

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	January 2024	
ADDRESS	VALES ROAD, MANNERING PARK NSW	



POINT 2 Combined air emissions from boiler 5 via Points 4 to 7 to Point 1 marked and shown as EPA ID 2 on The Plans ("VX837351-1 AND "VX837351-2" 03/06/2020 EPA REFERENCE DOC20/476695 AND DOC20/476695-1).												
Month	Pollutant	Unit of Measure	Sample/Measurement Frequency	Samples Collected & Analysed	Date Sampled	Lowest Sample Value	Mean of Samples	Highest Sample Value	99 Percentile Concentration Limit	100 Percentile Concentration Limit	Exceed 100% Limit (yes/no)	Comments
Jan-24	Cadmium	(mg/m3)	Every 6 months							0.2	No	
Jan-24	Chlorine	(mg/m3)	Every 6 months							20	No	
Jan-24	Fluorine	(mg/m3)	Every 6 months							30	No	
Jan-24	Hydrogen chloride	(mg/m3)	Every 6 months							50	No	
Jan-24	Mercury	(mg/m3)	Every 6 months							0.05	No	
Jan-24	Nitrogen Oxides	(mg/m3)	Continuous	95.0%	Jan-24	337	650	812	850	980	No	
Jan-24	Solid Particles	(mg/m3)	Quarterly							50	No	
Jan-24	Sulfur dioxide	(mg/m3)	Continuous	96.8%	Jan-24	455	884	1163	1400	1700	No	
Jan-24	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months							100	No	
Jan-24	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months							0.75	No	
Jan-24	VOC's as n-propane equivalent	(mg/m3)	Every 6 months							10	No	

POINT 3 Combined air emissions from boiler 6 via Points 8 to 11 to Point 1 marked and shown as EPA ID 3 on The Plans ("VX837351-1 AND "VX837351-2" 03/06/2020 EPA REFERENCE DOC20/476695 AND DOC20/476695-1).												
Month	Pollutant	Unit of Measure	Sample/Measurement Frequency	Samples Collected & Analysed	Date Sampled	Lowest Sample Value	Mean of Samples	Highest Sample Value	99 Percentile Concentration Limit	100 Percentile Concentration Limit	Exceed 100% Limit (yes/no)	Comments
Jan-24	Cadmium	(mg/m3)	Every 6 months							0.2	No	
Jan-24	Chlorine	(mg/m3)	Every 6 months							20	No	
Jan-24	Fluorine	(mg/m3)	Every 6 months							30	No	
Jan-24	Hydrogen chloride	(mg/m3)	Every 6 months							50	No	
Jan-24	Mercury	(mg/m3)	Every 6 months							0.05	No	
Jan-24	Nitrogen Oxides	(mg/m3)	Continuous	96.5%	Jan-24	349	634	808	850	980	No	
Jan-24	Solid Particles	(mg/m3)	Quarterly							50	No	
Jan-24	Sulfur dioxide	(mg/m3)	Continuous	97.8%	Jan-24	450	924	1231	1400	1700	No	
Jan-24	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months							100	No	
Jan-24	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months							0.75	No	
Jan-24	VOC's as n-propane equivalent	(mg/m3)	Every 6 months							10	No	

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
Jan-24	Cadmium	(mg/m3)	Every 6 months								N/A	
Jan-24	Carbon dioxide	(%)	Every 6 months								N/A	
Jan-24	Chlorine	(mg/m3)	Every 6 months								N/A	
Jan-24	Fluorine	(mg/m3)	Every 6 months								N/A	
Jan-24	Hydrogen chloride	(mg/m3)	Every 6 months								N/A	
Jan-24	Mercury	(mg/m3)	Every 6 months								N/A	
Jan-24	Solid Particles	(mg/m3)	Quarterly								N/A	
Jan-24	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months								N/A	
Jan-24	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months								N/A	
Jan-24	VOC's as n-propane equivalent	(mg/m3)	Every 6 months								N/A	

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
Jan-24	Cadmium	(mg/m3)	Every 6 months								N/A	
Jan-24	Mercury	(mg/m3)	Every 6 months								N/A	
Jan-24	Solid Particles	(mg/m3)	Quarterly								N/A	
Jan-24	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months								N/A	

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
Jan-24	Cadmium	(mg/m3)	Every 6 months								N/A	
Jan-24	Carbon dioxide	(%)	Every 6 months								N/A	
Jan-24	Chlorine	(mg/m3)	Every 6 months								N/A	
Jan-24	Fluorine	(mg/m3)	Every 6 months								N/A	
Jan-24	Hydrogen chloride	(mg/m3)	Every 6 months								N/A	
Jan-24	Mercury	(mg/m3)	Every 6 months								N/A	
Jan-24	Solid Particles	(mg/m3)	Quarterly								N/A	
Jan-24	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months								N/A	
Jan-24	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months								N/A	
Jan-24	VOC's as n-propane equivalent	(mg/m3)	Every 6 months								N/A	

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
Jan-24	Cadmium	(mg/m3)	Every 6 months								N/A	
Jan-24	Mercury	(mg/m3)	Every 6 months								N/A	
Jan-24	Solid Particles	(mg/m3)	Quarterly								N/A	
Jan-24	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months								N/A	

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
Jan-24	Cadmium	(mg/m3)	Every 6 months								N/A	
Jan-24	Carbon dioxide	(%)	Every 6 months								N/A	
Jan-24	Chlorine	(mg/m3)	Every 6 months								N/A	
Jan-24	Fluorine	(mg/m3)	Every 6 months								N/A	
Jan-24	Hydrogen chloride	(mg/m3)	Every 6 months								N/A	
Jan-24	Mercury	(mg/m3)	Every 6 months								N/A	
Jan-24	Solid Particles	(mg/m3)	Quarterly								N/A	
Jan-24	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months								N/A	
Jan-24	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months								N/A	
Jan-24	VOC's as n-propane equivalent	(mg/m3)	Every 6 months								N/A	

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
Jan-24	Cadmium	(mg/m3)	Every 6 months								N/A	
Jan-24	Mercury	(mg/m3)	Every 6 months								N/A	
Jan-24	Solid Particles	(mg/m3)	Quarterly								N/A	
Jan-24	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months								N/A	

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
Jan-24	Cadmium	(mg/m3)	Every 6 months								N/A	
Jan-24	Carbon dioxide	(%)	Every 6 months								N/A	
Jan-24	Chlorine	(mg/m3)	Every 6 months								N/A	
Jan-24	Fluorine	(mg/m3)	Every 6 months								N/A	
Jan-24	Hydrogen chloride	(mg/m3)	Every 6 months								N/A	
Jan-24	Mercury	(mg/m3)	Every 6 months								N/A	
Jan-24	Solid Particles	(mg/m3)	Quarterly								N/A	
Jan-24	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months								N/A	
Jan-24	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months								N/A	
Jan-24	VOC's as n-propane equivalent	(mg/m3)	Every 6 months								N/A	
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
Jan-24	Cadmium	(mg/m3)	Every 6 months								N/A	
Jan-24	Mercury	(mg/m3)	Every 6 months								N/A	
Jan-24	Solid Particles	(mg/m3)	Quarterly								N/A	
Jan-24	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months								N/A	
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
Jan-24	Nitrogen Oxides	(mg/m3)	Continuous	94.9%	Jan-24	314	641	858			N/A	
Jan-24	Sulfur dioxide	(mg/m3)	Continuous	97.2%	Jan-24	417	813	1070			N/A	
POINT 13 Boiler number 5 combined exhaust - duct C and D (points 6 and 7) marked and shown as EPA ID 13 on The Plans ("VX837351-1 AND "VX837351-2" 03/06/2020 EPA REFERENCE DOC20/476695 AND DOC20/476695-1).												
Month	Pollutant	Unit of Measure	Sample/Measurement Frequency	Samples Collected & Analysed	Date Sampled	Lowest Sample Value	Mean of Samples	Highest Sample Value	99 Percentile Concentration Limit	100 Percentile Concentration Limit	Exceedance (yes/no)	Comments
Jan-24	Nitrogen Oxides	(mg/m3)	Continuous	95.2%	Jan-24	361	659	825			N/A	
Jan-24	Sulfur dioxide	(mg/m3)	Continuous	96.5%	Jan-24	331	955	1256			N/A	
POINT 14 Boiler number 6 combined exhaust - duct A and B (points 8 and 9) marked and shown as EPA ID 14 on The Plans ("VX837351-1 AND "VX837351-2" 03/06/2020 EPA REFERENCE DOC20/476695 AND DOC20/476695-1).												
Month	Pollutant	Unit of Measure	Sample/Measurement Frequency	Samples Collected & Analysed	Date Sampled	Lowest Sample Value	Mean of Samples	Highest Sample Value	99 Percentile Concentration Limit	100 Percentile Concentration Limit	Exceedance (yes/no)	Comments
Jan-24	Nitrogen Oxides	(mg/m3)	Continuous	97.0%	Jan-24	327	682	900			N/A	
Jan-24	Sulfur dioxide	(mg/m3)	Continuous	98.3%	Jan-24	344	966	1304			N/A	
POINT 15 Boiler number 6 combined exhaust - duct C and D (points 10 and 11) marked and shown as EPA ID 12 on The Plans ("VX837351-1 AND "VX837351-2" 03/06/2020 EPA REFERENCE DOC20/476695 AND DOC20/476695-1).												
Month	Pollutant	Unit of Measure	Sample/Measurement Frequency	Samples Collected & Analysed	Date Sampled	Lowest Sample Value	Mean of Samples	Highest Sample Value	99 Percentile Concentration Limit	100 Percentile Concentration Limit	Exceedance (yes/no)	Comments
Jan-24	Nitrogen Oxides	(mg/m3)	Continuous	96.0%	Jan-24	248	585	810			N/A	
Jan-24	Sulfur dioxide	(mg/m3)	Continuous	97.2%	Jan-24	455	883	1200			N/A	

POINT 22 Discharge of cooling water from the cooling water outlet canal to Wyee Bay marked and shown as EPA ID 22 on The Plans ("VX837351-1 AND "VX837351-2" 03/06/2020 EPA REFERENCE DOC20/476695 AND DOC20/476695-1).												
Month	Pollutant	Unit of Measure	Sample/Measurement Frequency	Samples Collected & Analysed	Date Sampled	Lowest Sample Value	Mean of Samples	Highest Sample Value	98.5 Percentile Concentration Limit	100 Percentile Concentration Limit	Exceed 100% Limit (yes/no)	Comments
Jan-24	Chlorine (free residual)	(mg/L)	Monthly during discharge	1	9/01/2024	0	0	0		0.2	No	
Jan-24	Copper	(mg/L)	Monthly during discharge	1	9/01/2024	0.002	0.002	0.002		0.005	No	
Jan-24	Iron	(mg/L)	Monthly during discharge	1	9/01/2024	0.140	0.140	0.140		0.3	No	
Jan-24	Oil and Grease	Visible	Continuous during discharge	100%	Jan-24	NIL	NIL	NIL				
Jan-24	Selenium	(mg/L)	Monthly during discharge	1	9/01/2024	0.002	0.002	0.002		0.005	No	
Jan-24	Temperature	(°C)	Continuous during discharge	100%	Jan-24	29.4	32.1	36.5	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
Jan-24	Aluminium	(mg/L)	Monthly during discharge	1	9/01/2024	0.08	0.08	0.08				
Jan-24	Ammonia	(mg/L)	Monthly during discharge	1	9/01/2024	0.052	0.052	0.052				
Jan-24	Arsenic (III)	(mg/L)	Monthly during discharge	1	9/01/2024	<0.001	<0.001	<0.001				
Jan-24	Arsenic (V)	(mg/L)	Monthly during discharge	1	9/01/2024	0.010	0.010	0.010				
Jan-24	Cadmium	(mg/L)	Monthly during discharge	1	9/01/2024	0.0001	0.0001	0.0001				
Jan-24	Chromium (trivalent)	(mg/L)	Monthly during discharge	1	9/01/2024	0.030	0.030	0.030				
Jan-24	Chromium (VI) Compounds	(mg/L)	Monthly during discharge	1	9/01/2024	0.020	0.020	0.020				
Jan-24	Copper	(mg/L)	Monthly during discharge	1	9/01/2024	0.004	0.004	0.004				
Jan-24	Iron	(mg/L)	Monthly during discharge	1	9/01/2024	0.080	0.080	0.080				
Jan-24	Lead	(mg/L)	Monthly during discharge	1	9/01/2024	<0.001	<0.001	<0.001				
Jan-24	Manganese	(mg/L)	Monthly during discharge	1	9/01/2024	0.0210	0.0210	0.0210				
Jan-24	Nickel	(mg/L)	Monthly during discharge	1	9/01/2024	0.004	0.004	0.004				
Jan-24	Nitrate + nitrite (oxidised nitrogen)	(mg/L)	Monthly during discharge	1	9/01/2024	0.300	0.300	0.300				
Jan-24	Nitrogen	(mg/L)	Monthly during discharge	1	9/01/2024	0.60	0.60	0.60				
Jan-24	pH	pH	Monthly during discharge	1	9/01/2024	8.1	8.1	8.1		6.5 - 9.5	No	
Jan-24	Phosphorus	(mg/L)	Monthly during discharge	1	9/01/2024	0.30	0.30	0.30				
Jan-24	Reactive Phosphorus	(mg/L)	Monthly during discharge	1	9/01/2024	0.14	0.14	0.14				
Jan-24	Selenium	(mg/L)	Monthly during discharge	1	9/01/2024	0.075	0.075	0.075				
Jan-24	Total Kjeldahl Nitrogen	(mg/L)	Monthly during discharge	1	9/01/2024	0.3	0.3	0.3				
Jan-24	Total Suspended Solids	(mg/L)	Monthly during discharge	1	9/01/2024	8	8	8		50	No	
Jan-24	Vanadium	(mg/L)	Monthly during discharge	1	9/01/2024	0.13	0.13	0.13				
Jan-24	Zinc	(mg/L)	Monthly during discharge	1	9/01/2024	0.071	0.071	0.071				

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
Jan-24	Aluminium	(mg/L)	Monthly during discharge	1	9/01/2024				No			
Jan-24	Ammonia	(mg/L)	Monthly during discharge	1	9/01/2024				No			
Jan-24	Arsenic (III)	(mg/L)	Monthly during discharge	1	9/01/2024				No			
Jan-24	Arsenic (V)	(mg/L)	Monthly during discharge	1	9/01/2024				No			
Jan-24	Cadmium	(mg/L)	Monthly during discharge	1	9/01/2024				No			
Jan-24	Chromium (trivalent)	(mg/L)	Monthly during discharge	1	9/01/2024				No			
Jan-24	Chromium (VI) Compounds	(mg/L)	Monthly during discharge	1	9/01/2024				No			
Jan-24	Copper	(mg/L)	Monthly during discharge	1	9/01/2024				No			
Jan-24	Iron	(mg/L)	Monthly during discharge	1	9/01/2024				No			
Jan-24	Lead	(mg/L)	Monthly during discharge	1	9/01/2024				No			
Jan-24	Manganese	(mg/L)	Monthly during discharge	1	9/01/2024				No			No discharge from EPA Point 24 during January 2024
Jan-24	Nickel	(mg/L)	Monthly during discharge	1	9/01/2024				No			
Jan-24	Nitrate + nitrite (oxidised nitrogen)	(mg/L)	Monthly during discharge	1	9/01/2024				No			
Jan-24	Nitrogen	(mg/L)	Monthly during discharge	1	9/01/2024				No			
Jan-24	pH	pH	Monthly during discharge	1	9/01/2024				No	6.5 - 9.5	No	
Jan-24	Phosphorus	(mg/L)	Monthly during discharge	1	9/01/2024				No			
Jan-24	Reactive Phosphorus	(mg/L)	Monthly during discharge	1	9/01/2024				No			
Jan-24	Selenium	(mg/L)	Monthly during discharge	1	9/01/2024				No			
Jan-24	Total Kjeldahl Nitrogen	(mg/L)	Monthly during discharge	1	9/01/2024				No			
Jan-24	Total Suspended Solids	(mg/L)	Monthly during discharge	1	9/01/2024				No	50	No	
Jan-24	Vanadium	(mg/L)	Monthly during discharge	1	9/01/2024				No			
Jan-24	Zinc	(mg/L)	Monthly during discharge	1	9/01/2024				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
Jan-24	Aluminium	(mg/L)	Daily for any discharge >2 hrs						No			
Jan-24	Ammonia	(mg/L)	Daily for any discharge >2 hrs						No			
Jan-24	Arsenic (III)	(mg/L)	Daily for any discharge >2 hrs						No			
Jan-24	Arsenic (V)	(mg/L)	Daily for any discharge >2 hrs						No			
Jan-24	Cadmium	(mg/L)	Daily for any discharge >2 hrs						No			
Jan-24	Chromium (trivalent)	(mg/L)	Daily for any discharge >2 hrs						No			
Jan-24	Chromium (VI) Compounds	(mg/L)	Daily for any discharge >2 hrs						No			
Jan-24	Copper	(mg/L)	Daily for any discharge >2 hrs						No			
Jan-24	Iron	(mg/L)	Daily for any discharge >2 hrs						No			
Jan-24	Lead	(mg/L)	Daily for any discharge >2 hrs						No			
Jan-24	Manganese	(mg/L)	Daily for any discharge >2 hrs						No			No discharge from EPA Point 25 during January 2024
Jan-24	Nickel	(mg/L)	Daily for any discharge >2 hrs						No			
Jan-24	Nitrate + nitrite (oxidised nitrogen)	(mg/L)	Daily for any discharge >2 hrs						No			
Jan-24	Nitrogen	(mg/L)	Daily for any discharge >2 hrs						No			
Jan-24	pH	pH	Daily for any discharge >2 hrs						No	6.5 - 9.5	No	
Jan-24	Phosphorus	(mg/L)	Daily for any discharge >2 hrs						No			
Jan-24	Reactive Phosphorus	(mg/L)	Daily for any discharge >2 hrs						No			
Jan-24	Selenium	(mg/L)	Daily for any discharge >2 hrs						No			
Jan-24	Total Kjeldahl Nitrogen	(mg/L)	Daily for any discharge >2 hrs						No			
Jan-24	Total Suspended Solids	(mg/L)	Daily for any discharge >2 hrs						No	50	No	
Jan-24	Vanadium	(mg/L)	Daily for any discharge >2 hrs						No			
Jan-24	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
Jan-24	Aluminium	(mg/L)	Quarterly	1	9/01/2024	0.12	0.12	0.12				
Jan-24	Ammonia	(mg/L)	Quarterly	1	9/01/2024	5.6	5.6	5.6				
Jan-24	Arsenic (III)	(mg/L)	Quarterly	1	9/01/2024	0.004	0.004	0.004				
Jan-24	Arsenic (V)	(mg/L)	Quarterly	1	9/01/2024	<0.001	<0.001	<0.001				
Jan-24	Cadmium	(mg/L)	Quarterly	1	9/01/2024	<0.0001	<0.0001	<0.0001				
Jan-24	Chromium (trivalent)	(mg/L)	Quarterly	1	9/01/2024	<0.005	<0.005	<0.005				
Jan-24	Chromium (VI) Compounds	(mg/L)	Quarterly	1	9/01/2024	<0.005	<0.005	<0.005				
Jan-24	Copper	(mg/L)	Quarterly	1	9/01/2024	0.029	0.029	0.029				
Jan-24	Electrical Conductivity	(us/cm)	Quarterly	1	9/01/2024	778	778	778				
Jan-24	Iron	(mg/L)	Quarterly	1	9/01/2024	46.0	46.0	46.0				
Jan-24	Lead	(mg/L)	Quarterly	1	9/01/2024	0.002	0.002	0.002				Next sample scheduled for April 2024
Jan-24	Magnesium	(mg/L)	Quarterly	1	9/01/2024	840	840	840				
Jan-24	Manganese	(mg/L)	Quarterly	1	9/01/2024	3.6	3.6	3.6				
Jan-24	Nickel	(mg/L)	Quarterly	1	9/01/2024	0.031	0.031	0.031				
Jan-24	pH	pH	Quarterly	1	9/01/2024	5.03	5.03	5.03				
Jan-24	Potassium	(mg/L)	Quarterly	1	9/01/2024	170	170	170				
Jan-24	Selenium	(mg/L)	Quarterly	1	9/01/2024	<0.001	<0.001	<0.001				
Jan-24	Sodium	(mg/L)	Quarterly	1	9/01/2024	6900	6900	6900				
Jan-24	Standing Water Level	(m)	Quarterly	1	9/01/2024	4.15	4.15	4.15				
Jan-24	Vanadium	(mg/L)	Quarterly	1	9/01/2024	0.001	0.001	0.001				
Jan-24	Zinc	(mg/L)	Quarterly	1	9/01/2024	0.063	0.063	0.063				

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
Jan-24	Aluminium	(mg/L)	Quarterly	1	9/01/2024	0.44	0.44	0.44				
Jan-24	Ammonia	(mg/L)	Quarterly	1	9/01/2024	0.39	0.39	0.39				
Jan-24	Arsenic (III)	(mg/L)	Quarterly	1	9/01/2024	0.001	0.001	0.001				
Jan-24	Arsenic (V)	(mg/L)	Quarterly	1	9/01/2024	0.003	0.003	0.003				
Jan-24	Cadmium	(mg/L)	Quarterly	1	9/01/2024	<0.0001	<0.0001	<0.0001				
Jan-24	Chromium (trivalent)	(mg/L)	Quarterly	1	9/01/2024	<0.005	<0.005	<0.005				
Jan-24	Chromium (VI) Compounds	(mg/L)	Quarterly	1	9/01/2024	<0.0005	<0.0005	<0.0005				
Jan-24	Copper	(mg/L)	Quarterly	1	9/01/2024	0.034	0.034	0.034				
Jan-24	Electrical Conductivity	(us/cm)	Quarterly	1	9/01/2024	487	487	487				
Jan-24	Iron	(mg/L)	Quarterly	1	9/01/2024	260	260	260				
Jan-24	Lead	(mg/L)	Quarterly	1	9/01/2024	0.002	0.002	0.002				Next sample scheduled for April 2024
Jan-24	Magnesium	(mg/L)	Quarterly	1	9/01/2024	1100	1100	1100				
Jan-24	Manganese	(mg/L)	Quarterly	1	9/01/2024	4.6	4.6	4.6				
Jan-24	Nickel	(mg/L)	Quarterly	1	9/01/2024	0.170	0.170	0.170				
Jan-24	pH	pH	Quarterly	1	9/01/2024	5.19	5.19	5.19				
Jan-24	Potassium	(mg/L)	Quarterly	1	9/01/2024	46.0	46.0	46.0				
Jan-24	Selenium	(mg/L)	Quarterly	1	9/01/2024	<0.001	<0.001	<0.001				
Jan-24	Sodium	(mg/L)	Quarterly	1	9/01/2024	6000	6000	6000				
Jan-24	Standing Water Level	(m)	Quarterly	1	9/01/2024	1.70	1.70	1.70				
Jan-24	Vanadium	(mg/L)	Quarterly	1	9/01/2024	<0.001	<0.001	<0.001				
Jan-24	Zinc	(mg/L)	Quarterly	1	9/01/2024	0.16	0.16	0.16				

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
Jan-24	Aluminium	(mg/L)	Quarterly	1	9/01/2024	6.80	6.80	6.80				
Jan-24	Ammonia	(mg/L)	Quarterly	1	9/01/2024	0.25	0.25	0.25				
Jan-24	Arsenic (III)	(mg/L)	Quarterly	1	9/01/2024	<0.001	<0.001	<0.001				
Jan-24	Arsenic (V)	(mg/L)	Quarterly	1	9/01/2024	<0.001	<0.001	<0.001				
Jan-24	Cadmium	(mg/L)	Quarterly	1	9/01/2024	<0.0001	<0.0001	<0.0001				
Jan-24	Chromium (trivalent)	(mg/L)	Quarterly	1	9/01/2024	<0.005	<0.005	<0.005				
Jan-24	Chromium (VI) Compounds	(mg/L)	Quarterly	1	9/01/2024	<0.005	<0.005	<0.005				
Jan-24	Copper	(mg/L)	Quarterly	1	9/01/2024	0.066	0.066	0.066				
Jan-24	Electrical Conductivity	(us/cm)	Quarterly	1	9/01/2024	139	139	139				
Jan-24	Iron	(mg/L)	Quarterly	1	9/01/2024	36	36	36				
Jan-24	Lead	(mg/L)	Quarterly	1	9/01/2024	0.006	0.006	0.006				Next sample scheduled for April 2024
Jan-24	Magnesium	(mg/L)	Quarterly	1	9/01/2024	99	99	99				
Jan-24	Manganese	(mg/L)	Quarterly	1	9/01/2024	1.800	1.800	1.800				
Jan-24	Nickel	(mg/L)	Quarterly	1	9/01/2024	0.130	0.130	0.130				
Jan-24	pH	pH	Quarterly	1	9/01/2024	4.50	4.50	4.50				
Jan-24	Potassium	(mg/L)	Quarterly	1	9/01/2024	19.0	19.0	19.0				
Jan-24	Selenium	(mg/L)	Quarterly	1	9/01/2024	<0.001	<0.001	<0.001				
Jan-24	Sodium	(mg/L)	Quarterly	1	9/01/2024	1600	1600	1600				
Jan-24	Standing Water Level	(m)	Quarterly	1	9/01/2024	4.90	4.90	4.90				
Jan-24	Vanadium	(mg/L)	Quarterly	1	9/01/2024	<0.001	<0.001	<0.001				
Jan-24	Zinc	(mg/L)	Quarterly	1	9/01/2024	0.230	0.230	0.230				

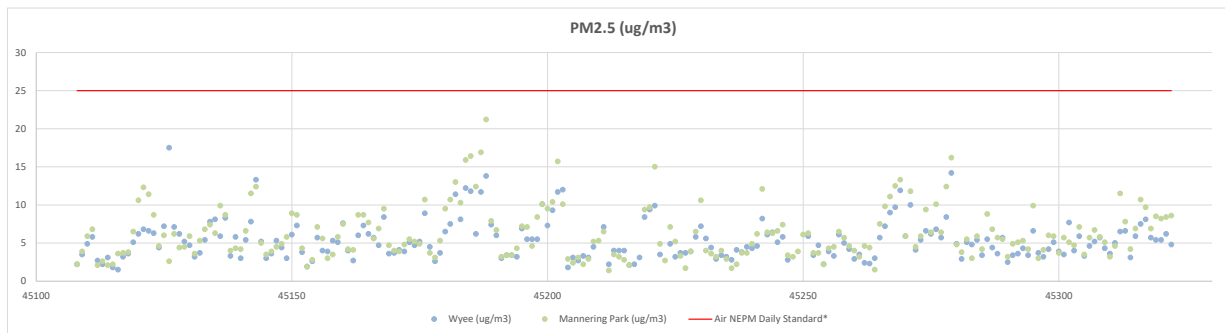
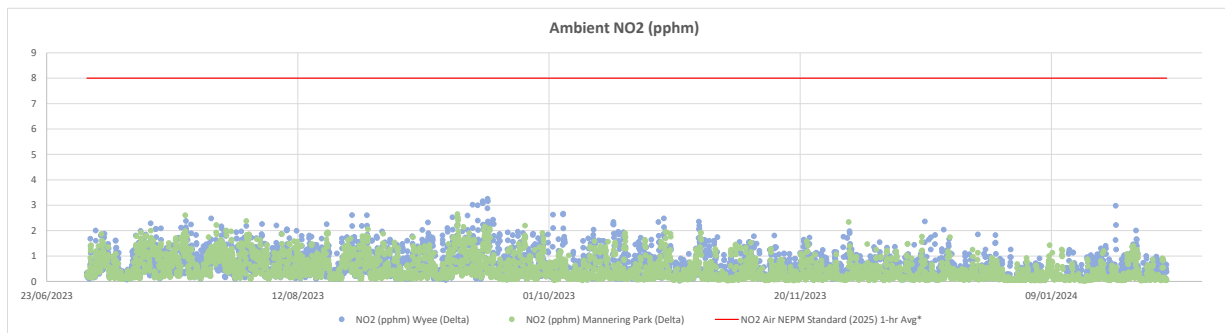
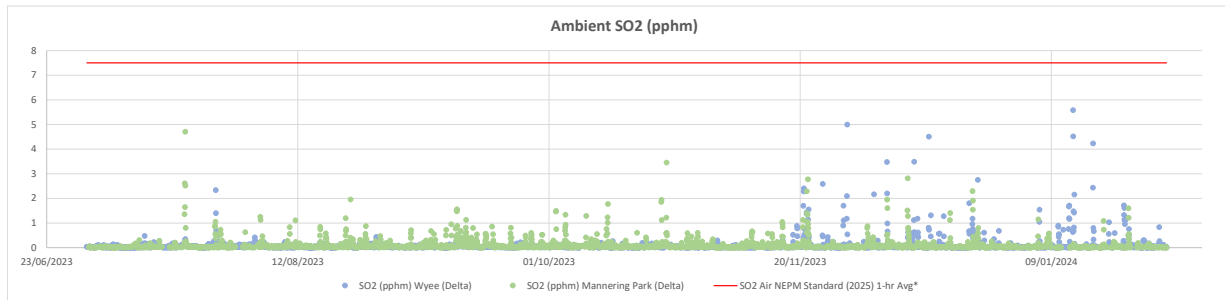
POINT 33 Groundwater quality monitoring bore marked and shown as EPA ID 33 on The Plans ("VX837351-1 AND "VX837351-2" 03/06/2020 EPA REFERENCE DOC20/476695 AND DOC20/476695-1).

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
Jan-24	Aluminium	(mg/L)	Quarterly	1	9/01/2024	1.6	1.6	1.6				
Jan-24	Ammonia	(mg/L)	Quarterly	1	9/01/2024	0.09	0.09	0.09				
Jan-24	Arsenic (III)	(mg/L)	Quarterly	1	9/01/2024	0.0010	0.0010	0.0010				
Jan-24	Arsenic (V)	(mg/L)	Quarterly	1	9/01/2024	<0.001	<0.001	<0.001				
Jan-24	Cadmium	(mg/L)	Quarterly	1	9/01/2024	0.0001	0.0001	0.0001				
Jan-24	Chromium (trivalent)	(mg/L)	Quarterly	1	9/01/2024	<0.005	<0.005	<0.005				
Jan-24	Chromium (VI) Compounds	(mg/L)	Quarterly	1	9/01/2024	<0.0005	<0.0005	<0.0005				
Jan-24	Copper	(mg/L)	Quarterly	1	9/01/2024	0.006	0.006	0.006				
Jan-24	Electrical Conductivity	(us/cm)	Quarterly	1	9/01/2024	49608	49608	49608				
Jan-24	Iron	(mg/L)	Quarterly	1	9/01/2024	140	140	140				
Jan-24	Lead	(mg/L)	Quarterly	1	9/01/2024	0.004	0.004	0.004				Next sample scheduled for April 2024
Jan-24	Magnesium	(mg/L)	Quarterly	1	9/01/2024	1500	1500	1500				
Jan-24	Manganese	(mg/L)	Quarterly	1	9/01/2024	0.22	0.22	0.22				
Jan-24	Nickel	(mg/L)	Quarterly	1	9/01/2024	0.006	0.006	0.006				
Jan-24	pH	pH	Quarterly	1	9/01/2024	6.18	6.18	6.18				
Jan-24	Potassium	(mg/L)	Quarterly	1	9/01/2024	410	410	410				
Jan-24	Selenium	(mg/L)	Quarterly	1	9/01/2024	0.002	0.002	0.002				
Jan-24	Sodium	(mg/L)	Quarterly	1	9/01/2024	11000	11000	11000				
Jan-24	Standing Water Level	(m)	Quarterly	1	9/01/2024	0.50	0.50	0.50				
Jan-24	Vanadium	(mg/L)	Quarterly	1	9/01/2024	0.011	0.011	0.011				
Jan-24	Zinc	(mg/L)	Quarterly	1	9/01/2024	0.140	0.140	0.140				

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
Jan-24	Aluminium	(mg/L)	Quarterly	1	9/01/2024	0.85	0.85	0.85				
Jan-24	Ammonia	(mg/L)	Quarterly	1	9/01/2024	0.005	0.005	0.005				
Jan-24	Arsenic (III)	(mg/L)	Quarterly	1	9/01/2024	<0.001	<0.001	<0.001				
Jan-24	Arsenic (V)	(mg/L)	Quarterly	1	9/01/2024	0.001	0.001	0.001				
Jan-24	Cadmium	(mg/L)	Quarterly	1	9/01/2024	<0.0001	<0.0001	<0.0001				
Jan-24	Chromium (trivalent)	(mg/L)	Quarterly	1	9/01/2024	<0.005	<0.005	<0.005				
Jan-24	Chromium (VI) Compounds	(mg/L)	Quarterly	1	9/01/2024	<0.005	<0.005	<0.005				
Jan-24	Copper	(mg/L)	Quarterly	1	9/01/2024	0.002	0.002	0.002				
Jan-24	Electrical Conductivity	(us/cm)	Quarterly	1	9/01/2024	620	620	620				
Jan-24	Iron	(mg/L)	Quarterly	1	9/01/2024	3.4	3.4	3.4				
Jan-24	Lead	(mg/L)	Quarterly	1	9/01/2024	0.001	0.001	0.001				Next sample scheduled for April 2024
Jan-24	Magnesium	(mg/L)	Quarterly	1	9/01/2024	9.1	9.1	9.1				
Jan-24	Manganese	(mg/L)	Quarterly	1	9/01/2024	0.072	0.072	0.072				
Jan-24	Nickel	(mg/L)	Quarterly	1	9/01/2024	0.005	0.005	0.005				
Jan-24	pH	pH	Quarterly	1	9/01/2024	5.00	5.00	5.00				
Jan-24	Potassium	(mg/L)	Quarterly	1	9/01/2024	2	2	2				
Jan-24	Selenium	(mg/L)	Quarterly	1	9/01/2024	<0.001	<0.001	<0.001				
Jan-24	Sodium	(mg/L)	Quarterly	1	9/01/2024	110	110	110				
Jan-24	Standing Water Level	(m)	Quarterly	1	9/01/2024	0.80	0.80	0.80				
Jan-24	Vanadium	(mg/L)	Quarterly	1	9/01/2024	0.007	0.007	0.007				
Jan-24	Zinc	(mg/L)	Quarterly	1	9/01/2024	0.015	0.015	0.015				

Ambient Air Quality Graphs

POINTS 16 & 35 Meteorological and ambient air quality monitoring stations at Wyee & Mannering Park marked and shown as EPA ID 16 & EPA ID 35 respectively on The Plan.



GENERAL COMMENTS

*For more information about the Australian Governments National Environment Protection (Ambient Air Quality) Measure (Air NEPM) visit <<https://www.nepc.gov.au/nepms/ambient-air-quality>>