

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 2022	
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
May-22	Cadmium	(mg/m3)	Every 6 months	1	Feb 2022	<0.0012	<0.0012	<0.0012		0.2	No	Q3 Stack Gas Testing Report received from consultant 10/6/22
May-22	Chlorine	(mg/m3)	Every 6 months	1	Feb 2022	<0.06	<0.06	<0.06		20	No	
May-22	Fluorine	(mg/m3)	Every 6 months	1	Feb 2022	5.45	5.45	5.45		30	No	
May-22	Hydrogen chloride	(mg/m3)	Every 6 months	1	Feb 2022	3.06	3.06	3.06		50	No	
May-22	Mercury	(mg/m3)	Every 6 months	1	Feb 2022	0.0007	0.0007	0.0007		0.05	No	
May-22	Nitrogen Oxides	(mg/m3)	Continuous	97.1%	May-22	415	606	766	850	980	No	
May-22	Solid Particles	(mg/m3)	Quarterly	1	Feb 2022	2.8	2.8	2.8		50	No	
May-22	Sulfur dioxide	(mg/m3)	Continuous	97.1%	May-22	506	694	842	1400	1700	No	
May-22	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months	1	Feb 2022	2.4	2.4	2.4		100	No	
May-22	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months	1	Feb 2022	0.13	0.13	0.13		0.75	No	
May-22	VOC's as n-propane equivalent	(mg/m3)	Every 6 months	1	Feb 2022	2.6	2.6	2.6		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
May-22	Cadmium	(mg/m3)	Every 6 months	1	Feb - Mar 2022	<0.0015	<0.0015	<0.0015		0.2	No	*This report (May 2022) was corrected and re-published 2/8/2022 after it was found that the Mercury result at EPA11 was reported incorrectly by the laboratory that undertook the analysis (reported in wrong unit of measure). This also affected the TM-38 calculation for EPA3.
May-22	Chlorine	(mg/m3)	Every 6 months	1	Feb - Mar 2022	<0.22	<0.22	<0.22		20	No	
May-22	Fluorine	(mg/m3)	Every 6 months	1	Feb - Mar 2022	2.56	2.56	2.56		30	No	
May-22	Hydrogen chloride	(mg/m3)	Every 6 months	1	Feb - Mar 2022	3.51	3.51	3.51		50	No	
May-22	Mercury	(mg/m3)	Every 6 months	1	Feb - Mar 2022	<0.0006*	<0.0006*	<0.0006*		0.05	No	
May-22	Nitrogen Oxides	(mg/m3)	Continuous	100.0%	May-22	452	666	820	850	980	No	
May-22	Solid Particles	(mg/m3)	Quarterly	1	Feb - Mar 2022	20.0	20.0	20.0		50	No	
May-22	Sulfur dioxide	(mg/m3)	Continuous	100.0%	May-22	528	676	816	1400	1700	No	
May-22	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months	1	Feb - Mar 2022	2.7	2.7	2.7		100	No	
May-22	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months	1	Feb - Mar 2022	0.14	0.14	0.14		0.75	No	
May-22	VOC's as n-propane equivalent	(mg/m3)	Every 6 months	1	Feb - Mar 2022	2.8	2.8	2.8		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
May-22	Cadmium	(mg/m3)	Every 6 months	1	Feb 2022	<0.001	<0.001	<0.001				Q3 Stack Gas Testing Report received from consultant 10/6/22
May-22	Carbon dioxide	(%)	Every 6 months	1	Feb 2022	12.2	12.2	12.2				
May-22	Chlorine	(mg/m3)	Every 6 months	1	Feb 2022	<0.03	<0.03	<0.03				
May-22	Flow rate	(m3/s)	Continuous									
May-22	Fluorine	(mg/m3)	Every 6 months	1	Feb 2022	5.42	5.42	5.42				
May-22	Hydrogen chloride	(mg/m3)	Every 6 months	1	Feb 2022	3.47	3.47	3.47				
May-22	Mercury	(mg/m3)	Every 6 months	1	Feb 2022	0.0006	0.0006	0.0006				
May-22	Moisture	(%)	Continuous									
May-22	Oxygen (O2)	(%)	Continuous									
May-22	Solid Particles	(mg/m3)	Quarterly	1	Feb 2022	3.8	3.8	3.8				
May-22	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months	1	Feb 2022	2.2	2.2	2.2				
May-22	Temperature	(°C)	Continuous									
May-22	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months	1	Feb 2022	0.062	0.062	0.062				
May-22	VOC's as n-propane equivalent	(mg/m3)	Every 6 months	1	Feb 2022	2.6	2.6	2.6				

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-22	Cadmium	(mg/m3)	Every 6 months	1	Feb 2022	<0.0011	<0.0011	<0.0011				Q3 Stack Gas Testing Report received from consultant 10/6/22
May-22	Flow rate	(m3/s)	Continuous									
May-22	Mercury	(mg/m3)	Every 6 months	1	Feb 2022	0.0007	0.0007	0.0007				
May-22	Moisture	(%)	Continuous									See note at end of report regarding installation of continuous monitoring instrumentation.
May-22	Oxygen (O2)	(%)	Continuous									
May-22	Solid Particles	(mg/m3)	Quarterly	1	Feb 2022	1.4	1.4	1.4				
May-22	Temperature	(°C)	Continuous									
May-22	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months	1	Feb 2022	0.259	0.259	0.259				

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-22	Cadmium	(mg/m3)	Every 6 months	1	Feb 2022	<0.0016	<0.0016	<0.0016				Q3 Stack Gas Testing Report received from consultant 10/6/22
May-22	Carbon dioxide	(%)	Every 6 months	1	Feb 2022	10.6	10.5	10.6				
May-22	Chlorine	(mg/m3)	Every 6 months	1	Feb 2022	<0.12	<0.12	<0.12				
May-22	Flow rate	(m3/s)	Continuous									
May-22	Fluorine	(mg/m3)	Every 6 months	1	Feb 2022	5.49	5.49	5.49				
May-22	Hydrogen chloride	(mg/m3)	Every 6 months	1	Feb 2022	2.37	2.37	2.37				
May-22	Mercury	(mg/m3)	Every 6 months	1	Feb 2022	<0.0008	<0.0008	<0.0008				See note at end of report regarding installation of continuous monitoring instrumentation.
May-22	Moisture	(%)	Continuous									
May-22	Oxygen (O2)	(%)	Continuous									
May-22	Solid Particles	(mg/m3)	Quarterly	1	Feb 2022	1.0	1.0	1.0				
May-22	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months	1	Feb 2022	2.6	2.6	2.6				
May-22	Temperature	(°C)	Continuous									
May-22	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months	1	Feb 2022	0.093	0.093	0.093				
May-22	VOC's as n-propane equivalent	(mg/m3)	Every 6 months	1	Feb 2022	2.6	2.6	2.6				

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-22	Cadmium	(mg/m3)	Every 6 months	1	Feb 2022	<0.0011	<0.0011	<0.0011				Q3 Stack Gas Testing Report received from consultant 10/6/22
May-22	Flow rate	(m3/s)	Continuous									
May-22	Mercury	(mg/m3)	Every 6 months	1	Feb 2022	<0.0007	<0.0007	<0.0007				
May-22	Moisture	(%)	Continuous									See note at end of report regarding installation of continuous monitoring instrumentation.
May-22	Oxygen (O2)	(%)	Continuous									
May-22	Solid Particles	(mg/m3)	Quarterly	1	Feb 2022	5.5	5.5	5.5				
May-22	Temperature	(°C)	Continuous									
May-22	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months	1	Feb 2022	0.0695	0.0695	0.0695				

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-22	Cadmium	(mg/m3)	Every 6 months	1	Feb - Mar 2022	<0.0015	<0.0015	<0.0015				Q3 Stack Gas Testing Report received from consultant 10/6/22
May-22	Carbon dioxide	(%)	Every 6 months	1	Feb - Mar 2022	10.0	10.0	10.0				
May-22	Chlorine	(mg/m3)	Every 6 months	1	Feb - Mar 2022	<0.16	<0.16	<0.16				
May-22	Flow rate	(m3/s)	Continuous									
May-22	Fluorine	(mg/m3)	Every 6 months	1	Feb - Mar 2022	1.54	1.54	1.54				
May-22	Hydrogen chloride	(mg/m3)	Every 6 months	1	Feb - Mar 2022	6.40	6.40	6.40				
May-22	Mercury	(mg/m3)	Every 6 months	1	Feb - Mar 2022	<0.0007	<0.0007	<0.0007				See note at end of report regarding installation of continuous monitoring instrumentation.
May-22	Moisture	(%)	Continuous									
May-22	Oxygen (O2)	(%)	Continuous									
May-22	Solid Particles	(mg/m3)	Quarterly	1	Feb - Mar 2022	3.0	3.0	3.0				
May-22	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months	1	Feb - Mar 2022	3.1	3.1	3.1				
May-22	Temperature	(°C)	Continuous									
May-22	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months	1	Feb - Mar 2022	0.049	0.049	0.049				
May-22	VOC's as n-propane equivalent	(mg/m3)	Every 6 months	1	Feb - Mar 2022	<3.05	<3.05	<3.05				

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-22	Cadmium	(mg/m3)	Every 6 months	1	Feb - Mar 2022	<0.0012	<0.0012	<0.0012				Q3 Stack Gas Testing Report received from consultant 10/6/22 See note at end of report regarding installation of continuous monitoring instrumentation.
May-22	Flow rate	(m3/s)	Continuous									
May-22	Mercury	(mg/m3)	Every 6 months	1	Feb - Mar 2022	<0.0005	<0.0005	<0.0005				
May-22	Moisture	(%)	Continuous									
May-22	Oxygen (O2)	(%)	Continuous									
May-22	Solid Particles	(mg/m3)	Quarterly	1	Feb - Mar 2022	2.2	2.2	2.2				
May-22	Temperature	(°C)	Continuous									
May-22	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months	1	Feb - Mar 2022	0.077	0.077	0.077				

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-22	Cadmium	(mg/m3)	Every 6 months	1	Feb - Mar 2022	<0.0015	<0.0015	<0.0015				Q3 Stack Gas Testing Report received from consultant 10/6/22 See note at end of report regarding installation of continuous monitoring instrumentation.
May-22	Carbon dioxide	(%)	Every 6 months	1	Feb - Mar 2022	12.6	12.6	12.6				
May-22	Chlorine	(mg/m3)	Every 6 months	1	Feb - Mar 2022	<0.29	<0.29	<0.29				
May-22	Flow rate	(m3/s)	Continuous									
May-22	Fluorine	(mg/m3)	Every 6 months	1	Feb - Mar 2022	3.48	3.48	3.48				
May-22	Hydrogen chloride	(mg/m3)	Every 6 months	1	Feb - Mar 2022	<0.03	<0.03	<0.03				
May-22	Mercury	(mg/m3)	Every 6 months	1	Feb - Mar 2022	<0.0006	<0.0006	<0.0006				
May-22	Moisture	(%)	Continuous									
May-22	Oxygen (O2)	(%)	Continuous									
May-22	Solid Particles	(mg/m3)	Quarterly	1	Feb - Mar 2022	1.3	1.3	1.3				
May-22	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months	1	Feb - Mar 2022	2.3	2.3	2.3				
May-22	Temperature	(°C)	Continuous									
May-22	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months	1	Feb - Mar 2022	0.0997	0.0997	0.0997				
May-22	VOC's as n-propane equivalent	(mg/m3)	Every 6 months	1	Feb - Mar 2022	<9.43	<9.43	<9.43				

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-22	Cadmium	(mg/m3)	Every 6 months	1	Feb - Mar 2022	<0.0017	<0.0017	<0.0017				Q3 Stack Gas Testing Report received from consultant 10/6/22 *This report (May 2022) was corrected and re-published 2/8/2022 after it was found that the Mercury result at EPA11 was reported incorrectly by the laboratory that undertook the analysis (reported in wrong unit of measure). This also affected the TM-38 calculation for EPA3.
May-22	Flow rate	(m3/s)	Continuous									
May-22	Mercury	(mg/m3)	Every 6 months	1	Feb - Mar 2022	<0.0008*	<0.0008*	<0.0008*				
May-22	Moisture	(%)	Continuous									
May-22	Oxygen (O2)	(%)	Continuous									
May-22	Solid Particles	(mg/m3)	Quarterly	1	Feb - Mar 2022	75.4	75.4	75.4				
May-22	Temperature	(°C)	Continuous									
May-22	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months	1	Feb - Mar 2022	0.296	0.296	0.296				

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-22	Nitrogen Oxides	(mg/m3)	Continuous	96.3%	May-22	222	562	730				N/A
May-22	Sulfur dioxide	(mg/m3)	Continuous	96.1%	May-22	516	661	822				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
May-22	Nitrogen Oxides	(mg/m3)	Continuous	97.9%	May-22	289	649	865				N/A
May-22	Sulfur dioxide	(mg/m3)	Continuous	98.1%	May-22	330	727	865				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
May-22	Nitrogen Oxides	(mg/m3)	Continuous	100.0%	May-22	464	716	876				N/A
May-22	Sulfur dioxide	(mg/m3)	Continuous	100.0%	May-22	540	705	855				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
May-22	Nitrogen Oxides	(mg/m3)	Continuous	100.0%	May-22	428	617	776			N/A	
May-22	Sulfur dioxide	(mg/m3)	Continuous	100.0%	May-22	441	647	793			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
May-22	Chlorine (free residual)	(mg/L)	Monthly during discharge	1	17/05/2022	<0.1	<0.1	<0.1		0.2	No	
May-22	Copper	(mg/L)	Monthly during discharge	1	17/05/2022	0.003	0.003	0.003		0.005	No	
May-22	Iron	(mg/L)	Monthly during discharge	1	17/05/2022	0.046	0.046	0.046		0.3	No	
May-22	Oil and Grease	Visible	Continuous during discharge	100%	May-22	NIL	NIL	NIL				
May-22	Selenium	(mg/L)	Monthly during discharge	1	17/05/2022	<0.002	<0.002	<0.002		0.005	No	
May-22	Temperature	(°C)	Continuous during discharge	100%	May-22	22.7	27.4	32.2	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
May-22	Aluminium	(mg/L)	Monthly during discharge	1	17/05/2022	0.187	0.187	0.187				
May-22	Ammonia	(mg/L)	Monthly during discharge	1	17/05/2022	0.2	0.2	0.2				
May-22	Arsenic (III)	(mg/L)	Monthly during discharge	1	17/05/2022	<0.0005	<0.0005	<0.0005				
May-22	Arsenic (V)	(mg/L)	Monthly during discharge	1	17/05/2022	0.0038	0.0038	0.0038				
May-22	Cadmium	(mg/L)	Monthly during discharge	1	17/05/2022	<0.00005	<0.00005	<0.00005				
May-22	Chromium (trivalent)	(mg/L)	Monthly during discharge	1	17/05/2022	0.018	0.018	0.018				
May-22	Chromium (VI) Compounds	(mg/L)	Monthly during discharge	1	17/05/2022	0.035	0.035	0.035				
May-22	Copper	(mg/L)	Monthly during discharge	1	17/05/2022	0.001	0.001	0.001				
May-22	Iron	(mg/L)	Monthly during discharge	1	17/05/2022	0.308	0.308	0.308				
May-22	Lead	(mg/L)	Monthly during discharge	1	17/05/2022	0.0004	0.0004	0.0004				
May-22	Manganese	(mg/L)	Monthly during discharge	1	17/05/2022	0.0124	0.0124	0.0124				
May-22	Nickel	(mg/L)	Monthly during discharge	1	17/05/2022	0.0005	0.0005	0.0005				
May-22	Nitrate + nitrite (oxidised nitrogen)	(mg/L)	Monthly during discharge	1	17/05/2022	0.17	0.17	0.17				
May-22	Nitrogen	(mg/L)	Monthly during discharge	1	17/05/2022	0.70	0.70	0.70				
May-22	pH	pH	Monthly during discharge	1	17/05/2022	8.81	8.81	8.81		6.5 - 9.5	No	
May-22	Phosphorus	(mg/L)	Monthly during discharge	1	17/05/2022	0.05	0.05	0.05				
May-22	Reactive Phosphorus	(mg/L)	Monthly during discharge	1	17/05/2022	<0.01	<0.01	<0.01				
May-22	Selenium	(mg/L)	Monthly during discharge	1	17/05/2022	0.0574	0.0574	0.0574				
May-22	Total Kjeldahl Nitrogen	(mg/L)	Monthly during discharge	1	17/05/2022	0.5	0.5	0.5				
May-22	Total Suspended Solids	(mg/L)	Monthly during discharge	1	17/05/2022	16	16	16		50	No	
May-22	Vanadium	(mg/L)	Monthly during discharge	1	17/05/2022	0.066	0.066	0.066				
May-22	Zinc	(mg/L)	Monthly during discharge	1	17/05/2022	0.002	0.002	0.002				

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-22	Aluminium	(mg/L)	Monthly during discharge	1	17/05/2022				No			
May-22	Ammonia	(mg/L)	Monthly during discharge	1	17/05/2022				No			
May-22	Arsenic (III)	(mg/L)	Monthly during discharge	1	17/05/2022				No			
May-22	Arsenic (V)	(mg/L)	Monthly during discharge	1	17/05/2022				No			
May-22	Cadmium	(mg/L)	Monthly during discharge	1	17/05/2022				No			
May-22	Chromium (trivalent)	(mg/L)	Monthly during discharge	1	17/05/2022				No			
May-22	Chromium (VI) Compounds	(mg/L)	Monthly during discharge	1	17/05/2022				No			
May-22	Copper	(mg/L)	Monthly during discharge	1	17/05/2022				No			
May-22	Iron	(mg/L)	Monthly during discharge	1	17/05/2022				No			
May-22	Lead	(mg/L)	Monthly during discharge	1	17/05/2022				No			
May-22	Manganese	(mg/L)	Monthly during discharge	1	17/05/2022				No			
May-22	Nickel	(mg/L)	Monthly during discharge	1	17/05/2022				No			No discharge from EPA Point 24 during May 2022
May-22	Nitrate + nitrite (oxidised nitrogen)	(mg/L)	Monthly during discharge	1	17/05/2022				No			
May-22	Nitrogen	(mg/L)	Monthly during discharge	1	17/05/2022				No			
May-22	pH	pH	Monthly during discharge	1	17/05/2022				No	6.5 - 9.5	No	
May-22	Phosphorus	(mg/L)	Monthly during discharge	1	17/05/2022				No			
May-22	Reactive Phosphorus	(mg/L)	Monthly during discharge	1	17/05/2022				No			
May-22	Selenium	(mg/L)	Monthly during discharge	1	17/05/2022				No			
May-22	Total Kjeldahl Nitrogen	(mg/L)	Monthly during discharge	1	17/05/2022				No			
May-22	Total Suspended Solids	(mg/L)	Monthly during discharge	1	17/05/2022				No	50	No	
May-22	Vanadium	(mg/L)	Monthly during discharge	1	17/05/2022				No			
May-22	Zinc	(mg/L)	Monthly during discharge	1	17/05/2022				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-22	Aluminium	(mg/L)	Daily for any discharge >2 hrs						No			
May-22	Ammonia	(mg/L)	Daily for any discharge >2 hrs						No			
May-22	Arsenic (III)	(mg/L)	Daily for any discharge >2 hrs						No			
May-22	Arsenic (V)	(mg/L)	Daily for any discharge >2 hrs						No			
May-22	Cadmium	(mg/L)	Daily for any discharge >2 hrs						No			
May-22	Chromium (trivalent)	(mg/L)	Daily for any discharge >2 hrs						No			
May-22	Chromium (VI) Compounds	(mg/L)	Daily for any discharge >2 hrs						No			
May-22	Copper	(mg/L)	Daily for any discharge >2 hrs						No			
May-22	Iron	(mg/L)	Daily for any discharge >2 hrs						No			
May-22	Lead	(mg/L)	Daily for any discharge >2 hrs						No			
May-22	Manganese	(mg/L)	Daily for any discharge >2 hrs						No			No discharge from EPA Point 25 during May 2022
May-22	Nickel	(mg/L)	Daily for any discharge >2 hrs						No			
May-22	Nitrate + nitrite (oxidised nitrogen)	(mg/L)	Daily for any discharge >2 hrs						No			
May-22	Nitrogen	(mg/L)	Daily for any discharge >2 hrs						No			
May-22	pH	pH	Daily for any discharge >2 hrs						No	6.5 - 9.5	No	
May-22	Phosphorus	(mg/L)	Daily for any discharge >2 hrs						No			
May-22	Reactive Phosphorus	(mg/L)	Daily for any discharge >2 hrs						No			
May-22	Selenium	(mg/L)	Daily for any discharge >2 hrs						No			
May-22	Total Kjeldahl Nitrogen	(mg/L)	Daily for any discharge >2 hrs						No			
May-22	Total Suspended Solids	(mg/L)	Daily for any discharge >2 hrs						No	50	No	
May-22	Vanadium	(mg/L)	Daily for any discharge >2 hrs						No			
May-22	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-22	Aluminium	(mg/L)	Quarterly									
May-22	Ammonia	(mg/L)	Quarterly									
May-22	Arsenic (III)	(mg/L)	Quarterly									
May-22	Arsenic (V)	(mg/L)	Quarterly									
May-22	Cadmium	(mg/L)	Quarterly									
May-22	Chromium (trivalent)	(mg/L)	Quarterly									
May-22	Chromium (VI) Compounds	(mg/L)	Quarterly									
May-22	Copper	(mg/L)	Quarterly									
May-22	Electrical Conductivity	(us/cm)	Quarterly									
May-22	Iron	(mg/L)	Quarterly									
May-22	Lead	(mg/L)	Quarterly									
May-22	Magnesium	(mg/L)	Quarterly									Next sample scheduled for July 2022
May-22	Manganese	(mg/L)	Quarterly									
May-22	Nickel	(mg/L)	Quarterly									
May-22	pH	pH	Quarterly									
May-22	Potassium	(mg/L)	Quarterly									
May-22	Selenium	(mg/L)	Quarterly									
May-22	Sodium	(mg/L)	Quarterly									
May-22	Standing Water Level	(m)	Quarterly									
May-22	Vanadium	(mg/L)	Quarterly									
May-22	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-22	Aluminium	(mg/L)	Quarterly									
May-22	Ammonia	(mg/L)	Quarterly									
May-22	Arsenic (III)	(mg/L)	Quarterly									
May-22	Arsenic (V)	(mg/L)	Quarterly									
May-22	Cadmium	(mg/L)	Quarterly									
May-22	Chromium (trivalent)	(mg/L)	Quarterly									
May-22	Chromium (VI) Compounds	(mg/L)	Quarterly									
May-22	Copper	(mg/L)	Quarterly									
May-22	Electrical Conductivity	(us/cm)	Quarterly									
May-22	Iron	(mg/L)	Quarterly									
May-22	Lead	(mg/L)	Quarterly									
May-22	Magnesium	(mg/L)	Quarterly									Next sample scheduled for July 2022
May-22	Manganese	(mg/L)	Quarterly									
May-22	Nickel	(mg/L)	Quarterly									
May-22	pH	pH	Quarterly									
May-22	Potassium	(mg/L)	Quarterly									
May-22	Selenium	(mg/L)	Quarterly									
May-22	Sodium	(mg/L)	Quarterly									
May-22	Standing Water Level	(m)	Quarterly									
May-22	Vanadium	(mg/L)	Quarterly									
May-22	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
May-22	Aluminium	(mg/L)	Quarterly									
May-22	Ammonia	(mg/L)	Quarterly									
May-22	Arsenic (III)	(mg/L)	Quarterly									
May-22	Arsenic (V)	(mg/L)	Quarterly									
May-22	Cadmium	(mg/L)	Quarterly									
May-22	Chromium (trivalent)	(mg/L)	Quarterly									
May-22	Chromium (VI) Compounds	(mg/L)	Quarterly									
May-22	Copper	(mg/L)	Quarterly									
May-22	Electrical Conductivity	(us/cm)	Quarterly									
May-22	Iron	(mg/L)	Quarterly									
May-22	Lead	(mg/L)	Quarterly									
May-22	Magnesium	(mg/L)	Quarterly									Next sample scheduled for July 2022
May-22	Manganese	(mg/L)	Quarterly									
May-22	Nickel	(mg/L)	Quarterly									
May-22	pH	pH	Quarterly									
May-22	Potassium	(mg/L)	Quarterly									
May-22	Selenium	(mg/L)	Quarterly									
May-22	Sodium	(mg/L)	Quarterly									
May-22	Standing Water Level	(m)	Quarterly									
May-22	Vanadium	(mg/L)	Quarterly									
May-22	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-22	Aluminium	(mg/L)	Quarterly									
May-22	Ammonia	(mg/L)	Quarterly									
May-22	Arsenic (III)	(mg/L)	Quarterly									
May-22	Arsenic (V)	(mg/L)	Quarterly									
May-22	Cadmium	(mg/L)	Quarterly									
May-22	Chromium (trivalent)	(mg/L)	Quarterly									
May-22	Chromium (VI) Compounds	(mg/L)	Quarterly									
May-22	Copper	(mg/L)	Quarterly									
May-22	Electrical Conductivity	(us/cm)	Quarterly									
May-22	Iron	(mg/L)	Quarterly									
May-22	Lead	(mg/L)	Quarterly									
May-22	Magnesium	(mg/L)	Quarterly									Next sample scheduled for July 2022
May-22	Manganese	(mg/L)	Quarterly									
May-22	Nickel	(mg/L)	Quarterly									
May-22	pH	pH	Quarterly									
May-22	Potassium	(mg/L)	Quarterly									
May-22	Selenium	(mg/L)	Quarterly									
May-22	Sodium	(mg/L)	Quarterly									
May-22	Standing Water Level	(m)	Quarterly									
May-22	Vanadium	(mg/L)	Quarterly									
May-22	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-22	Aluminium	(mg/L)	Quarterly									
May-22	Ammonia	(mg/L)	Quarterly									
May-22	Arsenic (III)	(mg/L)	Quarterly									
May-22	Arsenic (V)	(mg/L)	Quarterly									
May-22	Cadmium	(mg/L)	Quarterly									
May-22	Chromium (trivalent)	(mg/L)	Quarterly									
May-22	Chromium (VI) Compounds	(mg/L)	Quarterly									
May-22	Copper	(mg/L)	Quarterly									
May-22	Electrical Conductivity	(us/cm)	Quarterly									
May-22	Iron	(mg/L)	Quarterly									
May-22	Lead	(mg/L)	Quarterly									
May-22	Magnesium	(mg/L)	Quarterly									Next sample scheduled for July 2022
May-22	Manganese	(mg/L)	Quarterly									
May-22	Nickel	(mg/L)	Quarterly									
May-22	pH	pH	Quarterly									
May-22	Potassium	(mg/L)	Quarterly									
May-22	Selenium	(mg/L)	Quarterly									
May-22	Sodium	(mg/L)	Quarterly									
May-22	Standing Water Level	(m)	Quarterly									
May-22	Vanadium	(mg/L)	Quarterly									
May-22	Zinc	(mg/L)	Quarterly									

GENERAL COMMENTS

Delta has requested amendment of the required date for installation of continuous monitoring instrumentation (temperature, oxygen, moisture) as permissible under Condition M2.4 of EPL761. Delta has also provided the EPA with a proposal for utilisation of a gas flowrate calculation at monitoring points 4 to 11 as an alternative to in-line instrumentation. Instrument suppliers advise that there are currently no flow instruments capable of accurately measuring gas flowrate at monitoring locations 4 to 11.