

## 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 2020	
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
Sep-20	Cadmium	(mg/m3)	Every 6 months							0.2		
Sep-20	Chlorine	(mg/m3)	Every 6 months							20		
Sep-20	Fluorine	(mg/m3)	Every 6 months							30		
Sep-20	Hydrogen chloride	(mg/m3)	Every 6 months							50		
Sep-20	Mercury	(mg/m3)	Every 6 months							0.05		
Sep-20	Nitrogen Oxides	(mg/m3)	Continuous	100%	Sep-20	395	556	722	1100	1500	No	
Sep-20	Solid Particles	(mg/m3)	Quarterly							50		
Sep-20	Sulfur dioxide	(mg/m3)	Continuous	100%	Sep-20	496	630	924	1400	1700	No	
Sep-20	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months							100		
Sep-20	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months							0.75		
Sep-20	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
Sep-20	Cadmium	(mg/m3)	Every 6 months							0.2		
Sep-20	Chlorine	(mg/m3)	Every 6 months							20		
Sep-20	Fluorine	(mg/m3)	Every 6 months							30		
Sep-20	Hydrogen chloride	(mg/m3)	Every 6 months							50		
Sep-20	Mercury	(mg/m3)	Every 6 months							0.05		
Sep-20	Nitrogen Oxides	(mg/m3)	Continuous	100%	Sep-20	429	674	882	1100	1500	No	The 99th percentile limit does not apply until 31/1/2021
Sep-20	Solid Particles	(mg/m3)	Quarterly							50		
Sep-20	Sulfur dioxide	(mg/m3)	Continuous	100%	Sep-20	376	562	658	1400	1700	No	
Sep-20	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months							100		
Sep-20	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months							0.75		
Sep-20	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
Sep-20	Cadmium	(mg/m3)	Every 6 months									
Sep-20	Carbon dioxide	(%)	Every 6 months									
Sep-20	Chlorine	(mg/m3)	Every 6 months									
Sep-20	Flow rate	(m3/s)	Continuous									Not required until 31 October 2021
Sep-20	Fluorine	(mg/m3)	Every 6 months									
Sep-20	Hydrogen chloride	(mg/m3)	Every 6 months									
Sep-20	Mercury	(mg/m3)	Every 6 months									
Sep-20	Moisture	(%)	Continuous									Not required until 31 October 2021
Sep-20	Oxygen (O2)	(%)	Continuous									Not required until 31 October 2021
Sep-20	Solid Particles	(mg/m3)	Quarterly									
Sep-20	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months									
Sep-20	Temperature	(°C)	Continuous									Not required until 31 October 2021
Sep-20	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months									
Sep-20	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
Sep-20	Cadmium	(mg/m3)	Every 6 months									
Sep-20	Flow rate	(m3/s)	Continuous									Not required until 31 October 2021
Sep-20	Mercury	(mg/m3)	Every 6 months									
Sep-20	Moisture	(%)	Continuous									Not required until 31 October 2021
Sep-20	Oxygen (O2)	(%)	Continuous									Not required until 31 October 2021
Sep-20	Solid Particles	(mg/m3)	Quarterly									
Sep-20	Temperature	(°C)	Continuous									Not required until 31 October 2021
Sep-20	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
Sep-20	Cadmium	(mg/m3)	Every 6 months									
Sep-20	Carbon dioxide	(%)	Every 6 months									
Sep-20	Chlorine	(mg/m3)	Every 6 months									
Sep-20	Flow rate	(m3/s)	Continuous									Not required until 31 October 2021
Sep-20	Fluorine	(mg/m3)	Every 6 months									
Sep-20	Hydrogen chloride	(mg/m3)	Every 6 months									
Sep-20	Mercury	(mg/m3)	Every 6 months									
Sep-20	Moisture	(%)	Continuous									Not required until 31 October 2021
Sep-20	Oxygen (O2)	(%)	Continuous									Not required until 31 October 2021
Sep-20	Solid Particles	(mg/m3)	Quarterly									
Sep-20	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months									
Sep-20	Temperature	(°C)	Continuous									Not required until 31 October 2021
Sep-20	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months									
Sep-20	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
Sep-20	Cadmium	(mg/m3)	Every 6 months									
Sep-20	Flow rate	(m3/s)	Continuous									Not required until 31 October 2021
Sep-20	Mercury	(mg/m3)	Every 6 months									
Sep-20	Moisture	(%)	Continuous									Not required until 31 October 2021
Sep-20	Oxygen (O2)	(%)	Continuous									Not required until 31 October 2021
Sep-20	Solid Particles	(mg/m3)	Quarterly									
Sep-20	Temperature	(°C)	Continuous									Not required until 31 October 2021
Sep-20	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
Sep-20	Cadmium	(mg/m3)	Every 6 months									
Sep-20	Carbon dioxide	(%)	Every 6 months									
Sep-20	Chlorine	(mg/m3)	Every 6 months									
Sep-20	Flow rate	(m3/s)	Continuous									Not required until 31 October 2021
Sep-20	Fluorine	(mg/m3)	Every 6 months									
Sep-20	Hydrogen chloride	(mg/m3)	Every 6 months									
Sep-20	Mercury	(mg/m3)	Every 6 months									
Sep-20	Moisture	(%)	Continuous									Not required until 31 October 2021
Sep-20	Oxygen (O2)	(%)	Continuous									Not required until 31 October 2021
Sep-20	Solid Particles	(mg/m3)	Quarterly									
Sep-20	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months									
Sep-20	Temperature	(°C)	Continuous									Not required until 31 October 2021
Sep-20	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months									
Sep-20	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
Sep-20	Cadmium	(mg/m3)	Every 6 months									
Sep-20	Flow rate	(m3/s)	Continuous									Not required until 31 October 2021
Sep-20	Mercury	(mg/m3)	Every 6 months									
Sep-20	Moisture	(%)	Continuous									Not required until 31 October 2021
Sep-20	Oxygen (O2)	(%)	Continuous									Not required until 31 October 2021
Sep-20	Solid Particles	(mg/m3)	Quarterly									
Sep-20	Temperature	(°C)	Continuous									Not required until 31 October 2021
Sep-20	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
Sep-20	Cadmium	(mg/m3)	Every 6 months									
Sep-20	Carbon dioxide	(%)	Every 6 months									
Sep-20	Chlorine	(mg/m3)	Every 6 months									
Sep-20	Flow rate	(m3/s)	Continuous									Not required until 31 October 2021
Sep-20	Fluorine	(mg/m3)	Every 6 months									
Sep-20	Hydrogen chloride	(mg/m3)	Every 6 months									
Sep-20	Mercury	(mg/m3)	Every 6 months									
Sep-20	Moisture	(%)	Continuous									Not required until 31 October 2021
Sep-20	Oxygen (O2)	(%)	Continuous									Not required until 31 October 2021
Sep-20	Solid Particles	(mg/m3)	Quarterly									
Sep-20	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months									
Sep-20	Temperature	(°C)	Continuous									Not required until 31 October 2021
Sep-20	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months									
Sep-20	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
Sep-20	Cadmium	(mg/m3)	Every 6 months									
Sep-20	Flow rate	(m3/s)	Continuous									Not required until 31 October 2021
Sep-20	Mercury	(mg/m3)	Every 6 months									
Sep-20	Moisture	(%)	Continuous									Not required until 31 October 2021
Sep-20	Oxygen (O2)	(%)	Continuous									Not required until 31 October 2021
Sep-20	Solid Particles	(mg/m3)	Quarterly									
Sep-20	Temperature	(°C)	Continuous									Not required until 31 October 2021
Sep-20	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
Sep-20	Nitrogen Oxides	(mg/m3)	Continuous	100%	Sep-20	360	519	692			No	
Sep-20	Sulfur dioxide	(mg/m3)	Continuous	100%	Sep-20	435	554	854			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
Sep-20	Nitrogen Oxides	(mg/m3)	Continuous	100%	Sep-20	430	592	887			No	
Sep-20	Sulfur dioxide	(mg/m3)	Continuous	100%	Sep-20	550	706	995			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
Sep-20	Nitrogen Oxides	(mg/m3)	Continuous	100%	Sep-20	349	620	849			No	
Sep-20	Sulfur dioxide	(mg/m3)	Continuous	100%	Sep-20	398	575	682			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
Sep-20	Nitrogen Oxides	(mg/m3)	Continuous	100%	Sep-20	510	729	919			No	
Sep-20	Sulfur dioxide	(mg/m3)	Continuous	100%	Sep-20	354	548	664			No	

**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	97 Percentile Concentration Limit	100 Percentile Concentration Limit	Exceedance (yes/no)	Comments
Sep-20	Chlorine (free residual)	(mg/L)	Monthly during discharge	1	7/9/2020	<0.1	<0.1	<0.1		0.2	No	
Sep-20	Copper	(mg/L)	Monthly during discharge	1	7/9/2020	0.003	0.003	0.003		0.005	No	
Sep-20	Iron	(mg/L)	Monthly during discharge	1	7/9/2020	0.098	0.098	0.098		0.3	No	
Sep-20	Oil and Grease	Visible	Continuous during discharge	100%	Sep-20	NIL	NIL	NIL				
Sep-20	Selenium	(mg/L)	Monthly during discharge	1	7/9/2020	0.002	0.002	0.002		0.005	No	
Sep-20	Temperature	(°C)	Continuous during discharge	100%	Sep-20	19.3	26.0	32.9	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-20	Aluminium	(mg/L)	Monthly during discharge	1	7/9/2020	0.044	0.044	0.044				
Sep-20	Ammonia	(mg/L)	Monthly during discharge	1	7/9/2020	0.17	0.17	0.17				
Sep-20	Arsenic (III)	(mg/L)	Monthly during discharge	1	7/9/2020	0.0012	0.0012	0.0012				
Sep-20	Arsenic (V)	(mg/L)	Monthly during discharge	1	7/9/2020	0.0016	0.0016	0.0016				
Sep-20	Cadmium	(mg/L)	Monthly during discharge	1	7/9/2020	<0.0002	<0.0002	<0.0002				
Sep-20	Chromium (trivalent)	(mg/L)	Monthly during discharge	1	7/9/2020	<0.001	<0.001	<0.001				
Sep-20	Chromium (VI) Compounds	(mg/L)	Monthly during discharge	1	7/9/2020	0.008	0.008	0.008				
Sep-20	Copper	(mg/L)	Monthly during discharge	1	7/9/2020	0.001	0.001	0.001				
Sep-20	Iron	(mg/L)	Monthly during discharge	1	7/9/2020	0.04	0.04	0.04				
Sep-20	Lead	(mg/L)	Monthly during discharge	1	7/9/2020	0.0002	0.0002	0.0002				
Sep-20	Manganese	(mg/L)	Monthly during discharge	1	7/9/2020	0.009	0.009	0.009				
Sep-20	Nickel	(mg/L)	Monthly during discharge	1	7/9/2020	0.0007	0.0007	0.0007				
Sep-20	Nitrate + nitrite (oxidised nitrogen)	(mg/L)	Monthly during discharge	1	7/9/2020	0.08	0.08	0.08				
Sep-20	Nitrogen	(mg/L)	Monthly during discharge	1	7/9/2020	0.70	0.70	0.70				
Sep-20	pH	pH	Monthly during discharge	1	7/9/2020	8.15	8.15	8.15		6.5 - 9.5	No	
Sep-20	Phosphorus	(mg/L)	Monthly during discharge	1	7/9/2020	0.1	0.1	0.1				
Sep-20	Reactive Phosphorus	(mg/L)	Monthly during discharge	1	7/9/2020	0.01	0.01	0.01				
Sep-20	Selenium	(mg/L)	Monthly during discharge	1	7/9/2020	0.030	0.030	0.030				
Sep-20	Total Kjeldahl Nitrogen	(mg/L)	Monthly during discharge	1	7/9/2020	0.6	0.6	0.6				
Sep-20	Total Suspended Solids	(mg/L)	Monthly during discharge	1	7/9/2020	2	2	2		50	No	
Sep-20	Vanadium	(mg/L)	Monthly during discharge	1	7/9/2020	0.0202	0.0202	0.0202				
Sep-20	Zinc	(mg/L)	Monthly during discharge	1	7/9/2020	<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
Sep-20	Aluminium	(mg/L)	Monthly during discharge	1	7/9/2020				No			
Sep-20	Ammonia	(mg/L)	Monthly during discharge	1	7/9/2020				No			
Sep-20	Arsenic (III)	(mg/L)	Monthly during discharge	1	7/9/2020				No			
Sep-20	Arsenic (V)	(mg/L)	Monthly during discharge	1	7/9/2020				No			
Sep-20	Cadmium	(mg/L)	Monthly during discharge	1	7/9/2020				No			
Sep-20	Chromium (trivalent)	(mg/L)	Monthly during discharge	1	7/9/2020				No			
Sep-20	Chromium (VI) Compounds	(mg/L)	Monthly during discharge	1	7/9/2020				No			
Sep-20	Copper	(mg/L)	Monthly during discharge	1	7/9/2020				No			
Sep-20	Iron	(mg/L)	Monthly during discharge	1	7/9/2020				No			
Sep-20	Lead	(mg/L)	Monthly during discharge	1	7/9/2020				No			
Sep-20	Manganese	(mg/L)	Monthly during discharge	1	7/9/2020				No			No discharge from EPA Point 24 during September 2020
Sep-20	Nickel	(mg/L)	Monthly during discharge	1	7/9/2020				No			
Sep-20	Nitrate + nitrite (oxidised nitrogen)	(mg/L)	Monthly during discharge	1	7/9/2020				No			
Sep-20	Nitrogen	(mg/L)	Monthly during discharge	1	7/9/2020				No			
Sep-20	pH	pH	Monthly during discharge	1	7/9/2020				No	6.5 - 9.5		
Sep-20	Phosphorus	(mg/L)	Monthly during discharge	1	7/9/2020				No			
Sep-20	Reactive Phosphorus	(mg/L)	Monthly during discharge	1	7/9/2020				No			
Sep-20	Selenium	(mg/L)	Monthly during discharge	1	7/9/2020				No			
Sep-20	Total Kjeldahl Nitrogen	(mg/L)	Monthly during discharge	1	7/9/2020				No			
Sep-20	Total Suspended Solids	(mg/L)	Monthly during discharge	1	7/9/2020				No	50		
Sep-20	Vanadium	(mg/L)	Monthly during discharge	1	7/9/2020				No			
Sep-20	Zinc	(mg/L)	Monthly during discharge	1	7/9/2020				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-20	Aluminium	(mg/L)	Daily for any discharge >2 hrs						No			
Sep-20	Ammonia	(mg/L)	Daily for any discharge >2 hrs						No			
Sep-20	Arsenic (III)	(mg/L)	Daily for any discharge >2 hrs						No			
Sep-20	Arsenic (V)	(mg/L)	Daily for any discharge >2 hrs						No			
Sep-20	Cadmium	(mg/L)	Daily for any discharge >2 hrs						No			
Sep-20	Chromium (trivalent)	(mg/L)	Daily for any discharge >2 hrs						No			
Sep-20	Chromium (VI) Compounds	(mg/L)	Daily for any discharge >2 hrs						No			
Sep-20	Copper	(mg/L)	Daily for any discharge >2 hrs						No			
Sep-20	Iron	(mg/L)	Daily for any discharge >2 hrs						No			
Sep-20	Lead	(mg/L)	Daily for any discharge >2 hrs						No			
Sep-20	Manganese	(mg/L)	Daily for any discharge >2 hrs						No			
Sep-20	Nickel	(mg/L)	Daily for any discharge >2 hrs						No			
Sep-20	Nitrate + nitrite (oxidised nitrogen)	(mg/L)	Daily for any discharge >2 hrs						No			
Sep-20	Nitrogen	(mg/L)	Daily for any discharge >2 hrs						No			
Sep-20	pH	pH	Daily for any discharge >2 hrs						No	6.5 - 9.5	No	
Sep-20	Phosphorus	(mg/L)	Daily for any discharge >2 hrs						No			
Sep-20	Reactive Phosphorus	(mg/L)	Daily for any discharge >2 hrs						No			
Sep-20	Selenium	(mg/L)	Daily for any discharge >2 hrs						No			
Sep-20	Total Kjeldahl Nitrogen	(mg/L)	Daily for any discharge >2 hrs						No			
Sep-20	Total Suspended Solids	(mg/L)	Daily for any discharge >2 hrs						No	50	No	
Sep-20	Vanadium	(mg/L)	Daily for any discharge >2 hrs						No			
Sep-20	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-20	Aluminium	(mg/L)	Quarterly									
Sep-20	Ammonia	(mg/L)	Quarterly									
Sep-20	Arsenic (III)	(mg/L)	Quarterly									
Sep-20	Arsenic (V)	(mg/L)	Quarterly									
Sep-20	Cadmium	(mg/L)	Quarterly									
Sep-20	Chromium (trivalent)	(mg/L)	Quarterly									
Sep-20	Chromium (VI) Compounds	(mg/L)	Quarterly									
Sep-20	Copper	(mg/L)	Quarterly									
Sep-20	Electrical Conductivity	(us/cm)	Quarterly									
Sep-20	Iron	(mg/L)	Quarterly									
Sep-20	Lead	(mg/L)	Quarterly									(next quarterly sample scheduled for October 2020)
Sep-20	Magnesium	(mg/L)	Quarterly									
Sep-20	Manganese	(mg/L)	Quarterly									
Sep-20	Nickel	(mg/L)	Quarterly									
Sep-20	pH	pH	Quarterly									
Sep-20	Potassium	(mg/L)	Quarterly									
Sep-20	Selenium	(mg/L)	Quarterly									
Sep-20	Sodium	(mg/L)	Quarterly									
Sep-20	Standing Water Level	(m)	Quarterly									
Sep-20	Vanadium	(mg/L)	Quarterly									
Sep-20	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-20	Aluminium	(mg/L)	Quarterly									
Sep-20	Ammonia	(mg/L)	Quarterly									
Sep-20	Arsenic (III)	(mg/L)	Quarterly									
Sep-20	Arsenic (V)	(mg/L)	Quarterly									
Sep-20	Cadmium	(mg/L)	Quarterly									
Sep-20	Chromium (trivalent)	(mg/L)	Quarterly									
Sep-20	Chromium (VI) Compounds	(mg/L)	Quarterly									
Sep-20	Copper	(mg/L)	Quarterly									
Sep-20	Electrical Conductivity	(us/cm)	Quarterly									
Sep-20	Iron	(mg/L)	Quarterly									
Sep-20	Lead	(mg/L)	Quarterly									(next quarterly sample scheduled for October 2020)
Sep-20	Magnesium	(mg/L)	Quarterly									
Sep-20	Manganese	(mg/L)	Quarterly									
Sep-20	Nickel	(mg/L)	Quarterly									
Sep-20	pH	pH	Quarterly									
Sep-20	Potassium	(mg/L)	Quarterly									
Sep-20	Selenium	(mg/L)	Quarterly									
Sep-20	Sodium	(mg/L)	Quarterly									
Sep-20	Standing Water Level	(m)	Quarterly									
Sep-20	Vanadium	(mg/L)	Quarterly									
Sep-20	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-20	Aluminium	(mg/L)	Quarterly									
Sep-20	Ammonia	(mg/L)	Quarterly									
Sep-20	Arsenic (III)	(mg/L)	Quarterly									
Sep-20	Arsenic (V)	(mg/L)	Quarterly									
Sep-20	Cadmium	(mg/L)	Quarterly									
Sep-20	Chromium (trivalent)	(mg/L)	Quarterly									
Sep-20	Chromium (VI) Compounds	(mg/L)	Quarterly									
Sep-20	Copper	(mg/L)	Quarterly									
Sep-20	Electrical Conductivity	(us/cm)	Quarterly									
Sep-20	Iron	(mg/L)	Quarterly									
Sep-20	Lead	(mg/L)	Quarterly									(next quarterly sample scheduled for October 2020)
Sep-20	Magnesium	(mg/L)	Quarterly									
Sep-20	Manganese	(mg/L)	Quarterly									
Sep-20	Nickel	(mg/L)	Quarterly									
Sep-20	pH	pH	Quarterly									
Sep-20	Potassium	(mg/L)	Quarterly									
Sep-20	Selenium	(mg/L)	Quarterly									
Sep-20	Sodium	(mg/L)	Quarterly									
Sep-20	Standing Water Level	(m)	Quarterly									
Sep-20	Vanadium	(mg/L)	Quarterly									
Sep-20	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-20	Aluminium	(mg/L)	Quarterly									
Sep-20	Ammonia	(mg/L)	Quarterly									
Sep-20	Arsenic (III)	(mg/L)	Quarterly									
Sep-20	Arsenic (V)	(mg/L)	Quarterly									
Sep-20	Cadmium	(mg/L)	Quarterly									
Sep-20	Chromium (trivalent)	(mg/L)	Quarterly									
Sep-20	Chromium (VI) Compounds	(mg/L)	Quarterly									
Sep-20	Copper	(mg/L)	Quarterly									
Sep-20	Electrical Conductivity	(us/cm)	Quarterly									
Sep-20	Iron	(mg/L)	Quarterly									
Sep-20	Lead	(mg/L)	Quarterly									(next quarterly sample scheduled for October 2020)
Sep-20	Magnesium	(mg/L)	Quarterly									
Sep-20	Manganese	(mg/L)	Quarterly									
Sep-20	Nickel	(mg/L)	Quarterly									
Sep-20	pH	pH	Quarterly									
Sep-20	Potassium	(mg/L)	Quarterly									
Sep-20	Selenium	(mg/L)	Quarterly									
Sep-20	Sodium	(mg/L)	Quarterly									
Sep-20	Standing Water Level	(m)	Quarterly									
Sep-20	Vanadium	(mg/L)	Quarterly									
Sep-20	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-20	Aluminium	(mg/L)	Quarterly									
Sep-20	Ammonia	(mg/L)	Quarterly									
Sep-20	Arsenic (III)	(mg/L)	Quarterly									
Sep-20	Arsenic (V)	(mg/L)	Quarterly									
Sep-20	Cadmium	(mg/L)	Quarterly									
Sep-20	Chromium (trivalent)	(mg/L)	Quarterly									
Sep-20	Chromium (VI) Compounds	(mg/L)	Quarterly									
Sep-20	Copper	(mg/L)	Quarterly									
Sep-20	Electrical Conductivity	(us/cm)	Quarterly									
Sep-20	Iron	(mg/L)	Quarterly									(next quarterly sample scheduled for October 2020)
Sep-20	Lead	(mg/L)	Quarterly									
Sep-20	Magnesium	(mg/L)	Quarterly									
Sep-20	Manganese	(mg/L)	Quarterly									
Sep-20	Nickel	(mg/L)	Quarterly									
Sep-20	pH	pH	Quarterly									
Sep-20	Potassium	(mg/L)	Quarterly									
Sep-20	Selenium	(mg/L)	Quarterly									
Sep-20	Sodium	(mg/L)	Quarterly									
Sep-20	Standing Water Level	(m)	Quarterly									
Sep-20	Vanadium	(mg/L)	Quarterly									
Sep-20	Zinc	(mg/L)	Quarterly									

**GENERAL COMMENTS**