

September 30, 2020

Manager of Licensing
Nunavut Water Board
P.O. Box 119
Gjoa Haven, Nunavut X0B 1J0

Water Resources Officer, CIRNAC
Nunavut District, Nunavut Region
P.O. Box 100
Iqaluit, NU X0A 0H0

**RE: Water Licence 2AM-MRY1325 Monthly Surveillance Network Program (SNP) Report
August 2020**

The following is the monthly report for August 2020 as required under Part I, Item 21 of the Type 'A' Water Licence 2AM-MRY1325 (the Licence) which states:

"The Licensee shall submit to the Board, within thirty (30) days following the month being reported, a Monthly Monitoring Report. The Report shall include:

- a) All data and information required by this Part and generated by the Monitoring Program in the tables of Schedule I*
- b) An assessment of data to identify areas of non-compliance with regulated discharge parameters referred to in Part F"*

Monitoring Program

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

Table 1.1 presents a list of samples/monitoring required under the Licence and the details concerning which water quality samples were collected along with sample date/laboratory identification number as appropriate. Analytical water quality testing results received are presented in Tables 2.1 – 2.33. Water volumes consumed for domestic and industrial water purposes and the volumes of effluent discharged at the Mary River Mine Site and Milne Port are presented in Table 3.1.

Monitoring Program Results

Water Sampling and Analysis Results

Tables 2.1 – 2.33 provide the analytical results related to the SNP sampling requirements for August 2020. One (1) parameter exceedance was associated with measured total lead in stormwater discharge from the Milne Port bulk fuel storage facility. Total lead in the stormwater discharge was 0.00117 mg/L in grab sample MP-03 collected on August 26, 2020; above the permitted discharge criteria of 0.001 mg/L. Measured total lead was below 0.001 mg/L in three pre-discharge samples collected from MP-03 on August 19, 2020. The Milne Port bulk fuel storage facility discharged water from August 1-3 and August 26-27.

Flow and Volume Measurements

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

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

Prepared by:

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

Aaron MacDonell
Environmental Superintendent

Reviewed by:

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

Christopher Murray
Environmental & Regulatory Compliance Manager

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

Attachments

Attachments – Monthly Water Sampling Results: Table 1.1, Tables 2.1 – 2.33, Table 3.1

Attachments

Monthly Water Sampling Results

Table 1.1: Monitoring Program Water Sampling Summary for August 2020

Monitoring Program Station	Sampling Date	Lab ID Number	Comment
Milne Port			
MP-01 (Sewage Treatment Facility)	08/05/2020 08/23/2020	L2485369-1 L2495474-2	Discharge from August 1-8 and 20-31
MP-0102 (Field Blank of MP-01)	08/05/2020	L2485369-3	
MP-01A (Polishing Waste Stabilization Pond)	08/09/2020	L2486009-1	Discharge from August 8-17
MP-01B (Sewage Treatment Facility)	08/05/2020 08/18/2020	L2485422-1 L2490574-1	Volume reported daily during discharge
MP-01B (BLANK) (Field Blank of MP01B)	08/05/2020	L2485422-3	
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)	08/26/2020	L2495157-1	Discharge from August 1-3 and 26-27
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)	08/29/2020	L2496368-1	Discharge from August 29- 31
MP-05 Ore Stockpile Sedimentation Pond (East)	08/04/2020	L2484674-1	Discharge from August 2, 4- 5, 12-13, 15-16, 18, 22-25, and 27-28
MP-06 Ore Stockpile Sedimentation Pond (West)	08/15/2020	L2489339-1	Discharge from August 15- 16 and 20
MP-C-A (Downstream of Construction Area)	N/A	N/A	No flow
MP-C-B (Downstream of Construction Area)	08/03/2020 08/10/2020 08/17/2020 08/24/2020	L2484595-1 L2486374-1 L2490512-1 L2493980-1	

Monitoring Program Station	Sampling Date	Lab ID Number	Comment
MP-C-B01 (Downstream of Construction Area)	08/03/2020 08/10/2020 08/17/2020 08/24/2020	L2484595-2 L2486374-2 L2490512-2 L2493980-2	
MP-C-B0103 (Travel Blank of MP-C-B01)	08/24/2020	L2493980-3	
MP-C-C (Downstream of Construction Area)	N/A	N/A	No flow
MP-C-D (Downstream of Construction Area)	N/A	N/A	No flow
MP-C-E (Downstream of Construction Area)	N/A	N/A	No flow
MP-C-F (Downstream of Construction Area)	N/A	N/A	No flow
MP-C-G (Downstream of Construction Area)	N/A	N/A	No flow
MP-C-H (Downstream of Construction Area)	08/03/2020 08/10/2020 08/17/2020 08/24/2020	L2484595-6 L2486374-4 L2490512-4 L2493980-5	
MP-C-J (Downstream of Construction Area)	08/03/2020 08/10/2020 08/17/2020 08/24/2020	L2484595-3 L2486374-3 L2490512-3 L2493980-4	
MP-Q1-01 (Downstream of Q1 Quarry)	08/03/2020	L2484595-4	
MP-Q1-0101 (Field Duplicate of MP-Q1-01)	08/03/2020	L2484595-5	
MP-Q1-02 (Downstream of Q1 Quarry)	08/03/2020 08/10/2020 08/17/2020 08/24/2020	L2484595-7 L2486374-5 L2490512-5 L2493980-6	
Mary River Mine Site			
MS-01 (Sewage Treatment Facility)	08/05/2020	L2485339-1	Discharge volume reported daily
MS-0102 (Field Blank of MS-01)	08/05/2020	L2485339-3	
MS-01A (Mine Site Polishing Waste Stabilization Pond)	N/A	N/A	No discharge
MS-01B (Sewage Treatment Facility)	08/05/2020	L2485392-1	Discharge volume reported daily

Attachments

Monthly Water Sampling Results

Table 1.1: Monitoring Program Water Sampling Summary for August 2020

Monitoring Program Station	Sampling Date	Lab ID Number	Comment
Milne Port			
MP-01 (Sewage Treatment Facility)	08/05/2020 08/23/2020	L2485369-1 L2495474-2	Discharge from August 1-8 and 20-31
MP-0102 (Field Blank of MP-01)	08/05/2020	L2485369-3	
MP-01A (Polishing Waste Stabilization Pond)	08/09/2020	L2486009-1	Discharge from August 8-17
MP-01B (Sewage Treatment Facility)	08/05/2020 08/18/2020	L2485422-1 L2490574-1	Volume reported daily during discharge
MP-01B (BLANK) (Field Blank of MP01B)	08/05/2020	L2485422-3	
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)	08/26/2020	L2495157-1	Discharge from August 1-3 and 26-27
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)	08/29/2020	L2496368-1	Discharge from August 29- 31
MP-05 Ore Stockpile Sedimentation Pond (East)	08/04/2020	L2484674-1	Discharge from August 2, 4- 5, 12-13, 15-16, 18, 22-25, and 27-28
MP-06 Ore Stockpile Sedimentation Pond (West)	08/15/2020	L2489339-1	Discharge from August 15- 16 and 20
MP-C-A (Downstream of Construction Area)	N/A	N/A	No flow
MP-C-B (Downstream of Construction Area)	08/03/2020 08/10/2020 08/17/2020 08/24/2020	L2484595-1 L2486374-1 L2490512-1 L2493980-1	

Monitoring Program Station	Sampling Date	Lab ID Number	Comment
MP-C-B01 (Downstream of Construction Area)	08/03/2020 08/10/2020 08/17/2020 08/24/2020	L2484595-2 L2486374-2 L2490512-2 L2493980-2	
MP-C-B0103 (Travel Blank of MP-C-B01)	08/24/2020	L2493980-3	
MP-C-C (Downstream of Construction Area)	N/A	N/A	No flow
MP-C-D (Downstream of Construction Area)	N/A	N/A	No flow
MP-C-E (Downstream of Construction Area)	N/A	N/A	No flow
MP-C-F (Downstream of Construction Area)	N/A	N/A	No flow
MP-C-G (Downstream of Construction Area)	N/A	N/A	No flow
MP-C-H (Downstream of Construction Area)	08/03/2020 08/10/2020 08/17/2020 08/24/2020	L2484595-6 L2486374-4 L2490512-4 L2493980-5	
MP-C-J (Downstream of Construction Area)	08/03/2020 08/10/2020 08/17/2020 08/24/2020	L2484595-3 L2486374-3 L2490512-3 L2493980-4	
MP-Q1-01 (Downstream of Q1 Quarry)	08/03/2020	L2484595-4	
MP-Q1-0101 (Field Duplicate of MP-Q1-01)	08/03/2020	L2484595-5	
MP-Q1-02 (Downstream of Q1 Quarry)	08/03/2020 08/10/2020 08/17/2020 08/24/2020	L2484595-7 L2486374-5 L2490512-5 L2493980-6	
Mary River Mine Site			
MS-01 (Sewage Treatment Facility)	08/05/2020	L2485339-1	Discharge volume reported daily
MS-0102 (Field Blank of MS-01)	08/05/2020	L2485339-3	
MS-01A (Mine Site Polishing Waste Stabilization Pond)	N/A	N/A	No discharge
MS-01B (Sewage Treatment Facility)	08/05/2020	L2485392-1	Discharge volume reported 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)	08/01/2020	L2482800-1	Discharge from August 1-11
MS-03B (Mine Site Bulk Fuel Storage Facility Stormwater)	08/18/2020	L2491466-1	Discharge from August 18, 20-21, 24-26, and 28-31
MS-03B01 (Field Duplicate of MS-03B)	08/18/2020	L2491466-2	
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)	08/04/2020	L2485407-1	Discharge on August 4 and from 7-13
MS-0602 (Field Blank of MS-06)	08/04/2020	L2485407-2	
MS-07 (Run of Mine Ore Stockpile Pond Stormwater)	N/A	N/A	Not constructed
MS-08 (Mine Waste Rock Stockpile Pond)	08/18/2020	L2491370-1	Discharge on August 3-4, 9, 11, 17-19, 21-25, and 28-31
MS-0801 (Field Duplicate of MS-08)	08/18/2020	L2491370-2	
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)	08/05/2020 08/10/2020 08/16/2020 08/23/2020	L2485627-1 L2486375-16 L2489338-16 L2493952-16	

Monitoring Program Station	Sampling Date	Lab ID Number	Comment
MS-MRY-10 (Deposit 1 Surface Water Drainage)	08/03/2020 08/10/2020 08/16/2020 08/24/2020	L2482851-2 L2486375-1 L2489338-1 L2493952-1	
MS-MRY-13A (Downstream Non-Hazardous Landfill)	N/A	N/A	No flow
MS-MRY-13B (Downstream Non-Hazardous Landfill)	08/05/2020 08/10/2020 08/16/2020 08/23/2020	L2485627-2 L2486375-3 L2489338-8 L2493952-8	
MS-C-A (Downstream of Construction and Borrow Areas)	08/04/2020 08/10/2020 08/16/2020 08/23/2020	L2485411-4 L2486375-15 L2489338-3 L2493952-3	
MS-C-A01 (Field Duplicate of MS-C-A)	08/16/2020	L2489338-4	
MS-C-B (Downstream of Construction and Borrow Areas)	08/04/2020 08/10/2020 08/16/2020 08/23/2020	L2485411-5 L2486375-13 L2489338-5 L2493952-5	
MS-C-C (Downstream of Construction and Borrow Areas)	08/05/2020 08/10/2020 08/16/2020 08/23/2020	L2485627-5 L2486375-7 L2489338-11 L2493952-11	
MS-C-D (Downstream of Construction and Borrow Areas)	08/05/2020 08/10/2020 08/16/2020 08/23/2020	L2485627-4 L2486375-6 L2489338-10 L2493952-10	
MS-C-E (Downstream of Construction and Borrow Areas)	08/05/2020 08/10/2020 08/16/2020 08/23/2020	L2485627-3 L2486375-4 L2489338-9 L2493952-9	
MS-C-E02 (Field Blank of MS-C-E)	08/10/2020	L2486375-5	
MS-C-F (Downstream of Construction and Borrow Areas)	08/04/2020 08/10/2020 08/16/2020 08/23/2020	L2485411-3 L2486375-9 L2489338-2 L2493952-2	
MS-C-F01 (Field Duplicate of MS-C-F)	08/10/2020	L2486375-14	

Monitoring Program Station	Sampling Date	Lab ID Number	Comment
MS-C-G (Downstream of Construction and Borrow Areas)	08/05/2020	L2485627-6	
	08/10/2020	L2486375-2	
	08/16/2020	L2489338-6	
	08/23/2020	L2493952-6	
MS-C-G01 (Field Duplicate of MS-C-G)	08/23/2020	L2493952-7	
MS-C-G02 (Field Blank of MS-C-G)	08/05/2020	L2485627-7	
MS-C-H (Downstream of Construction and Borrow Areas)	08/05/2020	L2485627-8	
	08/10/2020	L2486375-10	
	08/16/2020	L2489338-7	
	08/23/2020	L2493952-7	
MS-C-H01 (Field Duplicate of MS-C-H)	08/05/2020	L2485627-9	
MQ-C-A (Downstream of QMR2 Quarry)	08/04/2020	L2485411-1	
	08/10/2020	L2486375-11	
	08/16/2020	L2489338-14	
	08/23/2020	L2493952-14	
MQ-C-A01 (Field Duplicate of MS-C-A)	08/23/2020	L2493952-13	
MQ-C-B (Downstream of QMR2 Quarry)	08/05/2020	L2485627-10	
	08/10/2020	L2486375-12	
	08/16/2020	L2489338-12	
	08/23/2020	L2493952-12	
MQ-C-B01 (Field Duplicate of MQ-C-B)	08/16/2020	L2489338-13	
MQ-C-D (Downstream of QMR2 Quarry)	08/04/2020	L2485411-2	
	08/10/2020	L2486375-8	
	08/16/2020	L2489338-15	
	08/23/2020	L2493952-15	
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-0102
	ALS Laboratory Sample ID			L2485369-1	L2485369-3
	Sample Date & Time			08/05/2020 13:15	08/05/2020 13:15
	QA/QC Sample Type			N/A	Field Blank
	Units	LOR	Criteria ¹		
pH	pH units	0.10	6.0 - 9.5	7.8	5.75
Total Suspended Solids	mg/L	2.0	120	<3.0	<3.0
Ammonia, Total (as N)	mg/L	0.010	-	0.047	<0.010
Total Kjeldahl Nitrogen	mg/L	0.15	-	0.39	<0.15
Phosphorus, Total	mg/L	0.0030	-	12.1	<0.0030
Fecal Coliforms	CFU/100 mL	0	10,000	0	0
BOD	mg/L	2.0	100	<2.0	<2.0
Oil and Grease, Total	mg/L	2.0	-	<2.0	2.9
	-	-	No Visible Sheen	No visible sheen	No visible sheen
Acute 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-01A

Analyte	Sample ID			MP-01A
	ALS Laboratory Sample ID			L2486009-1
	Sample Date & Time			2020-08-09 10:00
	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	120	15.7
Ammonia, Total (as N)	mg/L	0.010	-	5.58
Total Kjeldahl Nitrogen	mg/L	0.15	-	9.68
Phosphorus, Total	mg/L	0.0030	-	0.345
Fecal Coliforms	CFU/100 mL	0	10,000	<1
BOD	mg/L	2.0	100	2
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 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-01B

Analyte	Sample ID			MP-01B	MP-01B (BLANK)	MP-01B
	ALS Laboratory Sample ID			L2485422-1	L2485422-3	L2490574-1
	Sample Date & Time			2020-08-05 13:45	2020-08-05 13:45	08/18/2020 14:00
	QA/QC Sample Type			N/A	Field Blank	N/A
	Units	LOR	Criteria ¹			
pH	pH units	0.10	6.0 - 9.5	8.31	5.73	8.31
Total Suspended Solids	mg/L	2.0	120	<3.0	<3.0	<3.0
Ammonia, Total (as N)	mg/L	0.010	-	0.028	<0.010	0.014
Total Kjeldahl Nitrogen	mg/L	0.15	-	1.21	<0.15	<1.5
Phosphorus, Total	mg/L	0.060	-	7.33	<0.0030	8.35
Fecal Coliforms	CFU/100 mL	0	10,000	1	0	4600
BOD	mg/L	2.0	100	<2.0	<2.0	2.2
Oil and Grease, Total	mg/L	2.0	-	<2.0	<2.0	<2.0
	-	-	No visible sheen	No visible sheen	No visible sheen	No visible sheen
Toxicity	-	-	Not Acutely Toxic	-	-	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 2.4: Water Quality Results for Water Licence Monitoring Location - MP-03

Analyte	Sample ID			MP-03
	ALS Laboratory Sample ID			L2495157-1
	Sample Date & Time			2020-08-26 10:00
	QA/QC Sample Type			N/A
	Units	LOR	Criteria ¹	
pH	pH units	0.10	6.0 - 9.5	8.35
Total Suspended Solids	mg/L	2.0	-	26.9
Total Dissolved Solids	mg/L	10	-	495
Turbidity	NTU	0.10	-	24.6
Ammonia, Total (as N)	mg/L	0.025		0.243
Phosphorus, Total	mg/L	0.0020		0.0246
Lead (Pb)-Total	mg/L	0.000050	0.001	0.00117
Oil and Grease, Total	mg/L	5.0	15.0	<5.0
	-	-	No visible sheen	No visible sheen
Benzene	mg/L	0.00050	0.370	<0.00050
Ethylbenzene	mg/L	0.00050	0.090	<0.00050
Toluene	mg/L	0.00045	0.002	<0.00045
F1 (C6-C10)	mg/L	0.10	-	<0.10
F1-BTEX	mg/L	0.10	-	<0.10
F2 (C10-C16)	mg/L	0.10	-	2.01
F3 (C16-C34)	mg/L	0.30	-	1.28
F4 (C34-C50)	mg/L	0.30	-	<0.30
Total Hydrocarbons (TPH))	mg/L	0.30	-	3.29

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 2.5: Water Quality Results for Water Licence Monitoring Location - MP-04A

Analyte	Sample ID			MP-04A
	ALS Laboratory Sample ID			L2496368-1
	Sample Date & Time			2020-08-29 18:00
	QA/QC Sample Type			N/A
	Units	LOR	Criteria ¹	
pH	pH	0.10	6.0 - 9.0	7.8
Total Suspended Solids	mg/L	1.0	15.0	<1.0
Total Dissolved Solids	mg/L	20	-	941
Turbidity	NTU	0.10	-	1.55
Arsenic (As)-Total	mg/L	0.00010	-	0.00513
Copper (Cu)-Total	mg/L	0.00050	-	0.00076
Lead (Pb)-Total	mg/L	0.000050	-	0.000157
Nickel (Ni)-Total	mg/L	0.00050	-	0.0102
Phosphorus (P)-Total	mg/L	0.050	-	0.112
Zinc (Zn)-Total	mg/L	0.0030	-	0.0037
Benzene	mg/L	0.00050	0.370	<0.00050
Ethylbenzene	mg/L	0.00050	0.090	<0.00050
Methyl t-butyl ether (MTBE)	mg/L	0.00050	-	<0.00050
Styrene	mg/L	0.00050	-	<0.00050
Toluene	mg/L	0.00045	0.002	0.00077
ortho-Xylene	mg/L	0.00050	-	<0.00050
meta- & para-Xylene	mg/L	0.00050	-	0.00066
Xylenes	mg/L	0.00075	-	<0.00075
F1 (C6-C10)	mg/L	0.10	-	<0.10
F1-BTEX	mg/L	0.10	-	<0.10
F2 (C10-C16)	mg/L	0.30	-	<0.30
F3 (C16-C34)	mg/L	0.30	-	0.92
F4 (C34-C50)	mg/L	0.30	-	<0.30
Oil and Grease, Total	mg/L	5.0	15	<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 9: Effluent Quality Discharge Limits for the Landfarm Facilities.

Table 2.6: Water Quality Results for Water Licence Monitoring Location - MP-05

Analyte	Sample ID			MP-05
	ALS Laboratory Sample ID			L2484674-1
	Sample Date & Time			2020-08-04 8:30
	QA/QC Sample Type			N/A
	Units	LOR	Criteria ¹	
Hardness (as CaCO ₃)	mg/L	10	-	779
pH	pH units	0.1	6.0 - 9.5	8.1
Total Suspended Solids	mg/L	3.0	15.0	<3.0
Total Dissolved Solids	mg/L	20	-	1170
Turbidity	NTU	0.1	-	2.53
Alkalinity, Total (as CaCO ₃)	mg/L	10	-	171
Ammonia, Total (as N)	mg/L	0.02	-	0.124
Chloride (Cl)	mg/L	0.5	-	161
Fluoride (F)	mg/L	0.02	-	0.24
Nitrate (as N)	mg/L	0.02	-	6.42
Total Kjeldahl Nitrogen	mg/L	0.15	-	0.43
Phosphorus, Total	mg/L	0.003	-	0.0053
Sulfate (SO ₄)	mg/L	0.3	-	524
Dissolved Organic Carbon	mg/L	1	-	5.49
Total Organic Carbon	mg/L	1	-	5.89
Aluminum (Al)-Total	mg/L	0.050	-	<0.050
Arsenic (As)-Total	mg/L	0.0010	0.50	<0.0010
Cadmium (Cd)-Total	mg/L	0.000050	-	<0.000050
Calcium (Ca)-Total	mg/L	0.5	-	113
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	0.0001	0.20	<0.00050
Magnesium (Mg)-Total	mg/L	0.050	-	112
Manganese (Mn)-Total	mg/L	0.00050	-	0.945
Mercury (Hg)-Total	mg/L	0.000010	-	0.0000051
Molybdenum (Mo)-Total	mg/L	0.000050	-	0.00476
Nickel (Ni)-Total	mg/L	0.0050	0.50	<0.0050
Potassium (K)-Total	mg/L	0.050	-	10
Selenium (Se)-Total	mg/L	0.000050	-	0.00119
Sodium (Na)-Total	mg/L	0.5	-	61.6
Thallium (Tl)-Total	mg/L	0.00010	-	<0.00010
Uranium (U)-Total	mg/L	0.000010	-	0.0917
Zinc (Zn)-Total	mg/L	0.030	0.50	<0.030
Aluminum (Al)-Dissolved	mg/L	0.050	-	<0.050
Arsenic (As)-Dissolved	mg/L	0.0010	-	<0.0010
Cadmium (Cd)-Dissolved	mg/L	0.000050	-	<0.000050
Calcium (Ca)-Dissolved	mg/L	0.050	-	119
Copper (Cu)-Dissolved	mg/L	0.00200	-	<0.0020
Iron (Fe)-Dissolved	mg/L	0.10	-	<0.10
Lead (Pb)-Dissolved	mg/L	0.0005	-	<0.00050
Magnesium (Mg)-Dissolved	mg/L	0.05	-	117
Manganese (Mn)-Dissolved	mg/L	0.0005	-	0.895
Mercury (Hg)-Dissolved	mg/L	0.0000050	-	<0.0000050
Molybdenum (Mo)-Dissolved	mg/L	0.000050	-	0.00474
Nickel (Ni)-Dissolved	mg/L	0.00050	-	0.0056
Potassium (K)-Dissolved	mg/L	0.050	-	10.5
Selenium (Se)-Dissolved	mg/L	0.000050	-	0.00106
Sodium (Na)-Dissolved	mg/L	0.50	-	64.2
Thallium (Tl)-Dissolved	mg/L	0.00010	-	<0.00010
Uranium (U)-Dissolved	mg/L	0.00001	-	0.094
Zinc (Zn)-Dissolved	mg/L	0.001	-	0.018
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 2.7: Water Quality Results for Water Licence Monitoring Location - MP-06

Analyte	Sample ID			MP-06
	ALS Laboratory Sample ID			L2489339-1
	Sample Date & Time			8/15/2020 17:10
	QA/QC Sample Type			N/A
	Units	LOR	Criteria ¹	
Hardness (as CaCO ₃)	mg/L	0.50	-	649
pH	pH units	0.10	6.0 - 9.5	8.03
Total Suspended Solids	mg/L	2.0	Grab 30, Average 15	<2.0
Total Dissolved Solids	mg/L	20	-	1040
Turbidity	NTU	0.10	-	1.55
Alkalinity, Total (as CaCO ₃)	mg/L	10	-	80
Ammonia, Total (as N)	mg/L	0.020	-	0.017
Chloride (Cl)	mg/L	2.5	-	89.9
Fluoride (F)	mg/L	0.10	-	0.14
Nitrate (as N)	mg/L	0.10	-	4.92
Total Kjeldahl Nitrogen	mg/L	0.15	-	0.44
Phosphorus, Total	mg/L	0.0030	-	<0.0030
Sulfate (SO ₄)	mg/L	1.5	-	564
Dissolved Organic Carbon	mg/L	0.50	-	1.75
Total Organic Carbon	mg/L	0.50	-	2.3
Aluminum (Al)-Total	mg/L	0.0500	-	<0.050
Arsenic (As)-Total	mg/L	0.00100	0.50	<0.0010
Cadmium (Cd)-Total	mg/L	0.000050	-	<0.000050
Calcium (Ca)-Total	mg/L	0.50	-	86.8
Copper (Cu)-Total	mg/L	0.0050	0.30	<0.0050
Iron (Fe)-Total	mg/L	0.010	-	<0.10
Lead (Pb)-Total	mg/L	0.00050	0.20	<0.00050
Magnesium (Mg)-Total	mg/L	0.050	-	125
Manganese (Mn)-Total	mg/L	0.00050	-	0.615
Mercury (Hg)-Total	mg/L	0.0000050	-	<0.0000050
Molybdenum (Mo)-Total	mg/L	0.000050	-	0.00278
Nickel (Ni)-Total	mg/L	0.00500	0.50	<0.0050
Potassium (K)-Total	mg/L	0.050	-	6.96
Selenium (Se)-Total	mg/L	0.000050	-	0.00147
Sodium (Na)-Total	mg/L	0.050	-	38.6
Thallium (Tl)-Total	mg/L	0.00010	-	<0.00010
Uranium (U)-Total	mg/L	0.000010	-	0.0394
Zinc (Zn)-Total	mg/L	0.0300	0.50	<0.030
Aluminum (Al)-Dissolved	mg/L	0.0050	-	<0.050
Arsenic (As)-Dissolved	mg/L	0.00100	-	<0.0010
Cadmium (Cd)-Dissolved	mg/L	0.0000500	-	<0.000050
Calcium (Ca)-Dissolved	mg/L	0.050	-	77.7
Copper (Cu)-Dissolved	mg/L	0.0020	-	<0.0020
Iron (Fe)-Dissolved	mg/L	0.010	-	<0.10
Lead (Pb)-Dissolved	mg/L	0.00050	-	<0.00050
Magnesium (Mg)-Dissolved	mg/L	0.050	-	110
Manganese (Mn)-Dissolved	mg/L	0.00050	-	0.498
Mercury (Hg)-Dissolved	mg/L	0.0000050	-	<0.0000050
Molybdenum (Mo)-Dissolved	mg/L	0.000050	-	0.00262
Nickel (Ni)-Dissolved	mg/L	0.0050	-	<0.0050
Potassium (K)-Dissolved	mg/L	0.050	-	6.44
Selenium (Se)-Dissolved	mg/L	0.000050	-	0.00135
Sodium (Na)-Dissolved	mg/L	0.50	-	34.9
Thallium (Tl)-Dissolved	mg/L	0.00010	-	<0.00010
Uranium (U)-Dissolved	mg/L	0.000010	-	0.0348
Zinc (Zn)-Dissolved	mg/L	0.010	-	<0.010
Toxicity	-	-	Not Acutely Toxic	-

Notes:

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

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

Table 2.8: 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
	ALS Laboratory Sample ID			L2484595-1	L2486374-1	L2490512-1	L2493980-1
	Sample Date & Time			2020-08-03 9:30	2020-08-10 10:50	2020-08-17 12:20	2020-08-17 13:20
	QA/QC Sample Type			N/A	N/A	N/A	N/A
	Units	LOR	Criteria ¹				
Conductivity	umhos/cm	3.0	-	776	-	-	-
pH	pH units	0.10	6.0 - 9.5	8.33	8.25	8.24	9.19
Total Suspended Solids	mg/L	2.0	Grab 30, Average 15	<3.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	438	453	499	221
Turbidity	NTU	0.10	-	1.69	0.82	3	1
Ammonia, Total (as N)	mg/L	0.010	-	0.132	-	-	-
Nitrate (as N)	mg/L	0.020	-	6.12	-	-	-
Oil and Grease, Total	mg/L	2.0	-	<2.0	-	-	-
	-	-	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 2.9: Water Quality Results for Water Licence Monitoring Location - MP-C-B01

Analyte	Sample ID			MP-C-B01	MP-C-B01	MP-C-B01	MP-C-B01	MP-C-B0103
	ALS Laboratory Sample ID			L2484595-2	L2486374-2	L2490512-2	L2493980-2	L2493980-3
	Sample Date & Time			08/03/2020 9:50	08/10/2020 11:00	08/17/2020 12:10	08/24/2020 9:35	08/24/2020 9:35
	QA/QC Sample Type			N/A	N/A	N/A	N/A	Travel Blank
	Units	LOR	Criteria ¹					
Conductivity	umhos/cm	3.0	-	1300	-	-	-	-
pH	pH units	0.10	6.0 - 9.5	8.22	8.03	8.15	8.01	5.98
Total Suspended Solids	mg/L	2.0	Grab 30, Average 15	<3.0	4.6	2	2	<2.0
Total Dissolved Solids	mg/L	10	-	909	775	812	711	712
Turbidity	NTU	0.10	-	0.35	0.26	0.6	0.23	<0.10
Ammonia, Total (as N)	mg/L	0.010	-	0.283	-	-	-	-
Nitrate (as N)	mg/L	0.020	-	3.19	-	-	-	-
Oil and Grease, Total	mg/L	2.0	-	<2.0	-	-	-	-
	-	-	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 2.10: 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			L2484595-6	L2486374-4	L2490512-4	L2493980-5
	Sample Date & Time			08/03/2020 16:30	08/10/2020 10:30	08/17/2020 11:25	08/24/2020 11:50
	QA/QC Sample Type			N/A	N/A	N/A	N/A
	Units	LOR	Criteria ¹				
Conductivity	umhos/cm	3.0	-	396	-	-	-
pH	pH units	0.10	6.0 - 9.5	8.32	8.32	8.22	8.25
Total Suspended Solids	mg/L	2.0	Grab 30, Average 15	<3.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	206	208	297	387
Turbidity	NTU	0.10	-	0.81	0.45	0.99	0.22
Ammonia, Total (as N)	mg/L	0.010	-	0.014	-	-	-
Nitrate (as N)	mg/L	0.020	-	0.428	-	-	-
Oil and Grease, Total	mg/L	2.0	-	<2.0	-	-	-
	-	-	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 2.11: 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
	ALS Laboratory Sample ID			L2484595-3	L2486374-3	L2490512-3	L2493980-4
	Sample Date & Time			8/3/2020 11:00	08/10/2020 11:50	08/17/2020 12:35	08/24/2020 13:00
	QA/QC Sample Type			N/A	N/A	N/A	N/A
	Units	LOR	Criteria ¹				
Conductivity	umhos/cm	3.0	-	527	-	-	-
pH	pH units	0.10	6.0 - 9.5	8.05	8.44	8.31	8.31
Total Suspended Solids	mg/L	2.0	Grab 30, Average 15	<3.0	<2.0	<2.0	2.4
Total Dissolved Solids	mg/L	10	-	276	254	257	164
Turbidity	NTU	0.10	-	0.52	1.00	1.06	0.69
Ammonia, Total (as N)	mg/L	0.010	-	<0.010	-	-	-
Nitrate (as N)	mg/L	0.020	-	0.292	-	-	-
Oil and Grease, Total	mg/L	2.0	-	<2.0	-	-	-
	-	-	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 2.12: Water Quality Results for Water Licence Monitoring Location - MP-Q1-01

Analyte	Sample ID			MP-Q1-01	MP-Q1-0101
	ALS Laboratory Sample ID			L2484595-4	L2484595-5
	Sample Date & Time			08/03/2020 12:00	08/03/2020 12:00
	QA/QC Sample Type			N/A	Field Duplicate
	Units	LOR	Criteria ¹		
Conductivity	umhos/cm	3.0	-	248	249
pH	pH units	0.10	6.0 - 9.5	7.98	7.96
Total Suspended Solids	mg/L	3.0	Grab 30, Average 15	<3.0	<3.0
Total Dissolved Solids	mg/L	10	-	152	151
Turbidity	NTU	0.10	-	2.49	2.44
Ammonia, Total (as N)	mg/L	0.010	-	0.017	0.018
Nitrate (as N)	mg/L	0.020	-	0.723	0.721
Oil and Grease, Total	mg/L	2.0	-	<2.0	<2.0
	-	-	No Visible Sheen	No visible sheen	No visible sheen
Acute Toxicity	-	-	Not Acutely Toxic	-	-

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

Analyte	Sample ID			MP-Q1-02	MP-Q1-02	MP-Q1-02	MP-Q1-02
	ALS Laboratory Sample ID			L2484595-7	L2486374-5	L2490512-5	L2493980-6
	Sample Date & Time			08/03/2020 9:20	08/10/2020 14:10	08/17/2020 10:50	08/24/2020 11:15
	QA/QC Sample Type			N/A	N/A	N/A	N/A
	Units	LOR	Criteria ¹				
Conductivity	umhos/cm	3.0	-	619	-	-	-
pH	pH units	0.10	6.0 - 9.5	8.06	8.13	8.04	8.02
Total Suspended Solids	mg/L	2.0	Grab 30, Average 15	<3.0	<2.0	14.9	<2.0
Total Dissolved Solids	mg/L	10	-	375	247	266	486
Turbidity	NTU	0.10	-	1.09	1.46	8.87	0.68
Ammonia, Total (as N)	mg/L	0.010	-	0.628	-	-	-
Nitrate (as N)	mg/L	0.020	-	19.6	-	-	-
Oil and Grease, Total	mg/L	2.0	-	<2.0	-	-	-
	-	-	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 2.14: Water Quality Results for Water Licence Monitoring Location - MS-01

Analyte	Sample ID			MS-01	MS-0102
	ALS Laboratory Sample ID			L2485339-1	L2485339-3
	Sample Date & Time			08/05/2020 15:00	08/05/2020 15:00
	QA/QC Sample Type			N/A	Field Blank
	Units	LOR	Criteria ¹		
pH	pH units	0.10	6.0 - 9.5	7.42	5.89
Total Suspended Solids	mg/L	2.0	35	3.4	<3.0
Ammonia, Total (as N)	mg/L	0.020	4.0	0.024	<0.010
Total Kjeldahl Nitrogen	mg/L	1.5	-	1.28	<0.15
Phosphorus, Total	mg/L	0.0060	4.0	1.03	<0.0030
Fecal Coliforms	CFU/100 mL	0	1000	0	0
BOD	mg/L	2.0	30	<2.0	<2.0
Oil and Grease, Total	mg/L	2.0	-	<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 2.15: Water Quality Results for Water Licence Monitoring Location - MS-01B

Analyte	Sample ID			MS-01B
	ALS Laboratory Sample ID			L2485392-1
	Sample Date & Time			8/5/2020 14:30
	QA/QC Sample Type			N/A
	Units	LOR	Criteria ¹	
pH	pH units	0.10	6.0 - 9.5	8.64
Total Suspended Solids	mg/L	3.0	35	<3.0
Ammonia, Total (as N)	mg/L	0.010	4.0	0.579
Total Kjeldahl Nitrogen	mg/L	0.15	-	1.87
Phosphorus, Total	mg/L	0.0030	4.0	0.892
Fecal Coliforms	CFU/100 mL	0	1000	12
BOD	mg/L	2.0	30	<2.0
Oil and Grease, Total	mg/L	2.0	-	<2.0
	-	-	No visible sheen	No visible sheen
Toxicity	-	-	Not acutely toxic	-

Notes:

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

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

Table 2.16: Water Quality Results for Water Licence Monitoring Location - MS-03

Analyte	Sample ID			MS-03
	ALS Laboratory Sample ID			L2482800-1
	Sample Date & Time			08/01/2020 17:00
	QA/QC Sample Type			N/A
	Units	LOR	Criteria ¹	
pH	pH units	0.10	6.0 - 9.5	8.24
Total Suspended Solids	mg/L	2.0	-	<2.0
Total Dissolved Solids	mg/L	10	-	215
Turbidity	NTU	0.10	-	4.2
Lead (Pb)-Total	mg/L	0.000050	0.001	0.00025
Oil and Grease, Total	mg/L	5.0	15.0	<5.0
	-	-	No visible sheen	No visible sheen
Benzene	mg/L	0.00050	0.370	<0.00050
Ethylbenzene	mg/L	0.00050	0.090	<0.00050
Toluene	mg/L	0.00050	0.002	<0.00050
F1 (C6-C10)	mg/L	0.10	-	<0.10
F2 (C10-C16)	mg/L	0.10	-	<0.10
F3 (C16-C34)	mg/L	0.25	-	<0.25
F4 (C34-C50)	mg/L	0.25	-	<0.25
Total Hydrocarbons (C6-C50)	mg/L	0.38	-	<0.38

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

Analyte	Sample ID			MS-03B	MS-03B01
	ALS Laboratory Sample ID			L2491466-1	L2491466-2
	Sample Date & Time			08/18/2020 16:05	08/18/2020 16:05
	QA/QC Sample Type			N/A	Field Duplicate
	Units	LOR	Criteria ¹		
pH	pH units	0.10	6.0 - 9.5	8.18	8.18
Total Suspended Solids	mg/L	2.0	-	5.2	5.2
Total Dissolved Solids	mg/L	10.0	-	266	285
Turbidity	NTU	0.10	-	5.12	5.04
Lead (Pb)-Total	mg/L	0.000050	0.001	0.00095	0.00091
Oil and Grease, Total	mg/L	5.0	15	<5.0	<5.0
	-	-	No visible sheen	No visible sheen	No visible sheen
Benzene	mg/L	0.00050	0.37	<0.00050	<0.00050
Ethylbenzene	mg/L	0.00050	0.09	<0.00050	<0.00050
Toluene	mg/L	0.00050	0.002	<0.00050	<0.00050
F1 (C6-C10)	mg/L	0.10	-	<0.10	<0.10
F2 (C10-C16)	mg/L	0.10	-	<0.10	<0.10
F3 (C16-C34)	mg/L	0.25	-	<0.25	<0.25
F4 (C34-C50)	mg/L	0.25	-	<0.25	<0.25
Total Hydrocarbons (C6-C50)	mg/L	0.38	-	<0.38	<0.38

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 2.18: Water Quality Results for Water Licence Monitoring Location - MS-06

Analyte	Sample ID			MS-06	MS-0602
	ALS Laboratory Sample ID			L2485407-1	L2485407-2
	Sample Date & Time			08/04/2020 11:15	08/04/2020 11:15
	QA/QC Sample Type			N/A	Field Blank
	Units	LOR	Criteria ¹		
Conductivity	umhos/cm	3.0	-	1590	<3.0
Hardness (as CaCO ₃)	mg/L	0.50	-	917.0	<0.50
pH	pH units	0.10	6.0 - 9.5	7.26	5.85
Total Suspended Solids	mg/L	3.0	15	6.0	<3.0
Total Dissolved Solids	mg/L	10	-	1520	<10
Turbidity	NTU	0.1	-	7.08	0.58
Acidity (as CaCO ₃)	mg/L	2.0	-	2.3	<2.0
Alkalinity, Total (as CaCO ₃)	mg/L	10.0	-	13	<10
Ammonia, Total (as N)	mg/L	0.010	-	0.272	<0.010
Chloride (Cl)	mg/L	0.50	-	22.8	<0.50
Fluoride (F)	mg/L	0.02	-	<0.10	<0.020
Nitrate (as N)	mg/L	0.020	-	14.9	<0.020
Total Kjeldahl Nitrogen	mg/L	0.15	-	0.82	<0.15
Phosphorus, Total	mg/L	0.0030	-	0.0302	<0.0030
Sulfate (SO ₄)	mg/L	0.30	-	952	<0.30
Dissolved Organic Carbon	mg/L	0.50	-	1.2	0.7
Total Organic Carbon	mg/L	0.50	-	2.06	1.07
Aluminum (Al)-Total	mg/L	0.0050	-	0.068	<0.0050
Arsenic (As)-Total	mg/L	0.00010	0.5	<0.0010	<0.00010
Cadmium (Cd)-Total	mg/L	0.0000050	-	0.000206	<0.0000050
Calcium (Ca)-Total	mg/L	0.050	-	77.9	<0.050
Copper (Cu)-Total	mg/L	0.00050	0.3	<0.0050	<0.00050
Iron (Fe)-Total	mg/L	0.010	-	0.16	<0.010
Lead (Pb)-Total	mg/L	0.000050	0.2	<0.00050	<0.000050
Magnesium (Mg)-Total	mg/L	0.0050	-	197	0.0093
Manganese (Mn)-Total	mg/L	0.00050	-	7.9	<0.00050
Mercury (Hg)-Total	mg/L	0.0000050	-	<0.0000050	<0.0000050
Molybdenum (Mo)-Total	mg/L	0.000050	-	0.00113	<0.000050
Nickel (Ni)-Total	mg/L	0.00050	0.5	0.0361	<0.00050
Potassium (K)-Total	mg/L	0.050	-	11.30	<0.050
Selenium (Se)-Total	mg/L	0.000050	-	0.0021	<0.000050
Sodium (Na)-Total	mg/L	0.050	-	8.98	<0.050
Thallium (Tl)-Total	mg/L	0.000010	-	0.0001	<0.000010
Uranium (U)-Total	mg/L	0.000010	-	0.00269	<0.000010
Zinc (Zn)-Total	mg/L	0.0030	0.5	<0.030	<0.0030
Aluminum (Al)-Dissolved	mg/L	0.0050	-	<0.050	<0.0050
Arsenic (As)-Dissolved	mg/L	0.00010	-	<0.0010	<0.00010
Cadmium (Cd)-Dissolved	mg/L	0.0000050	-	0.000205	<0.0000050
Calcium (Ca)-Dissolved	mg/L	0.050	-	67.9	<0.050
Copper (Cu)-Dissolved	mg/L	0.00020	-	<0.0020	<0.00020
Iron (Fe)-Dissolved	mg/L	0.010	-	<0.10	<0.010
Lead (Pb)-Dissolved	mg/L	0.000050	-	<0.00050	<0.000050
Magnesium (Mg)-Dissolved	mg/L	0.0050	-	182	<0.0050
Manganese (Mn)-Dissolved	mg/L	0.00050	-	7.4	<0.00050
Mercury (Hg)-Dissolved	mg/L	0.0000050	-	<0.0000050	<0.0000050
Molybdenum (Mo)-Dissolved	mg/L	0.000050	-	0.00121	<0.000050
Nickel (Ni)-Dissolved	mg/L	0.00050	-	0.0324	<0.00050
Potassium (K)-Dissolved	mg/L	0.050	-	10.20	<0.050
Selenium (Se)-Dissolved	mg/L	0.000050	-	0	<0.000050
Sodium (Na)-Dissolved	mg/L	0.050	-	7.91	<0.050
Thallium (Tl)-Dissolved	mg/L	0.000010	-	<0.00010	<0.000010
Uranium (U)-Dissolved	mg/L	0.000010	-	0.00243	<0.000010
Zinc (Zn)-Dissolved	mg/L	0.0010	-	<0.010	<0.0010
Ra-226	Bq/L	0.0067	-	<0.0095	<0.0067
Oil and Grease, Total	-	-	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 10: Effluent Quality Discharge Limits for Open Pit, Stockpiles and Sedimentation Ponds.

Table 2.19: Water Quality Results for Water Licence Monitoring Location - MS-08

Analyte	Sample ID			MS-08	MS-0801
	ALS Laboratory Sample ID			L2491370-1	L2491370-2
	Sample Date & Time			08/18/2020 11:10	08/18/2020 11:10
	QA/QC Sample Type			N/A	Field Duplicate
	Units	LOR	Criteria ¹		
Conductivity	umhos/cm	2.0	-	2890	2880
Hardness (as CaCO3)	mg/L	0.5		1710	1730
pH	pH units	0.10	6.0 - 9.5	7.80	7.84
Total Suspended Solids	mg/L	2.0	15.0	7.2	8.4
Total Dissolved Solids	mg/L	10	-	2730	2760
Turbidity	NTU	0.10	-	3.02	2.68
Acidity (as CaCO3)	mg/L	2.0	-	3.1	3.2
Alkalinity, Total (as CaCO3)	mg/L	1.0	-	30	30
Ammonia, Total (as N)	mg/L	0.025	-	2.87	2.88
Chloride (Cl)	mg/L	2.5	-	15.7	16.3
Fluoride (F)	mg/L	0.10	-	0.13	0.19
Nitrate (as N)	mg/L	0.025	-	21.7	22.4
Total Kjeldahl Nitrogen	mg/L	0.050	-	3.82	2.55
Phosphorus, Total	mg/L	0.0030	-	<0.0030	<0.0030
Sulfate (SO4)	mg/L	1.5	-	1850	1900
Dissolved Organic Carbon	mg/L	0.50	-	4.14	3.16
Total Organic Carbon	mg/L	0.50	-	2.85	2.9
Aluminum (Al)-Total	mg/L	0.0500	-	<0.050	<0.050
Antimony (Sb)-Total	mg/L	0.0010	-	<0.0010	<0.0010
Arsenic (As)-Total	mg/L	0.0010	0.50	<0.0010	<0.0010
Barium (Ba)-Total	mg/L	0.0010	-	0.0120	0.0125
Beryllium (Be)-Total	mg/L	0.0010	-	<0.0010	<0.0010
Bismuth (Bi)-Total	mg/L	0.00050	-	<0.00050	<0.00050
Boron (B)-Total	mg/L	0.10	-	<0.10	<0.10
Cadmium (Cd)-Total	mg/L	0.000050	-	<0.000050	<0.000050
Calcium (Ca)-Total	mg/L	0.050	-	175	182
Cesium (Cs)-Total	mg/L	0.00010	-	<0.00010	<0.00010
Chromium (Cr)-Total	mg/L	0.0050	-	<0.0050	<0.0050
Cobalt (Co)-Total	mg/L	0.00010	-	0.0110	0.0116
Copper (Cu)-Total	mg/L	0.0050	0.30	<0.0050	<0.0050
Iron (Fe)-Total	mg/L	0.010	-	0.57	0.58
Lead (Pb)-Total	mg/L	0.00050	0.20	<0.00050	<0.00050
Lithium (Li)-Total	mg/L	0.0010	-	0.012	0.013
Magnesium (Mg)-Total	mg/L	0.0050	-	355	374
Manganese (Mn)-Total	mg/L	0.00010	-	1.74	1.85
Mercury (Hg)-Total	mg/L	0.0000050	-	<0.0000050	<0.0000050
Molybdenum (Mo)-Total	mg/L	0.000050	-	0.00081	0.00088
Nickel (Ni)-Total	mg/L	0.00050	0.50	0.0138	0.0145
Phosphorus (P)-Total	mg/L	0.50	-	<0.50	<0.50
Potassium (K)-Total	mg/L	0.050	-	6.33	6.55
Rubidium (Rb)-Total	mg/L	0.00020	-	0.0062	0.0063
Selenium (Se)-Total	mg/L	0.000050	-	0.00281	0.00275
Silicon (Si)-Total	mg/L	1.00	-	<1.0	<1.0
Silver (Ag)-Total	mg/L	0.00050	-	<0.00050	<0.00050
Sodium (Na)-Total	mg/L	0.050	-	5.01	5.09
Strontium (Sr)-Total	mg/L	0.00020	-	0.808	0.801
Sulfur (S)-Total	mg/L	0.50	-	622	631
Tellurium (Te)-Total	mg/L	0.0020	-	<0.0020	<0.0020
Thallium (Tl)-Total	mg/L	0.00010	-	<0.00010	<0.00010
Thorium (Th)-Total	mg/L	0.0010	-	<0.0010	<0.0010
Tin (Sn)-Total	mg/L	0.00010	-	0.0058	0.0057
Titanium (Ti)-Total	mg/L	0.0030	-	<0.0030	<0.0030
Tungsten (W)-Total	mg/L	0.0010	-	<0.0010	<0.0010
Uranium (U)-Total	mg/L	0.000010	-	0.00109	0.00108
Vanadium (V)-Total	mg/L	0.0050	-	<0.0050	<0.0050
Zinc (Zn)-Total	mg/L	0.030	0.50	<0.030	<0.030
Zirconium (Zr)-Total	mg/L	0.0020	-	<0.0020	<0.0020
Aluminum (Al)-Dissolved	mg/L	0.050	-	<0.050	<0.050
Antimony (Sb)-Dissolved	mg/L	0.0010	-	<0.0010	<0.0010
Arsenic (As)-Dissolved	mg/L	0.0010	-	<0.0010	<0.0010
Barium (Ba)-Dissolved	mg/L	0.00010	-	0.0117	0.0116
Beryllium (Be)-Dissolved	mg/L	0.0010	-	<0.0010	<0.0010
Bismuth (Bi)-Dissolved	mg/L	0.00050	-	<0.00050	<0.00050
Boron (B)-Dissolved	mg/L	0.10	-	<0.10	<0.10
Cadmium (Cd)-Dissolved	mg/L	0.000050	-	<0.000050	<0.000050
Calcium (Ca)-Dissolved	mg/L	0.050	-	167	171
Cesium (Cs)-Dissolved	mg/L	0.00010	-	<0.00010	<0.00010

Table 2.19: Water Quality Results for Water Licence Monitoring Location - MS-08

Analyte	Sample ID			MS-08	MS-0801
	ALS Laboratory Sample ID			L2491370-1	L2491370-2
	Sample Date & Time			08/18/2020 11:10	08/18/2020 11:10
	QA/QC Sample Type			N/A	Field Duplicate
	Units	LOR	Criteria ¹		
Chromium (Cr)-Dissolved	mg/L	0.0050	-	<0.0050	<0.0050
Cobalt (Co)-Dissolved	mg/L	0.00010	-	0.0097	0.0097
Copper (Cu)-Dissolved	mg/L	0.0020	-	<0.0020	<0.0020
Iron (Fe)-Dissolved	mg/L	0.10	-	<0.10	<0.10
Lead (Pb)-Dissolved	mg/L	0.00050	-	<0.00050	<0.00050
Lithium (Li)-Dissolved	mg/L	0.010	-	0.010	0.012
Magnesium (Mg)-Dissolved	mg/L	0.0050	-	314	317
Manganese (Mn)-Dissolved	mg/L	0.00010	-	1.60	1.62
Mercury (Hg)-Dissolved	mg/L	0.0000050	-	<0.0000050	<0.0000050
Molybdenum (Mo)-Dissolved	mg/L	0.000050	-	0.00083	0.00081
Nickel (Ni)-Dissolved	mg/L	0.00050	-	0.0137	0.0133
Phosphorus (P)-Dissolved	mg/L	0.50	-	<0.50	<0.50
Potassium (K)-Dissolved	mg/L	0.050	-	5.95	5.93
Rubidium (Rb)-Dissolved	mg/L	0.00020	-	0.0062	0.0060
Selenium (Se)-Dissolved	mg/L	0.000050	-	0.00254	0.00254
Silicon (Si)-Dissolved	mg/L	0.50	-	<0.50	<0.50
Silver (Ag)-Dissolved	mg/L	0.00050	-	<0.00050	<0.00050
Sodium (Na)-Dissolved	mg/L	0.050	-	4.31	4.26
Strontium (Sr)-Dissolved	mg/L	0.00020	-	0.737	0.759
Sulfur (S)-Dissolved	mg/L	0.50	-	541	543
Tellurium (Te)-Dissolved	mg/L	0.0020	-	<0.0020	<0.0020
Thallium (Tl)-Dissolved	mg/L	0.00010	-	<0.00010	<0.00010
Thorium (Th)-Dissolved	mg/L	0.0010	-	<0.0010	<0.0010
Tin (Sn)-Dissolved	mg/L	0.00010	-	0.0052	0.0052
Titanium (Ti)-Dissolved	mg/L	0.0030	-	<0.0030	<0.0030
Tungsten (W)-Dissolved	mg/L	0.0010	-	<0.0010	<0.0010
Uranium (U)-Dissolved	mg/L	0.0010	-	0.001	0.00093
Vanadium (V)-Dissolved	mg/L	0.0050	-	<0.0050	<0.0050
Zinc (Zn)-Dissolved	mg/L	0.010	-	<0.010	<0.010
Zirconium (Zr)-Dissolved	mg/L	0.0020	-	<0.0020	<0.0020
Ra-226	Bq/L	0.0074	-	-	-
Oil and Grease, Total	-	-	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 10: Effluent Quality Discharge Limits for Open Pit, Stockpiles and Sedimentation Ponds.

Table 2.20: 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			L2485627-1	L2486375-16	L2489338-16	L2493952-16
	Sample Date & Time			08/05/2020 8:45	08/10/2020 16:45	08/16/2020 17:05	08/23/2020 8:35
	QA/QC Sample Type			N/A	N/A	N/A	N/A
	Units	LOR	Criteria ¹				
Hardness	mg/L	0.50	-	75.4	-	-	-
pH	pH units	0.10	6.0 - 9.5	7.78	8.08	8.07	8.13
Total Suspended Solids	mg/L	3.0	15.0	<3.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	73	108	98	102
Turbidity	NTU	0.10	-	0.28	0.15	0.14	0.13
Alkalinity, Total (as CaCO3)	mg/L	10	-	86	-	-	-
Ammonia, Total (as N)	mg/L	0.010	-	<0.010	-	-	-
Chloride (Cl)	mg/L	0.50	-	2.15	-	-	-
Fluoride (F)	mg/L	0.020	-	0.024	-	-	-
Nitrate (as N)	mg/L	0.020	-	0.127	-	-	-
Total Kjeldahl Nitrogen	mg/L	0.15	-	0.38	-	-	-
Phosphorus, Total	mg/L	0.0030	-	0.0032	-	-	-
Sulfate (SO4)	mg/L	0.30	-	5.22	-	-	-
Dissolved Organic Carbon	mg/L	0.50	-	2.1	-	-	-
Total Organic Carbon	mg/L	0.50	-	2.8	-	-	-
Aluminum (Al)-Total	mg/L	0.0050	-	0.0158	-	-	-
Arsenic (As)-Total	mg/L	0.00010	0.50	<0.00010	-	-	-
Cadmium (Cd)-Total	mg/L	0.0000050	-	<0.0000050	-	-	-
Calcium (Ca)-Total	mg/L	0.50	-	15.3	-	-	-
Copper (Cu)-Total	mg/L	0.0010	0.30	0.00227	-	-	-
Iron (Fe)-Total	mg/L	0.010	-	0.016	-	-	-
Lead (Pb)-Total	mg/L	0.000050	0.20	<0.000050	-	-	-
Magnesium (Mg)-Total	mg/L	0.050	-	9.2	-	-	-
Manganese (Mn)-Total	mg/L	0.00050	-	0.0008	-	-	-
Mercury (Hg)-Total	mg/L	0.0000050	-	<0.0000050	-	-	-
Molybdenum (Mo)-Total	mg/L	0.000050	-	0.00157	-	-	-
Nickel (Ni)-Total	mg/L	0.00050	0.50	<0.00050	-	-	-
Potassium (K)-Total	mg/L	0.050	-	2.44	-	-	-
Selenium (Se)-Total	mg/L	0.000050	-	0.000085	-	-	-
Sodium (Na)-Total	mg/L	0.050	-	0.745	-	-	-
Thallium (Tl)-Total	mg/L	0.000010	-	0.000014	-	-	-
Uranium (U)-Total	mg/L	0.000010	-	0.00629	-	-	-
Zinc (Zn)-Total	mg/L	0.0030	0.50	<0.0030	-	-	-
Aluminum (Al)-Dissolved	mg/L	0.0050	-	0.006	-	-	-
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	-	14.8	-	-	-
Copper (Cu)-Dissolved	mg/L	0.00020	-	0.00225	-	-	-
Iron (Fe)-Dissolved	mg/L	0.010	-	<0.010	-	-	-
Lead (Pb)-Dissolved	mg/L	0.000050	-	<0.000050	-	-	-
Magnesium (Mg)-Dissolved	mg/L	0.050	-	9.3	-	-	-
Manganese (Mn)-Dissolved	mg/L	0.00050	-	0.0006	-	-	-
Mercury (Hg)-Dissolved	mg/L	0.0000050	-	<0.0000050	-	-	-
Molybdenum (Mo)-Dissolved	mg/L	0.000050	-	0.00153	-	-	-
Nickel (Ni)-Dissolved	mg/L	0.00050	-	<0.00050	-	-	-
Potassium (K)-Dissolved	mg/L	0.050	-	2.39	-	-	-
Selenium (Se)-Dissolved	mg/L	0.000050	-	0.000128	-	-	-
Sodium (Na)-Dissolved	mg/L	0.50	-	0.723	-	-	-
Thallium (Tl)-Dissolved	mg/L	0.000010	-	0.000014	-	-	-
Uranium (U)-Dissolved	mg/L	0.000010	-	0.00618	-	-	-
Zinc (Zn)-Dissolved	mg/L	0.0010	-	<0.0010	-	-	-
Oil and Grease, Total	-	-	No visible sheen	No visible sheen	-	-	-
Acute Toxicity	-	-	Not acutely toxic	-	-	-	-

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

Table 2.21: 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			L2482851-2	L2486375-1	L2489338-1	L2493952-1
	Sample Date & Time			08/03/2020 10:25	08/10/2020 8:35	08/16/2020 8:15	08/24/2020 15:30
	QA/QC Sample Type			N/A	N/A	N/A	N/A
	Units	LOR	Criteria ¹				
Hardness	mg/L	0.50	-	212	-	-	-
pH	pH units	0.10	6.0 - 9.5	8.37	8.31	8.27	8.34
Total Suspended Solids	mg/L	2.0	15.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	13	-	192	220	231	223
Turbidity	NTU	0.10	-	<0.10	<0.10	<0.10	<0.10
Alkalinity, Total (as CaCO3)	mg/L	10	-	216	-	-	-
Ammonia, Total (as N)	mg/L	0.010	-	<0.010	-	-	-
Chloride (Cl)	mg/L	0.50	-	17.6	-	-	-
Fluoride (F)	mg/L	0.020	-	0.04	-	-	-
Nitrate (as N)	mg/L	0.020	-	0.038	-	-	-
Total Kjeldahl Nitrogen	mg/L	0.15	-	0.27	-	-	-
Phosphorus, Total	mg/L	0.0030	-	<0.0030	-	-	-
Sulfate (SO4)	mg/L	0.30	-	15.1	-	-	-
Dissolved Organic Carbon	mg/L	0.50	-	2.78	-	-	-
Total Organic Carbon	mg/L	0.50	-	3.25	-	-	-
Aluminum (Al)-Total	mg/L	0.0050	-	0.0167	-	-	-
Arsenic (As)-Total	mg/L	0.00010	0.50	<0.00010	-	-	-
Cadmium (Cd)-Total	mg/L	0.0000050	-	<0.0000050	-	-	-
Calcium (Ca)-Total	mg/L	0.50	-	40.5	-	-	-
Copper (Cu)-Total	mg/L	0.0010	0.30	0.00136	-	-	-
Iron (Fe)-Total	mg/L	0.010	-	0.022	-	-	-
Lead (Pb)-Total	mg/L	0.000050	0.20	<0.000050	-	-	-
Magnesium (Mg)-Total	mg/L	0.050	-	26.1	-	-	-
Manganese (Mn)-Total	mg/L	0.00050	-	0.00054	-	-	-
Mercury (Hg)-Total	mg/L	0.0000050	-	<0.0000050	-	-	-
Molybdenum (Mo)-Total	mg/L	0.000050	-	0.000427	-	-	-
Nickel (Ni)-Total	mg/L	0.00050	0.50	0.00078	-	-	-
Potassium (K)-Total	mg/L	0.050	-	2.15	-	-	-
Selenium (Se)-Total	mg/L	0.000050	-	<0.000050	-	-	-
Sodium (Na)-Total	mg/L	0.050	-	5.3	-	-	-
Thallium (Tl)-Total	mg/L	0.000010	-	<0.000010	-	-	-
Uranium (U)-Total	mg/L	0.000010	-	0.00295	-	-	-
Zinc (Zn)-Total	mg/L	0.0030	0.50	<0.0030	-	-	-
Aluminum (Al)-Dissolved	mg/L	0.0050	-	<0.0050	-	-	-
Arsenic (As)-Dissolved	mg/L	0.00010	-	0.00011	-	-	-
Cadmium (Cd)-Dissolved	mg/L	0.000010	-	<0.0000050	-	-	-
Calcium (Ca)-Dissolved	mg/L	0.050	-	40.6	-	-	-
Copper (Cu)-Dissolved	mg/L	0.00020	-	0.00134	-	-	-
Iron (Fe)-Dissolved	mg/L	0.010	-	<0.010	-	-	-
Lead (Pb)-Dissolved	mg/L	0.000050	-	<0.000050	-	-	-
Magnesium (Mg)-Dissolved	mg/L	0.050	-	26.9	-	-	-
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	-	0.000425	-	-	-
Nickel (Ni)-Dissolved	mg/L	0.000500	-	0.00051	-	-	-
Potassium (K)-Dissolved	mg/L	0.050	-	2.25	-	-	-
Selenium (Se)-Dissolved	mg/L	0.000050	-	0.000063	-	-	-
Sodium (Na)-Dissolved	mg/L	0.50	-	5.47	-	-	-
Thallium (Tl)-Dissolved	mg/L	0.000010	-	<0.000010	-	-	-
Uranium (U)-Dissolved	mg/L	0.000010	-	0.00282	-	-	-
Zinc (Zn)-Dissolved	mg/L	0.0010	-	<0.0010	-	-	-
Oil and Grease, Total	-	-	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 Open Pit, Stockpiles, and Sedimentation Ponds.

Table 2.22: Water Quality Results for Water Licence Monitoring Location - MS-MRY-13B

Analyte	Sample ID			MS-MRY-13B	MS-MRY-13B	MS-MRY-13B	MS-MRY-13B
	ALS Laboratory Sample ID			L2485627-2	L2486375-3	L2489338-8	L2493952-8
	Sample Date & Time			08/05/2020 9:05	08/10/2020 11:05	08/16/2020 11:40	08/23/2020 11:10
	QA/QC Sample Type			N/A	N/A	N/A	N/A
	Units	LOR	Criteria ¹				
Conductivity	umhos/cm	3.0	-	1610	-	-	-
pH	pH units	0.10	6.0 - 9.5	8.29	8.00	7.95	8.03
Total Suspended Solids	mg/L	3.0	15.0	<3.0	3.8	3.0	3.1
Total Dissolved Solids	mg/L	10	-	1120	1400	1610	1810
Turbidity	NTU	0.10	-	0.49	0.20	0.15	0.15
Alkalinity, Total (as CaCO3)	mg/L	10	-	214	-	-	-
Dissolved Organic Carbon	mg/L	0.50	-	8.39	-	-	-
Total Organic Carbon	mg/L	0.50	-	9.42	-	-	-
Aluminum (Al)-Total	mg/L	0.050	-	<0.050	-	-	-
Antimony (Sb)-Total	mg/L	0.0010	-	<0.0010	-	-	-
Barium (Ba)-Total	mg/L	0.0010	-	0.0733	-	-	-
Cadmium (Cd)-Total	mg/L	0.000050	-	<0.000050	-	-	-
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	-	0.026	-	-	-
Manganese (Mn)-Total	mg/L	0.0050	-	<0.0050	-	-	-
Molybdenum (Mo)-Total	mg/L	0.00050	-	<0.00050	-	-	-
Nickel (Ni)-Total	mg/L	0.0050	0.50	0.0128	-	-	-
Selenium (Se)-Total	mg/L	0.00050	-	<0.00050	-	-	-
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	-	-	-
Uranium (U)-Total	mg/L	0.00010	-	0.01	-	-	-
Vanadium (V)-Total	mg/L	0.0050	-	<0.0050	-	-	-
Zinc (Zn)-Total	mg/L	0.030	0.50	<0.030	-	-	-
Oil and Grease, Total	mg/L	2.0	-	<5.0	-	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Phenols (4AAP)	ug/L	0.0010	-	<0.0010	-	-	-
F1 (C6-C10)	ug/L	100	-	<100	-	-	-
F2 (C10-C16)	ug/L	100	-	<100	-	-	-
F3 (C16-C34)	ug/L	250	-	<250	-	-	-
F4 (C34-C50)	ug/L	250	-	<250	-	-	-
Total Hydrocarbons (C6-C50)	ug/L	380	-	<380	-	-	-

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 2.23: 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-A01	MS-C-A
	ALS Laboratory Sample ID			L2485411-4	L2486375-15	L2489338-3	L2489338-4	L2493952-3
	Sample Date & Time			08/04/2020 11:00	08/10/2020 9:10	08/16/2020 9:30	08/16/2020 9:30	08/23/2020 13:05
	QA/QC Sample Type			N/A	N/A	N/A	Field Duplicate	N/A
	Units	LOR	Criteria ¹					
Conductivity	umhos/cm	3.0	-	218	-	-	-	-
pH	pH units	0.10	6.0 - 9.5	7.59	7.91	7.91	7.90	8.14
Total Suspended Solids	mg/L	2.0	Grab 30, Average 15	<3.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	131	146	132	128	148
Turbidity	NTU	0.10	-	0.4	0.22	0.21	0.22	0.23
Ammonia, Total (as N)	mg/L	0.010	-	<0.010	-	-	-	-
Nitrate (as N)	mg/L	0.020	-	0.183	-	-	-	-
Oil and Grease, Total	mg/L	2.0	-	<2.0	-	-	-	-
	-	-	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 2.24: 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			L2485411-5	L2486375-13	L2489338-5	L2493952-5
	Sample Date & Time			08/04/2020 11:25	08/10/2020 9:40	08/16/2020 9:50	08/23/2020 13:20
	QA/QC Sample Type			N/A	N/A	N/A	N/A
	Units	LOR	Criteria ¹				
Conductivity	umhos/cm	3.0	-	226	-	-	-
pH	pH units	0.10	6.0 - 9.5	7.64	7.79	7.74	8.08
Total Suspended Solids	mg/L	2.0	Grab 30, Average 15	<3.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	137	127	137	139
Turbidity	NTU	0.10	-	0.48	0.28	0.3	0.28
Ammonia, Total (as N)	mg/L	0.010	-	<0.010	-	-	-
Nitrate (as N)	mg/L	0.020	-	0.211	-	-	-
Oil and Grease, Total	mg/L	2.0	-	<2.0	-	-	-
	-	-	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 2.25: 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			L2485627-5	L2486375-7	L2489338-11	L2493952-11
	Sample Date & Time			08/05/2020 10:40	08/10/2020 10:35	08/16/2020 12:25	08/23/2020 10:25
	QA/QC Sample Type			N/A	N/A	N/A	N/A
	Units	LOR	Criteria ¹				
Conductivity	umhos/cm	3.0	-	1220	-	-	-
pH	pH units	0.10	6.0 - 9.5	8.32	7.98	7.99	8.14
Total Suspended Solids	mg/L	2.0	Grab 30, Average 15	<3.0	2.0	3	<2.0
Total Dissolved Solids	mg/L	10	-	857	880	918	920
Turbidity	NTU	0.10	-	0.55	0.36	0.88	0.24
Ammonia, Total (as N)	mg/L	0.010	-	<0.010	-	-	-
Nitrate (as N)	mg/L	0.020	-	11.5	-	-	-
Oil and Grease, Total	mg/L	2.0	-	<2.0	-	-	-
	-	-	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-D

Analyte	Sample ID			MS-C-D	MS-C-D	MS-C-D	MS-C-D
	ALS Laboratory Sample ID			L2485627-4	L2486375-6	L2489338-10	L2493952-10
	Sample Date & Time			08/05/2020 10:20	08/10/2020 10:15	08/16/2020 12:15	08/23/2020 10:15
	QA/QC Sample Type			N/A	N/A	N/A	N/A
	Units	LOR	Criteria ¹				
Conductivity	umhos/cm	3.0	-	1180	-	-	-
pH	pH units	0.10	6.0 - 9.5	8.43	8.38	8.38	8.33
Total Suspended Solids	mg/L	2.0	Grab 30, Average 15	<3.0	7.9	18.0	<2.0
Total Dissolved Solids	mg/L	10	-	811	855	846	894
Turbidity	NTU	0.10	-	4.63	4.76	10.20	14.4
Ammonia, Total (as N)	mg/L	0.010	-	0.028	-	-	-
Nitrate (as N)	mg/L	0.020	-	8.08	-	-	-
Oil and Grease, Total	mg/L	2.0	-	<2.0	-	-	-
	-	-	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 2.27: Water Quality Results for Water Licence Monitoring Location - MS-C-E

Analyte	Sample ID			MS-C-E	MS-C-E	MS-C-E02	MS-C-E	MS-C-E
	ALS Laboratory Sample ID			L2485627-3	L2486375-4	L2486375-5	L2489338-9	L2493952-9
	Sample Date & Time			08/05/2020 10:05	08/10/2020 10:10	08/10/2020 10:10	08/16/2020 12:05	08/23/2020 10:10
	QA/QC Sample Type			N/A	N/A	Field Blank	N/A	N/A
	Units	LOR	Criteria ¹					
Conductivity	umhos/cm	3.0	-	1280	-	-	-	-
pH	pH units	0.10	6.0 - 9.5	8.36	7.89	7.90	7.92	8.14
Total Suspended Solids	mg/L	2.0	Grab 30, Average 15	<3.0	3.4	2.6	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	913	936	922	923	955
Turbidity	NTU	0.10	-	0.8	0.67	0.72	0.67	1.76
Ammonia, Total (as N)	mg/L	0.010	-	<0.010	-	-	-	-
Nitrate (as N)	mg/L	0.020	-	8.04	-	-	-	-
Oil and Grease, Total	mg/L	2.0	-	<2.0	-	-	-	-
	-	-	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 2.28: Water Quality Results for Water Licence Monitoring Location - MS-C-F

Analyte	Sample ID			MS-C-F	MS-C-F	MS-C-F01	MS-C-F	MS-C-F
	ALS Laboratory Sample ID			L2485411-3	L2486375-9	L2486375-14	L2489338-2	L2493952-2
	Sample Date & Time			08/04/2020 10:35	08/10/2020 8:50	08/10/2020 8:50	08/16/2020 9:15	08/23/2020 12:45
	QA/QC Sample Type			N/A	N/A	Field Duplicate	N/A	N/A
	Units	LOR	Criteria ¹					
Conductivity	umhos/cm	3.0	-	228	-	-	-	-
pH	pH units	0.10	6.0 - 9.5	7.4	8.20	8.18	8.15	8.16
Total Suspended Solids	mg/L	2.0	Grab 30, Average 15	<3.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	132	155	147	142	147
Turbidity	NTU	0.10	-	1.29	1.01	1.05	0.73	0.78
Ammonia, Total (as N)	mg/L	0.010	-	<0.010	-	-	-	-
Nitrate (as N)	mg/L	0.020	-	0.217	-	-	-	-
Oil and Grease, Total	mg/L	2.0	-	<2.0	-	-	-	-
	-	-	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 2.29: Water Quality Results for Water Licence Monitoring Location - MS-C-G

Analyte	Sample ID			MS-C-G	MS-C-G02	MS-C-G	MS-C-G	MS-C-G	MS-C-G01
	ALS Laboratory Sample ID			L2485627-6	L2485627-7	L2486375-2	L2489338-6	L2493952-6	L2493952-7
	Sample Date & Time			08/05/2020 11:25	08/05/2020 11:25	08/10/2020 11:40	08/16/2020 10:35	08/23/2020 11:45	08/23/2020 11:45
	QA/QC Sample Type			N/A	Field Blank	N/A	N/A	N/A	Field Duplicate
	Units	LOR	Criteria ¹						
Conductivity	umhos/cm	3.0	-	268	<3.0	-	-	-	-
pH	pH units	0.10	6.0 - 9.5	8.21	5.68	7.62	7.65	8.05	7.96
Total Suspended Solids	mg/L	2.0	Grab 30, Average 15	<3.0	<3.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	152	<10	163	163	140	148
Turbidity	NTU	0.10	-	0.17	0.44	<0.10	<0.10	0.14	0.15
Ammonia, Total (as N)	mg/L	0.010	-	0.117	<0.010	-	-	-	-
Nitrate (as N)	mg/L	0.020	-	5.18	<0.020	-	-	-	-
Oil and Grease, Total	mg/L	2.0	-	<2.0	<2.0	-	-	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:
Bold highlight 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 - MS-C-H

Analyte	Sample ID			MS-C-H	MS-C-H01	MS-C-H	MS-C-H	MS-C-H
	ALS Laboratory Sample ID			L2485627-8	L2485627-9	L2486375-10	L2489338-7	L2493952-7
	Sample Date & Time			08/05/2020 11:50	08/05/2020 11:50	08/10/2020 12:05	08/16/2020 11:00	08/23/2020 12:15
	QA/QC Sample Type			N/A	Field Duplicate	N/A	N/A	N/A
	Units	LOR	Criteria ¹					
Conductivity	umhos/cm	3.0	-	278	276	-	-	-
pH	pH units	0.10	6.0 - 9.5	8.31	8.39	8.28	8.24	8.06
Total Suspended Solids	mg/L	2.0	Grab 30, Average 15	<3.0	<3.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	143	143	162	150	137
Turbidity	NTU	0.10	-	0.39	0.47	0.33	0.32	0.27
Ammonia, Total (as N)	mg/L	0.010	-	<0.010	<0.010	-	-	-
Nitrate (as N)	mg/L	0.020	-	0.028	0.031	-	-	-
Oil and Grease, Total	mg/L	2.0	-	<2.0	<2.0	-	-	-
	-	-	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 2.31: 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-A01
	ALS Laboratory Sample ID			L2485411-1	L2486375-11	L2489338-14	L2493952-14	L2493952-13
	Sample Date & Time			08/04/2020 9:20	08/10/2020 13:55	08/16/2020 13:55	08/23/2020 9:15	08/23/2020 9:15
	QA/QC Sample Type			N/A	N/A	N/A	N/A	Field Duplicate
	Units	LOR	Criteria ¹					
Conductivity	umhos/cm	3.0	-	364	-	-	-	-
pH	pH units	0.10	6.0 - 9.5	7.78	8.17	8.15	8.20	8.19
Total Suspended Solids	mg/L	2.0	Grab 30, Average 15	<3.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	220	215	217	222	219
Turbidity	NTU	0.10	-	0.43	<0.10	<0.10	<0.10	<0.10
Ammonia, Total (as N)	mg/L	0.010	-	<0.010	-	-	-	-
Nitrate (as N)	mg/L	0.020	-	0.025	-	-	-	-
Oil and Grease, Total	mg/L	2.0	-	<2.0	-	-	-	-
	-	-	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 2.32: 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-B01	MQ-C-B
	ALS Laboratory Sample ID			L2485627-10	L2486375-12	L2489338-12	L2489338-13	L2493952-12
	Sample Date & Time			08/05/2020 12:15	08/10/2020 14:30	08/16/2020 13:15	08/16/2020 13:15	08/23/2020 9:45
	QA/QC Sample Type			N/A	N/A	N/A	Field Duplicate	N/A
	Units	LOR	Criteria ¹					
Conductivity	umhos/cm	3.0	-	545	-	-	-	-
pH	pH units	0.10	6.0 - 9.5	8.36	8.19	8.13	8.13	8.12
Total Suspended Solids	mg/L	2.0	Grab 30, Average 15	<3.0	2.9	2.0	2.5	2.7
Total Dissolved Solids	mg/L	10	-	285	313	362	362	286
Turbidity	NTU	0.10	-	2.14	2.05	2.39	2.38	0.97
Ammonia, Total (as N)	mg/L	0.010	-	0.124	-	-	-	-
Nitrate (as N)	mg/L	0.020	-	5.42	-	-	-	-
Oil and Grease, Total	mg/L	2.0	-	<2.0	-	-	-	-
	-	-	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 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project.

Table 2.33: 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			L2485411-2	L2486375-8	L2489338-15	L2493952-15
	Sample Date & Time			08/04/2020 9:55	08/10/2020 14:05	08/16/2020 14:05	08/23/2020 9:25
	QA/QC Sample Type			N/A	N/A	N/A	N/A
	Units	LOR	Criteria ¹				
Conductivity	umhos/cm	3.0	-	373	-	-	-
pH	pH units	0.10	6.0 - 9.5	7.78	8.40	8.34	8.15
Total Suspended Solids	mg/L	2.0	Grab 30, Average 15	<3.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	225	230	232	250
Turbidity	NTU	0.10	-	2.44	2.1	2.31	3.88
Ammonia, Total (as N)	mg/L	0.010	-	0.028	-	-	-
Nitrate (as N)	mg/L	0.020	-	2.18	-	-	-
Oil and Grease, Total	mg/L	2.0	-	<2.0	-	-	-
	-	-	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 3.1: Flow and Volume Measurements-Part I Item 11 - August 2020

DATE	Camp Lake Freshwater for Domestic Use - Daily Water (m³) MS-MRY-1	Camp Lake Freshwater for Industrial Use - Daily Water (m³) MS-MRY-1	Treated Sewage Effluent (m³) from MS-01 to Discharge Location #1	Treated Sewage Effluent (m³) from MS-01B to Discharge Location #1	Sewage Sludge Removed (m³) from Mine Site WWTPs to Incinerator for Disposal Offsite (Backhaul)	Km 32 Lake Milne Port Camp Daily Water (m³) MP-MRY-3	Km 32 Lake Milne Port Camp Fresh Water Use for Industrial Purposes (m³) MP-MRY-3	Treated Sewage Effluent (m³) from MP-01 to Milne Port	Treated Sewage Effluent (m³) from MP-01B to Milne Port	Sewage Sludge Removed (m³) from Milne Port WWTP to Mine Site WWTP	Sewage Sludge Removed (m³) from Milne Port WWTP to PWSP at Mine Site	Sewage Sludge Removed (m³) from Milne Port WWTP to Incinerator for Disposal Offsite (Backhaul)	Sewage Sludge Removed (m³) from Milne Port WWTP to PWSP at Milne Port	Water Use for Dust Suppression from Authorized Sources	Treated Sewage Effluent (m3) from PWSP MP-01a to Milne Port (MP-01A)	Effluent Discharge (m³) from Mine Site Crusher Pad Sedimentation Pond (MS-06)	Effluent Discharge (m³) from Mine Site Waste Rock Stockpile Pond (MS-08)	Effluent Discharge (m³) from Milne Port Ore Stockpile Sedimentation Pond (East) to Milne Port (MP-05)	Effluent Discharge (m³) from Milne Port Ore Stockpile Sedimentation Pond (West) to Milne Port (MP-06)	Treated Oily Water (m³) from Milne Port Snowdump Facility to Tundra (MP-04a)	Effluent Discharge (m³) from Milne Port Bulk Fuel Tank farm Facility to Milne Port (MP-03)	Effluent Discharge (m³) from Mine Site Bulk Fuel Storage Facility Stormwater (MS-03)	Effluent Discharge (m³) from Mine Site Bulk Fuel Storage Facility Stormwater (MS-03B)
1-Aug-20	116.0	15.3	32.0	82.6	0.9	83.3	0.0	30.0	36.3	0.0	0.0	1.2	0.0	218.5	0.0	0.0	0.0	0.0	0.0	0.0	43.0	16.8	0.0
2-Aug-20	96.3	12.2	32.0	69.4	0.7	78.0	0.0	31.0	44.2	0.0	0.0	0.0	0.0	121.5	0.0	0.0	0.0	0.7	0.0	0.0	128.0	18.3	0.0
3-Aug-20	111.8	0.0	36.0	66.3	0.8	67.5	0.0	30.0	28.7	0.0	0.0	0.2	0.0	163.0	0.0	0.0	537.2	0.0	0.0	0.0	197.0	18.7	0.0
4-Aug-20	133.3	17.2	37.0	67.6	0.9	61.2	0.0	31.0	25.3	0.0	0.0	1.2	0.0	123.0	0.0	21.0	252.0	350.0	0.0	0.0	0.0	7.8	0.0
5-Aug-20	127.4	0.0	37.0	68.9	1.0	67.2	0.0	40.0	32.5	0.0	0.0	1.0	0.0	99.5	0.0	0.0	0.0	639.4	0.0	0.0	0.0	10.9	0.0
6-Aug-20	111.3	19.4	37.0	80.8	1.0	65.7	0.0	37.0	35.5	0.0	0.0	1.0	0.0	97.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.5	0.0
7-Aug-20	114.8	10.7	11.0	78.2	1.2	57.6	0.0	33.0	49.4	0.0	0.0	1.3	0.0	136.0	0.0	43.8	0.0	0.0	0.0	0.0	0.0	17.4	0.0
8-Aug-20	123.6	3.4	23.0	80.8	1.2	55.5	0.0	48.0	64.1	0.0	0.0	1.0	0.0	88.0	24.7	28.8	0.0	0.0	0.0	0.0	0.0	18.5	0.0
9-Aug-20	152.8	44.8	32.0	80.4	1.2	40.5	0.0	0.0	45.7	0.0	0.0	1.0	0.0	40.0	45.7	39.1	38.0	0.0	0.0	0.0	0.0	16.2	0.0
10-Aug-20	168.2	48.2	21.0	94.2	1.2	33.2	0.0	0.0	54.7	0.0	0.0	0.0	0.0	42.5	45.3	56.2	0.0	0.0	0.0	0.0	0.0	16.4	0.0
11-Aug-20	113.0	131.5	37.0	94.2	1.2	72.3	0.0	0.0	56.1	0.0	0.0	1.0	0.0	349.0	45.9	32.8	33.0	0.0	0.0	0.0	0.0	4.7	0.0
12-Aug-20	151.5	114.1	36.0	97.1	0.8	58.1	0.0	0.0	55.7	0.0	0.0	0.0	0.0	168.0	36.9	31.4	0.0	822.0	0.0	0.0	0.0	0.0	0.0
13-Aug-20	175.4	79.3	35.0	97.1	0.8	89.1	0.0	0.0	54.1	0.0	0.0	1.0	0.0	0.0	42.8	10.0	0.0	347.6	0.0	0.0	0.0	0.0	0.0
14-Aug-20	134.6	104.0	32.0	105.9	1.0	57.8	0.0	0.0	50.4	0.0	0.0	1.0	0.0	131.5	37.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15-Aug-20	104.9	44.0	32.0	106.4	0.8	43.1	0.0	0.0	54.3	0.0	0.0	0.0	0.0	160.0	45.6	0.0	0.0	269.9	125.0	0.0	0.0	0.0	0.0
16-Aug-20	93.7	42.7	37.0	92.2	0.8	67.2	0.0	0.0	60.6	0.0	0.0	0.0	0.0	104.0	42.6	0.0	0.0	148.1	419.0	0.0	0.0	0.0	0.0
17-Aug-20	144.4	87.2	33.0	86.1	0.8	51.3	0.0	0.0	50.9	0.0	0.0	1.0	0.0	0.0	43.3	0.0	360.5	0.0	0.0	0.0	0.0	0.0	0.0
18-Aug-20	128.3	68.1	30.0	86.1	0.8	89.5	0.0	0.0	47.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	467.0	3637.3	0.0	0.0	0.0	0.0	0.3
19-Aug-20	120.2	0.0	35.0	93.6	1.0	82.8	0.0	0.0	28.6	0.0	0.0	0.0	0.0	32.0	0.0	0.0	536.8	0.0	0.0	0.0	0.0	0.0	0.0
20-Aug-20	120.0	16.3	38.0	72.6	1.2	100.7	0.0	11.0	31.7	0.0	0.0	0.0	0.0	40.0	0.0	0.0	0.0	0.0	416.5	0.0	0.0	0.0	15.9
21-Aug-20	105.6	3.4	22.0	86.2	1.1	86.8	6.0	36.0	21.5	0.0	0.0	0.0	0.0	168.0	0.0	0.0	1181.1	0.0	0.0	0.0	0.0	0.0	61.3
22-Aug-20	123.7	4.3	31.0	89.7	0.8	84.9	0.0	38.0	28.1	0.0	0.0	0.0	0.0	8.0	0.0	0.0	1206.5	98.9	0.0	0.0	0.0	0.0	0.0
23-Aug-20	113.1	0.0	23.0	92.3	0.6	46.3	0.0	38.0	26.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3720.0	369.2	0.0	0.0	0.0	0.0	0.0
24-Aug-20	144.6	0.0	35.0	102.2	1.0	48.5	0.0	31.0	27.7	0.0	0.0	0.0	0.0	88.0	0.0	0.0	3552.0	822.0	0.0	0.0	0.0	0.0	249.6
25-Aug-20	109.1	12.9	44.0	89.2	0.8	55.6	0.0	35.0	32.7	0.0	0.0	0.0	0.0	160.0	0.0	0.0	1490.0	347.6	0.0	0.0	0.0	0.0	152.3
26-Aug-20	146.6	6.5	31.0	120.0	1.0	56.7	0.0	31.0	29.8	0.0	0.0	0.0	0.0	128.0	0.0	0.0	0.0	0.0	0.0	0.0	78.9	0.0	287.9
27-Aug-20	125.3	3.4	37.0	104.0	0.8	59.9	0.0	22.0	25.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	269.9	0.0	0.0	0.0	34.8	0.0
28-Aug-20	143.7	3.4	31.0	113.2	1.0	52.1	0.0	23.0	24.3	0.0	0.0	0.0	0.0	32.0	0.0	0.0	227.0	148.1	0.0	0.0	0.0	0.0	38.5
29-Aug-20	133.5	0.0	30.0	98.5	1.0	56.5	0.0	25.0	30.4	0.0	0.0	0.0	0.0	104.0	0.0	0.0	940.0	0.0	0.0	2.2	0.0	0.0	51.0
30-Aug-20	115.4	22.6	30.0	92.2	1.0	63.7	1.0	30.0	28.4	0.0	0.0	0.2	0.0	40.0	0.0	0.0	1179.0	0.0	0.0	3.4	0.0	0.0	131.0
31-Aug-20	129.9	11.6	30.0	68.6	1.0	68.2	0.0	25.0	30.4	0.0	0.0	1.0	0.0	0.0	0.0	0.0	1460.0	0.0	0.0	7.4	0.0	0.0	137.3
Total	3,932.2	926.5	987.0	2,756.6	29.1	2,000.5	7.0	625.0	1,210.3	0.0	0.0	14.1	0.0	2841.5	410.2	263.1	17180.1	8270.7	960.5	13.0	481.7	164.2	1125.2

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