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	April 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
Apr-22	Cadmium	(mg/m3)	Every 6 months							0.2		
Apr-22	Chlorine	(mg/m3)	Every 6 months							20		
Apr-22	Fluorine	(mg/m3)	Every 6 months							30		
Apr-22	Hydrogen chloride	(mg/m3)	Every 6 months							50		
Apr-22	Mercury	(mg/m3)	Every 6 months							0.05		
Apr-22	Nitrogen Oxides	(mg/m3)	Continuous	100.0%	Apr-22	398	605	771	850	980	No	
Apr-22	Solid Particles	(mg/m3)	Quarterly							50	No	
Apr-22	Sulfur dioxide	(mg/m3)	Continuous	100.0%	Apr-22	613	715	841	1400	1700	No	
Apr-22	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months							100		
Apr-22	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months							0.75		
Apr-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
Apr-22	Cadmium	(mg/m3)	Every 6 months							0.2		
Apr-22	Chlorine	(mg/m3)	Every 6 months							20		
Apr-22	Fluorine	(mg/m3)	Every 6 months							30		
Apr-22	Hydrogen chloride	(mg/m3)	Every 6 months							50		
Apr-22	Mercury	(mg/m3)	Every 6 months							0.05		
Apr-22	Nitrogen Oxides	(mg/m3)	Continuous	100.0%	Apr-22	518	662	789	850	980	No	
Apr-22	Solid Particles	(mg/m3)	Quarterly							50	No	
Apr-22	Sulfur dioxide	(mg/m3)	Continuous	100.0%	Apr-22	557	718	934	1400	1700	No	
Apr-22	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months							100		
Apr-22	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months							0.75		
Apr-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
Apr-22	Cadmium	(mg/m3)	Every 6 months									
Apr-22	Carbon dioxide	(%)	Every 6 months									
Apr-22	Chlorine	(mg/m3)	Every 6 months									
Apr-22	Flow rate	(m3/s)	Continuous									
Apr-22	Fluorine	(mg/m3)	Every 6 months									
Apr-22	Hydrogen chloride	(mg/m3)	Every 6 months									
Apr-22	Mercury	(mg/m3)	Every 6 months									See note at end of report regarding installation of continuous monitoring instrumentation.
Apr-22	Moisture	(%)	Continuous									
Apr-22	Oxygen (O2)	(%)	Continuous									
Apr-22	Solid Particles	(mg/m3)	Quarterly									
Apr-22	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months									
Apr-22	Temperature	(°C)	Continuous									
Apr-22	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months									
Apr-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
Apr-22	Cadmium	(mg/m3)	Every 6 months									
Apr-22	Flow rate	(m3/s)	Continuous									
Apr-22	Mercury	(mg/m3)	Every 6 months									
Apr-22	Moisture	(%)	Continuous									See note at end of report regarding installation of continuous monitoring instrumentation.
Apr-22	Oxygen (O2)	(%)	Continuous									
Apr-22	Solid Particles	(mg/m3)	Quarterly									
Apr-22	Temperature	(°C)	Continuous									
Apr-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
Apr-22	Cadmium	(mg/m3)	Every 6 months									
Apr-22	Carbon dioxide	(%)	Every 6 months									
Apr-22	Chlorine	(mg/m3)	Every 6 months									
Apr-22	Flow rate	(m3/s)	Continuous									
Apr-22	Fluorine	(mg/m3)	Every 6 months									
Apr-22	Hydrogen chloride	(mg/m3)	Every 6 months									
Apr-22	Mercury	(mg/m3)	Every 6 months									See note at end of report regarding installation of continuous monitoring instrumentation.
Apr-22	Moisture	(%)	Continuous									
Apr-22	Oxygen (O2)	(%)	Continuous									
Apr-22	Solid Particles	(mg/m3)	Quarterly									
Apr-22	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months									
Apr-22	Temperature	(°C)	Continuous									
Apr-22	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months									
Apr-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
Apr-22	Cadmium	(mg/m3)	Every 6 months									
Apr-22	Flow rate	(m3/s)	Continuous									
Apr-22	Mercury	(mg/m3)	Every 6 months									
Apr-22	Moisture	(%)	Continuous									See note at end of report regarding installation of continuous monitoring instrumentation.
Apr-22	Oxygen (O2)	(%)	Continuous									
Apr-22	Solid Particles	(mg/m3)	Quarterly									
Apr-22	Temperature	(°C)	Continuous									
Apr-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
Apr-22	Cadmium	(mg/m3)	Every 6 months									
Apr-22	Carbon dioxide	(%)	Every 6 months									
Apr-22	Chlorine	(mg/m3)	Every 6 months									
Apr-22	Flow rate	(m3/s)	Continuous									
Apr-22	Fluorine	(mg/m3)	Every 6 months									
Apr-22	Hydrogen chloride	(mg/m3)	Every 6 months									
Apr-22	Mercury	(mg/m3)	Every 6 months									See note at end of report regarding installation of continuous monitoring instrumentation.
Apr-22	Moisture	(%)	Continuous									
Apr-22	Oxygen (O2)	(%)	Continuous									
Apr-22	Solid Particles	(mg/m3)	Quarterly									
Apr-22	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months									
Apr-22	Temperature	(°C)	Continuous									
Apr-22	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months									
Apr-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
Apr-22	Cadmium	(mg/m3)	Every 6 months									
Apr-22	Flow rate	(m3/s)	Continuous									
Apr-22	Mercury	(mg/m3)	Every 6 months									
Apr-22	Moisture	(%)	Continuous									See note at end of report regarding installation of continuous monitoring instrumentation.
Apr-22	Oxygen (O2)	(%)	Continuous									
Apr-22	Solid Particles	(mg/m3)	Quarterly									
Apr-22	Temperature	(°C)	Continuous									
Apr-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
Apr-22	Cadmium	(mg/m3)	Every 6 months									
Apr-22	Carbon dioxide	(%)	Every 6 months									
Apr-22	Chlorine	(mg/m3)	Every 6 months									
Apr-22	Flow rate	(m3/s)	Continuous									
Apr-22	Fluorine	(mg/m3)	Every 6 months									
Apr-22	Hydrogen chloride	(mg/m3)	Every 6 months									
Apr-22	Mercury	(mg/m3)	Every 6 months									See note at end of report regarding installation of continuous monitoring instrumentation.
Apr-22	Moisture	(%)	Continuous									
Apr-22	Oxygen (O2)	(%)	Continuous									
Apr-22	Solid Particles	(mg/m3)	Quarterly									
Apr-22	Sulfuric acid mist and sulfur trioxide (as SO3)	(mg/m3)	Every 6 months									
Apr-22	Temperature	(°C)	Continuous									
Apr-22	Type 1 and Type 2 substances in aggregate	(mg/m3)	Every 6 months									
Apr-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
Apr-22	Cadmium	(mg/m3)	Every 6 months									
Apr-22	Flow rate	(m3/s)	Continuous									
Apr-22	Mercury	(mg/m3)	Every 6 months									
Apr-22	Moisture	(%)	Continuous									See note at end of report regarding installation of continuous monitoring instrumentation.
Apr-22	Oxygen (O2)	(%)	Continuous									
Apr-22	Solid Particles	(mg/m3)	Quarterly									
Apr-22	Temperature	(°C)	Continuous									
Apr-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
Apr-22	Nitrogen Oxides	(mg/m3)	Continuous	100.0%	Apr-22	368	574	724			N/A	
Apr-22	Sulfur dioxide	(mg/m3)	Continuous	100.0%	Apr-22	564	669	779			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
Apr-22	Nitrogen Oxides	(mg/m3)	Continuous	96.2%	Apr-22	412	637	819			N/A	
Apr-22	Sulfur dioxide	(mg/m3)	Continuous	96.2%	Apr-22	642	762	902			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
Apr-22	Nitrogen Oxides	(mg/m3)	Continuous	97.2%	Apr-22	572	732	838			N/A	
Apr-22	Sulfur dioxide	(mg/m3)	Continuous	97.2%	Apr-22	571	752	970			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
Apr-22	Nitrogen Oxides	(mg/m3)	Continuous	100.0%	Apr-22	462	591	739			N/A	
Apr-22	Sulfur dioxide	(mg/m3)	Continuous	100.0%	Apr-22	541	685	897			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
Apr-22	Chlorine (free residual)	(mg/L)	Monthly during discharge	1	13/04/2022	<0.1	<0.1	<0.1		**0.2**	No	
Apr-22	Copper	(mg/L)	Monthly during discharge	1	13/04/2022	0.0030	0.0030	0.0030		**0.005**	No	
Apr-22	Iron	(mg/L)	Monthly during discharge	1	13/04/2022	0.065	0.065	0.065		**0.3**	No	
Apr-22	Oil and Grease	Visible	Continuous during discharge	100%	Apr-22	NIL	NIL	NIL				
Apr-22	Selenium	(mg/L)	Monthly during discharge	1	13/04/2022	<0.002	<0.002	<0.002		**0.005**	No	
Apr-22	Temperature	(°C)	Continuous during discharge	100%	Apr-22	24.0	30.1	33.9	**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
Apr-22	Aluminium	(mg/L)	Monthly during discharge	1	13/04/2022	0.168	0.168	0.168				
Apr-22	Ammonia	(mg/L)	Monthly during discharge	1	13/04/2022	0.09	0.09	0.09				
Apr-22	Arsenic (III)	(mg/L)	Monthly during discharge	1	13/04/2022	<0.0006	<0.0006	<0.0006				
Apr-22	Arsenic (V)	(mg/L)	Monthly during discharge	1	13/04/2022	0.0028	0.0028	0.0028				
Apr-22	Cadmium	(mg/L)	Monthly during discharge	1	13/04/2022	<0.00005	<0.00005	<0.00005				
Apr-22	Chromium (trivalent)	(mg/L)	Monthly during discharge	1	13/04/2022	0.002	0.002	0.002				
Apr-22	Chromium (VI) Compounds	(mg/L)	Monthly during discharge	1	13/04/2022	0.019	0.019	0.019				
Apr-22	Copper	(mg/L)	Monthly during discharge	1	13/04/2022	0.0014	0.0014	0.0014				
Apr-22	Iron	(mg/L)	Monthly during discharge	1	13/04/2022	0.097	0.097	0.097				
Apr-22	Lead	(mg/L)	Monthly during discharge	1	13/04/2022	0.0002	0.0002	0.0002				
Apr-22	Manganese	(mg/L)	Monthly during discharge	1	13/04/2022	0.0044	0.0044	0.0044				
Apr-22	Nickel	(mg/L)	Monthly during discharge	1	13/04/2022	0.0005	0.0005	0.0005				
Apr-22	Nitrate + nitrite (oxidised nitrogen)	(mg/L)	Monthly during discharge	1	13/04/2022	0.06	0.06	0.06				
Apr-22	Nitrogen	(mg/L)	Monthly during discharge	1	13/04/2022	0.50	0.50	0.50				
Apr-22	pH	pH	Monthly during discharge	1	13/04/2022	8.86	8.86	8.86		**6.5 - 9.5**	No	
Apr-22	Phosphorus	(mg/L)	Monthly during discharge	1	13/04/2022	0.03	0.03	0.03				
Apr-22	Reactive Phosphorus	(mg/L)	Monthly during discharge	1	13/04/2022	<0.01	<0.01	<0.01				
Apr-22	Selenium	(mg/L)	Monthly during discharge	1	13/04/2022	0.0373	0.0373	0.0373				
Apr-22	Total Kjeldahl Nitrogen	(mg/L)	Monthly during discharge	1	13/04/2022	0.4	0.4	0.4				
Apr-22	Total Suspended Solids	(mg/L)	Monthly during discharge	1	13/04/2022	7.0	7.0	7.0		**50**	No	
Apr-22	Vanadium	(mg/L)	Monthly during discharge	1	13/04/2022	0.0394	0.0394	0.0394				
Apr-22	Zinc	(mg/L)	Monthly during discharge	1	13/04/2022	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
Apr-22	Aluminium	(mg/L)	Monthly during discharge	1	13/04/2022				No			
Apr-22	Ammonia	(mg/L)	Monthly during discharge	1	13/04/2022				No			
Apr-22	Arsenic (III)	(mg/L)	Monthly during discharge	1	13/04/2022				No			
Apr-22	Arsenic (V)	(mg/L)	Monthly during discharge	1	13/04/2022				No			
Apr-22	Cadmium	(mg/L)	Monthly during discharge	1	13/04/2022				No			
Apr-22	Chromium (trivalent)	(mg/L)	Monthly during discharge	1	13/04/2022				No			
Apr-22	Chromium (VI) Compounds	(mg/L)	Monthly during discharge	1	13/04/2022				No			
Apr-22	Copper	(mg/L)	Monthly during discharge	1	13/04/2022				No			
Apr-22	Iron	(mg/L)	Monthly during discharge	1	13/04/2022				No			
Apr-22	Lead	(mg/L)	Monthly during discharge	1	13/04/2022				No			
Apr-22	Manganese	(mg/L)	Monthly during discharge	1	13/04/2022				No			
Apr-22	Nickel	(mg/L)	Monthly during discharge	1	13/04/2022				No			No discharge from EPA Point 24 during April 2022
Apr-22	Nitrate + nitrite (oxidised nitrogen)	(mg/L)	Monthly during discharge	1	13/04/2022				No			
Apr-22	Nitrogen	(mg/L)	Monthly during discharge	1	13/04/2022				No			
Apr-22	pH	pH	Monthly during discharge	1	13/04/2022				No	6.5 - 9.5	No	
Apr-22	Phosphorus	(mg/L)	Monthly during discharge	1	13/04/2022				No			
Apr-22	Reactive Phosphorus	(mg/L)	Monthly during discharge	1	13/04/2022				No			
Apr-22	Selenium	(mg/L)	Monthly during discharge	1	13/04/2022				No			
Apr-22	Total Kjeldahl Nitrogen	(mg/L)	Monthly during discharge	1	13/04/2022				No			
Apr-22	Total Suspended Solids	(mg/L)	Monthly during discharge	1	13/04/2022				No	50	No	
Apr-22	Vanadium	(mg/L)	Monthly during discharge	1	13/04/2022				No			
Apr-22	Zinc	(mg/L)	Monthly during discharge	1	13/04/2022				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
Apr-22	Aluminium	(mg/L)	Daily for any discharge >2 hrs	14	1-14/4/2022	0.128	0.175	0.266	Yes			
Apr-22	Ammonia	(mg/L)	Daily for any discharge >2 hrs	14	1-14/4/2022	0.04	0.11	0.26	Yes			
Apr-22	Arsenic (III)	(mg/L)	Daily for any discharge >2 hrs	14	1-14/4/2022	<0.0005	0.0010	0.0030	Yes			
Apr-22	Arsenic (V)	(mg/L)	Daily for any discharge >2 hrs	14	1-14/4/2022	<0.0005	0.0025	0.0031	Yes			
Apr-22	Cadmium	(mg/L)	Daily for any discharge >2 hrs	14	1-14/4/2022	<0.00005	<0.00005	<0.00005	Yes			
Apr-22	Chromium (trivalent)	(mg/L)	Daily for any discharge >2 hrs	14	1-14/4/2022	<0.001	0.002	0.007	Yes			
Apr-22	Chromium (VI) Compounds	(mg/L)	Daily for any discharge >2 hrs	14	1-14/4/2022	0.012	0.019	0.023	Yes			
Apr-22	Copper	(mg/L)	Daily for any discharge >2 hrs	14	1-14/4/2022	<0.0005	0.0009	0.0037	Yes			
Apr-22	Iron	(mg/L)	Daily for any discharge >2 hrs	14	1-14/4/2022	0.052	0.109	0.279	Yes			
Apr-22	Lead	(mg/L)	Daily for any discharge >2 hrs	14	1-14/4/2022	<0.0001	0.0001	0.0003	Yes			
Apr-22	Manganese	(mg/L)	Daily for any discharge >2 hrs	14	1-14/4/2022	0.0039	0.0056	0.0096	Yes			
Apr-22	Nickel	(mg/L)	Daily for any discharge >2 hrs	14	1-14/4/2022	<0.0005	0.0019	<0.01	Yes			
Apr-22	Nitrate + nitrite (oxidised nitrogen)	(mg/L)	Daily for any discharge >2 hrs	14	1-14/4/2022	0.01	0.03	0.06	Yes			
Apr-22	Nitrogen	(mg/L)	Daily for any discharge >2 hrs	14	1-14/4/2022	0.2	0.44	0.7	Yes			
Apr-22	pH	pH	Daily for any discharge >2 hrs	14	1-14/4/2022	7.93	8.62	9.04	Yes	6.5 - 9.5	No	
Apr-22	Phosphorus	(mg/L)	Daily for any discharge >2 hrs	14	1-14/4/2022	0.01	0.046	0.21	Yes			
Apr-22	Reactive Phosphorus	(mg/L)	Daily for any discharge >2 hrs	14	1-14/4/2022	<0.01	0.01	0.01	Yes			
Apr-22	Selenium	(mg/L)	Daily for any discharge >2 hrs	14	1-14/4/2022	0.0033	0.0334	0.0410	Yes			
Apr-22	Total Kjeldahl Nitrogen	(mg/L)	Daily for any discharge >2 hrs	14	1-14/4/2022	0.2	0.429	0.7	Yes			
Apr-22	Total Suspended Solids	(mg/L)	Daily for any discharge >2 hrs	14	1-14/4/2022	<2	5.50	9.0	Yes	50	No	
Apr-22	Vanadium	(mg/L)	Daily for any discharge >2 hrs	14	1-14/4/2022	0.0341	0.0366	0.0389	Yes			
Apr-22	Zinc	(mg/L)	Daily for any discharge >2 hrs	14	1-14/4/2022	<0.001	0.002	0.003	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
Apr-22	Aluminium	(mg/L)	Quarterly	1	13/04/2022	0.449	0.449	0.449				
Apr-22	Ammonia	(mg/L)	Quarterly	1	13/04/2022	1.66	1.66	1.66				
Apr-22	Arsenic (III)	(mg/L)	Quarterly	1	13/04/2022	<0.004	<0.004	<0.004				
Apr-22	Arsenic (V)	(mg/L)	Quarterly	1	13/04/2022	<0.004	<0.004	<0.004				
Apr-22	Cadmium	(mg/L)	Quarterly	1	13/04/2022	0.00006	0.00006	0.00006				
Apr-22	Chromium (trivalent)	(mg/L)	Quarterly	1	13/04/2022	0.002	0.002	0.002				
Apr-22	Chromium (VI) Compounds	(mg/L)	Quarterly	1	13/04/2022	<0.001	<0.001	<0.001				
Apr-22	Copper	(mg/L)	Quarterly	1	13/04/2022	0.004	0.004	0.004				
Apr-22	Electrical Conductivity	(us/cm)	Quarterly	1	13/04/2022	23800	23800	23800				
Apr-22	Iron	(mg/L)	Quarterly	1	13/04/2022	37.6	37.6	37.6				
Apr-22	Lead	(mg/L)	Quarterly	1	13/04/2022	0.0013	0.0013	0.0013				
Apr-22	Magnesium	(mg/L)	Quarterly	1	13/04/2022	556	556	556				
Apr-22	Manganese	(mg/L)	Quarterly	1	13/04/2022	2.46	2.46	2.46				
Apr-22	Nickel	(mg/L)	Quarterly	1	13/04/2022	0.0149	0.0149	0.0149				
Apr-22	pH	pH	Quarterly	1	13/04/2022	6.00	6.00	6.00				
Apr-22	Potassium	(mg/L)	Quarterly	1	13/04/2022	71	71	71				
Apr-22	Selenium	(mg/L)	Quarterly	1	13/04/2022	0.0004	0.0004	0.0004				
Apr-22	Sodium	(mg/L)	Quarterly	1	13/04/2022	4080	4080	4080				
Apr-22	Standing Water Level	(m)	Quarterly	1	13/04/2022	3.62	3.62	3.62				
Apr-22	Vanadium	(mg/L)	Quarterly	1	13/04/2022	0.0010	0.0010	0.0010				
Apr-22	Zinc	(mg/L)	Quarterly	1	13/04/2022	0.014	0.014	0.014				

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
Apr-22	Aluminium	(mg/L)	Quarterly	1	13/04/2022	2.37	2.37	2.37				
Apr-22	Ammonia	(mg/L)	Quarterly	1	13/04/2022	0.03	0.03	0.03				
Apr-22	Arsenic (III)	(mg/L)	Quarterly	1	13/04/2022	<0.0005	<0.0005	<0.0005				
Apr-22	Arsenic (V)	(mg/L)	Quarterly	1	13/04/2022	<0.0005	<0.0005	<0.0005				
Apr-22	Cadmium	(mg/L)	Quarterly	1	13/04/2022	<0.00005	<0.00005	<0.00005				
Apr-22	Chromium (trivalent)	(mg/L)	Quarterly	1	13/04/2022	0.002	0.002	0.002				
Apr-22	Chromium (VI) Compounds	(mg/L)	Quarterly	1	13/04/2022	<0.01	<0.01	<0.01				
Apr-22	Copper	(mg/L)	Quarterly	1	13/04/2022	0.0211	0.0211	0.0211				
Apr-22	Electrical Conductivity	(us/cm)	Quarterly	1	13/04/2022	255	255	255				
Apr-22	Iron	(mg/L)	Quarterly	1	13/04/2022	2.80	2.80	2.80				
Apr-22	Lead	(mg/L)	Quarterly	1	13/04/2022	0.0087	0.0087	0.0087				
Apr-22	Magnesium	(mg/L)	Quarterly	1	13/04/2022	3	3	3				
Apr-22	Manganese	(mg/L)	Quarterly	1	13/04/2022	0.038	0.038	0.038				
Apr-22	Nickel	(mg/L)	Quarterly	1	13/04/2022	0.0030	0.0030	0.0030				
Apr-22	pH	pH	Quarterly	1	13/04/2022	6.52	6.52	6.52				
Apr-22	Potassium	(mg/L)	Quarterly	1	13/04/2022	2	2	2				
Apr-22	Selenium	(mg/L)	Quarterly	1	13/04/2022	0.0008	0.0008	0.0008				
Apr-22	Sodium	(mg/L)	Quarterly	1	13/04/2022	25	25	25				
Apr-22	Standing Water Level	(m)	Quarterly	1	13/04/2022	0.26	0.26	0.26				
Apr-22	Vanadium	(mg/L)	Quarterly	1	13/04/2022	0.005	0.005	0.005				
Apr-22	Zinc	(mg/L)	Quarterly	1	13/04/2022	0.56	0.56	0.56				

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
Apr-22	Aluminium	(mg/L)	Quarterly	1	13/04/2022	1.25	1.25	1.25				
Apr-22	Ammonia	(mg/L)	Quarterly	1	13/04/2022	0.01	0.01	0.01				
Apr-22	Arsenic (III)	(mg/L)	Quarterly	1	13/04/2022	<0.0005	<0.0005	<0.0005				
Apr-22	Arsenic (V)	(mg/L)	Quarterly	1	13/04/2022	<0.0005	<0.0005	<0.0005				
Apr-22	Cadmium	(mg/L)	Quarterly	1	13/04/2022	<0.00005	<0.00005	<0.00005				
Apr-22	Chromium (trivalent)	(mg/L)	Quarterly	1	13/04/2022	0.002	0.002	0.002				
Apr-22	Chromium (VI) Compounds	(mg/L)	Quarterly	1	13/04/2022	<0.001	<0.001	<0.001				
Apr-22	Copper	(mg/L)	Quarterly	1	13/04/2022	0.0085	0.0085	0.0085				
Apr-22	Electrical Conductivity	(us/cm)	Quarterly	1	13/04/2022	345	345	345				
Apr-22	Iron	(mg/L)	Quarterly	1	13/04/2022	0.54	0.54	0.54				
Apr-22	Lead	(mg/L)	Quarterly	1	13/04/2022	0.0008	0.0008	0.0008				
Apr-22	Magnesium	(mg/L)	Quarterly	1	13/04/2022	2	2	2				
Apr-22	Manganese	(mg/L)	Quarterly	1	13/04/2022	0.0117	0.0117	0.0117				
Apr-22	Nickel	(mg/L)	Quarterly	1	13/04/2022	0.0014	0.0014	0.0014				
Apr-22	pH	pH	Quarterly	1	13/04/2022	6.18	6.18	6.18				
Apr-22	Potassium	(mg/L)	Quarterly	1	13/04/2022	1	1	1				
Apr-22	Selenium	(mg/L)	Quarterly	1	13/04/2022	0.0002	0.0002	0.0002				
Apr-22	Sodium	(mg/L)	Quarterly	1	13/04/2022	17	17	17				
Apr-22	Standing Water Level	(m)	Quarterly	1	13/04/2022	0.46	0.46	0.46				
Apr-22	Vanadium	(mg/L)	Quarterly	1	13/04/2022	0.0016	0.0016	0.0016				
Apr-22	Zinc	(mg/L)	Quarterly	1	13/04/2022	0.014	0.014	0.014				

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
Apr-22	Aluminium	(mg/L)	Quarterly	1	13/04/2022	0.52	0.52	0.52				
Apr-22	Ammonia	(mg/L)	Quarterly	1	13/04/2022	0.15	0.15	0.15				
Apr-22	Arsenic (III)	(mg/L)	Quarterly	1	13/04/2022	<0.004	<0.004	<0.004				
Apr-22	Arsenic (V)	(mg/L)	Quarterly	1	13/04/2022	<0.004	<0.004	<0.004				
Apr-22	Cadmium	(mg/L)	Quarterly	1	13/04/2022	<0.0002	<0.0002	<0.0002				
Apr-22	Chromium (trivalent)	(mg/L)	Quarterly	1	13/04/2022	<0.001	<0.001	<0.001				
Apr-22	Chromium (VI) Compounds	(mg/L)	Quarterly	1	13/04/2022	0.007	0.007	0.007				
Apr-22	Copper	(mg/L)	Quarterly	1	13/04/2022	0.005	0.005	0.005				
Apr-22	Electrical Conductivity	(us/cm)	Quarterly	1	13/04/2022	50000	50000	50000				
Apr-22	Iron	(mg/L)	Quarterly	1	13/04/2022	64.4	64.4	64.4				
Apr-22	Lead	(mg/L)	Quarterly	1	13/04/2022	0.0012	0.0012	0.0012				
Apr-22	Magnesium	(mg/L)	Quarterly	1	13/04/2022	1350	1350	1350				
Apr-22	Manganese	(mg/L)	Quarterly	1	13/04/2022	0.675	0.675	0.675				
Apr-22	Nickel	(mg/L)	Quarterly	1	13/04/2022	0.0020	0.0020	0.0020				
Apr-22	pH	pH	Quarterly	1	13/04/2022	6.79	6.79	6.79				
Apr-22	Potassium	(mg/L)	Quarterly	1	13/04/2022	294	294	294				
Apr-22	Selenium	(mg/L)	Quarterly	1	13/04/2022	<0.002	<0.002	<0.002				
Apr-22	Sodium	(mg/L)	Quarterly	1	13/04/2022	9960	9960	9960				
Apr-22	Standing Water Level	(m)	Quarterly	1	13/04/2022	0.01	0.01	0.01				
Apr-22	Vanadium	(mg/L)	Quarterly	1	13/04/2022	0.0030	0.0030	0.0030				
Apr-22	Zinc	(mg/L)	Quarterly	1	13/04/2022	0.016	0.016	0.016				

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
Apr-22	Aluminium	(mg/L)	Quarterly	1	13/04/2022	0.52	0.52	0.52				
Apr-22	Ammonia	(mg/L)	Quarterly	1	13/04/2022	0.03	0.03	0.03				
Apr-22	Arsenic (III)	(mg/L)	Quarterly	1	13/04/2022	<0.0005	<0.0005	<0.0005				
Apr-22	Arsenic (V)	(mg/L)	Quarterly	1	13/04/2022	<0.0005	<0.0005	<0.0005				
Apr-22	Cadmium	(mg/L)	Quarterly	1	13/04/2022	<0.00005	<0.00005	<0.00005				
Apr-22	Chromium (trivalent)	(mg/L)	Quarterly	1	13/04/2022	0.001	0.001	0.001				
Apr-22	Chromium (VI) Compounds	(mg/L)	Quarterly	1	13/04/2022	<0.001	<0.001	<0.001				
Apr-22	Copper	(mg/L)	Quarterly	1	13/04/2022	0.0061	0.0061	0.0061				
Apr-22	Electrical Conductivity	(us/cm)	Quarterly	1	13/04/2022	815	815	815				
Apr-22	Iron	(mg/L)	Quarterly	1	13/04/2022	5.68	5.68	5.68				
Apr-22	Lead	(mg/L)	Quarterly	1	13/04/2022	0.0012	0.0012	0.0012				
Apr-22	Magnesium	(mg/L)	Quarterly	1	13/04/2022	12	12	12				
Apr-22	Manganese	(mg/L)	Quarterly	1	13/04/2022	0.0747	0.0747	0.0747				
Apr-22	Nickel	(mg/L)	Quarterly	1	13/04/2022	0.0061	0.0061	0.0061				
Apr-22	pH	pH	Quarterly	1	13/04/2022	5.91	5.91	5.91				
Apr-22	Potassium	(mg/L)	Quarterly	1	13/04/2022	2	2	2				
Apr-22	Selenium	(mg/L)	Quarterly	1	13/04/2022	<0.0002	<0.0002	<0.0002				
Apr-22	Sodium	(mg/L)	Quarterly	1	13/04/2022	120	120	120				
Apr-22	Standing Water Level	(m)	Quarterly	1	13/04/2022	0.55	0.55	0.55				
Apr-22	Vanadium	(mg/L)	Quarterly	1	13/04/2022	0.0020	0.0020	0.0020				
Apr-22	Zinc	(mg/L)	Quarterly	1	13/04/2022	0.030	0.030	0.030				

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.