0.0	0.0	0.0	0.0	5,882.0	11,436.5	463.3	0.0	0.0	0.0	0.0	0.0
14-Jul-22	0.0	0.0	0.0	0.0	0.0	5,612.0	5,257.7	0.0	17.5	0.0	0.0	0.0	0.0
15-Jul-22	0.0	121.1	0.0	0.0	0.0	5,531.0	11,968.4	0.0	0.0	0.0	0.0	0.0	0.0
16-Jul-22	0.0	151.4	0.0	0.0	0.0	5,648.0	7,163.3	0.0	0.0	0.0	0.0	0.0	0.0
17-Jul-22	0.0	132.5	0.0	0.0	0.0	5,336.0	2,937.4	0.0	0.0	0.0	0.0	0.0	0.0
18-Jul-22	0.0	151.4	0.0	0.0	118.1	4,923.0	2,011.6	155.6	0.0	0.0	0.0	0.0	0.0
19-Jul-22	0.0	151.4	0.0	0.0	181.7	4,140.0	1,747.3	112.9	0.0	0.0	0.0	0.0	0.0
20-Jul-22	0.0	227.1	0.0	0.0	332.2	2,645.7	1,514.1	304.9	0.0	0.0	0.0	0.0	0.0
21-Jul-22	0.0	454.2	0.0	0.0	398.8	100.0	1,107.3	226.4	0.0	0.0	0.0	0.0	0.0
22-Jul-22	0.0	424.0	0.0	0.0	368.5	149.0	1,063.9	0.0	0.0	0.0	0.0	0.0	0.0
23-Jul-22	0.0	484.5	0.0	0.0	242.3	1,797.2	1,015.6	0.0	0.0	0.0	0.0	0.0	0.0
24-Jul-22	0.0	999.3	0.0	0.0	424.0	588.0	954.9	0.0	0.0	0.0	0.0	0.0	0.0
25-Jul-22	0.0	726.8	0.0	0.0	181.7	906.0	948.5	0.0	0.0	0.0	0.0	0.0	0.0
26-Jul-22	0.0	726.8	0.0	0.0	302.8	1,691.0	920.8	0.0	0.0	0.0	0.0	0.0	0.0
27-Jul-22	0.0	545.1	0.0	0.0	181.7	2,211.0	951.3	198.4	0.0	0.0	0.0	0.0	0.0
28-Jul-22	0.0	484.5	0.0	0.0	30.3	2,369.0	987.7	270.0	0.0	0.0	0.0	0.0	0.0
29-Jul-22	0.0	787.4	0.0	0.0	60.6	2,714.4	998.4	0.0	0.0	0.0	0.0	0.0	0.0
30-Jul-22	0.0	817.6	0.0	0.0	60.6	2,905.0	947.2	295.1	0.0	0.0	0.0	0.0	0.0
31-Jul-22	0.0	151.4	0.0	0.0	111.7	2,069.0	923.7	0.0	0.0	0.0	0.0	0.0	0.0
Total	0.0	10,141.1	0.0	0.0	2,994.9	117,046.2	137,234.5	3,054.1	30.9	0.0	0.0	0.0	1,410.3

Notes:

WWTP - Waste Water Treatment Plant

PWSP - Polishing Waste Stabilization Pond



Table 3.1: Flow and Volume Measurements - Part I Item 11 - July 2022

DATE	Effluent Discharge from Milne Port Landfarm Facility to Tundra (MP-04) (m³)	Effluent Discharge from Mine Site Bulk Fuel Storage Facility Stormwater (MS-03) (m³)	Effluent Discharge from Mine Site Bulk Fuel Storage Facility Stormwater (MS-03B) (m³)
1-Jul-22	0.0	0.0	0.0
2-Jul-22	0.0	0.0	0.0
3-Jul-22	0.0	0.0	0.0
4-Jul-22	0.0	0.0	0.0
5-Jul-22	0.0	0.0	0.0
6-Jul-22	0.0	0.0	0.0
7-Jul-22	0.0	0.0	0.0
8-Jul-22	0.0	0.0	0.0
9-Jul-22	0.0	0.0	0.0
10-Jul-22	0.0	0.0	299.0
11-Jul-22	0.0	0.0	545.5
12-Jul-22	0.0	0.0	268.7
13-Jul-22	0.0	0.0	36.6
14-Jul-22	0.0	0.0	0.0
15-Jul-22	0.0	0.0	0.0
16-Jul-22	0.0	0.0	0.0
17-Jul-22	0.0	0.0	0.0
18-Jul-22	0.0	0.0	0.0
19-Jul-22	0.0	0.0	0.0
20-Jul-22	0.0	0.0	0.0
21-Jul-22	0.0	0.0	0.0
22-Jul-22	0.0	0.0	0.0
23-Jul-22	0.0	0.0	0.0
24-Jul-22	0.0	0.0	0.0
25-Jul-22	0.0	0.0	0.0
26-Jul-22	0.0	0.0	0.0
27-Jul-22	0.0	0.0	0.0
28-Jul-22	0.0	0.0	0.0
29-Jul-22	0.0	0.0	0.0
30-Jul-22	0.0	0.0	0.0
31-Jul-22	0.0	0.0	0.0
Total	0.0	0.0	1,149.9

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