

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	July 2023	
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
Jul-23	Cadmium	(mg/m3)	Every 6 months							0.2	No	
Jul-23	Chlorine	(mg/m3)	Every 6 months							20	No	
Jul-23	Fluorine	(mg/m3)	Every 6 months							30	No	
Jul-23	Hydrogen chloride	(mg/m3)	Every 6 months							50	No	
Jul-23	Mercury	(mg/m3)	Every 6 months							0.05	No	
Jul-23	Nitrogen Oxides	(mg/m3)	Continuous	98.8%	Jul-23	241	615	771	850	980	No	
Jul-23	Solid Particles	(mg/m3)	Quarterly	1	May 2023	2.29	2.29	2.29		50	No	
Jul-23	Sulfur dioxide	(mg/m3)	Continuous	98.8%	Jul-23	549	944	1330	1400	1700	No	
Jul-23	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months							100	No	
Jul-23	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months							0.75	No	
Jul-23	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
Jul-23	Cadmium	(mg/m3)	Every 6 months							0.2	No	
Jul-23	Chlorine	(mg/m3)	Every 6 months							20	No	
Jul-23	Fluorine	(mg/m3)	Every 6 months							30	No	
Jul-23	Hydrogen chloride	(mg/m3)	Every 6 months							50	No	
Jul-23	Mercury	(mg/m3)	Every 6 months							0.05	No	
Jul-23	Nitrogen Oxides	(mg/m3)	Continuous	99.1%	Jul-23	301	628	772	850	980	No	
Jul-23	Solid Particles	(mg/m3)	Quarterly	1	June 2023	7.34	7.34	7.34		50	No	
Jul-23	Sulfur dioxide	(mg/m3)	Continuous	99.1%	Jul-23	482	951	1421	1400	1700	No	
Jul-23	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months							100	No	
Jul-23	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months							0.75	No	
Jul-23	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
Jul-23	Cadmium	(mg/m3)	Every 6 months								N/A	
Jul-23	Carbon dioxide	(%)	Every 6 months								N/A	
Jul-23	Chlorine	(mg/m3)	Every 6 months								N/A	
Jul-23	Fluorine	(mg/m3)	Every 6 months								N/A	
Jul-23	Hydrogen chloride	(mg/m3)	Every 6 months								N/A	
Jul-23	Mercury	(mg/m3)	Every 6 months								N/A	
Jul-23	Solid Particles	(mg/m3)	Quarterly	1	29/5/2023	<1.14	<1.14	<1.14			N/A	
Jul-23	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months								N/A	
Jul-23	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months								N/A	
Jul-23	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
Jul-23	Cadmium	(mg/m3)	Every 6 months								N/A	
Jul-23	Mercury	(mg/m3)	Every 6 months								N/A	
Jul-23	Solid Particles	(mg/m3)	Quarterly	1	30/5/2023	<0.945	<0.945	<0.945			N/A	
Jul-23	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
Jul-23	Cadmium	(mg/m3)	Every 6 months								N/A	
Jul-23	Carbon dioxide	(%)	Every 6 months								N/A	
Jul-23	Chlorine	(mg/m3)	Every 6 months								N/A	
Jul-23	Fluorine	(mg/m3)	Every 6 months								N/A	
Jul-23	Hydrogen chloride	(mg/m3)	Every 6 months								N/A	
Jul-23	Mercury	(mg/m3)	Every 6 months								N/A	
Jul-23	Solid Particles	(mg/m3)	Quarterly	1	30/5/2023	<1.16	<1.16	<1.16			N/A	
Jul-23	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months								N/A	
Jul-23	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months								N/A	
Jul-23	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
Jul-23	Cadmium	(mg/m3)	Every 6 months								N/A	
Jul-23	Mercury	(mg/m3)	Every 6 months								N/A	
Jul-23	Solid Particles	(mg/m3)	Quarterly	1	30/5/2023	4.46	4.46	4.46			N/A	
Jul-23	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
Jul-23	Cadmium	(mg/m3)	Every 6 months								N/A	
Jul-23	Carbon dioxide	(%)	Every 6 months								N/A	
Jul-23	Chlorine	(mg/m3)	Every 6 months								N/A	
Jul-23	Fluorine	(mg/m3)	Every 6 months								N/A	
Jul-23	Hydrogen chloride	(mg/m3)	Every 6 months								N/A	
Jul-23	Mercury	(mg/m3)	Every 6 months								N/A	
Jul-23	Solid Particles	(mg/m3)	Quarterly	1	31/5/2023	12.4	12.4	12.4			N/A	
Jul-23	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months								N/A	
Jul-23	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months								N/A	
Jul-23	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
Jul-23	Cadmium	(mg/m3)	Every 6 months								N/A	
Jul-23	Mercury	(mg/m3)	Every 6 months								N/A	
Jul-23	Solid Particles	(mg/m3)	Quarterly	1	31/5/2023	17.5	17.5	17.5			N/A	
Jul-23	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
Jul-23	Cadmium	(mg/m3)	Every 6 months								N/A	
Jul-23	Carbon dioxide	(%)	Every 6 months								N/A	
Jul-23	Chlorine	(mg/m3)	Every 6 months								N/A	
Jul-23	Fluorine	(mg/m3)	Every 6 months								N/A	
Jul-23	Hydrogen chloride	(mg/m3)	Every 6 months								N/A	
Jul-23	Mercury	(mg/m3)	Every 6 months								N/A	
Jul-23	Solid Particles	(mg/m3)	Quarterly	1	1/6/2023	1.3	1.3	1.3			N/A	
Jul-23	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months								N/A	
Jul-23	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months								N/A	
Jul-23	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
Jul-23	Cadmium	(mg/m3)	Every 6 months								N/A	
Jul-23	Mercury	(mg/m3)	Every 6 months								N/A	
Jul-23	Solid Particles	(mg/m3)	Quarterly	1	1/6/2023	1.3	1.3	1.3			N/A	
Jul-23	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
Jul-23	Nitrogen Oxides	(mg/m3)	Continuous	98.8%	Jul-23	218	610	757			N/A	
Jul-23	Sulfur dioxide	(mg/m3)	Continuous	98.8%	Jul-23	483	864	1256			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
Jul-23	Nitrogen Oxides	(mg/m3)	Continuous	98.8%	Jul-23	264	621	803			N/A	
Jul-23	Sulfur dioxide	(mg/m3)	Continuous	98.8%	Jul-23	601	1024	1433			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
Jul-23	Nitrogen Oxides	(mg/m3)	Continuous	99.1%	Jul-23	320	664	823			N/A	
Jul-23	Sulfur dioxide	(mg/m3)	Continuous	99.1%	Jul-23	492	978	1480			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
Jul-23	Nitrogen Oxides	(mg/m3)	Continuous	99.1%	Jul-23	281	591	764			N/A	
Jul-23	Sulfur dioxide	(mg/m3)	Continuous	99.1%	Jul-23	472	924	1362			N/A	

POINT 22 Discharge of cooling water from the cooling water outlet canal to Wye Bay marked and shown as EPA ID 22 on The Plans ("VX837351-1 AND "VX837351-2" 03/06/2020 EPA REFERENCE DOC20/476695 AND DOC20/476695-1).

Month	Pollutant	Unit of Measure	Sample/Measurement Frequency	Samples Collected & Analysed	Date Sampled	Lowest Sample Value	Mean of Samples	Highest Sample Value	98.5 Percentile Concentration Limit	100 Percentile Concentration Limit	Exceed 100% Limit (yes/no)	Comments
Jul-23	Chlorine (free residual)	(mg/L)	Monthly during discharge	1	4/07/2023	<0.1	<0.1	<0.1		0.2	No	
Jul-23	Copper	(mg/L)	Monthly during discharge	1	4/07/2023	<0.005	<0.005	<0.005		0.005	No	
Jul-23	Iron	(mg/L)	Monthly during discharge	1	4/07/2023	0.067	0.067	0.067		0.3	No	
Jul-23	Oil and Grease	Visible	Continuous during discharge	100%	Jul-23	NIL	NIL	NIL				
Jul-23	Selenium	(mg/L)	Monthly during discharge	1	4/07/2023	<0.005	<0.005	<0.005		0.005	No	
Jul-23	Temperature	(°C)	Continuous during discharge	100%	Jul-23	18.3	22.3	27.2	35	37.5	No	

POINT 23 Discharge of supernatant water from the ash dam to the cooling water outlet canal to Wye Bay marked and shown as EPA ID 23 on The Plans ("VX837351-1 AND "VX837351-2" 03/06/2020 EPA REFERENCE DOC20/476695 AND DOC20/476695-1).

Month	Pollutant	Unit of Measure	Sample/Measurement Frequency	Samples Collected & Analysed	Date Sampled	Lowest Sample Value	Mean of Samples	Highest Sample Value	99 Percentile Concentration Limit	100 Percentile Concentration Limit	Exceedance (yes/no)	Comments
Jul-23	Aluminium	(mg/L)	Monthly during discharge	1	4/07/2023	<0.05	<0.05	<0.05				
Jul-23	Ammonia	(mg/L)	Monthly during discharge	1	4/07/2023	0.520	0.520	0.520				
Jul-23	Arsenic (III)	(mg/L)	Monthly during discharge	1	4/07/2023	<0.001	<0.001	<0.001				
Jul-23	Arsenic (V)	(mg/L)	Monthly during discharge	1	4/07/2023	0.012	0.012	0.012				
Jul-23	Cadmium	(mg/L)	Monthly during discharge	1	4/07/2023	<0.0005	<0.0005	<0.0005				
Jul-23	Chromium (trivalent)	(mg/L)	Monthly during discharge	1	4/07/2023	0.017	0.017	0.017				
Jul-23	Chromium (VI) Compounds	(mg/L)	Monthly during discharge	1	4/07/2023	0.040	0.040	0.040				
Jul-23	Copper	(mg/L)	Monthly during discharge	1	4/07/2023	<0.005	<0.005	<0.005				
Jul-23	Iron	(mg/L)	Monthly during discharge	1	4/07/2023	<0.05	<0.05	<0.05				
Jul-23	Lead	(mg/L)	Monthly during discharge	1	4/07/2023	<0.005	<0.005	<0.005				
Jul-23	Manganese	(mg/L)	Monthly during discharge	1	4/07/2023	<0.025	<0.025	<0.025				
Jul-23	Nickel	(mg/L)	Monthly during discharge	1	4/07/2023	<0.005	<0.005	<0.005				
Jul-23	Nitrate + nitrite (oxidised nitrogen)	(mg/L)	Monthly during discharge	1	4/07/2023	0.20	0.20	0.20				
Jul-23	Nitrogen	(mg/L)	Monthly during discharge	1	4/07/2023	0.70	0.70	0.70				
Jul-23	pH	pH	Monthly during discharge	1	4/07/2023	9.0	9.0	9.0		6.5 - 9.5	No	
Jul-23	Phosphorus	(mg/L)	Monthly during discharge	1	4/07/2023	0.10	0.10	0.10				
Jul-23	Reactive Phosphorus	(mg/L)	Monthly during discharge	1	4/07/2023	0.06	0.06	0.06				
Jul-23	Selenium	(mg/L)	Monthly during discharge	1	4/07/2023	0.095	0.095	0.095				
Jul-23	Total Kjeldahl Nitrogen	(mg/L)	Monthly during discharge	1	4/07/2023	0.6	0.6	0.6				
Jul-23	Total Suspended Solids	(mg/L)	Monthly during discharge	1	4/07/2023	<5	<5	<5		50	No	
Jul-23	Vanadium	(mg/L)	Monthly during discharge	1	4/07/2023	0.18	0.18	0.18				
Jul-23	Zinc	(mg/L)	Monthly during discharge	1	4/07/2023	<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
Jul-23	Aluminium	(mg/L)	Monthly during discharge	1	4/07/2023				No			
Jul-23	Ammonia	(mg/L)	Monthly during discharge	1	4/07/2023				No			
Jul-23	Arsenic (III)	(mg/L)	Monthly during discharge	1	4/07/2023				No			
Jul-23	Arsenic (V)	(mg/L)	Monthly during discharge	1	4/07/2023				No			
Jul-23	Cadmium	(mg/L)	Monthly during discharge	1	4/07/2023				No			
Jul-23	Chromium (trivalent)	(mg/L)	Monthly during discharge	1	4/07/2023				No			
Jul-23	Chromium (VI) Compounds	(mg/L)	Monthly during discharge	1	4/07/2023				No			
Jul-23	Copper	(mg/L)	Monthly during discharge	1	4/07/2023				No			
Jul-23	Iron	(mg/L)	Monthly during discharge	1	4/07/2023				No			
Jul-23	Lead	(mg/L)	Monthly during discharge	1	4/07/2023				No			
Jul-23	Manganese	(mg/L)	Monthly during discharge	1	4/07/2023				No			No discharge from EPA Point 24 during July 2023
Jul-23	Nickel	(mg/L)	Monthly during discharge	1	4/07/2023				No			
Jul-23	Nitrate + nitrite (oxidised nitrogen)	(mg/L)	Monthly during discharge	1	4/07/2023				No			
Jul-23	Nitrogen	(mg/L)	Monthly during discharge	1	4/07/2023				No			
Jul-23	pH	pH	Monthly during discharge	1	4/07/2023				No	6.5 - 9.5	No	
Jul-23	Phosphorus	(mg/L)	Monthly during discharge	1	4/07/2023				No			
Jul-23	Reactive Phosphorus	(mg/L)	Monthly during discharge	1	4/07/2023				No			
Jul-23	Selenium	(mg/L)	Monthly during discharge	1	4/07/2023				No			
Jul-23	Total Kjeldahl Nitrogen	(mg/L)	Monthly during discharge	1	4/07/2023				No			
Jul-23	Total Suspended Solids	(mg/L)	Monthly during discharge	1	4/07/2023				No	50	No	
Jul-23	Vanadium	(mg/L)	Monthly during discharge	1	4/07/2023				No			
Jul-23	Zinc	(mg/L)	Monthly during discharge	1	4/07/2023				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
Jul-23	Aluminium	(mg/L)	Daily for any discharge >2 hrs						No			
Jul-23	Ammonia	(mg/L)	Daily for any discharge >2 hrs						No			
Jul-23	Arsenic (III)	(mg/L)	Daily for any discharge >2 hrs						No			
Jul-23	Arsenic (V)	(mg/L)	Daily for any discharge >2 hrs						No			
Jul-23	Cadmium	(mg/L)	Daily for any discharge >2 hrs						No			
Jul-23	Chromium (trivalent)	(mg/L)	Daily for any discharge >2 hrs						No			
Jul-23	Chromium (VI) Compounds	(mg/L)	Daily for any discharge >2 hrs						No			
Jul-23	Copper	(mg/L)	Daily for any discharge >2 hrs						No			
Jul-23	Iron	(mg/L)	Daily for any discharge >2 hrs						No			
Jul-23	Lead	(mg/L)	Daily for any discharge >2 hrs						No			
Jul-23	Manganese	(mg/L)	Daily for any discharge >2 hrs						No			No discharge from EPA Point 25 during July 2023
Jul-23	Nickel	(mg/L)	Daily for any discharge >2 hrs						No			
Jul-23	Nitrate + nitrite (oxidised nitrogen)	(mg/L)	Daily for any discharge >2 hrs						No			
Jul-23	Nitrogen	(mg/L)	Daily for any discharge >2 hrs						No			
Jul-23	pH	pH	Daily for any discharge >2 hrs						No	6.5 - 9.5	No	
Jul-23	Phosphorus	(mg/L)	Daily for any discharge >2 hrs						No			
Jul-23	Reactive Phosphorus	(mg/L)	Daily for any discharge >2 hrs						No			
Jul-23	Selenium	(mg/L)	Daily for any discharge >2 hrs						No			
Jul-23	Total Kjeldahl Nitrogen	(mg/L)	Daily for any discharge >2 hrs						No			
Jul-23	Total Suspended Solids	(mg/L)	Daily for any discharge >2 hrs						No	50	No	
Jul-23	Vanadium	(mg/L)	Daily for any discharge >2 hrs						No			
Jul-23	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 & Analyzed	Date Sampled	Lowest Sample Value	Mean of Samples	Highest Sample Value	99 Percentile Concentration Limit	100 Percentile Concentration Limit	Exceedance (yes/no)	Comments
Jul-23	Aluminium	(mg/L)	Quarterly	1	4/07/2023	0.08	0.08	0.08				
Jul-23	Ammonia	(mg/L)	Quarterly	1	4/07/2023	7.0	7.0	7.0				
Jul-23	Arsenic (III)	(mg/L)	Quarterly	1	4/07/2023	0.005	0.005	0.005				
Jul-23	Arsenic (V)	(mg/L)	Quarterly	1	4/07/2023	<0.001	<0.001	<0.001				
Jul-23	Cadmium	(mg/L)	Quarterly	1	4/07/2023	<0.0005	<0.0005	<0.0005				
Jul-23	Chromium (trivalent)	(mg/L)	Quarterly	1	4/07/2023	<0.005	<0.005	<0.005				
Jul-23	Chromium (VI) Compounds	(mg/L)	Quarterly	1	4/07/2023	<0.005	<0.005	<0.005				
Jul-23	Copper	(mg/L)	Quarterly	1	4/07/2023	0.043	0.043	0.043				
Jul-23	Electrical Conductivity	(us/cm)	Quarterly	1	4/07/2023	37000	37000	37000				
Jul-23	Iron	(mg/L)	Quarterly	1	4/07/2023	74.0	74.0	74.0				
Jul-23	Lead	(mg/L)	Quarterly	1	4/07/2023	0.009	0.009	0.009				
Jul-23	Magnesium	(mg/L)	Quarterly	1	4/07/2023	670	670	670				
Jul-23	Manganese	(mg/L)	Quarterly	1	4/07/2023	4.8	4.8	4.8				
Jul-23	Nickel	(mg/L)	Quarterly	1	4/07/2023	0.030	0.030	0.030				
Jul-23	pH	pH	Quarterly	1	4/07/2023	6.02	6.02	6.02				
Jul-23	Potassium	(mg/L)	Quarterly	1	4/07/2023	140	140	140				
Jul-23	Selenium	(mg/L)	Quarterly	1	4/07/2023	<0.005	<0.005	<0.005				
Jul-23	Sodium	(mg/L)	Quarterly	1	4/07/2023	6900	6900	6900				
Jul-23	Standing Water Level	(m)	Quarterly	1	4/07/2023	3.92	3.92	3.92				
Jul-23	Vanadium	(mg/L)	Quarterly	1	4/07/2023	<0.005	<0.005	<0.005				
Jul-23	Zinc	(mg/L)	Quarterly	1	4/07/2023	0.091	0.091	0.091				

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 & Analyzed	Date Sampled	Lowest Sample Value	Mean of Samples	Highest Sample Value	99 Percentile Concentration Limit	100 Percentile Concentration Limit	Exceedance (yes/no)	Comments
Jul-23	Aluminium	(mg/L)	Quarterly	1	4/07/2023	1.30	1.30	1.30				
Jul-23	Ammonia	(mg/L)	Quarterly	1	4/07/2023	0.97	0.97	0.97				
Jul-23	Arsenic (III)	(mg/L)	Quarterly	1	4/07/2023	0.002	0.002	0.002				
Jul-23	Arsenic (V)	(mg/L)	Quarterly	1	4/07/2023	0.002	0.002	0.002				
Jul-23	Cadmium	(mg/L)	Quarterly	1	4/07/2023	<0.0005	<0.0005	<0.0005				
Jul-23	Chromium (trivalent)	(mg/L)	Quarterly	1	4/07/2023	<0.005	<0.005	<0.005				
Jul-23	Chromium (VI) Compounds	(mg/L)	Quarterly	1	4/07/2023	<0.005	<0.005	<0.005				
Jul-23	Copper	(mg/L)	Quarterly	1	4/07/2023	0.032	0.032	0.032				
Jul-23	Electrical Conductivity	(us/cm)	Quarterly	1	4/07/2023	32000	32000	32000				
Jul-23	Iron	(mg/L)	Quarterly	1	4/07/2023	280	280	280				
Jul-23	Lead	(mg/L)	Quarterly	1	4/07/2023	<0.005	<0.005	<0.005				
Jul-23	Magnesium	(mg/L)	Quarterly	1	4/07/2023	890	890	890				
Jul-23	Manganese	(mg/L)	Quarterly	1	4/07/2023	4.7	4.7	4.7				
Jul-23	Nickel	(mg/L)	Quarterly	1	4/07/2023	0.140	0.140	0.140				
Jul-23	pH	pH	Quarterly	1	4/07/2023	4.55	4.55	4.55				
Jul-23	Potassium	(mg/L)	Quarterly	1	4/07/2023	44.0	44.0	44.0				
Jul-23	Selenium	(mg/L)	Quarterly	1	4/07/2023	<0.005	<0.005	<0.005				
Jul-23	Sodium	(mg/L)	Quarterly	1	4/07/2023	5500	5500	5500				
Jul-23	Standing Water Level	(m)	Quarterly	1	4/07/2023	1.70	1.70	1.70				
Jul-23	Vanadium	(mg/L)	Quarterly	1	4/07/2023	<0.005	<0.005	<0.005				
Jul-23	Zinc	(mg/L)	Quarterly	1	4/07/2023	0.15	0.15	0.15				

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 & Analyzed	Date Sampled	Lowest Sample Value	Mean of Samples	Highest Sample Value	99 Percentile Concentration Limit	100 Percentile Concentration Limit	Exceedance (yes/no)	Comments
Jul-23	Aluminium	(mg/L)	Quarterly	1	4/07/2023	3.60	3.60	3.60				
Jul-23	Ammonia	(mg/L)	Quarterly	1	4/07/2023	0.25	0.25	0.25				
Jul-23	Arsenic (III)	(mg/L)	Quarterly	1	4/07/2023	<0.001	<0.001	<0.001				
Jul-23	Arsenic (V)	(mg/L)	Quarterly	1	4/07/2023	<0.001	<0.001	<0.001				
Jul-23	Cadmium	(mg/L)	Quarterly	1	4/07/2023	<0.0005	<0.0005	<0.0005				
Jul-23	Chromium (trivalent)	(mg/L)	Quarterly	1	4/07/2023	<0.005	<0.005	<0.005				
Jul-23	Chromium (VI) Compounds	(mg/L)	Quarterly	1	4/07/2023	<0.005	<0.005	<0.005				
Jul-23	Copper	(mg/L)	Quarterly	1	4/07/2023	0.061	0.061	0.061				
Jul-23	Electrical Conductivity	(us/cm)	Quarterly	1	4/07/2023	6900	6900	6900				
Jul-23	Iron	(mg/L)	Quarterly	1	4/07/2023	38	38	38				
Jul-23	Lead	(mg/L)	Quarterly	1	4/07/2023	0.007	0.007	0.007				
Jul-23	Magnesium	(mg/L)	Quarterly	1	4/07/2023	61	61	61				
Jul-23	Manganese	(mg/L)	Quarterly	1	4/07/2023	1.000	1.000	1.000				
Jul-23	Nickel	(mg/L)	Quarterly	1	4/07/2023	0.045	0.045	0.045				
Jul-23	pH	pH	Quarterly	1	4/07/2023	4.46	4.46	4.46				
Jul-23	Potassium	(mg/L)	Quarterly	1	4/07/2023	14.0	14.0	14.0				
Jul-23	Selenium	(mg/L)	Quarterly	1	4/07/2023	<0.001	<0.001	<0.001				
Jul-23	Sodium	(mg/L)	Quarterly	1	4/07/2023	840	840	840				
Jul-23	Standing Water Level	(m)	Quarterly	1	4/07/2023	3.83	3.83	3.83				
Jul-23	Vanadium	(mg/L)	Quarterly	1	4/07/2023	<0.001	<0.001	<0.001				
Jul-23	Zinc	(mg/L)	Quarterly	1	4/07/2023	0.200	0.200	0.200				

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 & Analyzed	Date Sampled	Lowest Sample Value	Mean of Samples	Highest Sample Value	99 Percentile Concentration Limit	100 Percentile Concentration Limit	Exceedance (yes/no)	Comments
Jul-23	Aluminium	(mg/L)	Quarterly	1	4/07/2023	2.0	2.0	2.0				
Jul-23	Ammonia	(mg/L)	Quarterly	1	4/07/2023	<0.005	<0.005	<0.005				
Jul-23	Arsenic (III)	(mg/L)	Quarterly	1	4/07/2023	<0.001	<0.001	<0.001				
Jul-23	Arsenic (V)	(mg/L)	Quarterly	1	4/07/2023	<0.001	<0.001	<0.001				
Jul-23	Cadmium	(mg/L)	Quarterly	1	4/07/2023	<0.0001	<0.0001	<0.0001				
Jul-23	Chromium (trivalent)	(mg/L)	Quarterly	1	4/07/2023	<0.005	<0.005	<0.005				
Jul-23	Chromium (VI) Compounds	(mg/L)	Quarterly	1	4/07/2023	<0.005	<0.005	<0.005				
Jul-23	Copper	(mg/L)	Quarterly	1	4/07/2023	<0.005	<0.005	<0.005				
Jul-23	Electrical Conductivity	(us/cm)	Quarterly	1	4/07/2023	50000	50000	50000				
Jul-23	Iron	(mg/L)	Quarterly	1	4/07/2023	88	88	88				
Jul-23	Lead	(mg/L)	Quarterly	1	4/07/2023	0.008	0.008	0.008				
Jul-23	Magnesium	(mg/L)	Quarterly	1	4/07/2023	1200	1200	1200				
Jul-23	Manganese	(mg/L)	Quarterly	1	4/07/2023	0.41	0.41	0.41				
Jul-23	Nickel	(mg/L)	Quarterly	1	4/07/2023	0.005	0.005	0.005				
Jul-23	pH	pH	Quarterly	1	4/07/2023	6.87	6.87	6.87				
Jul-23	Potassium	(mg/L)	Quarterly	1	4/07/2023	310	310	310				
Jul-23	Selenium	(mg/L)	Quarterly	1	4/07/2023	<0.005	<0.005	<0.005				
Jul-23	Sodium	(mg/L)	Quarterly	1	4/07/2023	11000	11000	11000				
Jul-23	Standing Water Level	(m)	Quarterly	1	4/07/2023	0.48	0.48	0.48				
Jul-23	Vanadium	(mg/L)	Quarterly	1	4/07/2023	0.017	0.017	0.017				
Jul-23	Zinc	(mg/L)	Quarterly	1	4/07/2023	0.044	0.044	0.044				

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
Jul-23	Aluminium	(mg/L)	Quarterly	1	4/07/2023	3.80	3.80	3.80				
Jul-23	Ammonia	(mg/L)	Quarterly	1	4/07/2023	<0.005	<0.005	<0.005				
Jul-23	Arsenic (III)	(mg/L)	Quarterly	1	4/07/2023	<0.001	<0.001	<0.001				
Jul-23	Arsenic (V)	(mg/L)	Quarterly	1	4/07/2023	<0.001	<0.001	<0.001				
Jul-23	Cadmium	(mg/L)	Quarterly	1	4/07/2023	<0.001	<0.001	<0.001				
Jul-23	Chromium (trivalent)	(mg/L)	Quarterly	1	4/07/2023	<0.005	<0.005	<0.005				
Jul-23	Chromium (VI) Compounds	(mg/L)	Quarterly	1	4/07/2023	<0.005	<0.005	<0.005				
Jul-23	Copper	(mg/L)	Quarterly	1	4/07/2023	0.007	0.007	0.007				
Jul-23	Electrical Conductivity	(us/cm)	Quarterly	1	4/07/2023	710	710	710				
Jul-23	Iron	(mg/L)	Quarterly	1	4/07/2023	8	8	8				
Jul-23	Lead	(mg/L)	Quarterly	1	4/07/2023	0.005	0.005	0.005				
Jul-23	Magnesium	(mg/L)	Quarterly	1	4/07/2023	9	9	9				
Jul-23	Manganese	(mg/L)	Quarterly	1	4/07/2023	0.070	0.070	0.070				
Jul-23	Nickel	(mg/L)	Quarterly	1	4/07/2023	0.006	0.006	0.006				
Jul-23	pH	pH	Quarterly	1	4/07/2023	5.04	5.04	5.04				
Jul-23	Potassium	(mg/L)	Quarterly	1	4/07/2023	2	2	2				
Jul-23	Selenium	(mg/L)	Quarterly	1	4/07/2023	<0.001	<0.001	<0.001				
Jul-23	Sodium	(mg/L)	Quarterly	1	4/07/2023	97	97	97				
Jul-23	Standing Water Level	(m)	Quarterly	1	4/07/2023	0.93	0.93	0.93				
Jul-23	Vanadium	(mg/L)	Quarterly	1	4/07/2023	0.030	0.030	0.030				
Jul-23	Zinc	(mg/L)	Quarterly	1	4/07/2023	0.025	0.025	0.025				

GENERAL COMMENTS