

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	February 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
Feb-22	Cadmium	(mg/m3)	Every 6 months	1	Aug - Oct 2021	<0.0021	<0.0021	<0.0021		0.2		
Feb-22	Chlorine	(mg/m3)	Every 6 months	1	Aug - Oct 2021	0.79	0.79	0.79		20		
Feb-22	Fluorine	(mg/m3)	Every 6 months	1	Aug - Oct 2021	3.03	3.03	3.03		30		
Feb-22	Hydrogen chloride	(mg/m3)	Every 6 months	1	Aug - Oct 2021	<0.43	<0.43	<0.43		50		
Feb-22	Mercury	(mg/m3)	Every 6 months	1	Aug - Oct 2021	<0.001	<0.001	<0.001		0.05		
Feb-22	Nitrogen Oxides	(mg/m3)	Continuous	98.0%	Feb-22	456	644	869	850	980	No	
Feb-22	Solid Particles	(mg/m3)	Quarterly	1	Aug - Oct 2021	8.5	8.5	8.5		50		
Feb-22	Sulfur dioxide	(mg/m3)	Continuous	98.0%	Feb-22	644	824	1137	1400	1700	No	
Feb-22	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months	1	Aug - Oct 2021	2.6	2.6	2.6		100		
Feb-22	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months	1	Aug - Oct 2021	0.06	0.06	0.06		0.75		
Feb-22	VOC's as n-propane equivalent	(mg/m3)	Every 6 months	1	Aug - Oct 2021	<2.19	<2.19	<2.19		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	Exceed 100% Limit (yes/no)	Comments
Feb-22	Cadmium	(mg/m3)	Every 6 months	1	Aug - Oct 2021	<0.0018	<0.0018	<0.0018		0.2		
Feb-22	Chlorine	(mg/m3)	Every 6 months	1	Aug - Oct 2021	<0.09	<0.09	<0.09		20		
Feb-22	Fluorine	(mg/m3)	Every 6 months	1	Aug - Oct 2021	7.68	7.68	7.68		30		
Feb-22	Hydrogen chloride	(mg/m3)	Every 6 months	1	Aug - Oct 2021	<0.45	<0.45	<0.45		50		
Feb-22	Mercury	(mg/m3)	Every 6 months	1	Aug - Oct 2021	<0.0008	<0.0008	<0.0008		0.05		
Feb-22	Nitrogen Oxides	(mg/m3)	Continuous	97.5%	Feb-22	322	650	849	850	980	No	
Feb-22	Solid Particles	(mg/m3)	Quarterly	1	Aug - Oct 2021	30.8	30.8	30.8		50		
Feb-22	Sulfur dioxide	(mg/m3)	Continuous	95.9%	Feb-22	597	813	1056	1400	1700	No	
Feb-22	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months	1	Aug - Oct 2021	1.3	1.3	1.3		100		
Feb-22	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months	1	Aug - Oct 2021	0.2	0.2	0.2		0.75		
Feb-22	VOC's as n-propane equivalent	(mg/m3)	Every 6 months	1	Aug - Oct 2021	<3.28	<3.28	<3.28		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
Feb-22	Cadmium	(mg/m3)	Every 6 months	1	Aug - Oct 2021	<0.0017	<0.0017	<0.0017				
Feb-22	Carbon dioxide	(%)	Every 6 months	1	Aug - Oct 2021	11.7	11.7	11.7				
Feb-22	Chlorine	(mg/m3)	Every 6 months	1	Aug - Oct 2021	1.04	1.04	1.04				
Feb-22	Flow rate	(m3/s)	Continuous									
Feb-22	Fluorine	(mg/m3)	Every 6 months	1	Aug - Oct 2021	2.60	2.60	2.60				
Feb-22	Hydrogen chloride	(mg/m3)	Every 6 months	1	Aug - Oct 2021	<0.24	<0.24	<0.24				
Feb-22	Mercury	(mg/m3)	Every 6 months	1	Aug - Oct 2021	<0.0009	<0.0009	<0.0009				
Feb-22	Moisture	(%)	Continuous									
Feb-22	Oxygen (O2)	(%)	Continuous									
Feb-22	Solid Particles	(mg/m3)	Quarterly	1	Aug - Oct 2021	11.0	11.0	11.0				
Feb-22	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months	1	Aug - Oct 2021	2	2	2				
Feb-22	Temperature	(°C)	Continuous									
Feb-22	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months	1	Aug - Oct 2021	0.051	0.051	0.051				
Feb-22	VOC's as n-propane equivalent	(mg/m3)	Every 6 months	1	Aug - Oct 2021	<1.73	<1.73	<1.73				

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 & Analyzed	Date Sampled	Lowest Sample Value	Mean of Samples	Highest Sample Value	99 Percentile Concentration Limit	100 Percentile Concentration Limit	Exceedance (yes/no)	Comments
Feb-22	Cadmium	(mg/m3)	Every 6 months	1	Aug - Oct 2021	<0.0019	<0.0019	<0.0019				
Feb-22	Flow rate	(m3/s)	Continuous									
Feb-22	Mercury	(mg/m3)	Every 6 months	1	Aug - Oct 2021	<0.001	<0.001	<0.001				
Feb-22	Moisture	(%)	Continuous									See note at end of report regarding installation of continuous monitoring instrumentation.
Feb-22	Oxygen (O2)	(%)	Continuous									
Feb-22	Solid Particles	(mg/m3)	Quarterly	1	Aug - Oct 2021	2	2	2				
Feb-22	Temperature	(°C)	Continuous									
Feb-22	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months	1	Aug - Oct 2021	0.058	0.058	0.058				

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 & Analyzed	Date Sampled	Lowest Sample Value	Mean of Samples	Highest Sample Value	99 Percentile Concentration Limit	100 Percentile Concentration Limit	Exceedance (yes/no)	Comments
Feb-22	Cadmium	(mg/m3)	Every 6 months	1	Aug - Oct 2021	<0.0029	<0.0029	<0.0029				
Feb-22	Carbon dioxide	(%)	Every 6 months	1	Aug - Oct 2021	13.0	13.0	13.0				
Feb-22	Chlorine	(mg/m3)	Every 6 months	1	Aug - Oct 2021	<0.44	<0.44	<0.44				
Feb-22	Flow rate	(m3/s)	Continuous									
Feb-22	Fluorine	(mg/m3)	Every 6 months	1	Aug - Oct 2021	3.52	3.52	3.52				
Feb-22	Hydrogen chloride	(mg/m3)	Every 6 months	1	Aug - Oct 2021	<0.7	<0.7	<0.7				
Feb-22	Mercury	(mg/m3)	Every 6 months	1	Aug - Oct 2021	<0.0012	<0.0012	<0.0012				See note at end of report regarding installation of continuous monitoring instrumentation.
Feb-22	Moisture	(%)	Continuous									
Feb-22	Oxygen (O2)	(%)	Continuous									
Feb-22	Solid Particles	(mg/m3)	Quarterly	1	Aug - Oct 2021	13.7	13.7	13.7				
Feb-22	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months	1	Aug - Oct 2021	3.8	3.8	3.8				
Feb-22	Temperature	(°C)	Continuous									
Feb-22	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months	1	Aug - Oct 2021	0.090	0.090	0.090				
Feb-22	VOC's as n-propane equivalent	(mg/m3)	Every 6 months	1	Aug - Oct 2021	<2.57	<2.57	<2.57				

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 & Analyzed	Date Sampled	Lowest Sample Value	Mean of Samples	Highest Sample Value	99 Percentile Concentration Limit	100 Percentile Concentration Limit	Exceedance (yes/no)	Comments
Feb-22	Cadmium	(mg/m3)	Every 6 months	1	Aug - Oct 2021	<0.0023	<0.0023	<0.0023				
Feb-22	Flow rate	(m3/s)	Continuous									
Feb-22	Mercury	(mg/m3)	Every 6 months	1	Aug - Oct 2021	<0.001	<0.001	<0.001				
Feb-22	Moisture	(%)	Continuous									See note at end of report regarding installation of continuous monitoring instrumentation.
Feb-22	Oxygen (O2)	(%)	Continuous									
Feb-22	Solid Particles	(mg/m3)	Quarterly	1	Aug - Oct 2021	4.3	4.3	4.3				
Feb-22	Temperature	(°C)	Continuous									
Feb-22	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months	1	Aug - Oct 2021	0.065	0.065	0.065				

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 & Analyzed	Date Sampled	Lowest Sample Value	Mean of Samples	Highest Sample Value	99 Percentile Concentration Limit	100 Percentile Concentration Limit	Exceedance (yes/no)	Comments
Feb-22	Cadmium	(mg/m3)	Every 6 months	1	Aug - Oct 2021	<0.0026	<0.0026	<0.0026				
Feb-22	Carbon dioxide	(%)	Every 6 months	1	Aug - Oct 2021	11.4	11.4	11.4				
Feb-22	Chlorine	(mg/m3)	Every 6 months	1	Aug - Oct 2021	<0.11	<0.11	<0.11				
Feb-22	Flow rate	(m3/s)	Continuous									
Feb-22	Fluorine	(mg/m3)	Every 6 months	1	Aug - Oct 2021	9.58	9.58	9.58				
Feb-22	Hydrogen chloride	(mg/m3)	Every 6 months	1	Aug - Oct 2021	<0.36	<0.36	<0.36				
Feb-22	Mercury	(mg/m3)	Every 6 months	1	Aug - Oct 2021	<0.0011	<0.0011	<0.0011				See note at end of report regarding installation of continuous monitoring instrumentation.
Feb-22	Moisture	(%)	Continuous									
Feb-22	Oxygen (O2)	(%)	Continuous									
Feb-22	Solid Particles	(mg/m3)	Quarterly	1	Aug - Oct 2021	16.7	16.7	16.7				
Feb-22	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months	1	Aug - Oct 2021	1.4	1.4	1.4				
Feb-22	Temperature	(°C)	Continuous									
Feb-22	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months	1	Aug - Oct 2021	0.107	0.107	0.107				
Feb-22	VOC's as n-propane equivalent	(mg/m3)	Every 6 months	1	Aug - Oct 2021	<2.66	<2.66	<2.66				

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
Feb-22	Cadmium	(mg/m3)	Every 6 months	1	Aug - Oct 2021	<0.001	<0.001	<0.001				
Feb-22	Flow rate	(m3/s)	Continuous									
Feb-22	Mercury	(mg/m3)	Every 6 months	1	Aug - Oct 2021	<0.0005	<0.0005	<0.0005				
Feb-22	Moisture	(%)	Continuous									See note at end of report regarding installation of continuous monitoring instrumentation.
Feb-22	Oxygen (O2)	(%)	Continuous									
Feb-22	Solid Particles	(mg/m3)	Quarterly	1	Aug - Oct 2021	14.0	14.0	14.0				
Feb-22	Temperature	(°C)	Continuous									
Feb-22	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months	1	Aug - Oct 2021	0.302	0.302	0.302				

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
Feb-22	Cadmium	(mg/m3)	Every 6 months	1	Aug - Oct 2021	<0.0024	<0.0024	<0.0024				
Feb-22	Carbon dioxide	(%)	Every 6 months	1	Aug - Oct 2021	10.9	10.9	10.9				
Feb-22	Chlorine	(mg/m3)	Every 6 months	1	Aug - Oct 2021	<0.08	<0.08	<0.08				
Feb-22	Flow rate	(m3/s)	Continuous									
Feb-22	Fluorine	(mg/m3)	Every 6 months	1	Aug - Oct 2021	6.1	6.1	6.1				
Feb-22	Hydrogen chloride	(mg/m3)	Every 6 months	1	Aug - Oct 2021	<0.53	<0.53	<0.53				
Feb-22	Mercury	(mg/m3)	Every 6 months	1	Aug - Oct 2021	<0.001	<0.001	<0.001				See note at end of report regarding installation of continuous monitoring instrumentation.
Feb-22	Moisture	(%)	Continuous									
Feb-22	Oxygen (O2)	(%)	Continuous									
Feb-22	Solid Particles	(mg/m3)	Quarterly	1	Aug - Oct 2021	41.9	41.9	41.9				
Feb-22	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months	1	Aug - Oct 2021	1.2	1.2	1.2				
Feb-22	Temperature	(°C)	Continuous									
Feb-22	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months	1	Aug - Oct 2021	0.23	0.23	0.23				
Feb-22	VOC's as n-propane equivalent	(mg/m3)	Every 6 months	1	Aug - Oct 2021	<8.28	<8.28	<8.28				

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
Feb-22	Cadmium	(mg/m3)	Every 6 months	1	Aug - Oct 2021	<0.0018	<0.0018	<0.0018				
Feb-22	Flow rate	(m3/s)	Continuous									
Feb-22	Mercury	(mg/m3)	Every 6 months	1	Aug - Oct 2021	<0.0008	<0.0008	<0.0008				
Feb-22	Moisture	(%)	Continuous									See note at end of report regarding installation of continuous monitoring instrumentation.
Feb-22	Oxygen (O2)	(%)	Continuous									
Feb-22	Solid Particles	(mg/m3)	Quarterly	1	Aug - Oct 2021	44.5	44.5	44.5				
Feb-22	Temperature	(°C)	Continuous									
Feb-22	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months	1	Aug - Oct 2021	0.102	0.102	0.102				

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
Feb-22	Nitrogen Oxides	(mg/m3)	Continuous	98.2%	Feb-22	435	642	890			N/A	
Feb-22	Sulfur dioxide	(mg/m3)	Continuous	98.2%	Feb-22	577	791	1137			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
Feb-22	Nitrogen Oxides	(mg/m3)	Continuous	97.8%	Feb-22	469	646	894			N/A	
Feb-22	Sulfur dioxide	(mg/m3)	Continuous	97.8%	Feb-22	660	858	1138			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
Feb-22	Nitrogen Oxides	(mg/m3)	Continuous	98.4%	Feb-22	388	716	934			N/A	
Feb-22	Sulfur dioxide	(mg/m3)	Continuous	97.9%	Feb-22	600	843	1073			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
Feb-22	Nitrogen Oxides	(mg/m3)	Continuous	96.7%	Feb-22	255	583	934			N/A	
Feb-22	Sulfur dioxide	(mg/m3)	Continuous	93.9%	Feb-22	532	783	1048			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
Feb-22	Chlorine (free residual)	(mg/L)	Monthly during discharge	1	9/02/2022	<0.1	<0.1	<0.1		0.2	No	
Feb-22	Copper	(mg/L)	Monthly during discharge	1	9/02/2022	0.0036	0.0036	0.0036		0.005	No	
Feb-22	Iron	(mg/L)	Monthly during discharge	1	9/02/2022	0.108	0.108	0.108		0.3	No	
Feb-22	Oil and Grease	Visible	Continuous during discharge	100%	Feb-22	NIL	NIL	NIL				
Feb-22	Selenium	(mg/L)	Monthly during discharge	1	9/02/2022	0.0026	0.0026	0.0026		0.005	No	
Feb-22	Temperature	(°C)	Continuous during discharge	100%	Feb-22	26.8	30.5	36.3	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
Feb-22	Aluminium	(mg/L)	Monthly during discharge	1	9/02/2022	0.029	0.029	0.029				
Feb-22	Ammonia	(mg/L)	Monthly during discharge	1	9/02/2022	0.08	0.08	0.08				
Feb-22	Arsenic (III)	(mg/L)	Monthly during discharge	1	9/02/2022	<0.005	<0.005	<0.005				
Feb-22	Arsenic (V)	(mg/L)	Monthly during discharge	1	9/02/2022	0.0082	0.0082	0.0082				
Feb-22	Cadmium	(mg/L)	Monthly during discharge	1	9/02/2022	0.00013	0.00013	0.00013				
Feb-22	Chromium (trivalent)	(mg/L)	Monthly during discharge	1	9/02/2022	0.001	0.001	0.001				
Feb-22	Chromium (VI) Compounds	(mg/L)	Monthly during discharge	1	9/02/2022	0.027	0.027	0.027				
Feb-22	Copper	(mg/L)	Monthly during discharge	1	9/02/2022	0.0161	0.0161	0.0161				
Feb-22	Iron	(mg/L)	Monthly during discharge	1	9/02/2022	0.033	0.033	0.033				
Feb-22	Lead	(mg/L)	Monthly during discharge	1	9/02/2022	0.0008	0.0008	0.0008				
Feb-22	Manganese	(mg/L)	Monthly during discharge	1	9/02/2022	0.0056	0.0056	0.0056				
Feb-22	Nickel	(mg/L)	Monthly during discharge	1	9/02/2022	0.0006	0.0006	0.0006				
Feb-22	Nitrate + nitrite (oxidised nitrogen)	(mg/L)	Monthly during discharge	1	9/02/2022	0.26	0.26	0.26				
Feb-22	Nitrogen	(mg/L)	Monthly during discharge	1	9/02/2022	<0.5	<0.5	<0.5				
Feb-22	pH	pH	Monthly during discharge	1	9/02/2022	8.70	8.70	8.70		6.5 - 9.5	No	
Feb-22	Phosphorus	(mg/L)	Monthly during discharge	1	9/02/2022	0.06	0.06	0.06				
Feb-22	Reactive Phosphorus	(mg/L)	Monthly during discharge	1	9/02/2022	0.05	0.05	0.05				
Feb-22	Selenium	(mg/L)	Monthly during discharge	1	9/02/2022	0.112	0.112	0.112				
Feb-22	Total Kjeldahl Nitrogen	(mg/L)	Monthly during discharge	1	9/02/2022	<0.5	<0.5	<0.5				
Feb-22	Total Suspended Solids	(mg/L)	Monthly during discharge	1	9/02/2022	<2	<2	<2		50	No	
Feb-22	Vanadium	(mg/L)	Monthly during discharge	1	9/02/2022	0.0837	0.0837	0.0837				
Feb-22	Zinc	(mg/L)	Monthly during discharge	1	9/02/2022	0.003	0.003	0.003				

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
Feb-22	Aluminium	(mg/L)	Monthly during discharge	1	9/02/2022				No			
Feb-22	Ammonia	(mg/L)	Monthly during discharge	1	9/02/2022				No			
Feb-22	Arsenic (III)	(mg/L)	Monthly during discharge	1	9/02/2022				No			
Feb-22	Arsenic (V)	(mg/L)	Monthly during discharge	1	9/02/2022				No			
Feb-22	Cadmium	(mg/L)	Monthly during discharge	1	9/02/2022				No			
Feb-22	Chromium (trivalent)	(mg/L)	Monthly during discharge	1	9/02/2022				No			
Feb-22	Chromium (VI) Compounds	(mg/L)	Monthly during discharge	1	9/02/2022				No			
Feb-22	Copper	(mg/L)	Monthly during discharge	1	9/02/2022				No			
Feb-22	Iron	(mg/L)	Monthly during discharge	1	9/02/2022				No			
Feb-22	Lead	(mg/L)	Monthly during discharge	1	9/02/2022				No			
Feb-22	Manganese	(mg/L)	Monthly during discharge	1	9/02/2022				No			
Feb-22	Nickel	(mg/L)	Monthly during discharge	1	9/02/2022				No			No discharge from EPA Point 24 during February 2022
Feb-22	Nitrate + nitrite (oxidised nitrogen)	(mg/L)	Monthly during discharge	1	9/02/2022				No			
Feb-22	Nitrogen	(mg/L)	Monthly during discharge	1	9/02/2022				No			
Feb-22	pH	pH	Monthly during discharge	1	9/02/2022				No	6.5 - 9.5	No	
Feb-22	Phosphorus	(mg/L)	Monthly during discharge	1	9/02/2022				No			
Feb-22	Reactive Phosphorus	(mg/L)	Monthly during discharge	1	9/02/2022				No			
Feb-22	Selenium	(mg/L)	Monthly during discharge	1	9/02/2022				No			
Feb-22	Total Kjeldahl Nitrogen	(mg/L)	Monthly during discharge	1	9/02/2022				No			
Feb-22	Total Suspended Solids	(mg/L)	Monthly during discharge	1	9/02/2022				No	50	No	
Feb-22	Vanadium	(mg/L)	Monthly during discharge	1	9/02/2022				No			
Feb-22	Zinc	(mg/L)	Monthly during discharge	1	9/02/2022				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
Feb-22	Aluminium	(mg/L)	Daily for any discharge >2 hrs						No			
Feb-22	Ammonia	(mg/L)	Daily for any discharge >2 hrs						No			
Feb-22	Arsenic (III)	(mg/L)	Daily for any discharge >2 hrs						No			
Feb-22	Arsenic (V)	(mg/L)	Daily for any discharge >2 hrs						No			
Feb-22	Cadmium	(mg/L)	Daily for any discharge >2 hrs						No			
Feb-22	Chromium (trivalent)	(mg/L)	Daily for any discharge >2 hrs						No			
Feb-22	Chromium (VI) Compounds	(mg/L)	Daily for any discharge >2 hrs						No			
Feb-22	Copper	(mg/L)	Daily for any discharge >2 hrs						No			
Feb-22	Iron	(mg/L)	Daily for any discharge >2 hrs						No			
Feb-22	Lead	(mg/L)	Daily for any discharge >2 hrs						No			
Feb-22	Manganese	(mg/L)	Daily for any discharge >2 hrs						No			No discharge from EPA Point 25 during February 2022
Feb-22	Nickel	(mg/L)	Daily for any discharge >2 hrs						No			
Feb-22	Nitrate + nitrite (oxidised nitrogen)	(mg/L)	Daily for any discharge >2 hrs						No			
Feb-22	Nitrogen	(mg/L)	Daily for any discharge >2 hrs						No			
Feb-22	pH	pH	Daily for any discharge >2 hrs						No	6.5 - 9.5	No	
Feb-22	Phosphorus	(mg/L)	Daily for any discharge >2 hrs						No			
Feb-22	Reactive Phosphorus	(mg/L)	Daily for any discharge >2 hrs						No			
Feb-22	Selenium	(mg/L)	Daily for any discharge >2 hrs						No			
Feb-22	Total Kjeldahl Nitrogen	(mg/L)	Daily for any discharge >2 hrs						No			
Feb-22	Total Suspended Solids	(mg/L)	Daily for any discharge >2 hrs						No	50	No	
Feb-22	Vanadium	(mg/L)	Daily for any discharge >2 hrs						No			
Feb-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
Feb-22	Aluminium	(mg/L)	Quarterly									
Feb-22	Ammonia	(mg/L)	Quarterly									
Feb-22	Arsenic (III)	(mg/L)	Quarterly									
Feb-22	Arsenic (V)	(mg/L)	Quarterly									
Feb-22	Cadmium	(mg/L)	Quarterly									
Feb-22	Chromium (trivalent)	(mg/L)	Quarterly									
Feb-22	Chromium (VI) Compounds	(mg/L)	Quarterly									
Feb-22	Copper	(mg/L)	Quarterly									
Feb-22	Electrical Conductivity	(us/cm)	Quarterly									
Feb-22	Iron	(mg/L)	Quarterly									Next Sampling Round Scheduled for April 2022
Feb-22	Lead	(mg/L)	Quarterly									
Feb-22	Magnesium	(mg/L)	Quarterly									
Feb-22	Manganese	(mg/L)	Quarterly									
Feb-22	Nickel	(mg/L)	Quarterly									
Feb-22	pH	pH	Quarterly									
Feb-22	Potassium	(mg/L)	Quarterly									
Feb-22	Selenium	(mg/L)	Quarterly									
Feb-22	Sodium	(mg/L)	Quarterly									
Feb-22	Standing Water Level	(m)	Quarterly									
Feb-22	Vanadium	(mg/L)	Quarterly									
Feb-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
Feb-22	Aluminium	(mg/L)	Quarterly									
Feb-22	Ammonia	(mg/L)	Quarterly									
Feb-22	Arsenic (III)	(mg/L)	Quarterly									
Feb-22	Arsenic (V)	(mg/L)	Quarterly									
Feb-22	Cadmium	(mg/L)	Quarterly									
Feb-22	Chromium (trivalent)	(mg/L)	Quarterly									
Feb-22	Chromium (VI) Compounds	(mg/L)	Quarterly									
Feb-22	Copper	(mg/L)	Quarterly									
Feb-22	Electrical Conductivity	(us/cm)	Quarterly									
Feb-22	Iron	(mg/L)	Quarterly									
Feb-22	Lead	(mg/L)	Quarterly									Next Sampling Round Scheduled for April 2022
Feb-22	Magnesium	(mg/L)	Quarterly									
Feb-22	Manganese	(mg/L)	Quarterly									
Feb-22	Nickel	(mg/L)	Quarterly									
Feb-22	pH	pH	Quarterly									
Feb-22	Potassium	(mg/L)	Quarterly									
Feb-22	Selenium	(mg/L)	Quarterly									
Feb-22	Sodium	(mg/L)	Quarterly									
Feb-22	Standing Water Level	(m)	Quarterly									
Feb-22	Vanadium	(mg/L)	Quarterly									
Feb-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
Feb-22	Aluminium	(mg/L)	Quarterly									
Feb-22	Ammonia	(mg/L)	Quarterly									
Feb-22	Arsenic (III)	(mg/L)	Quarterly									
Feb-22	Arsenic (V)	(mg/L)	Quarterly									
Feb-22	Cadmium	(mg/L)	Quarterly									
Feb-22	Chromium (trivalent)	(mg/L)	Quarterly									
Feb-22	Chromium (VI) Compounds	(mg/L)	Quarterly									
Feb-22	Copper	(mg/L)	Quarterly									
Feb-22	Electrical Conductivity	(us/cm)	Quarterly									
Feb-22	Iron	(mg/L)	Quarterly									
Feb-22	Lead	(mg/L)	Quarterly									Next Sampling Round Scheduled for April 2022
Feb-22	Magnesium	(mg/L)	Quarterly									
Feb-22	Manganese	(mg/L)	Quarterly									
Feb-22	Nickel	(mg/L)	Quarterly									
Feb-22	pH	pH	Quarterly									
Feb-22	Potassium	(mg/L)	Quarterly									
Feb-22	Selenium	(mg/L)	Quarterly									
Feb-22	Sodium	(mg/L)	Quarterly									
Feb-22	Standing Water Level	(m)	Quarterly									
Feb-22	Vanadium	(mg/L)	Quarterly									
Feb-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
Feb-22	Aluminium	(mg/L)	Quarterly									
Feb-22	Ammonia	(mg/L)	Quarterly									
Feb-22	Arsenic (III)	(mg/L)	Quarterly									
Feb-22	Arsenic (V)	(mg/L)	Quarterly									
Feb-22	Cadmium	(mg/L)	Quarterly									
Feb-22	Chromium (trivalent)	(mg/L)	Quarterly									
Feb-22	Chromium (VI) Compounds	(mg/L)	Quarterly									
Feb-22	Copper	(mg/L)	Quarterly									
Feb-22	Electrical Conductivity	(us/cm)	Quarterly									
Feb-22	Iron	(mg/L)	Quarterly									
Feb-22	Lead	(mg/L)	Quarterly									Next Sampling Round Scheduled for April 2022
Feb-22	Magnesium	(mg/L)	Quarterly									
Feb-22	Manganese	(mg/L)	Quarterly									
Feb-22	Nickel	(mg/L)	Quarterly									
Feb-22	pH	pH	Quarterly									
Feb-22	Potassium	(mg/L)	Quarterly									
Feb-22	Selenium	(mg/L)	Quarterly									
Feb-22	Sodium	(mg/L)	Quarterly									
Feb-22	Standing Water Level	(m)	Quarterly									
Feb-22	Vanadium	(mg/L)	Quarterly									
Feb-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
Feb-22	Aluminium	(mg/L)	Quarterly									
Feb-22	Ammonia	(mg/L)	Quarterly									
Feb-22	Arsenic (III)	(mg/L)	Quarterly									
Feb-22	Arsenic (V)	(mg/L)	Quarterly									
Feb-22	Cadmium	(mg/L)	Quarterly									
Feb-22	Chromium (trivalent)	(mg/L)	Quarterly									
Feb-22	Chromium (VI) Compounds	(mg/L)	Quarterly									
Feb-22	Copper	(mg/L)	Quarterly									
Feb-22	Electrical Conductivity	(us/cm)	Quarterly									
Feb-22	Iron	(mg/L)	Quarterly									Next Sampling Round Scheduled for April 2022
Feb-22	Lead	(mg/L)	Quarterly									
Feb-22	Magnesium	(mg/L)	Quarterly									
Feb-22	Manganese	(mg/L)	Quarterly									
Feb-22	Nickel	(mg/L)	Quarterly									
Feb-22	pH	pH	Quarterly									
Feb-22	Potassium	(mg/L)	Quarterly									
Feb-22	Selenium	(mg/L)	Quarterly									
Feb-22	Sodium	(mg/L)	Quarterly									
Feb-22	Standing Water Level	(m)	Quarterly									
Feb-22	Vanadium	(mg/L)	Quarterly									
Feb-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.