

Vales Point Power Station Monthly Environmental Data Summary



LICENCE NO	761	http://www.epa.nsw.gov.au/prpoeoapp/
LICENCE HOLDER	SUNSET POWER INTERNATIONAL PTY LTD	
REPORTING PERIOD	June 2022	
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	Exceed 100% Limit (yes/no)	Comments
Jun-22	Cadmium	(mg/m3)	Every 6 months							0.2		
Jun-22	Chlorine	(mg/m3)	Every 6 months							20		
Jun-22	Fluorine	(mg/m3)	Every 6 months							30		
Jun-22	Hydrogen chloride	(mg/m3)	Every 6 months							50		
Jun-22	Mercury	(mg/m3)	Every 6 months							0.05		
Jun-22	Nitrogen Oxides	(mg/m3)	Continuous	84.5%	Jun-22	530	656	828	850	980	No	
Jun-22	Solid Particles	(mg/m3)	Quarterly	1	May 2022	0.88	0.88	0.88		50	No	
Jun-22	Sulfur dioxide	(mg/m3)	Continuous	97.9%	Jun-22	548	745	923	1400	1700	No	
Jun-22	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months							100		
Jun-22	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months							0.75		
Jun-22	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	Exceed 100% Limit (yes/no)	Comments
Jun-22	Cadmium	(mg/m3)	Every 6 months							0.2		
Jun-22	Chlorine	(mg/m3)	Every 6 months							20		
Jun-22	Fluorine	(mg/m3)	Every 6 months							30		
Jun-22	Hydrogen chloride	(mg/m3)	Every 6 months							50		
Jun-22	Mercury	(mg/m3)	Every 6 months							0.05		
Jun-22	Nitrogen Oxides	(mg/m3)	Continuous	85.4%	Jun-22	467	678	876	850	980	No	Permitted hours >850mg/m3 (99% limit) were not exceeded for the 2021/22 reporting period.
Jun-22	Solid Particles	(mg/m3)	Quarterly	1	May 2022	1.09	1.09	1.09		50	No	
Jun-22	Sulfur dioxide	(mg/m3)	Continuous	85.4%	Jun-22	499	716	901	1400	1700	No	
Jun-22	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months							100		
Jun-22	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months							0.75		
Jun-22	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-22	Cadmium	(mg/m3)	Every 6 months									
Jun-22	Carbon dioxide	(%)	Every 6 months									
Jun-22	Chlorine	(mg/m3)	Every 6 months									
Jun-22	Flow rate	(m3/s)	Continuous									
Jun-22	Fluorine	(mg/m3)	Every 6 months									
Jun-22	Hydrogen chloride	(mg/m3)	Every 6 months									
Jun-22	Mercury	(mg/m3)	Every 6 months									
Jun-22	Moisture	(%)	Continuous									
Jun-22	Oxygen (O2)	(%)	Continuous									
Jun-22	Solid Particles	(mg/m3)	Quarterly	1	May 2022	0.2	0.2	0.2				
Jun-22	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months									
Jun-22	Temperature	(°C)	Continuous									
Jun-22	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months									
Jun-22	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-22	Cadmium	(mg/m3)	Every 6 months									
Jun-22	Flow rate	(m3/s)	Continuous									
Jun-22	Mercury	(mg/m3)	Every 6 months									
Jun-22	Moisture	(%)	Continuous									Continuous monitoring of flow rate, moisture, O2 and temperature not required until 30/11/2022.
Jun-22	Oxygen (O2)	(%)	Continuous									
Jun-22	Solid Particles	(mg/m3)	Quarterly	1	May 2022	0.9	0.9	0.9				
Jun-22	Temperature	(°C)	Continuous									
Jun-22	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-22	Cadmium	(mg/m3)	Every 6 months									
Jun-22	Carbon dioxide	(%)	Every 6 months									
Jun-22	Chlorine	(mg/m3)	Every 6 months									
Jun-22	Flow rate	(m3/s)	Continuous									
Jun-22	Fluorine	(mg/m3)	Every 6 months									
Jun-22	Hydrogen chloride	(mg/m3)	Every 6 months									
Jun-22	Mercury	(mg/m3)	Every 6 months									Continuous monitoring of flow rate, moisture, O2 and temperature not required until 30/11/2022.
Jun-22	Moisture	(%)	Continuous									
Jun-22	Oxygen (O2)	(%)	Continuous									
Jun-22	Solid Particles	(mg/m3)	Quarterly	1	May 2022	1.7	1.7	1.7				
Jun-22	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months									
Jun-22	Temperature	(°C)	Continuous									
Jun-22	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months									
Jun-22	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-22	Cadmium	(mg/m3)	Every 6 months									
Jun-22	Flow rate	(m3/s)	Continuous									
Jun-22	Mercury	(mg/m3)	Every 6 months									
Jun-22	Moisture	(%)	Continuous									Continuous monitoring of flow rate, moisture, O2 and temperature not required until 30/11/2022.
Jun-22	Oxygen (O2)	(%)	Continuous									
Jun-22	Solid Particles	(mg/m3)	Quarterly	1	May 2022	0.9	0.9	0.9				
Jun-22	Temperature	(°C)	Continuous									
Jun-22	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-22	Cadmium	(mg/m3)	Every 6 months									
Jun-22	Carbon dioxide	(%)	Every 6 months									
Jun-22	Chlorine	(mg/m3)	Every 6 months									
Jun-22	Flow rate	(m3/s)	Continuous									
Jun-22	Fluorine	(mg/m3)	Every 6 months									
Jun-22	Hydrogen chloride	(mg/m3)	Every 6 months									
Jun-22	Mercury	(mg/m3)	Every 6 months									Continuous monitoring of flow rate, moisture, O2 and temperature not required until 30/11/2022.
Jun-22	Moisture	(%)	Continuous									
Jun-22	Oxygen (O2)	(%)	Continuous									
Jun-22	Solid Particles	(mg/m3)	Quarterly	1	May 2022	2.2	2.2	2.2				
Jun-22	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months									
Jun-22	Temperature	(°C)	Continuous									
Jun-22	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months									
Jun-22	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-22	Cadmium	(mg/m3)	Every 6 months									
Jun-22	Flow rate	(m3/s)	Continuous									
Jun-22	Mercury	(mg/m3)	Every 6 months									
Jun-22	Moisture	(%)	Continuous									Continuous monitoring of flow rate, moisture, O2 and temperature not required until 30/11/2022.
Jun-22	Oxygen (O2)	(%)	Continuous									
Jun-22	Solid Particles	(mg/m3)	Quarterly	1	May 2022	1.7	1.7	1.7				
Jun-22	Temperature	(°C)	Continuous									
Jun-22	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-22	Cadmium	(mg/m3)	Every 6 months									
Jun-22	Carbon dioxide	(%)	Every 6 months									
Jun-22	Chlorine	(mg/m3)	Every 6 months									
Jun-22	Flow rate	(m3/s)	Continuous									
Jun-22	Fluorine	(mg/m3)	Every 6 months									
Jun-22	Hydrogen chloride	(mg/m3)	Every 6 months									
Jun-22	Mercury	(mg/m3)	Every 6 months									Continuous monitoring of flow rate, moisture, O2 and temperature not required until 30/11/2022.
Jun-22	Moisture	(%)	Continuous									
Jun-22	Oxygen (O2)	(%)	Continuous									
Jun-22	Solid Particles	(mg/m3)	Quarterly	1	May 2022	0.2	0.2	0.2				
Jun-22	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months									
Jun-22	Temperature	(°C)	Continuous									
Jun-22	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months									
Jun-22	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-22	Cadmium	(mg/m3)	Every 6 months									
Jun-22	Flow rate	(m3/s)	Continuous									
Jun-22	Mercury	(mg/m3)	Every 6 months									
Jun-22	Moisture	(%)	Continuous									Continuous monitoring of flow rate, moisture, O2 and temperature not required until 30/11/2022.
Jun-22	Oxygen (O2)	(%)	Continuous									
Jun-22	Solid Particles	(mg/m3)	Quarterly	1	May 2022	0.4	0.4	0.4				
Jun-22	Temperature	(°C)	Continuous									
Jun-22	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-22	Nitrogen Oxides	(mg/m3)	Continuous	71.1%	Jun-22	483	606	807			N/A	
Jun-22	Sulfur dioxide	(mg/m3)	Continuous	97.9%	Jun-22	479	704	888			N/A	

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-22	Nitrogen Oxides	(mg/m3)	Continuous	97.9%	Jun-22	536	705	932			N/A	
Jun-22	Sulfur dioxide	(mg/m3)	Continuous	97.9%	Jun-22	617	786	978			N/A	

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-22	Nitrogen Oxides	(mg/m3)	Continuous	72.6%	Jun-22	437	730	944			N/A	
Jun-22	Sulfur dioxide	(mg/m3)	Continuous	72.6%	Jun-22	349	731	950			N/A	

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-22	Nitrogen Oxides	(mg/m3)	Continuous	98.2%	Jun-22	411	625	807			N/A	
Jun-22	Sulfur dioxide	(mg/m3)	Continuous	98.2%	Jun-22	369	701	853			N/A	

POINT 22 Discharge of cooling water from the cooling water outlet canal to Wyee 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	98.5 Percentile Concentration Limit	100 Percentile Concentration Limit	Exceed 100% Limit (yes/no)	Comments
Jun-22	Chlorine (free residual)	(mg/L)	Monthly during discharge	1	9/06/2022	<0.1	<0.1	<0.1		0.2	No	
Jun-22	Copper	(mg/L)	Monthly during discharge	1	9/06/2022	0.002	0.002	0.002		0.005	No	
Jun-22	Iron	(mg/L)	Monthly during discharge	1	9/06/2022	0.061	0.061	0.061		0.3	No	
Jun-22	Oil and Grease	Visible	Continuous during discharge	100%	Jun-22	NIL	NIL	NIL				
Jun-22	Selenium	(mg/L)	Monthly during discharge	1	9/06/2022	<0.002	<0.002	<0.002		0.005	No	
Jun-22	Temperature	(°C)	Continuous during discharge	100%	Jun-22	18.1	22.4	26.5	35	37.5	No	

POINT 23 Discharge of supernatant water from the ash dam to the cooling water outlet canal to Wyee 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-22	Aluminium	(mg/L)	Monthly during discharge	1	9/06/2022	0.058	0.058	0.058				
Jun-22	Ammonia	(mg/L)	Monthly during discharge	1	9/06/2022	0.4	0.4	0.4				
Jun-22	Arsenic (III)	(mg/L)	Monthly during discharge	1	9/06/2022	<0.0005	<0.0005	<0.0005				
Jun-22	Arsenic (V)	(mg/L)	Monthly during discharge	1	9/06/2022	0.0053	0.0053	0.0053				
Jun-22	Cadmium	(mg/L)	Monthly during discharge	1	9/06/2022	<0.00005	<0.00005	<0.00005				
Jun-22	Chromium (trivalent)	(mg/L)	Monthly during discharge	1	9/06/2022	<0.001	<0.001	<0.001				
Jun-22	Chromium (VI) Compounds	(mg/L)	Monthly during discharge	1	9/06/2022	0.050	0.050	0.050				
Jun-22	Copper	(mg/L)	Monthly during discharge	1	9/06/2022	0.0006	0.0006	0.0006				
Jun-22	Iron	(mg/L)	Monthly during discharge	1	9/06/2022	0.060	0.060	0.060				
Jun-22	Lead	(mg/L)	Monthly during discharge	1	9/06/2022	0.0004	0.0004	0.0004				
Jun-22	Manganese	(mg/L)	Monthly during discharge	1	9/06/2022	0.0042	0.0042	0.0042				
Jun-22	Nickel	(mg/L)	Monthly during discharge	1	9/06/2022	<0.0005	<0.0005	<0.0005				
Jun-22	Nitrate + nitrite (oxidised nitrogen)	(mg/L)	Monthly during discharge	1	9/06/2022	0.17	0.17	0.17				
Jun-22	Nitrogen	(mg/L)	Monthly during discharge	1	9/06/2022	0.70	0.70	0.70				
Jun-22	pH	pH	Monthly during discharge	1	9/06/2022	9.32	9.32	9.32		6.5 - 9.5	No	
Jun-22	Phosphorus	(mg/L)	Monthly during discharge	1	9/06/2022	0.03	0.03	0.03				
Jun-22	Reactive Phosphorus	(mg/L)	Monthly during discharge	1	9/06/2022	0.02	0.02	0.02				
Jun-22	Selenium	(mg/L)	Monthly during discharge	1	9/06/2022	0.0752	0.0752	0.0752				
Jun-22	Total Kjeldahl Nitrogen	(mg/L)	Monthly during discharge	1	9/06/2022	0.5	0.5	0.5				
Jun-22	Total Suspended Solids	(mg/L)	Monthly during discharge	1	9/06/2022	2	2	2		50	No	
Jun-22	Vanadium	(mg/L)	Monthly during discharge	1	9/06/2022	0.070	0.070	0.070				
Jun-22	Zinc	(mg/L)	Monthly during discharge	1	9/06/2022	0.006	0.006	0.006				

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-22	Aluminium	(mg/L)	Monthly during discharge	1	9/06/2022				No			
Jun-22	Ammonia	(mg/L)	Monthly during discharge	1	9/06/2022				No			
Jun-22	Arsenic (III)	(mg/L)	Monthly during discharge	1	9/06/2022				No			
Jun-22	Arsenic (V)	(mg/L)	Monthly during discharge	1	9/06/2022				No			
Jun-22	Cadmium	(mg/L)	Monthly during discharge	1	9/06/2022				No			
Jun-22	Chromium (trivalent)	(mg/L)	Monthly during discharge	1	9/06/2022				No			
Jun-22	Chromium (VI) Compounds	(mg/L)	Monthly during discharge	1	9/06/2022				No			
Jun-22	Copper	(mg/L)	Monthly during discharge	1	9/06/2022				No			
Jun-22	Iron	(mg/L)	Monthly during discharge	1	9/06/2022				No			
Jun-22	Lead	(mg/L)	Monthly during discharge	1	9/06/2022				No			
Jun-22	Manganese	(mg/L)	Monthly during discharge	1	9/06/2022				No			
Jun-22	Nickel	(mg/L)	Monthly during discharge	1	9/06/2022				No			No discharge from EPA Point 24 during June 2022
Jun-22	Nitrate + nitrite (oxidised nitrogen)	(mg/L)	Monthly during discharge	1	9/06/2022				No			
Jun-22	Nitrogen	(mg/L)	Monthly during discharge	1	9/06/2022				No			
Jun-22	pH	pH	Monthly during discharge	1	9/06/2022				No	6.5 - 9.5	No	
Jun-22	Phosphorus	(mg/L)	Monthly during discharge	1	9/06/2022				No			
Jun-22	Reactive Phosphorus	(mg/L)	Monthly during discharge	1	9/06/2022				No			
Jun-22	Selenium	(mg/L)	Monthly during discharge	1	9/06/2022				No			
Jun-22	Total Kjeldahl Nitrogen	(mg/L)	Monthly during discharge	1	9/06/2022				No			
Jun-22	Total Suspended Solids	(mg/L)	Monthly during discharge	1	9/06/2022				No	50	No	
Jun-22	Vanadium	(mg/L)	Monthly during discharge	1	9/06/2022				No			
Jun-22	Zinc	(mg/L)	Monthly during discharge	1	9/06/2022				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-22	Aluminium	(mg/L)	Daily for any discharge >2 hrs						No			
Jun-22	Ammonia	(mg/L)	Daily for any discharge >2 hrs						No			
Jun-22	Arsenic (III)	(mg/L)	Daily for any discharge >2 hrs						No			
Jun-22	Arsenic (V)	(mg/L)	Daily for any discharge >2 hrs						No			
Jun-22	Cadmium	(mg/L)	Daily for any discharge >2 hrs						No			
Jun-22	Chromium (trivalent)	(mg/L)	Daily for any discharge >2 hrs						No			
Jun-22	Chromium (VI) Compounds	(mg/L)	Daily for any discharge >2 hrs						No			
Jun-22	Copper	(mg/L)	Daily for any discharge >2 hrs						No			
Jun-22	Iron	(mg/L)	Daily for any discharge >2 hrs						No			
Jun-22	Lead	(mg/L)	Daily for any discharge >2 hrs						No			
Jun-22	Manganese	(mg/L)	Daily for any discharge >2 hrs						No			No discharge from EPA Point 25 during June 2022
Jun-22	Nickel	(mg/L)	Daily for any discharge >2 hrs						No			
Jun-22	Nitrate + nitrite (oxidised nitrogen)	(mg/L)	Daily for any discharge >2 hrs						No			
Jun-22	Nitrogen	(mg/L)	Daily for any discharge >2 hrs						No			
Jun-22	pH	pH	Daily for any discharge >2 hrs						No	6.5 - 9.5	No	
Jun-22	Phosphorus	(mg/L)	Daily for any discharge >2 hrs						No			
Jun-22	Reactive Phosphorus	(mg/L)	Daily for any discharge >2 hrs						No			
Jun-22	Selenium	(mg/L)	Daily for any discharge >2 hrs						No			
Jun-22	Total Kjeldahl Nitrogen	(mg/L)	Daily for any discharge >2 hrs						No			
Jun-22	Total Suspended Solids	(mg/L)	Daily for any discharge >2 hrs						No	50	No	
Jun-22	Vanadium	(mg/L)	Daily for any discharge >2 hrs						No			
Jun-22	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-22	Aluminium	(mg/L)	Quarterly									
Jun-22	Ammonia	(mg/L)	Quarterly									
Jun-22	Arsenic (III)	(mg/L)	Quarterly									
Jun-22	Arsenic (V)	(mg/L)	Quarterly									
Jun-22	Cadmium	(mg/L)	Quarterly									
Jun-22	Chromium (trivalent)	(mg/L)	Quarterly									
Jun-22	Chromium (VI) Compounds	(mg/L)	Quarterly									
Jun-22	Copper	(mg/L)	Quarterly									
Jun-22	Electrical Conductivity	(us/cm)	Quarterly									
Jun-22	Iron	(mg/L)	Quarterly									
Jun-22	Lead	(mg/L)	Quarterly									
Jun-22	Magnesium	(mg/L)	Quarterly									Next sample scheduled for July 2022
Jun-22	Manganese	(mg/L)	Quarterly									
Jun-22	Nickel	(mg/L)	Quarterly									
Jun-22	pH	pH	Quarterly									
Jun-22	Potassium	(mg/L)	Quarterly									
Jun-22	Selenium	(mg/L)	Quarterly									
Jun-22	Sodium	(mg/L)	Quarterly									
Jun-22	Standing Water Level	(m)	Quarterly									
Jun-22	Vanadium	(mg/L)	Quarterly									
Jun-22	Zinc	(mg/L)	Quarterly									

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-22	Aluminium	(mg/L)	Quarterly									
Jun-22	Ammonia	(mg/L)	Quarterly									
Jun-22	Arsenic (III)	(mg/L)	Quarterly									
Jun-22	Arsenic (V)	(mg/L)	Quarterly									
Jun-22	Cadmium	(mg/L)	Quarterly									
Jun-22	Chromium (trivalent)	(mg/L)	Quarterly									
Jun-22	Chromium (VI) Compounds	(mg/L)	Quarterly									
Jun-22	Copper	(mg/L)	Quarterly									
Jun-22	Electrical Conductivity	(us/cm)	Quarterly									
Jun-22	Iron	(mg/L)	Quarterly									
Jun-22	Lead	(mg/L)	Quarterly									
Jun-22	Magnesium	(mg/L)	Quarterly									Next sample scheduled for July 2022
Jun-22	Manganese	(mg/L)	Quarterly									
Jun-22	Nickel	(mg/L)	Quarterly									
Jun-22	pH	pH	Quarterly									
Jun-22	Potassium	(mg/L)	Quarterly									
Jun-22	Selenium	(mg/L)	Quarterly									
Jun-22	Sodium	(mg/L)	Quarterly									
Jun-22	Standing Water Level	(m)	Quarterly									
Jun-22	Vanadium	(mg/L)	Quarterly									
Jun-22	Zinc	(mg/L)	Quarterly									

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/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-22	Aluminium	(mg/L)	Quarterly									
Jun-22	Ammonia	(mg/L)	Quarterly									
Jun-22	Arsenic (III)	(mg/L)	Quarterly									
Jun-22	Arsenic (V)	(mg/L)	Quarterly									
Jun-22	Cadmium	(mg/L)	Quarterly									
Jun-22	Chromium (trivalent)	(mg/L)	Quarterly									
Jun-22	Chromium (VI) Compounds	(mg/L)	Quarterly									
Jun-22	Copper	(mg/L)	Quarterly									
Jun-22	Electrical Conductivity	(us/cm)	Quarterly									
Jun-22	Iron	(mg/L)	Quarterly									
Jun-22	Lead	(mg/L)	Quarterly									Next sample scheduled for July 2022
Jun-22	Magnesium	(mg/L)	Quarterly									
Jun-22	Manganese	(mg/L)	Quarterly									
Jun-22	Nickel	(mg/L)	Quarterly									
Jun-22	pH	pH	Quarterly									
Jun-22	Potassium	(mg/L)	Quarterly									
Jun-22	Selenium	(mg/L)	Quarterly									
Jun-22	Sodium	(mg/L)	Quarterly									
Jun-22	Standing Water Level	(m)	Quarterly									
Jun-22	Vanadium	(mg/L)	Quarterly									
Jun-22	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/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-22	Aluminium	(mg/L)	Quarterly									
Jun-22	Ammonia	(mg/L)	Quarterly									
Jun-22	Arsenic (III)	(mg/L)	Quarterly									
Jun-22	Arsenic (V)	(mg/L)	Quarterly									
Jun-22	Cadmium	(mg/L)	Quarterly									
Jun-22	Chromium (trivalent)	(mg/L)	Quarterly									
Jun-22	Chromium (VI) Compounds	(mg/L)	Quarterly									
Jun-22	Copper	(mg/L)	Quarterly									
Jun-22	Electrical Conductivity	(us/cm)	Quarterly									
Jun-22	Iron	(mg/L)	Quarterly									
Jun-22	Lead	(mg/L)	Quarterly									Next sample scheduled for July 2022
Jun-22	Magnesium	(mg/L)	Quarterly									
Jun-22	Manganese	(mg/L)	Quarterly									
Jun-22	Nickel	(mg/L)	Quarterly									
Jun-22	pH	pH	Quarterly									
Jun-22	Potassium	(mg/L)	Quarterly									
Jun-22	Selenium	(mg/L)	Quarterly									
Jun-22	Sodium	(mg/L)	Quarterly									
Jun-22	Standing Water Level	(m)	Quarterly									
Jun-22	Vanadium	(mg/L)	Quarterly									
Jun-22	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-22	Aluminium	(mg/L)	Quarterly									
Jun-22	Ammonia	(mg/L)	Quarterly									
Jun-22	Arsenic (III)	(mg/L)	Quarterly									
Jun-22	Arsenic (V)	(mg/L)	Quarterly									
Jun-22	Cadmium	(mg/L)	Quarterly									
Jun-22	Chromium (trivalent)	(mg/L)	Quarterly									
Jun-22	Chromium (VI) Compounds	(mg/L)	Quarterly									
Jun-22	Copper	(mg/L)	Quarterly									
Jun-22	Electrical Conductivity	(us/cm)	Quarterly									
Jun-22	Iron	(mg/L)	Quarterly									
Jun-22	Lead	(mg/L)	Quarterly									
Jun-22	Magnesium	(mg/L)	Quarterly									Next sample scheduled for July 2022
Jun-22	Manganese	(mg/L)	Quarterly									
Jun-22	Nickel	(mg/L)	Quarterly									
Jun-22	pH	pH	Quarterly									
Jun-22	Potassium	(mg/L)	Quarterly									
Jun-22	Selenium	(mg/L)	Quarterly									
Jun-22	Sodium	(mg/L)	Quarterly									
Jun-22	Standing Water Level	(m)	Quarterly									
Jun-22	Vanadium	(mg/L)	Quarterly									
Jun-22	Zinc	(mg/L)	Quarterly									

GENERAL COMMENTS