

## 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	September 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
Sep-22	Cadmium	(mg/m3)	Every 6 months	1	August 2022	<0.0013	<0.0013	<0.0013		0.2		
Sep-22	Chlorine	(mg/m3)	Every 6 months	1	August 2022	0.07	0.07	0.07		20		
Sep-22	Fluorine	(mg/m3)	Every 6 months	1	August 2022	2.60	2.60	2.60		30		
Sep-22	Hydrogen chloride	(mg/m3)	Every 6 months	1	August 2022	0.43	0.43	0.43		50		
Sep-22	Mercury	(mg/m3)	Every 6 months	1	August 2022	0.0009	0.0009	0.0009		0.05		
Sep-22	Nitrogen Oxides	(mg/m3)	Continuous	100%	Sep-22	512	674	874	850	980	No	
Sep-22	Solid Particles	(mg/m3)	Quarterly	1	August 2022	8.95	8.95	8.95		50		
Sep-22	Sulfur dioxide	(mg/m3)	Continuous	100%	Sep-22	490	703	958	1400	1700	No	
Sep-22	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months	1	August 2022	6.1	6.1	6.1		100		
Sep-22	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months	1	August 2022	0.07	0.07	0.07		0.75		
Sep-22	VOC's as n-propane equivalent	(mg/m3)	Every 6 months	1	August 2022	<3	<3	<3		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
Sep-22	Cadmium	(mg/m3)	Every 6 months	1	August 2022	<0.0014	<0.0014	<0.0014		0.2		
Sep-22	Chlorine	(mg/m3)	Every 6 months	1	August 2022	<0.65	<0.65	<0.65		20		
Sep-22	Fluorine	(mg/m3)	Every 6 months	1	August 2022	3.83	3.83	3.83		30		
Sep-22	Hydrogen chloride	(mg/m3)	Every 6 months	1	August 2022	5.26	5.26	5.26		50		
Sep-22	Mercury	(mg/m3)	Every 6 months	1	August 2022	0.0008	0.0008	0.0008		0.05		
Sep-22	Nitrogen Oxides	(mg/m3)	Continuous	97.8%	Sep-22	310	660	837	850	980	No	
Sep-22	Solid Particles	(mg/m3)	Quarterly	1	August 2022	5.93	5.93	5.93		50		
Sep-22	Sulfur dioxide	(mg/m3)	Continuous	97.6%	Sep-22	523	699	998	1400	1700	No	
Sep-22	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months	1	August 2022	4.9	4.9	4.9		100		
Sep-22	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months	1	August 2022	0.2	0.2	0.2		0.75		
Sep-22	VOC's as n-propane equivalent	(mg/m3)	Every 6 months	1	August 2022	<3.4	<3.4	<3.4		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
Sep-22	Cadmium	(mg/m3)	Every 6 months	1	August 2022	<0.0012	<0.0012	<0.0012				
Sep-22	Carbon dioxide	(%)	Every 6 months	1	August 2022	11.2	11.2	11.2				
Sep-22	Chlorine	(mg/m3)	Every 6 months	1	August 2022	0.04	0.04	0.04				
Sep-22	Flow rate	(m3/s)	Continuous									
Sep-22	Fluorine	(mg/m3)	Every 6 months	1	August 2022	3.46	3.46	3.46				
Sep-22	Hydrogen chloride	(mg/m3)	Every 6 months	1	August 2022	0.40	0.40	0.40				
Sep-22	Mercury	(mg/m3)	Every 6 months	1	August 2022	<0.0006	<0.0006	<0.0006				
Sep-22	Moisture	(%)	Continuous									Continuous monitoring of flow rate, moisture, O2 and temperature not required until 30/11/2022.
Sep-22	Oxygen (O2)	(%)	Continuous									
Sep-22	Solid Particles	(mg/m3)	Quarterly	1	August 2022	13.3	13.3	13.3				
Sep-22	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months	1	August 2022	6.7	6.7	6.7				
Sep-22	Temperature	(°C)	Continuous									
Sep-22	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months	1	August 2022	0.072	0.072	0.072				
Sep-22	VOC's as n-propane equivalent	(mg/m3)	Every 6 months	1	August 2022	<2.9	<2.9	<2.9				

**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 & Analyzed	Date Sampled	Lowest Sample Value	Mean of Samples	Highest Sample Value	99 Percentile Concentration Limit	100 Percentile Concentration Limit	Exceedance (yes/no)	Comments
Sep-22	Cadmium	(mg/m3)	Every 6 months	1	August 2022	<0.0012	<0.0012	<0.0012				
Sep-22	Flow rate	(m3/s)	Continuous									
Sep-22	Mercury	(mg/m3)	Every 6 months	1	August 2022	<0.0006	<0.0006	<0.0006				
Sep-22	Moisture	(%)	Continuous									Continuous monitoring of flow rate, moisture, O2 and temperature not required until 30/11/2022.
Sep-22	Oxygen (O2)	(%)	Continuous									
Sep-22	Solid Particles	(mg/m3)	Quarterly	1	August 2022	1.0	1.0	1.0				
Sep-22	Temperature	(°C)	Continuous									
Sep-22	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months	1	August 2022	0.076	0.076	0.076				

**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 & Analyzed	Date Sampled	Lowest Sample Value	Mean of Samples	Highest Sample Value	99 Percentile Concentration Limit	100 Percentile Concentration Limit	Exceedance (yes/no)	Comments
Sep-22	Cadmium	(mg/m3)	Every 6 months	1	August 2022	<0.0016	<0.0016	<0.0016				
Sep-22	Carbon dioxide	(%)	Every 6 months	1	August 2022	12.8	12.8	12.8				
Sep-22	Chlorine	(mg/m3)	Every 6 months	1	August 2022	<0.12	<0.12	<0.12				
Sep-22	Flow rate	(m3/s)	Continuous									
Sep-22	Fluorine	(mg/m3)	Every 6 months	1	August 2022	1.84	1.84	1.84				
Sep-22	Hydrogen chloride	(mg/m3)	Every 6 months	1	August 2022	<0.47	<0.47	<0.47				
Sep-22	Mercury	(mg/m3)	Every 6 months	1	August 2022	<0.0008	<0.0008	<0.0008				Continuous monitoring of flow rate, moisture, O2 and temperature not required until 30/11/2022.
Sep-22	Moisture	(%)	Continuous									
Sep-22	Oxygen (O2)	(%)	Continuous									
Sep-22	Solid Particles	(mg/m3)	Quarterly	1	August 2022	18.2	18.2	18.2				
Sep-22	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months	1	August 2022	4.6	4.6	4.6				
Sep-22	Temperature	(°C)	Continuous									
Sep-22	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months	1	August 2022	0.064	0.064	0.064				
Sep-22	VOC's as n-propane equivalent	(mg/m3)	Every 6 months	1	August 2022	<3.01	<3.01	<3.01				

**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 & Analyzed	Date Sampled	Lowest Sample Value	Mean of Samples	Highest Sample Value	99 Percentile Concentration Limit	100 Percentile Concentration Limit	Exceedance (yes/no)	Comments
Sep-22	Cadmium	(mg/m3)	Every 6 months	1	August 2022	<0.0014	<0.0014	<0.0014				
Sep-22	Flow rate	(m3/s)	Continuous									
Sep-22	Mercury	(mg/m3)	Every 6 months	1	August 2022	0.0016	0.0016	0.0016				
Sep-22	Moisture	(%)	Continuous									Continuous monitoring of flow rate, moisture, O2 and temperature not required until 30/11/2022.
Sep-22	Oxygen (O2)	(%)	Continuous									
Sep-22	Solid Particles	(mg/m3)	Quarterly	1	August 2022	3.2	3.2	3.2				
Sep-22	Temperature	(°C)	Continuous									
Sep-22	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months	1	August 2022	0.045	0.045	0.045				

**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 & Analyzed	Date Sampled	Lowest Sample Value	Mean of Samples	Highest Sample Value	99 Percentile Concentration Limit	100 Percentile Concentration Limit	Exceedance (yes/no)	Comments
Sep-22	Cadmium	(mg/m3)	Every 6 months	1	August 2022	<0.0009	<0.0009	<0.0009				
Sep-22	Carbon dioxide	(%)	Every 6 months	1	August 2022	11.3	11.3	11.3				
Sep-22	Chlorine	(mg/m3)	Every 6 months	1	August 2022	<0.33	<0.33	<0.33				
Sep-22	Flow rate	(m3/s)	Continuous									
Sep-22	Fluorine	(mg/m3)	Every 6 months	1	August 2022	2.53	2.53	2.53				
Sep-22	Hydrogen chloride	(mg/m3)	Every 6 months	1	August 2022	7.67	7.67	7.67				
Sep-22	Mercury	(mg/m3)	Every 6 months	1	August 2022	0.0005	0.0005	0.0005				Continuous monitoring of flow rate, moisture, O2 and temperature not required until 30/11/2022.
Sep-22	Moisture	(%)	Continuous									
Sep-22	Oxygen (O2)	(%)	Continuous									
Sep-22	Solid Particles	(mg/m3)	Quarterly	1	August 2022	12.4	12.4	12.4				
Sep-22	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months	1	August 2022	5.3	5.3	5.3				
Sep-22	Temperature	(°C)	Continuous									
Sep-22	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months	1	August 2022	0.458	0.458	0.458				
Sep-22	VOC's as n-propane equivalent	(mg/m3)	Every 6 months	1	August 2022	<3.45	<3.45	<3.45				

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
Sep-22	Cadmium	(mg/m3)	Every 6 months	1	August 2022	<0.0015	<0.0015	<0.0015				
Sep-22	Flow rate	(m3/s)	Continuous									
Sep-22	Mercury	(mg/m3)	Every 6 months	1	August 2022	<0.0007	<0.0007	<0.0007				
Sep-22	Moisture	(%)	Continuous									Continuous monitoring of flow rate, moisture, O2 and temperature not required until 30/11/2022.
Sep-22	Oxygen (O2)	(%)	Continuous									
Sep-22	Solid Particles	(mg/m3)	Quarterly	1	August 2022	1.9	1.9	1.9				
Sep-22	Temperature	(°C)	Continuous									
Sep-22	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months	1	August 2022	0.076	0.076	0.076				

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
Sep-22	Cadmium	(mg/m3)	Every 6 months	1	August 2022	<0.0017	<0.0017	<0.0017				
Sep-22	Carbon dioxide	(%)	Every 6 months	1	August 2022	13.1	13.1	13.1				
Sep-22	Chlorine	(mg/m3)	Every 6 months	1	August 2022	<1.16	<1.16	<1.16				
Sep-22	Flow rate	(m3/s)	Continuous									
Sep-22	Fluorine	(mg/m3)	Every 6 months	1	August 2022	4.8	4.8	4.8				
Sep-22	Hydrogen chloride	(mg/m3)	Every 6 months	1	August 2022	<1.51	<1.51	<1.51				
Sep-22	Mercury	(mg/m3)	Every 6 months	1	August 2022	0.0009	0.0009	0.0009				Continuous monitoring of flow rate, moisture, O2 and temperature not required until 30/11/2022.
Sep-22	Moisture	(%)	Continuous									
Sep-22	Oxygen (O2)	(%)	Continuous									
Sep-22	Solid Particles	(mg/m3)	Quarterly	1	August 2022	5.5	5.5	5.5				
Sep-22	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months	1	August 2022	4.3	4.3	4.3				
Sep-22	Temperature	(°C)	Continuous									
Sep-22	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months	1	August 2022	0.07	0.07	0.07				
Sep-22	VOC's as n-propane equivalent	(mg/m3)	Every 6 months	1	August 2022	<3.36	<3.36	<3.36				

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
Sep-22	Cadmium	(mg/m3)	Every 6 months	1	August 2022	<0.0017	<0.0017	<0.0017				
Sep-22	Flow rate	(m3/s)	Continuous									
Sep-22	Mercury	(mg/m3)	Every 6 months	1	August 2022	0.0013	0.0013	0.0013				
Sep-22	Moisture	(%)	Continuous									Continuous monitoring of flow rate, moisture, O2 and temperature not required until 30/11/2022.
Sep-22	Oxygen (O2)	(%)	Continuous									
Sep-22	Solid Particles	(mg/m3)	Quarterly	1	August 2022	1.8	1.8	1.8				
Sep-22	Temperature	(°C)	Continuous									
Sep-22	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months	1	August 2022	0.113	0.113	0.113				

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
Sep-22	Nitrogen Oxides	(mg/m3)	Continuous	100.0%	Sep-22	478	678	824			N/A	
Sep-22	Sulfur dioxide	(mg/m3)	Continuous	100.0%	Sep-22	469	664	924			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
Sep-22	Nitrogen Oxides	(mg/m3)	Continuous	100.0%	Sep-22	536	671	924			N/A	
Sep-22	Sulfur dioxide	(mg/m3)	Continuous	100.0%	Sep-22	491	742	1001			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
Sep-22	Nitrogen Oxides	(mg/m3)	Continuous	97.4%	Sep-22	304	702	857			N/A	
Sep-22	Sulfur dioxide	(mg/m3)	Continuous	97.4%	Sep-22	466	704	995			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
Sep-22	Nitrogen Oxides	(mg/m3)	Continuous	98.2%	Sep-22	315	619	847			N/A	
Sep-22	Sulfur dioxide	(mg/m3)	Continuous	97.8%	Sep-22	494	695	1002			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
Sep-22	Chlorine (free residual)	(mg/L)	Monthly during discharge	1	6/09/2022	<0.1	<0.1	<0.1		0.2	No	
Sep-22	Copper	(mg/L)	Monthly during discharge	1	6/09/2022	<0.001	<0.001	<0.001		0.005	No	
Sep-22	Iron	(mg/L)	Monthly during discharge	1	6/09/2022	0.075	0.075	0.075		0.3	No	
Sep-22	Oil and Grease	Visible	Continuous during discharge	100%	Sep-22	NIL	NIL	NIL				
Sep-22	Selenium	(mg/L)	Monthly during discharge	1	6/09/2022	0.001	0.001	0.001		0.005	No	
Sep-22	Temperature	(°C)	Continuous during discharge	100%	Sep-22	20.0	24.8	30.0	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
Sep-22	Aluminium	(mg/L)	Monthly during discharge	1	6/09/2022	0.08	0.08	0.08				
Sep-22	Ammonia	(mg/L)	Monthly during discharge	1	6/09/2022	0.03	0.03	0.03				
Sep-22	Arsenic (III)	(mg/L)	Monthly during discharge	1	6/09/2022	<0.001	<0.001	<0.001				
Sep-22	Arsenic (V)	(mg/L)	Monthly during discharge	1	6/09/2022	0.009	0.009	0.009				
Sep-22	Cadmium	(mg/L)	Monthly during discharge	1	6/09/2022	<0.0001	<0.0001	<0.0001				
Sep-22	Chromium (trivalent)	(mg/L)	Monthly during discharge	1	6/09/2022	<0.005	<0.005	<0.005				
Sep-22	Chromium (VI) Compounds	(mg/L)	Monthly during discharge	1	6/09/2022	0.052	0.052	0.052				
Sep-22	Copper	(mg/L)	Monthly during discharge	1	6/09/2022	<0.001	<0.001	<0.001				
Sep-22	Iron	(mg/L)	Monthly during discharge	1	6/09/2022	0.059	0.059	0.059				
Sep-22	Lead	(mg/L)	Monthly during discharge	1	6/09/2022	<0.001	<0.001	<0.001				
Sep-22	Manganese	(mg/L)	Monthly during discharge	1	6/09/2022	<0.005	<0.005	<0.005				
Sep-22	Nickel	(mg/L)	Monthly during discharge	1	6/09/2022	<0.001	<0.001	<0.001				
Sep-22	Nitrate + nitrite (oxidised nitrogen)	(mg/L)	Monthly during discharge	1	6/09/2022	0.10	0.10	0.10				
Sep-22	Nitrogen	(mg/L)	Monthly during discharge	1	6/09/2022	0.40	0.40	0.40				
Sep-22	pH	pH	Monthly during discharge	1	6/09/2022	8.89	8.89	8.89		6.5 - 9.5	No	
Sep-22	Phosphorus	(mg/L)	Monthly during discharge	1	6/09/2022	<0.05	<0.05	<0.05				
Sep-22	Reactive Phosphorus	(mg/L)	Monthly during discharge	1	6/09/2022	<0.005	<0.005	<0.005				
Sep-22	Selenium	(mg/L)	Monthly during discharge	1	6/09/2022	0.069	0.069	0.069				
Sep-22	Total Kjeldahl Nitrogen	(mg/L)	Monthly during discharge	1	6/09/2022	0.3	0.3	0.3				
Sep-22	Total Suspended Solids	(mg/L)	Monthly during discharge	1	6/09/2022	5	5	5		50	No	
Sep-22	Vanadium	(mg/L)	Monthly during discharge	1	6/09/2022	0.12	0.12	0.12				
Sep-22	Zinc	(mg/L)	Monthly during discharge	1	6/09/2022	0.003	0.003	0.003				

**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
Sep-22	Aluminium	(mg/L)	Monthly during discharge	1	6/09/2022				No			
Sep-22	Ammonia	(mg/L)	Monthly during discharge	1	6/09/2022				No			
Sep-22	Arsenic (III)	(mg/L)	Monthly during discharge	1	6/09/2022				No			
Sep-22	Arsenic (V)	(mg/L)	Monthly during discharge	1	6/09/2022				No			
Sep-22	Cadmium	(mg/L)	Monthly during discharge	1	6/09/2022				No			
Sep-22	Chromium (trivalent)	(mg/L)	Monthly during discharge	1	6/09/2022				No			
Sep-22	Chromium (VI) Compounds	(mg/L)	Monthly during discharge	1	6/09/2022				No			
Sep-22	Copper	(mg/L)	Monthly during discharge	1	6/09/2022				No			
Sep-22	Iron	(mg/L)	Monthly during discharge	1	6/09/2022				No			
Sep-22	Lead	(mg/L)	Monthly during discharge	1	6/09/2022				No			
Sep-22	Manganese	(mg/L)	Monthly during discharge	1	6/09/2022				No			No discharge from EPA Point 24 during September 2022
Sep-22	Nickel	(mg/L)	Monthly during discharge	1	6/09/2022				No			
Sep-22	Nitrate + nitrite (oxidised nitrogen)	(mg/L)	Monthly during discharge	1	6/09/2022				No			
Sep-22	Nitrogen	(mg/L)	Monthly during discharge	1	6/09/2022				No			
Sep-22	pH	pH	Monthly during discharge	1	6/09/2022				No	6.5 - 9.5	No	
Sep-22	Phosphorus	(mg/L)	Monthly during discharge	1	6/09/2022				No			
Sep-22	Reactive Phosphorus	(mg/L)	Monthly during discharge	1	6/09/2022				No			
Sep-22	Selenium	(mg/L)	Monthly during discharge	1	6/09/2022				No			
Sep-22	Total Kjeldahl Nitrogen	(mg/L)	Monthly during discharge	1	6/09/2022				No			
Sep-22	Total Suspended Solids	(mg/L)	Monthly during discharge	1	6/09/2022				No	50	No	
Sep-22	Vanadium	(mg/L)	Monthly during discharge	1	6/09/2022				No			
Sep-22	Zinc	(mg/L)	Monthly during discharge	1	6/09/2022				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
Sep-22	Aluminium	(mg/L)	Daily for any discharge >2 hrs						No			
Sep-22	Ammonia	(mg/L)	Daily for any discharge >2 hrs						No			
Sep-22	Arsenic (III)	(mg/L)	Daily for any discharge >2 hrs						No			
Sep-22	Arsenic (V)	(mg/L)	Daily for any discharge >2 hrs						No			
Sep-22	Cadmium	(mg/L)	Daily for any discharge >2 hrs						No			
Sep-22	Chromium (trivalent)	(mg/L)	Daily for any discharge >2 hrs						No			
Sep-22	Chromium (VI) Compounds	(mg/L)	Daily for any discharge >2 hrs						No			
Sep-22	Copper	(mg/L)	Daily for any discharge >2 hrs						No			
Sep-22	Iron	(mg/L)	Daily for any discharge >2 hrs						No			
Sep-22	Lead	(mg/L)	Daily for any discharge >2 hrs						No			
Sep-22	Manganese	(mg/L)	Daily for any discharge >2 hrs						No			No discharge from EPA Point 25 during September 2022
Sep-22	Nickel	(mg/L)	Daily for any discharge >2 hrs						No			
Sep-22	Nitrate + nitrite (oxidised nitrogen)	(mg/L)	Daily for any discharge >2 hrs						No			
Sep-22	Nitrogen	(mg/L)	Daily for any discharge >2 hrs						No			
Sep-22	pH	pH	Daily for any discharge >2 hrs						No	6.5 - 9.5	No	
Sep-22	Phosphorus	(mg/L)	Daily for any discharge >2 hrs						No			
Sep-22	Reactive Phosphorus	(mg/L)	Daily for any discharge >2 hrs						No			
Sep-22	Selenium	(mg/L)	Daily for any discharge >2 hrs						No			
Sep-22	Total Kjeldahl Nitrogen	(mg/L)	Daily for any discharge >2 hrs						No			
Sep-22	Total Suspended Solids	(mg/L)	Daily for any discharge >2 hrs						No	50	No	
Sep-22	Vanadium	(mg/L)	Daily for any discharge >2 hrs						No			
Sep-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
Sep-22	Aluminium	(mg/L)	Quarterly									
Sep-22	Ammonia	(mg/L)	Quarterly									
Sep-22	Arsenic (III)	(mg/L)	Quarterly									
Sep-22	Arsenic (V)	(mg/L)	Quarterly									
Sep-22	Cadmium	(mg/L)	Quarterly									
Sep-22	Chromium (trivalent)	(mg/L)	Quarterly									
Sep-22	Chromium (VI) Compounds	(mg/L)	Quarterly									
Sep-22	Copper	(mg/L)	Quarterly									
Sep-22	Electrical Conductivity	(us/cm)	Quarterly									
Sep-22	Iron	(mg/L)	Quarterly									Next sample scheduled for October 2022
Sep-22	Lead	(mg/L)	Quarterly									
Sep-22	Magnesium	(mg/L)	Quarterly									
Sep-22	Manganese	(mg/L)	Quarterly									
Sep-22	Nickel	(mg/L)	Quarterly									
Sep-22	pH	pH	Quarterly									
Sep-22	Potassium	(mg/L)	Quarterly									
Sep-22	Selenium	(mg/L)	Quarterly									
Sep-22	Sodium	(mg/L)	Quarterly									
Sep-22	Standing Water Level	(m)	Quarterly									
Sep-22	Vanadium	(mg/L)	Quarterly									
Sep-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
Sep-22	Aluminium	(mg/L)	Quarterly									
Sep-22	Ammonia	(mg/L)	Quarterly									
Sep-22	Arsenic (III)	(mg/L)	Quarterly									
Sep-22	Arsenic (V)	(mg/L)	Quarterly									
Sep-22	Cadmium	(mg/L)	Quarterly									
Sep-22	Chromium (trivalent)	(mg/L)	Quarterly									
Sep-22	Chromium (VI) Compounds	(mg/L)	Quarterly									
Sep-22	Copper	(mg/L)	Quarterly									
Sep-22	Electrical Conductivity	(us/cm)	Quarterly									
Sep-22	Iron	(mg/L)	Quarterly									Next sample scheduled for October 2022
Sep-22	Lead	(mg/L)	Quarterly									
Sep-22	Magnesium	(mg/L)	Quarterly									
Sep-22	Manganese	(mg/L)	Quarterly									
Sep-22	Nickel	(mg/L)	Quarterly									
Sep-22	pH	pH	Quarterly									
Sep-22	Potassium	(mg/L)	Quarterly									
Sep-22	Selenium	(mg/L)	Quarterly									
Sep-22	Sodium	(mg/L)	Quarterly									
Sep-22	Standing Water Level	(m)	Quarterly									
Sep-22	Vanadium	(mg/L)	Quarterly									
Sep-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
Sep-22	Aluminium	(mg/L)	Quarterly									
Sep-22	Ammonia	(mg/L)	Quarterly									
Sep-22	Arsenic (III)	(mg/L)	Quarterly									
Sep-22	Arsenic (V)	(mg/L)	Quarterly									
Sep-22	Cadmium	(mg/L)	Quarterly									
Sep-22	Chromium (trivalent)	(mg/L)	Quarterly									
Sep-22	Chromium (VI) Compounds	(mg/L)	Quarterly									
Sep-22	Copper	(mg/L)	Quarterly									
Sep-22	Electrical Conductivity	(us/cm)	Quarterly									
Sep-22	Iron	(mg/L)	Quarterly									
Sep-22	Lead	(mg/L)	Quarterly									Next sample scheduled for October 2022
Sep-22	Magnesium	(mg/L)	Quarterly									
Sep-22	Manganese	(mg/L)	Quarterly									
Sep-22	Nickel	(mg/L)	Quarterly									
Sep-22	pH	pH	Quarterly									
Sep-22	Potassium	(mg/L)	Quarterly									
Sep-22	Selenium	(mg/L)	Quarterly									
Sep-22	Sodium	(mg/L)	Quarterly									
Sep-22	Standing Water Level	(m)	Quarterly									
Sep-22	Vanadium	(mg/L)	Quarterly									
Sep-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
Sep-22	Aluminium	(mg/L)	Quarterly									
Sep-22	Ammonia	(mg/L)	Quarterly									
Sep-22	Arsenic (III)	(mg/L)	Quarterly									
Sep-22	Arsenic (V)	(mg/L)	Quarterly									
Sep-22	Cadmium	(mg/L)	Quarterly									
Sep-22	Chromium (trivalent)	(mg/L)	Quarterly									
Sep-22	Chromium (VI) Compounds	(mg/L)	Quarterly									
Sep-22	Copper	(mg/L)	Quarterly									
Sep-22	Electrical Conductivity	(us/cm)	Quarterly									
Sep-22	Iron	(mg/L)	Quarterly									
Sep-22	Lead	(mg/L)	Quarterly									Next sample scheduled for October 2022
Sep-22	Magnesium	(mg/L)	Quarterly									
Sep-22	Manganese	(mg/L)	Quarterly									
Sep-22	Nickel	(mg/L)	Quarterly									
Sep-22	pH	pH	Quarterly									
Sep-22	Potassium	(mg/L)	Quarterly									
Sep-22	Selenium	(mg/L)	Quarterly									
Sep-22	Sodium	(mg/L)	Quarterly									
Sep-22	Standing Water Level	(m)	Quarterly									
Sep-22	Vanadium	(mg/L)	Quarterly									
Sep-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
Sep-22	Aluminium	(mg/L)	Quarterly									
Sep-22	Ammonia	(mg/L)	Quarterly									
Sep-22	Arsenic (III)	(mg/L)	Quarterly									
Sep-22	Arsenic (V)	(mg/L)	Quarterly									
Sep-22	Cadmium	(mg/L)	Quarterly									
Sep-22	Chromium (trivalent)	(mg/L)	Quarterly									
Sep-22	Chromium (VI) Compounds	(mg/L)	Quarterly									
Sep-22	Copper	(mg/L)	Quarterly									
Sep-22	Electrical Conductivity	(us/cm)	Quarterly									
Sep-22	Iron	(mg/L)	Quarterly									Next sample scheduled for October 2022
Sep-22	Lead	(mg/L)	Quarterly									
Sep-22	Magnesium	(mg/L)	Quarterly									
Sep-22	Manganese	(mg/L)	Quarterly									
Sep-22	Nickel	(mg/L)	Quarterly									
Sep-22	pH	pH	Quarterly									
Sep-22	Potassium	(mg/L)	Quarterly									
Sep-22	Selenium	(mg/L)	Quarterly									
Sep-22	Sodium	(mg/L)	Quarterly									
Sep-22	Standing Water Level	(m)	Quarterly									
Sep-22	Vanadium	(mg/L)	Quarterly									
Sep-22	Zinc	(mg/L)	Quarterly									

**GENERAL COMMENTS**