

## 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	August 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
Aug-21	Cadmium	(mg/m3)	Every 6 months							0.2		
Aug-21	Chlorine	(mg/m3)	Every 6 months							20		
Aug-21	Fluorine	(mg/m3)	Every 6 months							30		
Aug-21	Hydrogen chloride	(mg/m3)	Every 6 months							50		
Aug-21	Mercury	(mg/m3)	Every 6 months							0.05		
Aug-21	Nitrogen Oxides	(mg/m3)	Continuous	100.0%	Aug-21	473	648	796	1100	1500	No	
Aug-21	Solid Particles	(mg/m3)	Quarterly							50	No	
Aug-21	Sulfur dioxide	(mg/m3)	Continuous	100.0%	Aug-21	559	739	911	1400	1700	No	
Aug-21	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months							100		
Aug-21	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months							0.75		
Aug-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
Aug-21	Cadmium	(mg/m3)	Every 6 months							0.2		
Aug-21	Chlorine	(mg/m3)	Every 6 months							20		
Aug-21	Fluorine	(mg/m3)	Every 6 months							30		
Aug-21	Hydrogen chloride	(mg/m3)	Every 6 months							50		
Aug-21	Mercury	(mg/m3)	Every 6 months							0.05		
Aug-21	Nitrogen Oxides	(mg/m3)	Continuous	95.4%	Aug-21	394	562	841	1100	1500	No	
Aug-21	Solid Particles	(mg/m3)	Quarterly							50		
Aug-21	Sulfur dioxide	(mg/m3)	Continuous	100.0%	Aug-21	412	692	866	1400	1700	No	
Aug-21	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months							100		
Aug-21	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months							0.75		
Aug-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
Aug-21	Cadmium	(mg/m3)	Every 6 months									
Aug-21	Carbon dioxide	(%)	Every 6 months									
Aug-21	Chlorine	(mg/m3)	Every 6 months									
Aug-21	Flow rate	(m3/s)	Continuous									Not required until 31 October 2021
Aug-21	Fluorine	(mg/m3)	Every 6 months									
Aug-21	Hydrogen chloride	(mg/m3)	Every 6 months									
Aug-21	Mercury	(mg/m3)	Every 6 months									
Aug-21	Moisture	(%)	Continuous									Not required until 31 October 2021
Aug-21	Oxygen (O2)	(%)	Continuous									Not required until 31 October 2021
Aug-21	Solid Particles	(mg/m3)	Quarterly									
Aug-21	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months									
Aug-21	Temperature	(°C)	Continuous									Not required until 31 October 2021
Aug-21	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months									
Aug-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
Aug-21	Cadmium	(mg/m3)	Every 6 months									
Aug-21	Flow rate	(m3/s)	Continuous									Not required until 31 October 2021
Aug-21	Mercury	(mg/m3)	Every 6 months									
Aug-21	Moisture	(%)	Continuous									Not required until 31 October 2021
Aug-21	Oxygen (O2)	(%)	Continuous									Not required until 31 October 2021
Aug-21	Solid Particles	(mg/m3)	Quarterly									
Aug-21	Temperature	(°C)	Continuous									Not required until 31 October 2021
Aug-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
Aug-21	Cadmium	(mg/m3)	Every 6 months									
Aug-21	Carbon dioxide	(%)	Every 6 months									
Aug-21	Chlorine	(mg/m3)	Every 6 months									
Aug-21	Flow rate	(m3/s)	Continuous									Not required until 31 October 2021
Aug-21	Fluorine	(mg/m3)	Every 6 months									
Aug-21	Hydrogen chloride	(mg/m3)	Every 6 months									
Aug-21	Mercury	(mg/m3)	Every 6 months									
Aug-21	Moisture	(%)	Continuous									Not required until 31 October 2021
Aug-21	Oxygen (O2)	(%)	Continuous									Not required until 31 October 2021
Aug-21	Solid Particles	(mg/m3)	Quarterly									
Aug-21	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months									
Aug-21	Temperature	(°C)	Continuous									Not required until 31 October 2021
Aug-21	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months									
Aug-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
Aug-21	Cadmium	(mg/m3)	Every 6 months									
Aug-21	Flow rate	(m3/s)	Continuous									Not required until 31 October 2021
Aug-21	Mercury	(mg/m3)	Every 6 months									
Aug-21	Moisture	(%)	Continuous									Not required until 31 October 2021
Aug-21	Oxygen (O2)	(%)	Continuous									Not required until 31 October 2021
Aug-21	Solid Particles	(mg/m3)	Quarterly									
Aug-21	Temperature	(°C)	Continuous									Not required until 31 October 2021
Aug-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
Aug-21	Cadmium	(mg/m3)	Every 6 months									
Aug-21	Carbon dioxide	(%)	Every 6 months									
Aug-21	Chlorine	(mg/m3)	Every 6 months									
Aug-21	Flow rate	(m3/s)	Continuous									Not required until 31 October 2021
Aug-21	Fluorine	(mg/m3)	Every 6 months									
Aug-21	Hydrogen chloride	(mg/m3)	Every 6 months									
Aug-21	Mercury	(mg/m3)	Every 6 months									
Aug-21	Moisture	(%)	Continuous									Not required until 31 October 2021
Aug-21	Oxygen (O2)	(%)	Continuous									Not required until 31 October 2021
Aug-21	Solid Particles	(mg/m3)	Quarterly									
Aug-21	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months									
Aug-21	Temperature	(°C)	Continuous									Not required until 31 October 2021
Aug-21	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months									
Aug-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
Aug-21	Cadmium	(mg/m3)	Every 6 months									
Aug-21	Flow rate	(m3/s)	Continuous									Not required until 31 October 2021
Aug-21	Mercury	(mg/m3)	Every 6 months									
Aug-21	Moisture	(%)	Continuous									Not required until 31 October 2021
Aug-21	Oxygen (O2)	(%)	Continuous									Not required until 31 October 2021
Aug-21	Solid Particles	(mg/m3)	Quarterly									
Aug-21	Temperature	(°C)	Continuous									Not required until 31 October 2021
Aug-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
Aug-21	Cadmium	(mg/m3)	Every 6 months									
Aug-21	Carbon dioxide	(%)	Every 6 months									
Aug-21	Chlorine	(mg/m3)	Every 6 months									
Aug-21	Flow rate	(m3/s)	Continuous									Not required until 31 October 2021
Aug-21	Fluorine	(mg/m3)	Every 6 months									
Aug-21	Hydrogen chloride	(mg/m3)	Every 6 months									
Aug-21	Mercury	(mg/m3)	Every 6 months									
Aug-21	Moisture	(%)	Continuous									Not required until 31 October 2021
Aug-21	Oxygen (O2)	(%)	Continuous									Not required until 31 October 2021
Aug-21	Solid Particles	(mg/m3)	Quarterly									
Aug-21	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months									
Aug-21	Temperature	(°C)	Continuous									Not required until 31 October 2021
Aug-21	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months									
Aug-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
Aug-21	Cadmium	(mg/m3)	Every 6 months									
Aug-21	Flow rate	(m3/s)	Continuous									Not required until 31 October 2021
Aug-21	Mercury	(mg/m3)	Every 6 months									
Aug-21	Moisture	(%)	Continuous									Not required until 31 October 2021
Aug-21	Oxygen (O2)	(%)	Continuous									Not required until 31 October 2021
Aug-21	Solid Particles	(mg/m3)	Quarterly									
Aug-21	Temperature	(°C)	Continuous									Not required until 31 October 2021
Aug-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
Aug-21	Nitrogen Oxides	(mg/m3)	Continuous	100.0%	Aug-21	395	595	731			No	
Aug-21	Sulfur dioxide	(mg/m3)	Continuous	100.0%	Aug-21	401	669	849			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
Aug-21	Nitrogen Oxides	(mg/m3)	Continuous	100.0%	Aug-21	507	700	922			No	
Aug-21	Sulfur dioxide	(mg/m3)	Continuous	100.0%	Aug-21	577	760	911			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
Aug-21	Nitrogen Oxides	(mg/m3)	Continuous	92.6%	Aug-21	387	543	745			No	
Aug-21	Sulfur dioxide	(mg/m3)	Continuous	100.0%	Aug-21	600	745	935			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
Aug-21	Nitrogen Oxides	(mg/m3)	Continuous	95.0%	Aug-21	330	584	976			No	
Aug-21	Sulfur dioxide	(mg/m3)	Continuous	99.6%	Aug-21	338	639	837			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
Aug-21	Chlorine (free residual)	(mg/L)	Monthly during discharge	1	31/08/2021	<0.1	<0.1	<0.1		0.2	No	
Aug-21	Copper	(mg/L)	Monthly during discharge	1	31/08/2021	0.006	0.006	0.006		0.005	Yes	
Aug-21	Iron	(mg/L)	Monthly during discharge	1	31/08/2021	0.144	0.144	0.144		0.3	No	
Aug-21	Oil and Grease	Visible	Continuous during discharge	100%	Aug-21	NIL	NIL	NIL				
Aug-21	Selenium	(mg/L)	Monthly during discharge	1	31/08/2021	<0.002	<0.002	<0.002		0.005	No	
Aug-21	Temperature	(°C)	Continuous during discharge	100%	Aug-21	18.1	21.6	24.7	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
Aug-21	Aluminium	(mg/L)	Monthly during discharge	1	31/08/2021	0.026	0.026	0.026				
Aug-21	Ammonia	(mg/L)	Monthly during discharge	1	31/08/2021	0.28	0.28	0.28				
Aug-21	Arsenic (III)	(mg/L)	Monthly during discharge	1	31/08/2021	<0.005	<0.005	<0.005				
Aug-21	Arsenic (V)	(mg/L)	Monthly during discharge	1	31/08/2021	<0.005	<0.005	<0.005				
Aug-21	Cadmium	(mg/L)	Monthly during discharge	1	31/08/2021	<0.0002	<0.0002	<0.0002				
Aug-21	Chromium (trivalent)	(mg/L)	Monthly during discharge	1	31/08/2021	0.005	0.005	0.005				
Aug-21	Chromium (VI) Compounds	(mg/L)	Monthly during discharge	1	31/08/2021	0.033	0.033	0.033				
Aug-21	Copper	(mg/L)	Monthly during discharge	1	31/08/2021	<0.001	<0.001	<0.001				
Aug-21	Iron	(mg/L)	Monthly during discharge	1	31/08/2021	0.036	0.036	0.036				
Aug-21	Lead	(mg/L)	Monthly during discharge	1	31/08/2021	<0.0002	<0.0002	<0.0002				
Aug-21	Manganese	(mg/L)	Monthly during discharge	1	31/08/2021	0.0055	0.0055	0.0055				
Aug-21	Nickel	(mg/L)	Monthly during discharge	1	31/08/2021	0.0017	0.0017	0.0017				
Aug-21	Nitrate + nitrite (oxidised nitrogen)	(mg/L)	Monthly during discharge	1	31/08/2021	0.24	0.24	0.24				
Aug-21	Nitrogen	(mg/L)	Monthly during discharge	1	31/08/2021	<0.5	<0.5	<0.5				
Aug-21	pH	pH	Monthly during discharge	1	31/08/2021	9.10	9.10	9.10		6.5 - 9.5	No	
Aug-21	Phosphorus	(mg/L)	Monthly during discharge	1	31/08/2021	<0.05	<0.05	<0.05				
Aug-21	Reactive Phosphorus	(mg/L)	Monthly during discharge	1	31/08/2021	0.02	0.02	0.02				
Aug-21	Selenium	(mg/L)	Monthly during discharge	1	31/08/2021	0.091	0.091	0.091				
Aug-21	Total Kjeldahl Nitrogen	(mg/L)	Monthly during discharge	1	31/08/2021	<0.5	<0.5	<0.5				
Aug-21	Total Suspended Solids	(mg/L)	Monthly during discharge	1	31/08/2021	2	2	2		50	No	
Aug-21	Vanadium	(mg/L)	Monthly during discharge	1	31/08/2021	0.0673	0.0673	0.0673				
Aug-21	Zinc	(mg/L)	Monthly during discharge	1	31/08/2021	<0.005	<0.005	<0.005				

**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
Aug-21	Aluminium	(mg/L)	Monthly during discharge	1	31/08/2021				No			
Aug-21	Ammonia	(mg/L)	Monthly during discharge	1	31/08/2021				No			
Aug-21	Arsenic (III)	(mg/L)	Monthly during discharge	1	31/08/2021				No			
Aug-21	Arsenic (V)	(mg/L)	Monthly during discharge	1	31/08/2021				No			
Aug-21	Cadmium	(mg/L)	Monthly during discharge	1	31/08/2021				No			
Aug-21	Chromium (trivalent)	(mg/L)	Monthly during discharge	1	31/08/2021				No			
Aug-21	Chromium (VI) Compounds	(mg/L)	Monthly during discharge	1	31/08/2021				No			
Aug-21	Copper	(mg/L)	Monthly during discharge	1	31/08/2021				No			
Aug-21	Iron	(mg/L)	Monthly during discharge	1	31/08/2021				No			
Aug-21	Lead	(mg/L)	Monthly during discharge	1	31/08/2021				No			No discharge from EPA Point 24 during August 2021
Aug-21	Manganese	(mg/L)	Monthly during discharge	1	31/08/2021				No			
Aug-21	Nickel	(mg/L)	Monthly during discharge	1	31/08/2021				No			
Aug-21	Nitrate + nitrite (oxidised nitrogen)	(mg/L)	Monthly during discharge	1	31/08/2021				No			
Aug-21	Nitrogen	(mg/L)	Monthly during discharge	1	31/08/2021				No			
Aug-21	pH	pH	Monthly during discharge	1	31/08/2021				No	6.5 - 9.5	No	
Aug-21	Phosphorus	(mg/L)	Monthly during discharge	1	31/08/2021				No			
Aug-21	Reactive Phosphorus	(mg/L)	Monthly during discharge	1	31/08/2021				No			
Aug-21	Selenium	(mg/L)	Monthly during discharge	1	31/08/2021				No			
Aug-21	Total Kjeldahl Nitrogen	(mg/L)	Monthly during discharge	1	31/08/2021				No			
Aug-21	Total Suspended Solids	(mg/L)	Monthly during discharge	1	31/08/2021				No	50	No	
Aug-21	Vanadium	(mg/L)	Monthly during discharge	1	31/08/2021				No			
Aug-21	Zinc	(mg/L)	Monthly during discharge	1	31/08/2021				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
Aug-21	Aluminium	(mg/L)	Daily for any discharge >2 hrs						No			
Aug-21	Ammonia	(mg/L)	Daily for any discharge >2 hrs						No			
Aug-21	Arsenic (III)	(mg/L)	Daily for any discharge >2 hrs						No			
Aug-21	Arsenic (V)	(mg/L)	Daily for any discharge >2 hrs						No			
Aug-21	Cadmium	(mg/L)	Daily for any discharge >2 hrs						No			
Aug-21	Chromium (trivalent)	(mg/L)	Daily for any discharge >2 hrs						No			
Aug-21	Chromium (VI) Compounds	(mg/L)	Daily for any discharge >2 hrs						No			
Aug-21	Copper	(mg/L)	Daily for any discharge >2 hrs						No			
Aug-21	Iron	(mg/L)	Daily for any discharge >2 hrs						No			
Aug-21	Lead	(mg/L)	Daily for any discharge >2 hrs						No			
Aug-21	Manganese	(mg/L)	Daily for any discharge >2 hrs						No			
Aug-21	Nickel	(mg/L)	Daily for any discharge >2 hrs						No			No discharge from EPA Point 25 during August 2021
Aug-21	Nitrate + nitrite (oxidised nitrogen)	(mg/L)	Daily for any discharge >2 hrs						No			
Aug-21	Nitrogen	(mg/L)	Daily for any discharge >2 hrs						No			
Aug-21	pH	pH	Daily for any discharge >2 hrs						No	6.5 - 9.5	No	
Aug-21	Phosphorus	(mg/L)	Daily for any discharge >2 hrs						No			
Aug-21	Reactive Phosphorus	(mg/L)	Daily for any discharge >2 hrs						No			
Aug-21	Selenium	(mg/L)	Daily for any discharge >2 hrs						No			
Aug-21	Total Kjeldahl Nitrogen	(mg/L)	Daily for any discharge >2 hrs						No			
Aug-21	Total Suspended Solids	(mg/L)	Daily for any discharge >2 hrs						No	50	No	
Aug-21	Vanadium	(mg/L)	Daily for any discharge >2 hrs						No			
Aug-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
Aug-21	Aluminium	(mg/L)	Quarterly									
Aug-21	Ammonia	(mg/L)	Quarterly									
Aug-21	Arsenic (III)	(mg/L)	Quarterly									
Aug-21	Arsenic (V)	(mg/L)	Quarterly									
Aug-21	Cadmium	(mg/L)	Quarterly									
Aug-21	Chromium (trivalent)	(mg/L)	Quarterly									
Aug-21	Chromium (VI) Compounds	(mg/L)	Quarterly									
Aug-21	Copper	(mg/L)	Quarterly									
Aug-21	Electrical Conductivity	(us/cm)	Quarterly									
Aug-21	Iron	(mg/L)	Quarterly									
Aug-21	Lead	(mg/L)	Quarterly									
Aug-21	Magnesium	(mg/L)	Quarterly									
Aug-21	Manganese	(mg/L)	Quarterly									Next sample due before end of September 2021
Aug-21	Nickel	(mg/L)	Quarterly									
Aug-21	pH	pH	Quarterly									
Aug-21	Potassium	(mg/L)	Quarterly									
Aug-21	Selenium	(mg/L)	Quarterly									
Aug-21	Sodium	(mg/L)	Quarterly									
Aug-21	Standing Water Level	(m)	Quarterly									
Aug-21	Vanadium	(mg/L)	Quarterly									
Aug-21	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
Aug-21	Aluminium	(mg/L)	Quarterly									
Aug-21	Ammonia	(mg/L)	Quarterly									
Aug-21	Arsenic (III)	(mg/L)	Quarterly									
Aug-21	Arsenic (V)	(mg/L)	Quarterly									
Aug-21	Cadmium	(mg/L)	Quarterly									
Aug-21	Chromium (trivalent)	(mg/L)	Quarterly									
Aug-21	Chromium (VI) Compounds	(mg/L)	Quarterly									
Aug-21	Copper	(mg/L)	Quarterly									
Aug-21	Electrical Conductivity	(us/cm)	Quarterly									
Aug-21	Iron	(mg/L)	Quarterly									
Aug-21	Lead	(mg/L)	Quarterly									
Aug-21	Magnesium	(mg/L)	Quarterly									
Aug-21	Manganese	(mg/L)	Quarterly									Next sample due before end of September 2021
Aug-21	Nickel	(mg/L)	Quarterly									
Aug-21	pH	pH	Quarterly									
Aug-21	Potassium	(mg/L)	Quarterly									
Aug-21	Selenium	(mg/L)	Quarterly									
Aug-21	Sodium	(mg/L)	Quarterly									
Aug-21	Standing Water Level	(m)	Quarterly									
Aug-21	Vanadium	(mg/L)	Quarterly									
Aug-21	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
Aug-21	Aluminium	(mg/L)	Quarterly									
Aug-21	Ammonia	(mg/L)	Quarterly									
Aug-21	Arsenic (III)	(mg/L)	Quarterly									
Aug-21	Arsenic (V)	(mg/L)	Quarterly									
Aug-21	Cadmium	(mg/L)	Quarterly									
Aug-21	Chromium (trivalent)	(mg/L)	Quarterly									
Aug-21	Chromium (VI) Compounds	(mg/L)	Quarterly									
Aug-21	Copper	(mg/L)	Quarterly									
Aug-21	Electrical Conductivity	(us/cm)	Quarterly									
Aug-21	Iron	(mg/L)	Quarterly									
Aug-21	Lead	(mg/L)	Quarterly									
Aug-21	Magnesium	(mg/L)	Quarterly									
Aug-21	Manganese	(mg/L)	Quarterly									Next sample due before end of September 2021
Aug-21	Nickel	(mg/L)	Quarterly									
Aug-21	pH	pH	Quarterly									
Aug-21	Potassium	(mg/L)	Quarterly									
Aug-21	Selenium	(mg/L)	Quarterly									
Aug-21	Sodium	(mg/L)	Quarterly									
Aug-21	Standing Water Level	(m)	Quarterly									
Aug-21	Vanadium	(mg/L)	Quarterly									
Aug-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/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
Aug-21	Aluminium	(mg/L)	Quarterly									
Aug-21	Ammonia	(mg/L)	Quarterly									
Aug-21	Arsenic (III)	(mg/L)	Quarterly									
Aug-21	Arsenic (V)	(mg/L)	Quarterly									
Aug-21	Cadmium	(mg/L)	Quarterly									
Aug-21	Chromium (trivalent)	(mg/L)	Quarterly									
Aug-21	Chromium (VI) Compounds	(mg/L)	Quarterly									
Aug-21	Copper	(mg/L)	Quarterly									
Aug-21	Electrical Conductivity	(us/cm)	Quarterly									
Aug-21	Iron	(mg/L)	Quarterly									
Aug-21	Lead	(mg/L)	Quarterly									
Aug-21	Magnesium	(mg/L)	Quarterly									
Aug-21	Manganese	(mg/L)	Quarterly									Next sample due before end of September 2021
Aug-21	Nickel	(mg/L)	Quarterly									
Aug-21	pH	pH	Quarterly									
Aug-21	Potassium	(mg/L)	Quarterly									
Aug-21	Selenium	(mg/L)	Quarterly									
Aug-21	Sodium	(mg/L)	Quarterly									
Aug-21	Standing Water Level	(m)	Quarterly									
Aug-21	Vanadium	(mg/L)	Quarterly									
Aug-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
Aug-21	Aluminium	(mg/L)	Quarterly									
Aug-21	Ammonia	(mg/L)	Quarterly									
Aug-21	Arsenic (III)	(mg/L)	Quarterly									
Aug-21	Arsenic (V)	(mg/L)	Quarterly									
Aug-21	Cadmium	(mg/L)	Quarterly									
Aug-21	Chromium (trivalent)	(mg/L)	Quarterly									
Aug-21	Chromium (VI) Compounds	(mg/L)	Quarterly									
Aug-21	Copper	(mg/L)	Quarterly									
Aug-21	Electrical Conductivity	(us/cm)	Quarterly									
Aug-21	Iron	(mg/L)	Quarterly									
Aug-21	Lead	(mg/L)	Quarterly									
Aug-21	Magnesium	(mg/L)	Quarterly									
Aug-21	Manganese	(mg/L)	Quarterly									
Aug-21	Nickel	(mg/L)	Quarterly									
Aug-21	pH	pH	Quarterly									
Aug-21	Potassium	(mg/L)	Quarterly									
Aug-21	Selenium	(mg/L)	Quarterly									
Aug-21	Sodium	(mg/L)	Quarterly									
Aug-21	Standing Water Level	(m)	Quarterly									
Aug-21	Vanadium	(mg/L)	Quarterly									
Aug-21	Zinc	(mg/L)	Quarterly									

Next sample due before end of September 2021

GENERAL COMMENTS