

## Vales Point Power Station Monthly Environmental Data Summary



LICENCE NO	761 <a href="http://www.epa.nsw.gov.au/prpoeoapp/">http://www.epa.nsw.gov.au/prpoeoapp/</a>
LICENCE HOLDER	SUNSET POWER INTERNATIONAL PTY LTD
REPORTING PERIOD	June 2021
ADDRESS	VALES ROAD, MANNERING PARK NSW

POINT 2 Combined air emissions from boiler 5 via Points 4 to 7 to Point 1 marked and shown as EPA ID 2 on The Plans ("VX837351-1 AND "VX837351-2" 03/06/2020 EPA REFERENCE DOC20/476695 AND DOC20/476695-1).												
Month	Pollutant	Unit of Measure	Sample/Measurement Frequency	Samples Collected & Analysed	Date Sampled	Lowest Sample Value	Mean of Samples	Highest Sample Value	99 Percentile Concentration Limit	100 Percentile Concentration Limit	Exceedance (yes/no)	Comments
Jun-21	Cadmium	(mg/m3)	Every 6 months							0.2		
Jun-21	Chlorine	(mg/m3)	Every 6 months							20		
Jun-21	Fluorine	(mg/m3)	Every 6 months							30		
Jun-21	Hydrogen chloride	(mg/m3)	Every 6 months							50		
Jun-21	Mercury	(mg/m3)	Every 6 months							0.05		
Jun-21	Nitrogen Oxides	(mg/m3)	Continuous	100%	Jun-21	427	625	732	1100	1500	No	
Jun-21	Solid Particles	(mg/m3)	Quarterly							50		
Jun-21	Sulfur dioxide	(mg/m3)	Continuous	100%	Jun-21	599	707	869	1400	1700	No	
Jun-21	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months							100		
Jun-21	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months							0.75		
Jun-21	VOC's as n-propane equivalent	(mg/m3)	Every 6 months							10		

POINT 3 Combined air emissions from boiler 6 via Points 8 to 11 to Point 1 marked and shown as EPA ID 3 on The Plans ("VX837351-1 AND "VX837351-2" 03/06/2020 EPA REFERENCE DOC20/476695 AND DOC20/476695-1).												
Month	Pollutant	Unit of Measure	Sample/Measurement Frequency	Samples Collected & Analysed	Date Sampled	Lowest Sample Value	Mean of Samples	Highest Sample Value	99 Percentile Concentration Limit	100 Percentile Concentration Limit	Exceedance (yes/no)	Comments
Jun-21	Cadmium	(mg/m3)	Every 6 months							0.2		
Jun-21	Chlorine	(mg/m3)	Every 6 months							20		
Jun-21	Fluorine	(mg/m3)	Every 6 months							30		
Jun-21	Hydrogen chloride	(mg/m3)	Every 6 months							50		
Jun-21	Mercury	(mg/m3)	Every 6 months							0.05		
Jun-21	Nitrogen Oxides	(mg/m3)	Continuous		Jun-21				1100	1500	No	Unit 6 was out of service for the entire month of June 2021
Jun-21	Solid Particles	(mg/m3)	Quarterly							50		
Jun-21	Sulfur dioxide	(mg/m3)	Continuous		Jun-21				1400	1700	No	
Jun-21	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months							100		
Jun-21	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months							0.75		
Jun-21	VOC's as n-propane equivalent	(mg/m3)	Every 6 months							10		

POINT 4 Boiler number 5 exhaust - duct A marked and shown as EPA ID 4 on The Plans ("VX837351-1 AND "VX837351-2" 03/06/2020 EPA REFERENCE DOC20/476695 AND DOC20/476695-1).												
Month	Pollutant	Unit of Measure	Sample/Measurement Frequency	Samples Collected & Analysed	Date Sampled	Lowest Sample Value	Mean of Samples	Highest Sample Value	99 Percentile Concentration Limit	100 Percentile Concentration Limit	Exceedance (yes/no)	Comments
Jun-21	Cadmium	(mg/m3)	Every 6 months									
Jun-21	Carbon dioxide	(%)	Every 6 months									
Jun-21	Chlorine	(mg/m3)	Every 6 months									
Jun-21	Flow rate	(m3/s)	Continuous									Not required until 31 October 2021
Jun-21	Fluorine	(mg/m3)	Every 6 months									
Jun-21	Hydrogen chloride	(mg/m3)	Every 6 months									
Jun-21	Mercury	(mg/m3)	Every 6 months									
Jun-21	Moisture	(%)	Continuous									Not required until 31 October 2021
Jun-21	Oxygen (O2)	(%)	Continuous									Not required until 31 October 2021
Jun-21	Solid Particles	(mg/m3)	Quarterly									
Jun-21	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months									
Jun-21	Temperature	(°C)	Continuous									Not required until 31 October 2021
Jun-21	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months									
Jun-21	VOC's as n-propane equivalent	(mg/m3)	Every 6 months									

POINT 5 Boiler number 5 exhaust - duct B marked and shown as EPA ID 5 on The Plans ("VX837351-1 AND "VX837351-2" 03/06/2020 EPA REFERENCE DOC20/476695 AND DOC20/476695-1).												
Month	Pollutant	Unit of Measure	Sample/Measurement Frequency	Samples Collected & Analysed	Date Sampled	Lowest Sample Value	Mean of Samples	Highest Sample Value	99 Percentile Concentration Limit	100 Percentile Concentration Limit	Exceedance (yes/no)	Comments
Jun-21	Cadmium	(mg/m3)	Every 6 months									
Jun-21	Flow rate	(m3/s)	Continuous									Not required until 31 October 2021
Jun-21	Mercury	(mg/m3)	Every 6 months									
Jun-21	Moisture	(%)	Continuous									
Jun-21	Oxygen (O2)	(%)	Continuous									Not required until 31 October 2021
Jun-21	Solid Particles	(mg/m3)	Quarterly									
Jun-21	Temperature	(°C)	Continuous									Not required until 31 October 2021
Jun-21	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months									

POINT 6 Boiler number 5 exhaust - duct C marked and shown as EPA ID 6 on The Plans ("VX837351-1 AND "VX837351-2" 03/06/2020 EPA REFERENCE DOC20/476695 AND DOC20/476695-1).												
Month	Pollutant	Unit of Measure	Sample/Measurement Frequency	Samples Collected & Analysed	Date Sampled	Lowest Sample Value	Mean of Samples	Highest Sample Value	99 Percentile Concentration Limit	100 Percentile Concentration Limit	Exceedance (yes/no)	Comments
Jun-21	Cadmium	(mg/m3)	Every 6 months									
Jun-21	Carbon dioxide	(%)	Every 6 months									
Jun-21	Chlorine	(mg/m3)	Every 6 months									
Jun-21	Flow rate	(m3/s)	Continuous									Not required until 31 October 2021
Jun-21	Fluorine	(mg/m3)	Every 6 months									
Jun-21	Hydrogen chloride	(mg/m3)	Every 6 months									
Jun-21	Mercury	(mg/m3)	Every 6 months									
Jun-21	Moisture	(%)	Continuous									Not required until 31 October 2021
Jun-21	Oxygen (O2)	(%)	Continuous									Not required until 31 October 2021
Jun-21	Solid Particles	(mg/m3)	Quarterly									
Jun-21	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months									
Jun-21	Temperature	(°C)	Continuous									Not required until 31 October 2021
Jun-21	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months									
Jun-21	VOC's as n-propane equivalent	(mg/m3)	Every 6 months									

POINT 7 Boiler number 5 exhaust - duct D marked and shown as EPA ID 7 on The Plans ("VX837351-1 AND "VX837351-2" 03/06/2020 EPA REFERENCE DOC20/476695 AND DOC20/476695-1).												
Month	Pollutant	Unit of Measure	Sample/Measurement Frequency	Samples Collected & Analysed	Date Sampled	Lowest Sample Value	Mean of Samples	Highest Sample Value	99 Percentile Concentration Limit	100 Percentile Concentration Limit	Exceedance (yes/no)	Comments
Jun-21	Cadmium	(mg/m3)	Every 6 months									
Jun-21	Flow rate	(m3/s)	Continuous									Not required until 31 October 2021
Jun-21	Mercury	(mg/m3)	Every 6 months									
Jun-21	Moisture	(%)	Continuous									Not required until 31 October 2021
Jun-21	Oxygen (O2)	(%)	Continuous									Not required until 31 October 2021
Jun-21	Solid Particles	(mg/m3)	Quarterly									
Jun-21	Temperature	(°C)	Continuous									Not required until 31 October 2021
Jun-21	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months									

POINT 8 Boiler number 6 exhaust - duct A marked and shown as EPA ID 8 on The Plans ("VX837351-1 AND "VX837351-2" 03/06/2020 EPA REFERENCE DOC20/476695 AND DOC20/476695-1).												
Month	Pollutant	Unit of Measure	Sample/Measurement Frequency	Samples Collected & Analysed	Date Sampled	Lowest Sample Value	Mean of Samples	Highest Sample Value	99 Percentile Concentration Limit	100 Percentile Concentration Limit	Exceedance (yes/no)	Comments
Jun-21	Cadmium	(mg/m3)	Every 6 months									
Jun-21	Carbon dioxide	(%)	Every 6 months									
Jun-21	Chlorine	(mg/m3)	Every 6 months									
Jun-21	Flow rate	(m3/s)	Continuous									Not required until 31 October 2021
Jun-21	Fluorine	(mg/m3)	Every 6 months									
Jun-21	Hydrogen chloride	(mg/m3)	Every 6 months									
Jun-21	Mercury	(mg/m3)	Every 6 months									
Jun-21	Moisture	(%)	Continuous									Not required until 31 October 2021
Jun-21	Oxygen (O2)	(%)	Continuous									Not required until 31 October 2021
Jun-21	Solid Particles	(mg/m3)	Quarterly									
Jun-21	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months									
Jun-21	Temperature	(°C)	Continuous									Not required until 31 October 2021
Jun-21	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months									
Jun-21	VOC's as n-propane equivalent	(mg/m3)	Every 6 months									

**POINT 9 Boiler number 6 exhaust - duct B marked and shown as EPA ID 9 on The Plans ("VX837351-1 AND "VX837351-2" 03/06/2020 EPA REFERENCE DOC20/476695 AND DOC20/476695-1).**

Month	Pollutant	Unit of Measure	Sample/Measurement Frequency	Samples Collected & Analysed	Date Sampled	Lowest Sample Value	Mean of Samples	Highest Sample Value	99 Percentile Concentration Limit	100 Percentile Concentration Limit	Exceedance (yes/no)	Comments
Jun-21	Cadmium	(mg/m3)	Every 6 months									
Jun-21	Flow rate	(m3/s)	Continuous									Not required until 31 October 2021
Jun-21	Mercury	(mg/m3)	Every 6 months									
Jun-21	Moisture	(%)	Continuous									Not required until 31 October 2021
Jun-21	Oxygen (O2)	(%)	Continuous									Not required until 31 October 2021
Jun-21	Solid Particles	(mg/m3)	Quarterly									
Jun-21	Temperature	(°C)	Continuous									Not required until 31 October 2021
Jun-21	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months									

**POINT 10 Boiler number 6 exhaust - duct C marked and shown as EPA ID 10 on The Plans ("VX837351-1 AND "VX837351-2" 03/06/2020 EPA REFERENCE DOC20/476695 AND DOC20/476695-1).**

Month	Pollutant	Unit of Measure	Sample/Measurement Frequency	Samples Collected & Analysed	Date Sampled	Lowest Sample Value	Mean of Samples	Highest Sample Value	99 Percentile Concentration Limit	100 Percentile Concentration Limit	Exceedance (yes/no)	Comments
Jun-21	Cadmium	(mg/m3)	Every 6 months									
Jun-21	Carbon dioxide	(%)	Every 6 months									
Jun-21	Chlorine	(mg/m3)	Every 6 months									
Jun-21	Flow rate	(m3/s)	Continuous									Not required until 31 October 2021
Jun-21	Fluorine	(mg/m3)	Every 6 months									
Jun-21	Hydrogen chloride	(mg/m3)	Every 6 months									
Jun-21	Mercury	(mg/m3)	Every 6 months									
Jun-21	Moisture	(%)	Continuous									Not required until 31 October 2021
Jun-21	Oxygen (O2)	(%)	Continuous									Not required until 31 October 2021
Jun-21	Solid Particles	(mg/m3)	Quarterly									
Jun-21	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months									
Jun-21	Temperature	(°C)	Continuous									Not required until 31 October 2021
Jun-21	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months									
Jun-21	VOC's as n-propane equivalent	(mg/m3)	Every 6 months									

**POINT 11 Boiler number 6 exhaust - duct D marked and shown as EPA ID 11 on The Plans ("VX837351-1 AND "VX837351-2" 03/06/2020 EPA REFERENCE DOC20/476695 AND DOC20/476695-1).**

Month	Pollutant	Unit of Measure	Sample/Measurement Frequency	Samples Collected & Analysed	Date Sampled	Lowest Sample Value	Mean of Samples	Highest Sample Value	99 Percentile Concentration Limit	100 Percentile Concentration Limit	Exceedance (yes/no)	Comments
Jun-21	Cadmium	(mg/m3)	Every 6 months									
Jun-21	Flow rate	(m3/s)	Continuous									Not required until 31 October 2021
Jun-21	Mercury	(mg/m3)	Every 6 months									
Jun-21	Moisture	(%)	Continuous									Not required until 31 October 2021
Jun-21	Oxygen (O2)	(%)	Continuous									Not required until 31 October 2021
Jun-21	Solid Particles	(mg/m3)	Quarterly									
Jun-21	Temperature	(°C)	Continuous									Not required until 31 October 2021
Jun-21	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months									

**POINT 12 Boiler number 5 combined exhaust - duct A and B (points 4 and 5) marked and shown as EPA ID 12 on The Plans ("VX837351-1 AND "VX837351-2" 03/06/2020 EPA REFERENCE DOC20/476695 AND DOC20/476695-1).**

Month	Pollutant	Unit of Measure	Sample/Measurement Frequency	Samples Collected & Analysed	Date Sampled	Lowest Sample Value	Mean of Samples	Highest Sample Value	99 Percentile Concentration Limit	100 Percentile Concentration Limit	Exceedance (yes/no)	Comments
Jun-21	Nitrogen Oxides	(mg/m3)	Continuous	100%	Jun-21	368	571	651			No	
Jun-21	Sulfur dioxide	(mg/m3)	Continuous	100%	Jun-21	446	639	812			No	

**POINT 13 Boiler number 5 combined exhaust - duct C and D (points 6 and 7) marked and shown as EPA ID 13 on The Plans ("VX837351-1 AND "VX837351-2" 03/06/2020 EPA REFERENCE DOC20/476695 AND DOC20/476695-1).**

Month	Pollutant	Unit of Measure	Sample/Measurement Frequency	Samples Collected & Analysed	Date Sampled	Lowest Sample Value	Mean of Samples	Highest Sample Value	99 Percentile Concentration Limit	100 Percentile Concentration Limit	Exceedance (yes/no)	Comments
Jun-21	Nitrogen Oxides	(mg/m3)	Continuous	100%	Jun-21	461	677	839			No	
Jun-21	Sulfur dioxide	(mg/m3)	Continuous	100%	Jun-21	684	773	869			No	

**POINT 14 Boiler number 6 combined exhaust - duct A and B (points 8 and 9) marked and shown as EPA ID 14 on The Plans ("VX837351-1 AND "VX837351-2" 03/06/2020 EPA REFERENCE DOC20/476695 AND DOC20/476695-1).**

Month	Pollutant	Unit of Measure	Sample/Measurement Frequency	Samples Collected & Analysed	Date Sampled	Lowest Sample Value	Mean of Samples	Highest Sample Value	99 Percentile Concentration Limit	100 Percentile Concentration Limit	Exceedance (yes/no)	Comments
Jun-21	Nitrogen Oxides	(mg/m3)	Continuous		Jun-21						No	Unit 6 was out of service for the entire month of June 2021
Jun-21	Sulfur dioxide	(mg/m3)	Continuous		Jun-21						No	

**POINT 15 Boiler number 6 combined exhaust - duct C and D (points 10 and 11) marked and shown as EPA ID 12 on The Plans ("VX837351-1 AND "VX837351-2" 03/06/2020 EPA REFERENCE DOC20/476695 AND DOC20/476695-1).**

Month	Pollutant	Unit of Measure	Sample/Measurement Frequency	Samples Collected & Analysed	Date Sampled	Lowest Sample Value	Mean of Samples	Highest Sample Value	99 Percentile Concentration Limit	100 Percentile Concentration Limit	Exceedance (yes/no)	Comments
Jun-21	Nitrogen Oxides	(mg/m3)	Continuous		Jun-21						No	Unit 6 was out of service for the entire month of June 2021
Jun-21	Sulfur dioxide	(mg/m3)	Continuous		Jun-21						No	

**POINT 22 Discharge of cooling water from the cooling water outlet canal to Wye Bay marked and shown as EPA ID 22 on The Plans ("VX837351-1 AND "VX837351-2" 03/06/2020 EPA REFERENCE DOC20/476695 AND DOC20/476695-1).**

Month	Pollutant	Unit of Measure	Sample/Measurement Frequency	Samples Collected & Analysed	Date Sampled	Lowest Sample Value	Mean of Samples	Highest Sample Value	97 Percentile Concentration Limit	100 Percentile Concentration Limit	Exceedance (yes/no)	Comments
Jun-21	Chlorine (free residual)	(mg/L)	Monthly during discharge	1	2/06/2021	<0.1	<0.1	<0.1		0.2	No	
Jun-21	Copper	(mg/L)	Monthly during discharge	1	2/06/2021	0.0026	0.0026	0.0026		0.005	No	
Jun-21	Iron	(mg/L)	Monthly during discharge	1	2/06/2021	0.053	0.053	0.053		0.3	No	
Jun-21	Oil and Grease	Visible	Continuous during discharge	100%	Jun-21	NIL	NIL	NIL				
Jun-21	Selenium	(mg/L)	Monthly during discharge	1	2/06/2021	0.0008	0.0008	0.0008		0.005	No	
Jun-21	Temperature	(°C)	Continuous during discharge	100%	Jun-21	17.9	23.2	28.6	35	37.5	No	

**POINT 23 Discharge of supernatant water from the ash dam to the cooling water outlet canal to Wye Bay marked and shown as EPA ID 23 on The Plans ("VX837351-1 AND "VX837351-2" 03/06/2020 EPA REFERENCE DOC20/476695 AND DOC20/476695-1).**

Month	Pollutant	Unit of Measure	Sample/Measurement Frequency	Samples Collected & Analysed	Date Sampled	Lowest Sample Value	Mean of Samples	Highest Sample Value	99 Percentile Concentration Limit	100 Percentile Concentration Limit	Exceedance (yes/no)	Comments
Jun-21	Aluminium	(mg/L)	Monthly during discharge	1	2/06/2021	0.035	0.035	0.035				
Jun-21	Ammonia	(mg/L)	Monthly during discharge	1	2/06/2021	<0.1	<0.1	<0.1				
Jun-21	Arsenic (III)	(mg/L)	Monthly during discharge	1	2/06/2021	<0.0005	<0.0005	<0.0005				
Jun-21	Arsenic (V)	(mg/L)	Monthly during discharge	1	2/06/2021	0.0023	0.0023	0.0023				
Jun-21	Cadmium	(mg/L)	Monthly during discharge	1	2/06/2021	0.00012	0.00012	0.00012				
Jun-21	Chromium (trivalent)	(mg/L)	Monthly during discharge	1	2/06/2021	0.002	0.002	0.002				
Jun-21	Chromium (VI) Compounds	(mg/L)	Monthly during discharge	1	2/06/2021	0.014	0.014	0.014				
Jun-21	Copper	(mg/L)	Monthly during discharge	1	2/06/2021	0.0006	0.0006	0.0006				
Jun-21	Iron	(mg/L)	Monthly during discharge	1	2/06/2021	0.040	0.040	0.040				
Jun-21	Lead	(mg/L)	Monthly during discharge	1	2/06/2021	<0.0001	<0.0001	<0.0001				
Jun-21	Manganese	(mg/L)	Monthly during discharge	1	2/06/2021	0.0038	0.0038	0.0038				
Jun-21	Nickel	(mg/L)	Monthly during discharge	1	2/06/2021	0.0006	0.0006	0.0006				
Jun-21	Nitrate + nitrite (oxidised nitrogen)	(mg/L)	Monthly during discharge	1	2/06/2021	0.07	0.07	0.07				
Jun-21	Nitrogen	(mg/L)	Monthly during discharge	1	2/06/2021	0.30	0.30	0.30				
Jun-21	pH	pH	Monthly during discharge	1	2/06/2021	7.91	7.91	7.91		6.5 - 9.5	No	
Jun-21	Phosphorus	(mg/L)	Monthly during discharge	1	2/06/2021	0.05	0.05	0.05				
Jun-21	Reactive Phosphorus	(mg/L)	Monthly during discharge	1	2/06/2021	<0.01	<0.01	<0.01				
Jun-21	Selenium	(mg/L)	Monthly during discharge	1	2/06/2021	0.0563	0.0563	0.0563				
Jun-21	Total Kjeldahl Nitrogen	(mg/L)	Monthly during discharge	1	2/06/2021	0.2	0.2	0.2				
Jun-21	Total Suspended Solids	(mg/L)	Monthly during discharge	1	2/06/2021	3	3	3		50	No	
Jun-21	Vanadium	(mg/L)	Monthly during discharge	1	2/06/2021	0.0439	0.0439	0.0439				
Jun-21	Zinc	(mg/L)	Monthly during discharge	1	2/06/2021	0.001	0.001	0.001				

**POINT 24 Discharge of seepage water from the ash dam rehabilitation area to Mannering Bay marked and shown as EPA ID 24 on The Plans ("VX837351-1 AND "VX837351-2" 03/06/2020 EPA REFERENCE DOC20/476695 AND DOC20/476695-1).**

Month	Pollutant	Unit of Measure	Sample/Measurement Frequency	Samples Collected & Analysed	Date Sampled	Lowest Sample Value	Mean of Samples	Highest Sample Value	Discharge (yes/no)	100 Percentile Concentration Limit	Exceedance (yes/no)	Comments
Jun-21	Aluminium	(mg/L)	Monthly during discharge	1	2/06/2021				No			
Jun-21	Ammonia	(mg/L)	Monthly during discharge	1	2/06/2021				No			
Jun-21	Arsenic (III)	(mg/L)	Monthly during discharge	1	2/06/2021				No			
Jun-21	Arsenic (V)	(mg/L)	Monthly during discharge	1	2/06/2021				No			
Jun-21	Cadmium	(mg/L)	Monthly during discharge	1	2/06/2021				No			
Jun-21	Chromium (trivalent)	(mg/L)	Monthly during discharge	1	2/06/2021				No			
Jun-21	Chromium (VI) Compounds	(mg/L)	Monthly during discharge	1	2/06/2021				No			
Jun-21	Copper	(mg/L)	Monthly during discharge	1	2/06/2021				No			
Jun-21	Iron	(mg/L)	Monthly during discharge	1	2/06/2021				No			
Jun-21	Lead	(mg/L)	Monthly during discharge	1	2/06/2021				No			No discharge from EPA Point 24 during June 2021
Jun-21	Manganese	(mg/L)	Monthly during discharge	1	2/06/2021				No			
Jun-21	Nickel	(mg/L)	Monthly during discharge	1	2/06/2021				No			
Jun-21	Nitrate + nitrite (oxidised nitrogen)	(mg/L)	Monthly during discharge	1	2/06/2021				No			
Jun-21	Nitrogen	(mg/L)	Monthly during discharge	1	2/06/2021				No			
Jun-21	pH	pH	Monthly during discharge	1	2/06/2021				No	6.5 - 9.5	No	
Jun-21	Phosphorus	(mg/L)	Monthly during discharge	1	2/06/2021				No			
Jun-21	Reactive Phosphorus	(mg/L)	Monthly during discharge	1	2/06/2021				No			
Jun-21	Selenium	(mg/L)	Monthly during discharge	1	2/06/2021				No			
Jun-21	Total Kjeldahl Nitrogen	(mg/L)	Monthly during discharge	1	2/06/2021				No			
Jun-21	Total Suspended Solids	(mg/L)	Monthly during discharge	1	2/06/2021				No	50	No	
Jun-21	Vanadium	(mg/L)	Monthly during discharge	1	2/06/2021				No			
Jun-21	Zinc	(mg/L)	Monthly during discharge	1	2/06/2021				No			

**POINT 25 Discharge of over boarded water from the ash dam to Mannering Bay marked and shown as EPA ID 25 on The Plans ("VX837351-1 AND "VX837351-2" 03/06/2020 EPA REFERENCE DOC20/476695 AND DOC20/476695-1).**

Month	Pollutant	Unit of Measure	Sample/Measurement Frequency	Samples Collected & Analysed	Date Sampled	Lowest Sample Value	Mean of Samples	Highest Sample Value	Discharge (yes/no)	100 Percentile Concentration Limit	Exceedance (yes/no)	Comments
Jun-21	Aluminium	(mg/L)	Daily for any discharge >2 hrs						No			
Jun-21	Ammonia	(mg/L)	Daily for any discharge >2 hrs						No			
Jun-21	Arsenic (III)	(mg/L)	Daily for any discharge >2 hrs						No			
Jun-21	Arsenic (V)	(mg/L)	Daily for any discharge >2 hrs						No			
Jun-21	Cadmium	(mg/L)	Daily for any discharge >2 hrs						No			
Jun-21	Chromium (trivalent)	(mg/L)	Daily for any discharge >2 hrs						No			
Jun-21	Chromium (VI) Compounds	(mg/L)	Daily for any discharge >2 hrs						No			
Jun-21	Copper	(mg/L)	Daily for any discharge >2 hrs						No			
Jun-21	Iron	(mg/L)	Daily for any discharge >2 hrs						No			
Jun-21	Lead	(mg/L)	Daily for any discharge >2 hrs						No			
Jun-21	Manganese	(mg/L)	Daily for any discharge >2 hrs						No			
Jun-21	Nickel	(mg/L)	Daily for any discharge >2 hrs						No			No discharge from EPA Point 25 during June 2021
Jun-21	Nitrate + nitrite (oxidised nitrogen)	(mg/L)	Daily for any discharge >2 hrs						No			
Jun-21	Nitrogen	(mg/L)	Daily for any discharge >2 hrs						No			
Jun-21	pH	pH	Daily for any discharge >2 hrs						No	6.5 - 9.5	No	
Jun-21	Phosphorus	(mg/L)	Daily for any discharge >2 hrs						No			
Jun-21	Reactive Phosphorus	(mg/L)	Daily for any discharge >2 hrs						No			
Jun-21	Selenium	(mg/L)	Daily for any discharge >2 hrs						No			
Jun-21	Total Kjeldahl Nitrogen	(mg/L)	Daily for any discharge >2 hrs						No			
Jun-21	Total Suspended Solids	(mg/L)	Daily for any discharge >2 hrs						No	50	No	
Jun-21	Vanadium	(mg/L)	Daily for any discharge >2 hrs						No			
Jun-21	Zinc	(mg/L)	Daily for any discharge >2 hrs						No			

**POINT 30** Groundwater quality monitoring bore marked and shown as EPA ID 30 on The Plans ("VX837351-1 AND "VX837351-2" 03/06/2020 EPA REFERENCE DOC20/476695 AND DOC20/476695-1).

Month	Pollutant	Unit of Measure	Sample/Measurement Frequency	Samples Collected & Analysed	Date Sampled	Lowest Sample Value	Mean of Samples	Highest Sample Value	99 Percentile Concentration Limit	100 Percentile Concentration Limit	Exceedance (yes/no)	Comments
Jun-21	Aluminium	(mg/L)	Quarterly									
Jun-21	Ammonia	(mg/L)	Quarterly									
Jun-21	Arsenic (III)	(mg/L)	Quarterly									
Jun-21	Arsenic (V)	(mg/L)	Quarterly									
Jun-21	Cadmium	(mg/L)	Quarterly									
Jun-21	Chromium (trivalent)	(mg/L)	Quarterly									
Jun-21	Chromium (VI) Compounds	(mg/L)	Quarterly									
Jun-21	Copper	(mg/L)	Quarterly									
Jun-21	Electrical Conductivity	(us/cm)	Quarterly									
Jun-21	Iron	(mg/L)	Quarterly									
Jun-21	Lead	(mg/L)	Quarterly									
Jun-21	Magnesium	(mg/L)	Quarterly									
Jun-21	Manganese	(mg/L)	Quarterly									
Jun-21	Nickel	(mg/L)	Quarterly									
Jun-21	pH	pH	Quarterly									
Jun-21	Potassium	(mg/L)	Quarterly									
Jun-21	Selenium	(mg/L)	Quarterly									
Jun-21	Sodium	(mg/L)	Quarterly									
Jun-21	Standing Water Level	(m)	Quarterly									
Jun-21	Vanadium	(mg/L)	Quarterly									
Jun-21	Zinc	(mg/L)	Quarterly									

Next sample due July 2021

**POINT 31** Groundwater quality monitoring bore marked and shown as EPA ID 31 on The Plans ("VX837351-1 AND "VX837351-2" 03/06/2020 EPA REFERENCE DOC20/476695 AND DOC20/476695-1).

Month	Pollutant	Unit of Measure	Sample/Measurement Frequency	Samples Collected & Analysed	Date Sampled	Lowest Sample Value	Mean of Samples	Highest Sample Value	99 Percentile Concentration Limit	100 Percentile Concentration Limit	Exceedance (yes/no)	Comments
Jun-21	Aluminium	(mg/L)	Quarterly									
Jun-21	Ammonia	(mg/L)	Quarterly									
Jun-21	Arsenic (III)	(mg/L)	Quarterly									
Jun-21	Arsenic (V)	(mg/L)	Quarterly									
Jun-21	Cadmium	(mg/L)	Quarterly									
Jun-21	Chromium (trivalent)	(mg/L)	Quarterly									
Jun-21	Chromium (VI) Compounds	(mg/L)	Quarterly									
Jun-21	Copper	(mg/L)	Quarterly									
Jun-21	Electrical Conductivity	(us/cm)	Quarterly									
Jun-21	Iron	(mg/L)	Quarterly									
Jun-21	Lead	(mg/L)	Quarterly									
Jun-21	Magnesium	(mg/L)	Quarterly									
Jun-21	Manganese	(mg/L)	Quarterly									
Jun-21	Nickel	(mg/L)	Quarterly									
Jun-21	pH	pH	Quarterly									
Jun-21	Potassium	(mg/L)	Quarterly									
Jun-21	Selenium	(mg/L)	Quarterly									
Jun-21	Sodium	(mg/L)	Quarterly									
Jun-21	Standing Water Level	(m)	Quarterly									
Jun-21	Vanadium	(mg/L)	Quarterly									
Jun-21	Zinc	(mg/L)	Quarterly									

Next sample due July 2021

**POINT 32** Groundwater quality monitoring bore marked and shown as EPA ID 32 on The Plans ("VX837351-1 AND "VX837351-2" 03/06/2020 EPA REFERENCE DOC20/476695 AND DOC20/476695-1).

Month	Pollutant	Unit of Measure	Sample/Masurement Frequency	Samples Collected & Analysed	Date Sampled	Lowest Sample Value	Mean of Samples	Highest Sample Value	99 Percentile Concentration Limit	100 Percentile Concentration Limit	Exceedance (yes/no)	Comments
Jun-21	Aluminium	(mg/L)	Quarterly									
Jun-21	Ammonia	(mg/L)	Quarterly									
Jun-21	Arsenic (III)	(mg/L)	Quarterly									
Jun-21	Arsenic (V)	(mg/L)	Quarterly									
Jun-21	Cadmium	(mg/L)	Quarterly									
Jun-21	Chromium (trivalent)	(mg/L)	Quarterly									
Jun-21	Chromium (VI) Compounds	(mg/L)	Quarterly									
Jun-21	Copper	(mg/L)	Quarterly									
Jun-21	Electrical Conductivity	(us/cm)	Quarterly									
Jun-21	Iron	(mg/L)	Quarterly									
Jun-21	Lead	(mg/L)	Quarterly									
Jun-21	Magnesium	(mg/L)	Quarterly									
Jun-21	Manganese	(mg/L)	Quarterly									Next sample due July 2021
Jun-21	Nickel	(mg/L)	Quarterly									
Jun-21	pH	pH	Quarterly									
Jun-21	Potassium	(mg/L)	Quarterly									
Jun-21	Selenium	(mg/L)	Quarterly									
Jun-21	Sodium	(mg/L)	Quarterly									
Jun-21	Standing Water Level	(m)	Quarterly									
Jun-21	Vanadium	(mg/L)	Quarterly									
Jun-21	Zinc	(mg/L)	Quarterly									

**POINT 33** Groundwater quality monitoring bore marked and shown as EPA ID 33 on The Plans ("VX837351-1 AND "VX837351-2" 03/06/2020 EPA REFERENCE DOC20/476695 AND DOC20/476695-1).

Month	Pollutant	Unit of Measure	Sample/Masurement Frequency	Samples Collected & Analysed	Date Sampled	Lowest Sample Value	Mean of Samples	Highest Sample Value	99 Percentile Concentration Limit	100 Percentile Concentration Limit	Exceedance (yes/no)	Comments
Jun-21	Aluminium	(mg/L)	Quarterly									
Jun-21	Ammonia	(mg/L)	Quarterly									
Jun-21	Arsenic (III)	(mg/L)	Quarterly									
Jun-21	Arsenic (V)	(mg/L)	Quarterly									
Jun-21	Cadmium	(mg/L)	Quarterly									
Jun-21	Chromium (trivalent)	(mg/L)	Quarterly									
Jun-21	Chromium (VI) Compounds	(mg/L)	Quarterly									
Jun-21	Copper	(mg/L)	Quarterly									
Jun-21	Electrical Conductivity	(us/cm)	Quarterly									
Jun-21	Iron	(mg/L)	Quarterly									
Jun-21	Lead	(mg/L)	Quarterly									
Jun-21	Magnesium	(mg/L)	Quarterly									
Jun-21	Manganese	(mg/L)	Quarterly									Next sample due July 2021
Jun-21	Nickel	(mg/L)	Quarterly									
Jun-21	pH	pH	Quarterly									
Jun-21	Potassium	(mg/L)	Quarterly									
Jun-21	Selenium	(mg/L)	Quarterly									
Jun-21	Sodium	(mg/L)	Quarterly									
Jun-21	Standing Water Level	(m)	Quarterly									
Jun-21	Vanadium	(mg/L)	Quarterly									
Jun-21	Zinc	(mg/L)	Quarterly									

POINT 34 Groundwater quality monitoring bore marked and shown as EPA ID 33 on The Plans ("VX837351-1 AND "VX837351-2" 03/06/2020 EPA REFERENCE DOC20/476695 AND DOC20/476695-1).

Month	Pollutant	Unit of Measure	Sample/Measurement Frequency	Samples Collected & Analysed	Date Sampled	Lowest Sample Value	Mean of Samples	Highest Sample Value	99 Percentile Concentration Limit	100 Percentile Concentration Limit	Exceedance (yes/no)	Comments
Jun-21	Aluminium	(mg/L)	Quarterly									
Jun-21	Ammonia	(mg/L)	Quarterly									
Jun-21	Arsenic (III)	(mg/L)	Quarterly									
Jun-21	Arsenic (V)	(mg/L)	Quarterly									
Jun-21	Cadmium	(mg/L)	Quarterly									
Jun-21	Chromium (trivalent)	(mg/L)	Quarterly									
Jun-21	Chromium (VI) Compounds	(mg/L)	Quarterly									
Jun-21	Copper	(mg/L)	Quarterly									
Jun-21	Electrical Conductivity	(us/cm)	Quarterly									
Jun-21	Iron	(mg/L)	Quarterly									
Jun-21	Lead	(mg/L)	Quarterly									
Jun-21	Magnesium	(mg/L)	Quarterly									
Jun-21	Manganese	(mg/L)	Quarterly									
Jun-21	Nickel	(mg/L)	Quarterly									
Jun-21	pH	pH	Quarterly									
Jun-21	Potassium	(mg/L)	Quarterly									
Jun-21	Selenium	(mg/L)	Quarterly									
Jun-21	Sodium	(mg/L)	Quarterly									
Jun-21	Standing Water Level	(m)	Quarterly									
Jun-21	Vanadium	(mg/L)	Quarterly									
Jun-21	Zinc	(mg/L)	Quarterly									

Next sample due July 2021

GENERAL COMMENTS