

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	August 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
Aug-20	Cadmium	(mg/m3)	Every 6 months							0.2		
Aug-20	Chlorine	(mg/m3)	Every 6 months							20		
Aug-20	Fluorine	(mg/m3)	Every 6 months							30		
Aug-20	Hydrogen chloride	(mg/m3)	Every 6 months							50		
Aug-20	Mercury	(mg/m3)	Every 6 months							0.05		
Aug-20	Nitrogen Oxides	(mg/m3)	Continuous	100%	Aug-20	469	653	751	1100	1500	No	
Aug-20	Solid Particles	(mg/m3)	Quarterly							50		
Aug-20	Sulfur dioxide	(mg/m3)	Continuous	100%	Aug-20	530	622	669	1400	1700	No	
Aug-20	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months							100		
Aug-20	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months							0.75		
Aug-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
Aug-20	Cadmium	(mg/m3)	Every 6 months							0.2		
Aug-20	Chlorine	(mg/m3)	Every 6 months							20		
Aug-20	Fluorine	(mg/m3)	Every 6 months							30		
Aug-20	Hydrogen chloride	(mg/m3)	Every 6 months							50		
Aug-20	Mercury	(mg/m3)	Every 6 months							0.05		
Aug-20	Nitrogen Oxides	(mg/m3)	Continuous	100%	Aug-20	521	737	875	1100	1500	No	The 99th percentile limit does not apply until 31/1/2021
Aug-20	Solid Particles	(mg/m3)	Quarterly							50		
Aug-20	Sulfur dioxide	(mg/m3)	Continuous	100%	Aug-20	449	578	656	1400	1700	No	
Aug-20	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months							100		
Aug-20	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months							0.75		
Aug-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
Aug-20	Cadmium	(mg/m3)	Every 6 months									
Aug-20	Carbon dioxide	(%)	Every 6 months									
Aug-20	Chlorine	(mg/m3)	Every 6 months									
Aug-20	Flow rate	(m3/s)	Continuous									Not required until 31 October 2021
Aug-20	Fluorine	(mg/m3)	Every 6 months									
Aug-20	Hydrogen chloride	(mg/m3)	Every 6 months									
Aug-20	Mercury	(mg/m3)	Every 6 months									
Aug-20	Moisture	(%)	Continuous									Not required until 31 October 2021
Aug-20	Oxygen (O2)	(%)	Continuous									Not required until 31 October 2021
Aug-20	Solid Particles	(mg/m3)	Quarterly									
Aug-20	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months									
Aug-20	Temperature	(°C)	Continuous									Not required until 31 October 2021
Aug-20	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months									
Aug-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
Aug-20	Cadmium	(mg/m3)	Every 6 months									
Aug-20	Flow rate	(m3/s)	Continuous									Not required until 31 October 2021
Aug-20	Mercury	(mg/m3)	Every 6 months									
Aug-20	Moisture	(%)	Continuous									Not required until 31 October 2021
Aug-20	Oxygen (O2)	(%)	Continuous									Not required until 31 October 2021
Aug-20	Solid Particles	(mg/m3)	Quarterly									
Aug-20	Temperature	(°C)	Continuous									Not required until 31 October 2021
Aug-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
Aug-20	Cadmium	(mg/m3)	Every 6 months									
Aug-20	Carbon dioxide	(%)	Every 6 months									
Aug-20	Chlorine	(mg/m3)	Every 6 months									
Aug-20	Flow rate	(m3/s)	Continuous									Not required until 31 October 2021
Aug-20	Fluorine	(mg/m3)	Every 6 months									
Aug-20	Hydrogen chloride	(mg/m3)	Every 6 months									
Aug-20	Mercury	(mg/m3)	Every 6 months									
Aug-20	Moisture	(%)	Continuous									Not required until 31 October 2021
Aug-20	Oxygen (O2)	(%)	Continuous									Not required until 31 October 2021
Aug-20	Solid Particles	(mg/m3)	Quarterly									
Aug-20	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months									
Aug-20	Temperature	(°C)	Continuous									Not required until 31 October 2021
Aug-20	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months									
Aug-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
Aug-20	Cadmium	(mg/m3)	Every 6 months									
Aug-20	Flow rate	(m3/s)	Continuous									Not required until 31 October 2021
Aug-20	Mercury	(mg/m3)	Every 6 months									
Aug-20	Moisture	(%)	Continuous									Not required until 31 October 2021
Aug-20	Oxygen (O2)	(%)	Continuous									Not required until 31 October 2021
Aug-20	Solid Particles	(mg/m3)	Quarterly									
Aug-20	Temperature	(°C)	Continuous									Not required until 31 October 2021
Aug-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
Aug-20	Cadmium	(mg/m3)	Every 6 months									
Aug-20	Carbon dioxide	(%)	Every 6 months									
Aug-20	Chlorine	(mg/m3)	Every 6 months									
Aug-20	Flow rate	(m3/s)	Continuous									Not required until 31 October 2021
Aug-20	Fluorine	(mg/m3)	Every 6 months									
Aug-20	Hydrogen chloride	(mg/m3)	Every 6 months									
Aug-20	Mercury	(mg/m3)	Every 6 months									
Aug-20	Moisture	(%)	Continuous									Not required until 31 October 2021
Aug-20	Oxygen (O2)	(%)	Continuous									Not required until 31 October 2021
Aug-20	Solid Particles	(mg/m3)	Quarterly									
Aug-20	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months									
Aug-20	Temperature	(°C)	Continuous									Not required until 31 October 2021
Aug-20	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months									
Aug-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
Aug-20	Cadmium	(mg/m3)	Every 6 months									
Aug-20	Flow rate	(m3/s)	Continuous									Not required until 31 October 2021
Aug-20	Mercury	(mg/m3)	Every 6 months									
Aug-20	Moisture	(%)	Continuous									Not required until 31 October 2021
Aug-20	Oxygen (O2)	(%)	Continuous									Not required until 31 October 2021
Aug-20	Solid Particles	(mg/m3)	Quarterly									
Aug-20	Temperature	(°C)	Continuous									Not required until 31 October 2021
Aug-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
Aug-20	Cadmium	(mg/m3)	Every 6 months									
Aug-20	Carbon dioxide	(%)	Every 6 months									
Aug-20	Chlorine	(mg/m3)	Every 6 months									
Aug-20	Flow rate	(m3/s)	Continuous									Not required until 31 October 2021
Aug-20	Fluorine	(mg/m3)	Every 6 months									
Aug-20	Hydrogen chloride	(mg/m3)	Every 6 months									
Aug-20	Mercury	(mg/m3)	Every 6 months									
Aug-20	Moisture	(%)	Continuous									Not required until 31 October 2021
Aug-20	Oxygen (O2)	(%)	Continuous									Not required until 31 October 2021
Aug-20	Solid Particles	(mg/m3)	Quarterly									
Aug-20	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months									
Aug-20	Temperature	(°C)	Continuous									Not required until 31 October 2021
Aug-20	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months									
Aug-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
Aug-20	Cadmium	(mg/m3)	Every 6 months									
Aug-20	Flow rate	(m3/s)	Continuous									Not required until 31 October 2021
Aug-20	Mercury	(mg/m3)	Every 6 months									
Aug-20	Moisture	(%)	Continuous									Not required until 31 October 2021
Aug-20	Oxygen (O2)	(%)	Continuous									Not required until 31 October 2021
Aug-20	Solid Particles	(mg/m3)	Quarterly									
Aug-20	Temperature	(°C)	Continuous									Not required until 31 October 2021
Aug-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
Aug-20	Nitrogen Oxides	(mg/m3)	Continuous	100%	Aug-20	506	641	736			No	
Aug-20	Sulfur dioxide	(mg/m3)	Continuous	100%	Aug-20	481	556	602			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-20	Nitrogen Oxides	(mg/m3)	Continuous	100%	Aug-20	429	665	854			No	
Aug-20	Sulfur dioxide	(mg/m3)	Continuous	100%	Aug-20	578	688	743			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-20	Nitrogen Oxides	(mg/m3)	Continuous	100%	Aug-20	443	681	826			No	
Aug-20	Sulfur dioxide	(mg/m3)	Continuous	100%	Aug-20	443	583	672			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-20	Nitrogen Oxides	(mg/m3)	Continuous	100%	Aug-20	579	793	934			No		
Aug-20	Sulfur dioxide	(mg/m3)	Continuous	100%	Aug-20	396	573	668			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	
Aug-20	Chlorine (free residual)	(mg/L)	Monthly during discharge	1	6/8/2020	0.12	0.12	0.12		0.2	No		
Aug-20	Copper	(mg/L)	Monthly during discharge	1	6/8/2020	0.002	0.002	0.002		0.005	No		
Aug-20	Iron	(mg/L)	Monthly during discharge	1	6/8/2020	0.1	0.1	0.1		0.3	No		
Aug-20	Oil and Grease	Visible	Continuous during discharge	100%	Aug-20	NIL	NIL	NIL					
Aug-20	Selenium	(mg/L)	Monthly during discharge	1	6/8/2020	0.002	0.002	0.002		0.005	No		
Aug-20	Temperature	(°C)	Continuous during discharge	99.82%	Aug-20	18.8	24.3	29.2	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	
Aug-20	Aluminium	(mg/L)	Monthly during discharge	1	6/8/2020	0.055	0.055	0.055					
Aug-20	Ammonia	(mg/L)	Monthly during discharge	1	6/8/2020	0.10	0.10	0.10					
Aug-20	Arsenic (III)	(mg/L)	Monthly during discharge	1	6/8/2020	0.002	0.002	0.002					
Aug-20	Arsenic (V)	(mg/L)	Monthly during discharge	1	6/8/2020	0.0056	0.0056	0.0056					
Aug-20	Cadmium	(mg/L)	Monthly during discharge	1	6/8/2020	<0.0002	<0.0002	<0.0002					
Aug-20	Chromium (trivalent)	(mg/L)	Monthly during discharge	1	6/8/2020	<0.001	<0.001	<0.001					
Aug-20	Chromium (VI) Compounds	(mg/L)	Monthly during discharge	1	6/8/2020	0.007	0.007	0.007					
Aug-20	Copper	(mg/L)	Monthly during discharge	1	6/8/2020	0.002	0.002	0.002					
Aug-20	Iron	(mg/L)	Monthly during discharge	1	6/8/2020	0.086	0.086	0.086					
Aug-20	Lead	(mg/L)	Monthly during discharge	1	6/8/2020	<0.0002	<0.0002	<0.0002					
Aug-20	Manganese	(mg/L)	Monthly during discharge	1	6/8/2020	0.0322	0.0322	0.0322					
Aug-20	Nickel	(mg/L)	Monthly during discharge	1	6/8/2020	0.0009	0.0009	0.0009					
Aug-20	Nitrate + nitrite (oxidised nitrogen)	(mg/L)	Monthly during discharge	1	6/8/2020	0.04	0.04	0.04					
Aug-20	Nitrogen	(mg/L)	Monthly during discharge	1	6/8/2020	<0.5	<0.5	<0.5					
Aug-20	pH	pH	Monthly during discharge	1	6/8/2020	9.21	9.21	9.21		6.5 - 9.5	No		
Aug-20	Phosphorus	(mg/L)	Monthly during discharge	1	6/8/2020	0.2	0.2	0.2					
Aug-20	Reactive Phosphorus	(mg/L)	Monthly during discharge	1	6/8/2020	0.04	0.04	0.04					
Aug-20	Selenium	(mg/L)	Monthly during discharge	1	6/8/2020	0.032	0.032	0.032					
Aug-20	Total Kjeldahl Nitrogen	(mg/L)	Monthly during discharge	1	6/8/2020	<0.5	<0.5	<0.5					
Aug-20	Total Suspended Solids	(mg/L)	Monthly during discharge	1	6/8/2020	5	5	5		50	No		
Aug-20	Vanadium	(mg/L)	Monthly during discharge	1	6/8/2020	0.0232	0.0232	0.0232					
Aug-20	Zinc	(mg/L)	Monthly during discharge	1	6/8/2020	0.006	0.006	0.006					

POINT 24 Discharge of seepage water from the ash dam rehabilitation area to Mannering Bay marked and shown as EPA ID 24 on The Plans ("VX837351-1 AND "VX837351-2" 03/06/2020 EPA REFERENCE DOC20/476695 AND DOC20/476695-1).

Month	Pollutant	Unit of Measure	Sample/Measurement Frequency	Samples Collected & Analysed	Date Sampled	Lowest Sample Value	Mean of Samples	Highest Sample Value	Discharge (yes/no)	100 Percentile Concentration Limit	Exceedance (yes/no)	Comments
Aug-20	Aluminium	(mg/L)	Monthly during discharge	1	6/8/2020				No			
Aug-20	Ammonia	(mg/L)	Monthly during discharge	1	6/8/2020				No			
Aug-20	Arsenic (III)	(mg/L)	Monthly during discharge	1	6/8/2020				No			
Aug-20	Arsenic (V)	(mg/L)	Monthly during discharge	1	6/8/2020				No			
Aug-20	Cadmium	(mg/L)	Monthly during discharge	1	6/8/2020				No			
Aug-20	Chromium (trivalent)	(mg/L)	Monthly during discharge	1	6/8/2020				No			
Aug-20	Chromium (VI) Compounds	(mg/L)	Monthly during discharge	1	6/8/2020				No			
Aug-20	Copper	(mg/L)	Monthly during discharge	1	6/8/2020				No			
Aug-20	Iron	(mg/L)	Monthly during discharge	1	6/8/2020				No			
Aug-20	Lead	(mg/L)	Monthly during discharge	1	6/8/2020				No			
Aug-20	Manganese	(mg/L)	Monthly during discharge	1	6/8/2020				No			
Aug-20	Nickel	(mg/L)	Monthly during discharge	1	6/8/2020				No			No discharge from EPA Point 24 during August 2020
Aug-20	Nitrate + nitrite (oxidised nitrogen)	(mg/L)	Monthly during discharge	1	6/8/2020				No			
Aug-20	Nitrogen	(mg/L)	Monthly during discharge	1	6/8/2020				No			
Aug-20	pH	pH	Monthly during discharge	1	6/8/2020				No	6.5 - 9.5		
Aug-20	Phosphorus	(mg/L)	Monthly during discharge	1	6/8/2020				No			
Aug-20	Reactive Phosphorus	(mg/L)	Monthly during discharge	1	6/8/2020				No			
Aug-20	Selenium	(mg/L)	Monthly during discharge	1	6/8/2020				No			
Aug-20	Total Kjeldahl Nitrogen	(mg/L)	Monthly during discharge	1	6/8/2020				No			
Aug-20	Total Suspended Solids	(mg/L)	Monthly during discharge	1	6/8/2020				No	50		
Aug-20	Vanadium	(mg/L)	Monthly during discharge	1	6/8/2020				No			
Aug-20	Zinc	(mg/L)	Monthly during discharge	1	6/8/2020				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
Aug-20	Aluminium	(mg/L)	Daily for any discharge >2 hrs	6	Aug 7 - Aug 12	0.09	0.86	2.51	Yes			
Aug-20	Ammonia	(mg/L)	Daily for any discharge >2 hrs	6	Aug 7 - Aug 12	0.03	0.13	0.20	Yes			
Aug-20	Arsenic (III)	(mg/L)	Daily for any discharge >2 hrs	6	Aug 7 - Aug 12	<0.0005	0.003	0.005	Yes			
Aug-20	Arsenic (V)	(mg/L)	Daily for any discharge >2 hrs	6	Aug 7 - Aug 12	<0.0005	0.004	0.006	Yes			
Aug-20	Cadmium	(mg/L)	Daily for any discharge >2 hrs	6	Aug 7 - Aug 12	<0.00005	0.00014	0.00025	Yes			
Aug-20	Chromium (trivalent)	(mg/L)	Daily for any discharge >2 hrs	6	Aug 7 - Aug 12	<0.001	0.002	0.003	Yes			
Aug-20	Chromium (VI) Compounds	(mg/L)	Daily for any discharge >2 hrs	6	Aug 7 - Aug 12	<0.005	0.005	0.006	Yes			
Aug-20	Copper	(mg/L)	Daily for any discharge >2 hrs	6	Aug 7 - Aug 12	<0.001	0.0015	0.0026	Yes			
Aug-20	Iron	(mg/L)	Daily for any discharge >2 hrs	6	Aug 7 - Aug 12	0.09	1.06	2.49	Yes			
Aug-20	Lead	(mg/L)	Daily for any discharge >2 hrs	6	Aug 7 - Aug 12	<0.0001	0.0009	0.0024	Yes			
Aug-20	Manganese	(mg/L)	Daily for any discharge >2 hrs	6	Aug 7 - Aug 12	0.05	0.07	0.14	Yes			
Aug-20	Nickel	(mg/L)	Daily for any discharge >2 hrs	6	Aug 7 - Aug 12	0.0006	0.0013	0.0025	Yes			
Aug-20	Nitrate + nitrite (oxidised nitrogen)	(mg/L)	Daily for any discharge >2 hrs	6	Aug 7 - Aug 12	0.02	0.04	0.06	Yes			
Aug-20	Nitrogen	(mg/L)	Daily for any discharge >2 hrs	6	Aug 7 - Aug 12	<0.5	0.67	1.60	Yes			
Aug-20	pH	pH	Daily for any discharge >2 hrs	6	Aug 7 - Aug 12	6.87	8.00	8.57	Yes	6.5 - 9.5	No	
Aug-20	Phosphorus	(mg/L)	Daily for any discharge >2 hrs	6	Aug 7 - Aug 12	<0.02	0.10	0.16	Yes			
Aug-20	Reactive Phosphorus	(mg/L)	Daily for any discharge >2 hrs	6	Aug 7 - Aug 12	<0.01	0.05	0.10	Yes			
Aug-20	Selenium	(mg/L)	Daily for any discharge >2 hrs	6	Aug 7 - Aug 12	0.0002	0.02	0.03	Yes			
Aug-20	Total Kjeldahl Nitrogen	(mg/L)	Daily for any discharge >2 hrs	6	Aug 7 - Aug 12	<0.5	0.65	1.50	Yes			
Aug-20	Total Suspended Solids	(mg/L)	Daily for any discharge >2 hrs	6	Aug 7 - Aug 12	2	21	77	Yes	50	Yes	*see comments at the end of this report.
Aug-20	Vanadium	(mg/L)	Daily for any discharge >2 hrs	6	Aug 7 - Aug 12	0.004	0.016	0.026	Yes			
Aug-20	Zinc	(mg/L)	Daily for any discharge >2 hrs	6	Aug 7 - Aug 12	<0.005	0.016	0.032	Yes			

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-20	Aluminium	(mg/L)	Quarterly									
Aug-20	Ammonia	(mg/L)	Quarterly									
Aug-20	Arsenic (III)	(mg/L)	Quarterly									
Aug-20	Arsenic (V)	(mg/L)	Quarterly									
Aug-20	Cadmium	(mg/L)	Quarterly									
Aug-20	Chromium (trivalent)	(mg/L)	Quarterly									
Aug-20	Chromium (VI) Compounds	(mg/L)	Quarterly									
Aug-20	Copper	(mg/L)	Quarterly									
Aug-20	Electrical Conductivity	(us/cm)	Quarterly									
Aug-20	Iron	(mg/L)	Quarterly									(next quarterly sample scheduled for October 2020)
Aug-20	Lead	(mg/L)	Quarterly									
Aug-20	Magnesium	(mg/L)	Quarterly									
Aug-20	Manganese	(mg/L)	Quarterly									
Aug-20	Nickel	(mg/L)	Quarterly									
Aug-20	pH	pH	Quarterly									
Aug-20	Potassium	(mg/L)	Quarterly									
Aug-20	Selenium	(mg/L)	Quarterly									
Aug-20	Sodium	(mg/L)	Quarterly									
Aug-20	Standing Water Level	(m)	Quarterly									
Aug-20	Vanadium	(mg/L)	Quarterly									
Aug-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
Aug-20	Aluminium	(mg/L)	Quarterly									
Aug-20	Ammonia	(mg/L)	Quarterly									
Aug-20	Arsenic (III)	(mg/L)	Quarterly									
Aug-20	Arsenic (V)	(mg/L)	Quarterly									
Aug-20	Cadmium	(mg/L)	Quarterly									
Aug-20	Chromium (trivalent)	(mg/L)	Quarterly									
Aug-20	Chromium (VI) Compounds	(mg/L)	Quarterly									
Aug-20	Copper	(mg/L)	Quarterly									
Aug-20	Electrical Conductivity	(us/cm)	Quarterly									
Aug-20	Iron	(mg/L)	Quarterly									
Aug-20	Lead	(mg/L)	Quarterly									(next quarterly sample scheduled for October 2020)
Aug-20	Magnesium	(mg/L)	Quarterly									
Aug-20	Manganese	(mg/L)	Quarterly									
Aug-20	Nickel	(mg/L)	Quarterly									
Aug-20	pH	pH	Quarterly									
Aug-20	Potassium	(mg/L)	Quarterly									
Aug-20	Selenium	(mg/L)	Quarterly									
Aug-20	Sodium	(mg/L)	Quarterly									
Aug-20	Standing Water Level	(m)	Quarterly									
Aug-20	Vanadium	(mg/L)	Quarterly									
Aug-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
Aug-20	Aluminium	(mg/L)	Quarterly									
Aug-20	Ammonia	(mg/L)	Quarterly									
Aug-20	Arsenic (III)	(mg/L)	Quarterly									
Aug-20	Arsenic (V)	(mg/L)	Quarterly									
Aug-20	Cadmium	(mg/L)	Quarterly									
Aug-20	Chromium (trivalent)	(mg/L)	Quarterly									
Aug-20	Chromium (VI) Compounds	(mg/L)	Quarterly									
Aug-20	Copper	(mg/L)	Quarterly									
Aug-20	Electrical Conductivity	(us/cm)	Quarterly									
Aug-20	Iron	(mg/L)	Quarterly									
Aug-20	Lead	(mg/L)	Quarterly									(next quarterly sample scheduled for October 2020)
Aug-20	Magnesium	(mg/L)	Quarterly									
Aug-20	Manganese	(mg/L)	Quarterly									
Aug-20	Nickel	(mg/L)	Quarterly									
Aug-20	pH	pH	Quarterly									
Aug-20	Potassium	(mg/L)	Quarterly									
Aug-20	Selenium	(mg/L)	Quarterly									
Aug-20	Sodium	(mg/L)	Quarterly									
Aug-20	Standing Water Level	(m)	Quarterly									
Aug-20	Vanadium	(mg/L)	Quarterly									
Aug-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
Aug-20	Aluminium	(mg/L)	Quarterly									
Aug-20	Ammonia	(mg/L)	Quarterly									
Aug-20	Arsenic (III)	(mg/L)	Quarterly									
Aug-20	Arsenic (V)	(mg/L)	Quarterly									
Aug-20	Cadmium	(mg/L)	Quarterly									
Aug-20	Chromium (trivalent)	(mg/L)	Quarterly									
Aug-20	Chromium (VI) Compounds	(mg/L)	Quarterly									
Aug-20	Copper	(mg/L)	Quarterly									
Aug-20	Electrical Conductivity	(us/cm)	Quarterly									
Aug-20	Iron	(mg/L)	Quarterly									
Aug-20	Lead	(mg/L)	Quarterly									(next quarterly sample scheduled for October 2020)
Aug-20	Magnesium	(mg/L)	Quarterly									
Aug-20	Manganese	(mg/L)	Quarterly									
Aug-20	Nickel	(mg/L)	Quarterly									
Aug-20	pH	pH	Quarterly									
Aug-20	Potassium	(mg/L)	Quarterly									
Aug-20	Selenium	(mg/L)	Quarterly									
Aug-20	Sodium	(mg/L)	Quarterly									
Aug-20	Standing Water Level	(m)	Quarterly									
Aug-20	Vanadium	(mg/L)	Quarterly									
Aug-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
Aug-20	Aluminium	(mg/L)	Quarterly									
Aug-20	Ammonia	(mg/L)	Quarterly									
Aug-20	Arsenic (III)	(mg/L)	Quarterly									
Aug-20	Arsenic (V)	(mg/L)	Quarterly									
Aug-20	Cadmium	(mg/L)	Quarterly									
Aug-20	Chromium (trivalent)	(mg/L)	Quarterly									
Aug-20	Chromium (VI) Compounds	(mg/L)	Quarterly									
Aug-20	Copper	(mg/L)	Quarterly									
Aug-20	Electrical Conductivity	(us/cm)	Quarterly									
Aug-20	Iron	(mg/L)	Quarterly									(next quarterly sample scheduled for October 2020)
Aug-20	Lead	(mg/L)	Quarterly									
Aug-20	Magnesium	(mg/L)	Quarterly									
Aug-20	Manganese	(mg/L)	Quarterly									
Aug-20	Nickel	(mg/L)	Quarterly									
Aug-20	pH	pH	Quarterly									
Aug-20	Potassium	(mg/L)	Quarterly									
Aug-20	Selenium	(mg/L)	Quarterly									
Aug-20	Sodium	(mg/L)	Quarterly									
Aug-20	Standing Water Level	(m)	Quarterly									
Aug-20	Vanadium	(mg/L)	Quarterly									
Aug-20	Zinc	(mg/L)	Quarterly									

GENERAL COMMENTS

The EPA issued a new version of the Vales Point Power Station Environment Protection Licence on 23 July 2020. The new licence includes some additional analytes, changes to some sampling frequencies and changed sampling point ID's. 11 August 2020 returned a TSS result of 77mg/L. TSS upstream of the discharge point in Wyee Creek was also >50mg/L at the time of sampling.

*Analysis of a water sample taken at EPA 25 on