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	March 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
Mar-22	Cadmium	(mg/m3)	Every 6 months							0.2		
Mar-22	Chlorine	(mg/m3)	Every 6 months							20		
Mar-22	Fluorine	(mg/m3)	Every 6 months							30		
Mar-22	Hydrogen chloride	(mg/m3)	Every 6 months							50		
Mar-22	Mercury	(mg/m3)	Every 6 months							0.05		
Mar-22	Nitrogen Oxides	(mg/m3)	Continuous	98.1%	Mar-22	298	632	833	850	980	No	
Mar-22	Solid Particles	(mg/m3)	Quarterly	1	Nov-2021	1.2	1.2	1.2		50	No	
Mar-22	Sulfur dioxide	(mg/m3)	Continuous	98.1%	Mar-22	541	685	889	1400	1700	No	
Mar-22	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months							100		
Mar-22	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months							0.75		
Mar-22	VOC's as n-propane equivalent	(mg/m3)	Every 6 months							10		

POINT 3 **Combined air emissions from boiler 6 via Points 8 to 11 to Point 1 marked and shown as EPA ID 3 on The Plans ("VX837351-1 AND "VX837351-2" 03/06/2020 EPA REFERENCE DOC20/476695 AND DOC20/476695-1).**

Month	Pollutant	Unit of Measure	Sample/Measurement Frequency	Samples Collected & Analysed	Date Sampled	Lowest Sample Value	Mean of Samples	Highest Sample Value	99 Percentile Concentration Limit	100 Percentile Concentration Limit	Exceed 100% Limit (yes/no)	Comments
Mar-22	Cadmium	(mg/m3)	Every 6 months							0.2		
Mar-22	Chlorine	(mg/m3)	Every 6 months							20		
Mar-22	Fluorine	(mg/m3)	Every 6 months							30		
Mar-22	Hydrogen chloride	(mg/m3)	Every 6 months							50		
Mar-22	Mercury	(mg/m3)	Every 6 months							0.05		
Mar-22	Nitrogen Oxides	(mg/m3)	Continuous	98.6%	Mar-22	307	667	923	850	980	No	
Mar-22	Solid Particles	(mg/m3)	Quarterly	1	Nov-2021	42.6	42.6	42.6		50	No	
Mar-22	Sulfur dioxide	(mg/m3)	Continuous	98.6%	Mar-22	501	669	951	1400	1700	No	
Mar-22	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months							100		
Mar-22	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months							0.75		
Mar-22	VOC's as n-propane equivalent	(mg/m3)	Every 6 months							10		

POINT 4 **Boiler number 5 exhaust - duct A marked and shown as EPA ID 4 on The Plans ("VX837351-1 AND "VX837351-2" 03/06/2020 EPA REFERENCE DOC20/476695 AND DOC20/476695-1).**

Month	Pollutant	Unit of Measure	Sample/Measurement Frequency	Samples Collected & Analysed	Date Sampled	Lowest Sample Value	Mean of Samples	Highest Sample Value	99 Percentile Concentration Limit	100 Percentile Concentration Limit	Exceedance (yes/no)	Comments
Mar-22	Cadmium	(mg/m3)	Every 6 months									
Mar-22	Carbon dioxide	(%)	Every 6 months									
Mar-22	Chlorine	(mg/m3)	Every 6 months									
Mar-22	Flow rate	(m3/s)	Continuous									
Mar-22	Fluorine	(mg/m3)	Every 6 months									
Mar-22	Hydrogen chloride	(mg/m3)	Every 6 months									
Mar-22	Mercury	(mg/m3)	Every 6 months									See note at end of report regarding installation of continuous monitoring instrumentation.
Mar-22	Moisture	(%)	Continuous									
Mar-22	Oxygen (O2)	(%)	Continuous									
Mar-22	Solid Particles	(mg/m3)	Quarterly	1	Nov-2021	1.8	1.8	1.8				
Mar-22	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months									
Mar-22	Temperature	(°C)	Continuous									
Mar-22	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months									
Mar-22	VOC's as n-propane equivalent	(mg/m3)	Every 6 months									

POINT 5 **Boiler number 5 exhaust - duct B marked and shown as EPA ID 5 on The Plans ("VX837351-1 AND "VX837351-2" 03/06/2020 EPA REFERENCE DOC20/476695 AND DOC20/476695-1).**

Month	Pollutant	Unit of Measure	Sample/Measurement Frequency	Samples Collected & Analysed	Date Sampled	Lowest Sample Value	Mean of Samples	Highest Sample Value	99 Percentile Concentration Limit	100 Percentile Concentration Limit	Exceedance (yes/no)	Comments
Mar-22	Cadmium	(mg/m3)	Every 6 months									
Mar-22	Flow rate	(m3/s)	Continuous									
Mar-22	Mercury	(mg/m3)	Every 6 months									
Mar-22	Moisture	(%)	Continuous									See note at end of report regarding installation of continuous monitoring instrumentation.
Mar-22	Oxygen (O2)	(%)	Continuous									
Mar-22	Solid Particles	(mg/m3)	Quarterly	1	Nov-2021	0.5	0.5	0.5				
Mar-22	Temperature	(°C)	Continuous									
Mar-22	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months									

POINT 6 **Boiler number 5 exhaust - duct C marked and shown as EPA ID 6 on The Plans ("VX837351-1 AND "VX837351-2" 03/06/2020 EPA REFERENCE DOC20/476695 AND DOC20/476695-1).**

Month	Pollutant	Unit of Measure	Sample/Measurement Frequency	Samples Collected & Analysed	Date Sampled	Lowest Sample Value	Mean of Samples	Highest Sample Value	99 Percentile Concentration Limit	100 Percentile Concentration Limit	Exceedance (yes/no)	Comments
Mar-22	Cadmium	(mg/m3)	Every 6 months									
Mar-22	Carbon dioxide	(%)	Every 6 months									
Mar-22	Chlorine	(mg/m3)	Every 6 months									
Mar-22	Flow rate	(m3/s)	Continuous									
Mar-22	Fluorine	(mg/m3)	Every 6 months									
Mar-22	Hydrogen chloride	(mg/m3)	Every 6 months									
Mar-22	Mercury	(mg/m3)	Every 6 months									See note at end of report regarding installation of continuous monitoring instrumentation.
Mar-22	Moisture	(%)	Continuous									
Mar-22	Oxygen (O2)	(%)	Continuous									
Mar-22	Solid Particles	(mg/m3)	Quarterly	1	Nov-2021	1.8	1.8	1.8				
Mar-22	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months									
Mar-22	Temperature	(°C)	Continuous									
Mar-22	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months									
Mar-22	VOC's as n-propane equivalent	(mg/m3)	Every 6 months									

POINT 7 **Boiler number 5 exhaust - duct D marked and shown as EPA ID 7 on The Plans ("VX837351-1 AND "VX837351-2" 03/06/2020 EPA REFERENCE DOC20/476695 AND DOC20/476695-1).**

Month	Pollutant	Unit of Measure	Sample/Measurement Frequency	Samples Collected & Analysed	Date Sampled	Lowest Sample Value	Mean of Samples	Highest Sample Value	99 Percentile Concentration Limit	100 Percentile Concentration Limit	Exceedance (yes/no)	Comments
Mar-22	Cadmium	(mg/m3)	Every 6 months									
Mar-22	Flow rate	(m3/s)	Continuous									
Mar-22	Mercury	(mg/m3)	Every 6 months									
Mar-22	Moisture	(%)	Continuous									See note at end of report regarding installation of continuous monitoring instrumentation.
Mar-22	Oxygen (O2)	(%)	Continuous									
Mar-22	Solid Particles	(mg/m3)	Quarterly	1	Nov-2021	0.9	0.9	0.9				
Mar-22	Temperature	(°C)	Continuous									
Mar-22	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months									

POINT 8 **Boiler number 6 exhaust - duct A marked and shown as EPA ID 8 on The Plans ("VX837351-1 AND "VX837351-2" 03/06/2020 EPA REFERENCE DOC20/476695 AND DOC20/476695-1).**

Month	Pollutant	Unit of Measure	Sample/Measurement Frequency	Samples Collected & Analysed	Date Sampled	Lowest Sample Value	Mean of Samples	Highest Sample Value	99 Percentile Concentration Limit	100 Percentile Concentration Limit	Exceedance (yes/no)	Comments
Mar-22	Cadmium	(mg/m3)	Every 6 months									
Mar-22	Carbon dioxide	(%)	Every 6 months									
Mar-22	Chlorine	(mg/m3)	Every 6 months									
Mar-22	Flow rate	(m3/s)	Continuous									
Mar-22	Fluorine	(mg/m3)	Every 6 months									
Mar-22	Hydrogen chloride	(mg/m3)	Every 6 months									
Mar-22	Mercury	(mg/m3)	Every 6 months									See note at end of report regarding installation of continuous monitoring instrumentation.
Mar-22	Moisture	(%)	Continuous									
Mar-22	Oxygen (O2)	(%)	Continuous									
Mar-22	Solid Particles	(mg/m3)	Quarterly	1	Nov-2021	9.0	9.0	9.0				
Mar-22	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months									
Mar-22	Temperature	(°C)	Continuous									
Mar-22	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months									
Mar-22	VOC's as n-propane equivalent	(mg/m3)	Every 6 months									

POINT 9 **Boiler number 6 exhaust - duct B marked and shown as EPA ID 9 on The Plans ("VX837351-1 AND "VX837351-2" 03/06/2020 EPA REFERENCE DOC20/476695 AND DOC20/476695-1).**

Month	Pollutant	Unit of Measure	Sample/Measurement Frequency	Samples Collected & Analysed	Date Sampled	Lowest Sample Value	Mean of Samples	Highest Sample Value	99 Percentile Concentration Limit	100 Percentile Concentration Limit	Exceedance (yes/no)	Comments
Mar-22	Cadmium	(mg/m3)	Every 6 months									
Mar-22	Flow rate	(m3/s)	Continuous									
Mar-22	Mercury	(mg/m3)	Every 6 months									
Mar-22	Moisture	(%)	Continuous									See note at end of report regarding installation of continuous monitoring instrumentation.
Mar-22	Oxygen (O2)	(%)	Continuous									
Mar-22	Solid Particles	(mg/m3)	Quarterly	1	Nov-2021	9.5	9.5	9.5				
Mar-22	Temperature	(°C)	Continuous									
Mar-22	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months									

POINT 10 **Boiler number 6 exhaust - duct C marked and shown as EPA ID 10 on The Plans ("VX837351-1 AND "VX837351-2" 03/06/2020 EPA REFERENCE DOC20/476695 AND DOC20/476695-1).**

Month	Pollutant	Unit of Measure	Sample/Measurement Frequency	Samples Collected & Analysed	Date Sampled	Lowest Sample Value	Mean of Samples	Highest Sample Value	99 Percentile Concentration Limit	100 Percentile Concentration Limit	Exceedance (yes/no)	Comments
Mar-22	Cadmium	(mg/m3)	Every 6 months									
Mar-22	Carbon dioxide	(%)	Every 6 months									
Mar-22	Chlorine	(mg/m3)	Every 6 months									
Mar-22	Flow rate	(m3/s)	Continuous									
Mar-22	Fluorine	(mg/m3)	Every 6 months									
Mar-22	Hydrogen chloride	(mg/m3)	Every 6 months									
Mar-22	Mercury	(mg/m3)	Every 6 months									See note at end of report regarding installation of continuous monitoring instrumentation.
Mar-22	Moisture	(%)	Continuous									
Mar-22	Oxygen (O2)	(%)	Continuous									
Mar-22	Solid Particles	(mg/m3)	Quarterly	1	Nov-2021	0.5	0.5	0.5				
Mar-22	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months									
Mar-22	Temperature	(°C)	Continuous									
Mar-22	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months									
Mar-22	VOC's as n-propane equivalent	(mg/m3)	Every 6 months									

POINT 11 **Boiler number 6 exhaust - duct D marked and shown as EPA ID 11 on The Plans ("VX837351-1 AND "VX837351-2" 03/06/2020 EPA REFERENCE DOC20/476695 AND DOC20/476695-1).**

Month	Pollutant	Unit of Measure	Sample/Measurement Frequency	Samples Collected & Analysed	Date Sampled	Lowest Sample Value	Mean of Samples	Highest Sample Value	99 Percentile Concentration Limit	100 Percentile Concentration Limit	Exceedance (yes/no)	Comments
Mar-22	Cadmium	(mg/m3)	Every 6 months									
Mar-22	Flow rate	(m3/s)	Continuous									
Mar-22	Mercury	(mg/m3)	Every 6 months									
Mar-22	Moisture	(%)	Continuous									See note at end of report regarding installation of continuous monitoring instrumentation.
Mar-22	Oxygen (O2)	(%)	Continuous									
Mar-22	Solid Particles	(mg/m3)	Quarterly	1	Nov-2021	116.0	116.0	116.0				
Mar-22	Temperature	(°C)	Continuous									
Mar-22	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months									

POINT 12 **Boiler number 5 combined exhaust - duct A and B (points 4 and 5) marked and shown as EPA ID 12 on The Plans ("VX837351-1 AND "VX837351-2" 03/06/2020 EPA REFERENCE DOC20/476695 AND DOC20/476695-1).**

Month	Pollutant	Unit of Measure	Sample/Measurement Frequency	Samples Collected & Analysed	Date Sampled	Lowest Sample Value	Mean of Samples	Highest Sample Value	99 Percentile Concentration Limit	100 Percentile Concentration Limit	Exceedance (yes/no)	Comments
Mar-22	Nitrogen Oxides	(mg/m3)	Continuous	100.0%	Mar-22	270	597	730			N/A	
Mar-22	Sulfur dioxide	(mg/m3)	Continuous	100.0%	Mar-22	496	647	860			N/A	

POINT 13 **Boiler number 5 combined exhaust - duct C and D (points 6 and 7) marked and shownas 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
Mar-22	Nitrogen Oxides	(mg/m3)	Continuous	96.2%	Mar-22	327	668	954			N/A	
Mar-22	Sulfur dioxide	(mg/m3)	Continuous	96.2%	Mar-22	565	722	932			N/A	

POINT 14 **Boiler number 6 combined exhaust - duct A and B (points 8 and 9) marked and shownas 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
Mar-22	Nitrogen Oxides	(mg/m3)	Continuous	97.2%	Mar-22	369	736	1260			N/A	
Mar-22	Sulfur dioxide	(mg/m3)	Continuous	97.2%	Mar-22	475	691	1185			N/A	

POINT 15 **Boiler number 6 combined exhaust - duct C and D (points 10 and 11) marked and shownas 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
Mar-22	Nitrogen Oxides	(mg/m3)	Continuous	100.0%	Mar-22	244	599	876			N/A	
Mar-22	Sulfur dioxide	(mg/m3)	Continuous	100.0%	Mar-22	517	646	853			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
Mar-22	Chlorine (free residual)	(mg/L)	Monthly during discharge	1	10/03/2022	<0.1	<0.1	<0.1		**0.2**	No	
Mar-22	Copper	(mg/L)	Monthly during discharge	1	10/03/2022	0.0040	0.0040	0.0040		**0.005**	No	
Mar-22	Iron	(mg/L)	Monthly during discharge	1	10/03/2022	0.421	0.421	0.421		**0.3**	Yes	EPA notified as per licence 761 condition R4.1.
Mar-22	Oil and Grease	Visible	Continuous during discharge	100%	Mar-22	NIL	NIL	NIL				
Mar-22	Selenium	(mg/L)	Monthly during discharge	1	10/03/2022	<0.002	<0.002	<0.002		**0.005**	No	
Mar-22	Temperature	(°C)	Continuous during discharge	100%	Mar-22	26.7	29.6	34.3	**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
Mar-22	Aluminium	(mg/L)	Monthly during discharge	1	10/03/2022	0.147	0.147	0.147				
Mar-22	Ammonia	(mg/L)	Monthly during discharge	1	10/03/2022	0.25	0.25	0.25				
Mar-22	Arsenic (III)	(mg/L)	Monthly during discharge	1	10/03/2022	<0.005	<0.005	<0.005				
Mar-22	Arsenic (V)	(mg/L)	Monthly during discharge	1	10/03/2022	0.0059	0.0059	0.0059				
Mar-22	Cadmium	(mg/L)	Monthly during discharge	1	10/03/2022	<0.00005	<0.00005	<0.00005				
Mar-22	Chromium (trivalent)	(mg/L)	Monthly during discharge	1	10/03/2022	0.006	0.006	0.006				
Mar-22	Chromium (VI) Compounds	(mg/L)	Monthly during discharge	1	10/03/2022	0.012	0.012	0.012				
Mar-22	Copper	(mg/L)	Monthly during discharge	1	10/03/2022	0.0075	0.0075	0.0075				
Mar-22	Iron	(mg/L)	Monthly during discharge	1	10/03/2022	0.091	0.091	0.091				
Mar-22	Lead	(mg/L)	Monthly during discharge	1	10/03/2022	0.0004	0.0004	0.0004				
Mar-22	Manganese	(mg/L)	Monthly during discharge	1	10/03/2022	0.0094	0.0094	0.0094				
Mar-22	Nickel	(mg/L)	Monthly during discharge	1	10/03/2022	<0.0005	<0.0005	<0.0005				
Mar-22	Nitrate + nitrite (oxidised nitrogen)	(mg/L)	Monthly during discharge	1	10/03/2022	0.22	0.22	0.22				
Mar-22	Nitrogen	(mg/L)	Monthly during discharge	1	10/03/2022	0.80	0.80	0.80				
Mar-22	pH	pH	Monthly during discharge	1	10/03/2022	8.36	8.36	8.36		**6.5 - 9.5**	No	
Mar-22	Phosphorus	(mg/L)	Monthly during discharge	1	10/03/2022	0.08	0.08	0.08				
Mar-22	Reactive Phosphorus	(mg/L)	Monthly during discharge	1	10/03/2022	0.04	0.04	0.04				
Mar-22	Selenium	(mg/L)	Monthly during discharge	1	10/03/2022	0.0419	0.0419	0.0419				
Mar-22	Total Kjeldahl Nitrogen	(mg/L)	Monthly during discharge	1	10/03/2022	0.6	0.6	0.6				
Mar-22	Total Suspended Solids	(mg/L)	Monthly during discharge	1	10/03/2022	6	6	6		**50**	No	
Mar-22	Vanadium	(mg/L)	Monthly during discharge	1	10/03/2022	0.0452	0.0452	0.0452				
Mar-22	Zinc	(mg/L)	Monthly during discharge	1	10/03/2022	0.008	0.008	0.008				

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
Mar-22	Aluminium	(mg/L)	Monthly during discharge	1	10/03/2022				No			
Mar-22	Ammonia	(mg/L)	Monthly during discharge	1	10/03/2022				No			
Mar-22	Arsenic (III)	(mg/L)	Monthly during discharge	1	10/03/2022				No			
Mar-22	Arsenic (V)	(mg/L)	Monthly during discharge	1	10/03/2022				No			
Mar-22	Cadmium	(mg/L)	Monthly during discharge	1	10/03/2022				No			
Mar-22	Chromium (trivalent)	(mg/L)	Monthly during discharge	1	10/03/2022				No			
Mar-22	Chromium (VI) Compounds	(mg/L)	Monthly during discharge	1	10/03/2022				No			
Mar-22	Copper	(mg/L)	Monthly during discharge	1	10/03/2022				No			
Mar-22	Iron	(mg/L)	Monthly during discharge	1	10/03/2022				No			
Mar-22	Lead	(mg/L)	Monthly during discharge	1	10/03/2022				No			
Mar-22	Manganese	(mg/L)	Monthly during discharge	1	10/03/2022				No			
Mar-22	Nickel	(mg/L)	Monthly during discharge	1	10/03/2022				No			No discharge from EPA Point 24 during March 2022
Mar-22	Nitrate + nitrite (oxidised nitrogen)	(mg/L)	Monthly during discharge	1	10/03/2022				No			
Mar-22	Nitrogen	(mg/L)	Monthly during discharge	1	10/03/2022				No			
Mar-22	pH	pH	Monthly during discharge	1	10/03/2022				No	6.5 - 9.5	No	
Mar-22	Phosphorus	(mg/L)	Monthly during discharge	1	10/03/2022				No			
Mar-22	Reactive Phosphorus	(mg/L)	Monthly during discharge	1	10/03/2022				No			
Mar-22	Selenium	(mg/L)	Monthly during discharge	1	10/03/2022				No			
Mar-22	Total Kjeldahl Nitrogen	(mg/L)	Monthly during discharge	1	10/03/2022				No			
Mar-22	Total Suspended Solids	(mg/L)	Monthly during discharge	1	10/03/2022				No	50	No	
Mar-22	Vanadium	(mg/L)	Monthly during discharge	1	10/03/2022				No			
Mar-22	Zinc	(mg/L)	Monthly during discharge	1	10/03/2022				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
Mar-22	Aluminium	(mg/L)	Daily for any discharge >2 hrs	1	31/3/2022				Yes			
Mar-22	Ammonia	(mg/L)	Daily for any discharge >2 hrs	1	31/3/2022				Yes			
Mar-22	Arsenic (III)	(mg/L)	Daily for any discharge >2 hrs	1	31/3/2022				Yes			
Mar-22	Arsenic (V)	(mg/L)	Daily for any discharge >2 hrs	1	31/3/2022				Yes			
Mar-22	Cadmium	(mg/L)	Daily for any discharge >2 hrs	1	31/3/2022				Yes			
Mar-22	Chromium (trivalent)	(mg/L)	Daily for any discharge >2 hrs	1	31/3/2022				Yes			
Mar-22	Chromium (VI) Compounds	(mg/L)	Daily for any discharge >2 hrs	1	31/3/2022				Yes			
Mar-22	Copper	(mg/L)	Daily for any discharge >2 hrs	1	31/3/2022				Yes			
Mar-22	Iron	(mg/L)	Daily for any discharge >2 hrs	1	31/3/2022				Yes			
Mar-22	Lead	(mg/L)	Daily for any discharge >2 hrs	1	31/3/2022				Yes			
Mar-22	Manganese	(mg/L)	Daily for any discharge >2 hrs	1	31/3/2022				Yes			Results not available at time of publishing all results will be provided when they become available.
Mar-22	Nickel	(mg/L)	Daily for any discharge >2 hrs	1	31/3/2022				Yes			
Mar-22	Nitrate + nitrite (oxidised nitrogen)	(mg/L)	Daily for any discharge >2 hrs	1	31/3/2022				Yes			
Mar-22	Nitrogen	(mg/L)	Daily for any discharge >2 hrs	1	31/3/2022				Yes			
Mar-22	pH	pH	Daily for any discharge >2 hrs	1	31/3/2022				Yes	6.5 - 9.5	No	
Mar-22	Phosphorus	(mg/L)	Daily for any discharge >2 hrs	1	31/3/2022				Yes			
Mar-22	Reactive Phosphorus	(mg/L)	Daily for any discharge >2 hrs	1	31/3/2022				Yes			
Mar-22	Selenium	(mg/L)	Daily for any discharge >2 hrs	1	31/3/2022				Yes			
Mar-22	Total Kjeldahl Nitrogen	(mg/L)	Daily for any discharge >2 hrs	1	31/3/2022				Yes			
Mar-22	Total Suspended Solids	(mg/L)	Daily for any discharge >2 hrs	1	31/3/2022				Yes	50	No	
Mar-22	Vanadium	(mg/L)	Daily for any discharge >2 hrs	1	31/3/2022				Yes			
Mar-22	Zinc	(mg/L)	Daily for any discharge >2 hrs	1	31/3/2022				Yes			

POINT 30 **Groundwater quality monitoring bore marked and shown as EPA ID 30 on The Plans ("VX837351-1 AND "VX837351-2" 03/06/2020 EPA REFERENCE DOC20/476695 AND DOC20/476695-1).**

Month	Pollutant	Unit of Measure	Sample/Measurement Frequency	Samples Collected & Analysed	Date Sampled	Lowest Sample Value	Mean of Samples	Highest Sample Value	99 Percentile Concentration Limit	100 Percentile Concentration Limit	Exceedance (yes/no)	Comments
Mar-22	Aluminium	(mg/L)	Quarterly									
Mar-22	Ammonia	(mg/L)	Quarterly									
Mar-22	Arsenic (III)	(mg/L)	Quarterly									
Mar-22	Arsenic (V)	(mg/L)	Quarterly									
Mar-22	Cadmium	(mg/L)	Quarterly									
Mar-22	Chromium (trivalent)	(mg/L)	Quarterly									
Mar-22	Chromium (VI) Compounds	(mg/L)	Quarterly									
Mar-22	Copper	(mg/L)	Quarterly									
Mar-22	Electrical Conductivity	(us/cm)	Quarterly									
Mar-22	Iron	(mg/L)	Quarterly									Next Sampling Round Scheduled for April 2022
Mar-22	Lead	(mg/L)	Quarterly									
Mar-22	Magnesium	(mg/L)	Quarterly									
Mar-22	Manganese	(mg/L)	Quarterly									
Mar-22	Nickel	(mg/L)	Quarterly									
Mar-22	pH	pH	Quarterly									
Mar-22	Potassium	(mg/L)	Quarterly									
Mar-22	Selenium	(mg/L)	Quarterly									
Mar-22	Sodium	(mg/L)	Quarterly									
Mar-22	Standing Water Level	(m)	Quarterly									
Mar-22	Vanadium	(mg/L)	Quarterly									
Mar-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
Mar-22	Aluminium	(mg/L)	Quarterly									
Mar-22	Ammonia	(mg/L)	Quarterly									
Mar-22	Arsenic (III)	(mg/L)	Quarterly									
Mar-22	Arsenic (V)	(mg/L)	Quarterly									
Mar-22	Cadmium	(mg/L)	Quarterly									
Mar-22	Chromium (trivalent)	(mg/L)	Quarterly									
Mar-22	Chromium (VI) Compounds	(mg/L)	Quarterly									
Mar-22	Copper	(mg/L)	Quarterly									
Mar-22	Electrical Conductivity	(us/cm)	Quarterly									
Mar-22	Iron	(mg/L)	Quarterly									
Mar-22	Lead	(mg/L)	Quarterly									Next Sampling Round Scheduled for April 2022
Mar-22	Magnesium	(mg/L)	Quarterly									
Mar-22	Manganese	(mg/L)	Quarterly									
Mar-22	Nickel	(mg/L)	Quarterly									
Mar-22	pH	pH	Quarterly									
Mar-22	Potassium	(mg/L)	Quarterly									
Mar-22	Selenium	(mg/L)	Quarterly									
Mar-22	Sodium	(mg/L)	Quarterly									
Mar-22	Standing Water Level	(m)	Quarterly									
Mar-22	Vanadium	(mg/L)	Quarterly									
Mar-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
Mar-22	Aluminium	(mg/L)	Quarterly									
Mar-22	Ammonia	(mg/L)	Quarterly									
Mar-22	Arsenic (III)	(mg/L)	Quarterly									
Mar-22	Arsenic (V)	(mg/L)	Quarterly									
Mar-22	Cadmium	(mg/L)	Quarterly									
Mar-22	Chromium (trivalent)	(mg/L)	Quarterly									
Mar-22	Chromium (VI) Compounds	(mg/L)	Quarterly									
Mar-22	Copper	(mg/L)	Quarterly									
Mar-22	Electrical Conductivity	(us/cm)	Quarterly									
Mar-22	Iron	(mg/L)	Quarterly									
Mar-22	Lead	(mg/L)	Quarterly									Next Sampling Round Scheduled for April 2022
Mar-22	Magnesium	(mg/L)	Quarterly									
Mar-22	Manganese	(mg/L)	Quarterly									
Mar-22	Nickel	(mg/L)	Quarterly									
Mar-22	pH	pH	Quarterly									
Mar-22	Potassium	(mg/L)	Quarterly									
Mar-22	Selenium	(mg/L)	Quarterly									
Mar-22	Sodium	(mg/L)	Quarterly									
Mar-22	Standing Water Level	(m)	Quarterly									
Mar-22	Vanadium	(mg/L)	Quarterly									
Mar-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
Mar-22	Aluminium	(mg/L)	Quarterly									
Mar-22	Ammonia	(mg/L)	Quarterly									
Mar-22	Arsenic (III)	(mg/L)	Quarterly									
Mar-22	Arsenic (V)	(mg/L)	Quarterly									
Mar-22	Cadmium	(mg/L)	Quarterly									
Mar-22	Chromium (trivalent)	(mg/L)	Quarterly									
Mar-22	Chromium (VI) Compounds	(mg/L)	Quarterly									
Mar-22	Copper	(mg/L)	Quarterly									
Mar-22	Electrical Conductivity	(us/cm)	Quarterly									
Mar-22	Iron	(mg/L)	Quarterly									
Mar-22	Lead	(mg/L)	Quarterly									Next Sampling Round Scheduled for April 2022
Mar-22	Magnesium	(mg/L)	Quarterly									
Mar-22	Manganese	(mg/L)	Quarterly									
Mar-22	Nickel	(mg/L)	Quarterly									
Mar-22	pH	pH	Quarterly									
Mar-22	Potassium	(mg/L)	Quarterly									
Mar-22	Selenium	(mg/L)	Quarterly									
Mar-22	Sodium	(mg/L)	Quarterly									
Mar-22	Standing Water Level	(m)	Quarterly									
Mar-22	Vanadium	(mg/L)	Quarterly									
Mar-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
Mar-22	Aluminium	(mg/L)	Quarterly									
Mar-22	Ammonia	(mg/L)	Quarterly									
Mar-22	Arsenic (III)	(mg/L)	Quarterly									
Mar-22	Arsenic (V)	(mg/L)	Quarterly									
Mar-22	Cadmium	(mg/L)	Quarterly									
Mar-22	Chromium (trivalent)	(mg/L)	Quarterly									
Mar-22	Chromium (VI) Compounds	(mg/L)	Quarterly									
Mar-22	Copper	(mg/L)	Quarterly									
Mar-22	Electrical Conductivity	(us/cm)	Quarterly									
Mar-22	Iron	(mg/L)	Quarterly									Next Sampling Round Scheduled for April 2022
Mar-22	Lead	(mg/L)	Quarterly									
Mar-22	Magnesium	(mg/L)	Quarterly									
Mar-22	Manganese	(mg/L)	Quarterly									
Mar-22	Nickel	(mg/L)	Quarterly									
Mar-22	pH	pH	Quarterly									
Mar-22	Potassium	(mg/L)	Quarterly									
Mar-22	Selenium	(mg/L)	Quarterly									
Mar-22	Sodium	(mg/L)	Quarterly									
Mar-22	Standing Water Level	(m)	Quarterly									
Mar-22	Vanadium	(mg/L)	Quarterly									
Mar-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.