

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	May 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
May-21	Cadmium	(mg/m3)	Every 6 months							0.2		
May-21	Chlorine	(mg/m3)	Every 6 months							20		
May-21	Fluorine	(mg/m3)	Every 6 months							30		
May-21	Hydrogen chloride	(mg/m3)	Every 6 months							50		
May-21	Mercury	(mg/m3)	Every 6 months							0.05		
May-21	Nitrogen Oxides	(mg/m3)	Continuous	99.1%	May-21	206	609	736	1100	1500	No	
May-21	Solid Particles	(mg/m3)	Quarterly							50		
May-21	Sulfur dioxide	(mg/m3)	Continuous	99.1%	May-21	311	740	931	1400	1700	No	
May-21	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months							100		
May-21	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months							0.75		
May-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
May-21	Cadmium	(mg/m3)	Every 6 months							0.2		
May-21	Chlorine	(mg/m3)	Every 6 months							20		
May-21	Fluorine	(mg/m3)	Every 6 months							30		
May-21	Hydrogen chloride	(mg/m3)	Every 6 months							50		
May-21	Mercury	(mg/m3)	Every 6 months							0.05		
May-21	Nitrogen Oxides	(mg/m3)	Continuous		May-21				1100	1500	No	Unit 6 was out of service for the entire month of May 2021
May-21	Solid Particles	(mg/m3)	Quarterly							50		
May-21	Sulfur dioxide	(mg/m3)	Continuous		May-21				1400	1700	No	
May-21	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months							100		
May-21	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months							0.75		
May-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
May-21	Cadmium	(mg/m3)	Every 6 months									
May-21	Carbon dioxide	(%)	Every 6 months									
May-21	Chlorine	(mg/m3)	Every 6 months									
May-21	Flow rate	(m3/s)	Continuous									Not required until 31 October 2021
May-21	Fluorine	(mg/m3)	Every 6 months									
May-21	Hydrogen chloride	(mg/m3)	Every 6 months									
May-21	Mercury	(mg/m3)	Every 6 months									
May-21	Moisture	(%)	Continuous									Not required until 31 October 2021
May-21	Oxygen (O2)	(%)	Continuous									Not required until 31 October 2021
May-21	Solid Particles	(mg/m3)	Quarterly									
May-21	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months									
May-21	Temperature	(°C)	Continuous									Not required until 31 October 2021
May-21	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months									
May-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
May-21	Cadmium	(mg/m3)	Every 6 months									
May-21	Flow rate	(m3/s)	Continuous									Not required until 31 October 2021
May-21	Mercury	(mg/m3)	Every 6 months									
May-21	Moisture	(%)	Continuous									
May-21	Oxygen (O2)	(%)	Continuous									Not required until 31 October 2021
May-21	Solid Particles	(mg/m3)	Quarterly									
May-21	Temperature	(°C)	Continuous									Not required until 31 October 2021
May-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
May-21	Cadmium	(mg/m3)	Every 6 months									
May-21	Carbon dioxide	(%)	Every 6 months									
May-21	Chlorine	(mg/m3)	Every 6 months									
May-21	Flow rate	(m3/s)	Continuous									Not required until 31 October 2021
May-21	Fluorine	(mg/m3)	Every 6 months									
May-21	Hydrogen chloride	(mg/m3)	Every 6 months									
May-21	Mercury	(mg/m3)	Every 6 months									
May-21	Moisture	(%)	Continuous									Not required until 31 October 2021
May-21	Oxygen (O2)	(%)	Continuous									Not required until 31 October 2021
May-21	Solid Particles	(mg/m3)	Quarterly									
May-21	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months									
May-21	Temperature	(°C)	Continuous									Not required until 31 October 2021
May-21	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months									
May-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
May-21	Cadmium	(mg/m3)	Every 6 months									
May-21	Flow rate	(m3/s)	Continuous									Not required until 31 October 2021
May-21	Mercury	(mg/m3)	Every 6 months									
May-21	Moisture	(%)	Continuous									Not required until 31 October 2021
May-21	Oxygen (O2)	(%)	Continuous									Not required until 31 October 2021
May-21	Solid Particles	(mg/m3)	Quarterly									
May-21	Temperature	(°C)	Continuous									Not required until 31 October 2021
May-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
May-21	Cadmium	(mg/m3)	Every 6 months									
May-21	Carbon dioxide	(%)	Every 6 months									
May-21	Chlorine	(mg/m3)	Every 6 months									
May-21	Flow rate	(m3/s)	Continuous									Not required until 31 October 2021
May-21	Fluorine	(mg/m3)	Every 6 months									
May-21	Hydrogen chloride	(mg/m3)	Every 6 months									
May-21	Mercury	(mg/m3)	Every 6 months									
May-21	Moisture	(%)	Continuous									Not required until 31 October 2021
May-21	Oxygen (O2)	(%)	Continuous									Not required until 31 October 2021
May-21	Solid Particles	(mg/m3)	Quarterly									
May-21	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months									
May-21	Temperature	(°C)	Continuous									Not required until 31 October 2021
May-21	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months									
May-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
May-21	Cadmium	(mg/m3)	Every 6 months									
May-21	Flow rate	(m3/s)	Continuous									Not required until 31 October 2021
May-21	Mercury	(mg/m3)	Every 6 months									
May-21	Moisture	(%)	Continuous									Not required until 31 October 2021
May-21	Oxygen (O2)	(%)	Continuous									Not required until 31 October 2021
May-21	Solid Particles	(mg/m3)	Quarterly									
May-21	Temperature	(°C)	Continuous									Not required until 31 October 2021
May-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
May-21	Cadmium	(mg/m3)	Every 6 months									
May-21	Carbon dioxide	(%)	Every 6 months									
May-21	Chlorine	(mg/m3)	Every 6 months									
May-21	Flow rate	(m3/s)	Continuous									Not required until 31 October 2021
May-21	Fluorine	(mg/m3)	Every 6 months									
May-21	Hydrogen chloride	(mg/m3)	Every 6 months									
May-21	Mercury	(mg/m3)	Every 6 months									
May-21	Moisture	(%)	Continuous									Not required until 31 October 2021
May-21	Oxygen (O2)	(%)	Continuous									Not required until 31 October 2021
May-21	Solid Particles	(mg/m3)	Quarterly									
May-21	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months									
May-21	Temperature	(°C)	Continuous									Not required until 31 October 2021
May-21	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months									
May-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
May-21	Cadmium	(mg/m3)	Every 6 months									
May-21	Flow rate	(m3/s)	Continuous									Not required until 31 October 2021
May-21	Mercury	(mg/m3)	Every 6 months									
May-21	Moisture	(%)	Continuous									Not required until 31 October 2021
May-21	Oxygen (O2)	(%)	Continuous									Not required until 31 October 2021
May-21	Solid Particles	(mg/m3)	Quarterly									
May-21	Temperature	(°C)	Continuous									Not required until 31 October 2021
May-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
May-21	Nitrogen Oxides	(mg/m3)	Continuous	100.0%	May-21	399	554	681			No	
May-21	Sulfur dioxide	(mg/m3)	Continuous	100.0%	May-21	431	667	843			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
May-21	Nitrogen Oxides	(mg/m3)	Continuous	98.6%	May-21	499	670	804			No	
May-21	Sulfur dioxide	(mg/m3)	Continuous	98.6%	May-21	593	818	931			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
May-21	Nitrogen Oxides	(mg/m3)	Continuous		May-21						No	Unit 6 was out of service for the entire month of May 2021
May-21	Sulfur dioxide	(mg/m3)	Continuous		May-21						No	

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

Month	Pollutant	Unit of Measure	Sample/Measurement Frequency	Samples Collected & Analysed	Date Sampled	Lowest Sample Value	Mean of Samples	Highest Sample Value	99 Percentile Concentration Limit	100 Percentile Concentration Limit	Exceedance (yes/no)	Comments
May-21	Nitrogen Oxides	(mg/m3)	Continuous		May-21						No	Unit 6 was out of service for the entire month of May 2021
May-21	Sulfur dioxide	(mg/m3)	Continuous		May-21						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
May-21	Chlorine (free residual)	(mg/L)	Monthly during discharge	1	11/05/2021	0.14	0.14	0.14		0.2	No	
May-21	Copper	(mg/L)	Monthly during discharge	1	11/05/2021	0.001	0.001	0.001		0.005	No	
May-21	Iron	(mg/L)	Monthly during discharge	1	11/05/2021	0.215	0.215	0.215		0.3	No	
May-21	Oil and Grease	Visible	Continuous during discharge	100%	May-21	NIL	NIL	NIL				
May-21	Selenium	(mg/L)	Monthly during discharge	1	11/05/2021	<0.002	<0.002	<0.002		0.005	No	
May-21	Temperature	(°C)	Continuous during discharge	100%	May-21	21.1	28.2	35.1	35	37.5	No	78 minutes > 97 percentile limit (35 degrees C) on 8/5/2021.

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
May-21	Aluminium	(mg/L)	Monthly during discharge	1	11/05/2021	0.517	0.517	0.517				
May-21	Ammonia	(mg/L)	Monthly during discharge	1	11/05/2021	0.66	0.66	0.66				
May-21	Arsenic (III)	(mg/L)	Monthly during discharge	1	11/05/2021	0.0008	0.0008	0.0008				
May-21	Arsenic (V)	(mg/L)	Monthly during discharge	1	11/05/2021	0.0115	0.0115	0.0115				
May-21	Cadmium	(mg/L)	Monthly during discharge	1	11/05/2021	0.00012	0.00012	0.00012				
May-21	Chromium (trivalent)	(mg/L)	Monthly during discharge	1	11/05/2021	0.011	0.011	0.011				
May-21	Chromium (VI) Compounds	(mg/L)	Monthly during discharge	1	11/05/2021	0.004	0.004	0.004				
May-21	Copper	(mg/L)	Monthly during discharge	1	11/05/2021	0.0059	0.0059	0.0059				
May-21	Iron	(mg/L)	Monthly during discharge	1	11/05/2021	1.120	1.120	1.120				
May-21	Lead	(mg/L)	Monthly during discharge	1	11/05/2021	0.0011	0.0011	0.0011				
May-21	Manganese	(mg/L)	Monthly during discharge	1	11/05/2021	0.4910	0.4910	0.4910				
May-21	Nickel	(mg/L)	Monthly during discharge	1	11/05/2021	0.0070	0.0070	0.0070				
May-21	Nitrate + nitrite (oxidised nitrogen)	(mg/L)	Monthly during discharge	1	11/05/2021	0.20	0.20	0.20				
May-21	Nitrogen	(mg/L)	Monthly during discharge	1	11/05/2021	1.40	1.40	1.40				
May-21	pH	pH	Monthly during discharge	1	11/05/2021	8.04	8.04	8.04		6.5 - 9.5	No	
May-21	Phosphorus	(mg/L)	Monthly during discharge	1	11/05/2021	0.18	0.18	0.18				
May-21	Reactive Phosphorus	(mg/L)	Monthly during discharge	1	11/05/2021	0.05	0.05	0.05				
May-21	Selenium	(mg/L)	Monthly during discharge	1	11/05/2021	0.0453	0.0453	0.0453				
May-21	Total Kjeldahl Nitrogen	(mg/L)	Monthly during discharge	1	11/05/2021	1.2	1.2	1.2				
May-21	Total Suspended Solids	(mg/L)	Monthly during discharge	1	11/05/2021	68	68	68		50	Yes	EPA notified as per condition R4.1 of the Vales Point EPL.
May-21	Vanadium	(mg/L)	Monthly during discharge	1	11/05/2021	0.0481	0.0481	0.0481				
May-21	Zinc	(mg/L)	Monthly during discharge	1	11/05/2021	0.066	0.066	0.066				

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
May-21	Aluminium	(mg/L)	Monthly during discharge	1	11/05/2021				No			
May-21	Ammonia	(mg/L)	Monthly during discharge	1	11/05/2021				No			
May-21	Arsenic (III)	(mg/L)	Monthly during discharge	1	11/05/2021				No			
May-21	Arsenic (V)	(mg/L)	Monthly during discharge	1	11/05/2021				No			
May-21	Cadmium	(mg/L)	Monthly during discharge	1	11/05/2021				No			
May-21	Chromium (trivalent)	(mg/L)	Monthly during discharge	1	11/05/2021				No			
May-21	Chromium (VI) Compounds	(mg/L)	Monthly during discharge	1	11/05/2021				No			
May-21	Copper	(mg/L)	Monthly during discharge	1	11/05/2021				No			
May-21	Iron	(mg/L)	Monthly during discharge	1	11/05/2021				No			
May-21	Lead	(mg/L)	Monthly during discharge	1	11/05/2021				No			No discharge from EPA Point 24 during May 2021
May-21	Manganese	(mg/L)	Monthly during discharge	1	11/05/2021				No			
May-21	Nickel	(mg/L)	Monthly during discharge	1	11/05/2021				No			
May-21	Nitrate + nitrite (oxidised nitrogen)	(mg/L)	Monthly during discharge	1	11/05/2021				No			
May-21	Nitrogen	(mg/L)	Monthly during discharge	1	11/05/2021				No			
May-21	pH	pH	Monthly during discharge	1	11/05/2021				No	6.5 - 9.5		
May-21	Phosphorus	(mg/L)	Monthly during discharge	1	11/05/2021				No			
May-21	Reactive Phosphorus	(mg/L)	Monthly during discharge	1	11/05/2021				No			
May-21	Selenium	(mg/L)	Monthly during discharge	1	11/05/2021				No			
May-21	Total Kjeldahl Nitrogen	(mg/L)	Monthly during discharge	1	11/05/2021				No			
May-21	Total Suspended Solids	(mg/L)	Monthly during discharge	1	11/05/2021				No	50		
May-21	Vanadium	(mg/L)	Monthly during discharge	1	11/05/2021				No			
May-21	Zinc	(mg/L)	Monthly during discharge	1	11/05/2021				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
May-21	Aluminium	(mg/L)	Daily for any discharge >2 hrs						No			
May-21	Ammonia	(mg/L)	Daily for any discharge >2 hrs						No			
May-21	Arsenic (III)	(mg/L)	Daily for any discharge >2 hrs						No			
May-21	Arsenic (V)	(mg/L)	Daily for any discharge >2 hrs						No			
May-21	Cadmium	(mg/L)	Daily for any discharge >2 hrs						No			
May-21	Chromium (trivalent)	(mg/L)	Daily for any discharge >2 hrs						No			
May-21	Chromium (VI) Compounds	(mg/L)	Daily for any discharge >2 hrs						No			
May-21	Copper	(mg/L)	Daily for any discharge >2 hrs						No			
May-21	Iron	(mg/L)	Daily for any discharge >2 hrs						No			
May-21	Lead	(mg/L)	Daily for any discharge >2 hrs						No			
May-21	Manganese	(mg/L)	Daily for any discharge >2 hrs						No			
May-21	Nickel	(mg/L)	Daily for any discharge >2 hrs						No			No discharge from EPA Point 25 during May 2021
May-21	Nitrate + nitrite (oxidised nitrogen)	(mg/L)	Daily for any discharge >2 hrs						No			
May-21	Nitrogen	(mg/L)	Daily for any discharge >2 hrs						No			
May-21	pH	pH	Daily for any discharge >2 hrs						No	6.5 - 9.5	No	
May-21	Phosphorus	(mg/L)	Daily for any discharge >2 hrs						No			
May-21	Reactive Phosphorus	(mg/L)	Daily for any discharge >2 hrs						No			
May-21	Selenium	(mg/L)	Daily for any discharge >2 hrs						No			
May-21	Total Kjeldahl Nitrogen	(mg/L)	Daily for any discharge >2 hrs						No			
May-21	Total Suspended Solids	(mg/L)	Daily for any discharge >2 hrs						No	50	No	
May-21	Vanadium	(mg/L)	Daily for any discharge >2 hrs						No			
May-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
May-21	Aluminium	(mg/L)	Quarterly									
May-21	Ammonia	(mg/L)	Quarterly									
May-21	Arsenic (III)	(mg/L)	Quarterly									
May-21	Arsenic (V)	(mg/L)	Quarterly									
May-21	Cadmium	(mg/L)	Quarterly									
May-21	Chromium (trivalent)	(mg/L)	Quarterly									
May-21	Chromium (VI) Compounds	(mg/L)	Quarterly									
May-21	Copper	(mg/L)	Quarterly									
May-21	Electrical Conductivity	(us/cm)	Quarterly									
May-21	Iron	(mg/L)	Quarterly									
May-21	Lead	(mg/L)	Quarterly									
May-21	Magnesium	(mg/L)	Quarterly									Next sample due July 2021
May-21	Manganese	(mg/L)	Quarterly									
May-21	Nickel	(mg/L)	Quarterly									
May-21	pH	pH	Quarterly									
May-21	Potassium	(mg/L)	Quarterly									
May-21	Selenium	(mg/L)	Quarterly									
May-21	Sodium	(mg/L)	Quarterly									
May-21	Standing Water Level	(m)	Quarterly									
May-21	Vanadium	(mg/L)	Quarterly									
May-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
May-21	Aluminium	(mg/L)	Quarterly									
May-21	Ammonia	(mg/L)	Quarterly									
May-21	Arsenic (III)	(mg/L)	Quarterly									
May-21	Arsenic (V)	(mg/L)	Quarterly									
May-21	Cadmium	(mg/L)	Quarterly									
May-21	Chromium (trivalent)	(mg/L)	Quarterly									
May-21	Chromium (VI) Compounds	(mg/L)	Quarterly									
May-21	Copper	(mg/L)	Quarterly									
May-21	Electrical Conductivity	(us/cm)	Quarterly									
May-21	Iron	(mg/L)	Quarterly									
May-21	Lead	(mg/L)	Quarterly									
May-21	Magnesium	(mg/L)	Quarterly									Next sample due July 2021
May-21	Manganese	(mg/L)	Quarterly									
May-21	Nickel	(mg/L)	Quarterly									
May-21	pH	pH	Quarterly									
May-21	Potassium	(mg/L)	Quarterly									
May-21	Selenium	(mg/L)	Quarterly									
May-21	Sodium	(mg/L)	Quarterly									
May-21	Standing Water Level	(m)	Quarterly									
May-21	Vanadium	(mg/L)	Quarterly									
May-21	Zinc	(mg/L)	Quarterly									

POINT 32 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
May-21	Aluminium	(mg/L)	Quarterly									
May-21	Ammonia	(mg/L)	Quarterly									
May-21	Arsenic (III)	(mg/L)	Quarterly									
May-21	Arsenic (V)	(mg/L)	Quarterly									
May-21	Cadmium	(mg/L)	Quarterly									
May-21	Chromium (trivalent)	(mg/L)	Quarterly									
May-21	Chromium (VI) Compounds	(mg/L)	Quarterly									
May-21	Copper	(mg/L)	Quarterly									
May-21	Electrical Conductivity	(us/cm)	Quarterly									
May-21	Iron	(mg/L)	Quarterly									
May-21	Lead	(mg/L)	Quarterly									
May-21	Magnesium	(mg/L)	Quarterly									
May-21	Manganese	(mg/L)	Quarterly									Next sample due July 2021
May-21	Nickel	(mg/L)	Quarterly									
May-21	pH	pH	Quarterly									
May-21	Potassium	(mg/L)	Quarterly									
May-21	Selenium	(mg/L)	Quarterly									
May-21	Sodium	(mg/L)	Quarterly									
May-21	Standing Water Level	(m)	Quarterly									
May-21	Vanadium	(mg/L)	Quarterly									
May-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
May-21	Aluminium	(mg/L)	Quarterly									
May-21	Ammonia	(mg/L)	Quarterly									
May-21	Arsenic (III)	(mg/L)	Quarterly									
May-21	Arsenic (V)	(mg/L)	Quarterly									
May-21	Cadmium	(mg/L)	Quarterly									
May-21	Chromium (trivalent)	(mg/L)	Quarterly									
May-21	Chromium (VI) Compounds	(mg/L)	Quarterly									
May-21	Copper	(mg/L)	Quarterly									
May-21	Electrical Conductivity	(us/cm)	Quarterly									
May-21	Iron	(mg/L)	Quarterly									
May-21	Lead	(mg/L)	Quarterly									
May-21	Magnesium	(mg/L)	Quarterly									
May-21	Manganese	(mg/L)	Quarterly									Next sample due July 2021
May-21	Nickel	(mg/L)	Quarterly									
May-21	pH	pH	Quarterly									
May-21	Potassium	(mg/L)	Quarterly									
May-21	Selenium	(mg/L)	Quarterly									
May-21	Sodium	(mg/L)	Quarterly									
May-21	Standing Water Level	(m)	Quarterly									
May-21	Vanadium	(mg/L)	Quarterly									
May-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
May-21	Aluminium	(mg/L)	Quarterly									
May-21	Ammonia	(mg/L)	Quarterly									
May-21	Arsenic (III)	(mg/L)	Quarterly									
May-21	Arsenic (V)	(mg/L)	Quarterly									
May-21	Cadmium	(mg/L)	Quarterly									
May-21	Chromium (trivalent)	(mg/L)	Quarterly									
May-21	Chromium (VI) Compounds	(mg/L)	Quarterly									
May-21	Copper	(mg/L)	Quarterly									
May-21	Electrical Conductivity	(us/cm)	Quarterly									
May-21	Iron	(mg/L)	Quarterly									
May-21	Lead	(mg/L)	Quarterly									
May-21	Magnesium	(mg/L)	Quarterly									
May-21	Manganese	(mg/L)	Quarterly									
May-21	Nickel	(mg/L)	Quarterly									
May-21	pH	pH	Quarterly									
May-21	Potassium	(mg/L)	Quarterly									
May-21	Selenium	(mg/L)	Quarterly									
May-21	Sodium	(mg/L)	Quarterly									
May-21	Standing Water Level	(m)	Quarterly									
May-21	Vanadium	(mg/L)	Quarterly									
May-21	Zinc	(mg/L)	Quarterly									

Next sample due July 2021

GENERAL COMMENTS