

## Vales Point Power Station Monthly Environmental Data Summary



LICENCE NO	761	<a href="http://www.epa.nsw.gov.au/prpoeoapp/">http://www.epa.nsw.gov.au/prpoeoapp/</a>
LICENCE HOLDER	SUNSET POWER INTERNATIONAL PTY LTD	
REPORTING PERIOD	June 2020	
ADDRESS	VALES POINT ROAD, MANNERING PARK NSW	

POINT 1 Cooling water outlet at Wyee Bay, marked and shown as "VPOC" on the Plan (VX837351, 30.06.2015, DOC15/381265).											
Month	Pollutant	Unit of Measure	Sample/Measurement Frequency	Samples Collected & Analysed	Date Sampled	Lowest Sample Value	Mean of Samples	Highest Sample Value	EPL Limit	Exceedance (yes/no)	Comments
Jun-20	Chlorine (free residual)	milligrams per litre	Monthly	1	10/6/2020	0.11	0.11	0.11	0.2	No	
Jun-20	Temperature	degrees celsius	Continuous	100%	Jun-20	15.7	23.7	30.2	37.5	No	
Jun-20	Oil and Grease	Visible	Continuous	100%	Jun-20	NIL	NIL	NIL		No	No visible oil or grease detected during June 2020.

POINT 2 Discharge from the ash water recycle system to the cooling water outlet canal, marked and shown as "VPADB" on the Plan (VX837351, 30.06.2015, DOC15/381265).											
Month	Pollutant	Unit of Measure	Sample/Measurement Frequency	Samples Collected & Analysed	Date Sampled	Lowest Sample Value	Mean of Samples	Highest Sample Value	EPL Limit	Exceedance (yes/no)	Comments
Jun-20	Ammonia	milligrams per litre	Quarterly								
Jun-20	Cadmium	milligrams per litre	Quarterly								
Jun-20	Copper	milligrams per litre	Quarterly								
Jun-20	Lead	milligrams per litre	Quarterly								
Jun-20	Manganese	milligrams per litre	Quarterly								
Jun-20	Nitrate + nitrite (oxidised nitrogen)	milligrams per litre	Monthly	1	10/6/2020	0.02	0.02	0.02			
Jun-20	Nitrogen (total)	milligrams per litre	Quarterly								
Jun-20	pH	pH	Monthly	1	10/6/2020	8.85	8.85	8.85	6.5 - 9.5	No	
Jun-20	Phosphorus (total)	milligrams per litre	Monthly	1	10/6/2020	<0.05	<0.05	<0.05			
Jun-20	Reactive Phosphorus	milligrams per litre	Monthly	1	10/6/2020	0.02	0.02	0.02			
Jun-20	Selenium	milligrams per litre	Quarterly								
Jun-20	Total Kjeldahl Nitrogen	milligrams per litre	Quarterly								
Jun-20	Total Suspended Solids	milligrams per litre	Fortnightly	2	Jun-20	<2	<2	<2	50	No	
Jun-20	Zinc	milligrams per litre	Quarterly								

POINT 4 Seepage from ash dam rehabilitated area, marked and shown as "VPADS" on the Plan (VX837351, 30.06.2015, DOC15/381265).											
Month	Pollutant	Unit of Measure	Sample/Measurement Frequency	Samples Collected & Analysed	Date Sampled	Lowest Sample Value	Mean of Samples	Highest Sample Value	EPL Limit	Exceedance (yes/no)	Comments
Jun-20	Ammonia	milligrams per litre	Quarterly								
Jun-20	Cadmium	milligrams per litre	Quarterly								
Jun-20	Copper	milligrams per litre	Quarterly								
Jun-20	Lead	milligrams per litre	Quarterly								
Jun-20	Manganese	milligrams per litre	Quarterly								
Jun-20	Nitrate + nitrite (oxidised nitrogen)	milligrams per litre	Monthly	1	10/6/2020						** Seepage water sampled is captured and pumped back to the ash dam. There was no licence 'discharge to waters' (Manning Bay ) during June 2020.
Jun-20	Nitrogen (total)	milligrams per litre	Quarterly								
Jun-20	pH	pH	Monthly	1	10/6/2020						
Jun-20	Phosphorus (total)	milligrams per litre	Monthly	1	10/6/2020						
Jun-20	Selenium	milligrams per litre	Quarterly								
Jun-20	Total Kjeldahl Nitrogen	milligrams per litre	Quarterly								
Jun-20	Total Suspended Solids	milligrams per litre	Monthly	1	10/6/2020				50	No	
Jun-20	Zinc	milligrams per litre	Quarterly								

POINT 18 Overboarding of Ash Dam, marked and shown as "VPADD" on the Plan (VX837351, 30.06.2015, DOC15/381265).											
Month	Pollutant	Unit of Measure	Sample/Measurement Frequency	Samples Collected & Analysed	Date Sampled	Lowest Sample Value	Mean of Samples	Highest Sample Value	EPL Limit	Exceedance (yes/no)	Comments
Jun-20	Ammonia	milligrams per litre	Daily for discharge >2 hrs								
Jun-20	Cadmium	milligrams per litre	Daily for discharge >2 hrs								
Jun-20	Copper	milligrams per litre	Daily for discharge >2 hrs								
Jun-20	Lead	milligrams per litre	Daily for discharge >2 hrs								
Jun-20	Manganese	milligrams per litre	Daily for discharge >2 hrs								
Jun-20	Nitrate + nitrite (oxidised nitrogen)	milligrams per litre	Daily for discharge >2 hrs								
Jun-20	Nitrogen (total)	milligrams per litre	Daily for discharge >2 hrs								
Jun-20	pH	pH	Daily for discharge >2 hrs						6.5 - 9.0		
Jun-20	Phosphorus (total)	milligrams per litre	Daily for discharge >2 hrs								
Jun-20	Selenium	milligrams per litre	Daily for discharge >2 hrs								
Jun-20	Total Kjeldahl Nitrogen	milligrams per litre	Daily for discharge >2 hrs								
Jun-20	Total Suspended Solids	milligrams per litre	Daily for discharge >2 hrs						50		
Jun-20	Zinc	milligrams per litre	Daily for discharge >2 hrs								

POINT 19 Groundwater bore, marked and shown as "VPGM/D3" on the Plan (VX837351, 30.06.2015, DOC15/381265).											
Month	Pollutant	Unit of Measure	Sample/Measurement Frequency	Samples Collected & Analysed	Date Sampled	Lowest Sample Value	Mean of Samples	Highest Sample Value	EPL Limit	Exceedance (yes/no)	Comments
Jun-20	Arsenic	milligrams per litre	Quarterly								
Jun-20	Cadmium	milligrams per litre	Quarterly								
Jun-20	Calcium	milligrams per litre	Quarterly								
Jun-20	Chromium	milligrams per litre	Quarterly								
Jun-20	Copper	milligrams per litre	Quarterly								
Jun-20	Electrical conductivity	microsiemens per centimetre	Quarterly								
Jun-20	Iron	milligrams per litre	Quarterly								
Jun-20	Lead	milligrams per litre	Quarterly								
Jun-20	Magnesium	milligrams per litre	Quarterly								(next quarterly sample scheduled for July 2020)
Jun-20	Manganese	milligrams per litre	Quarterly								
Jun-20	Nickel	milligrams per litre	Quarterly								
Jun-20	pH	pH	Quarterly								
Jun-20	Potassium	milligrams per litre	Quarterly								
Jun-20	Selenium	milligrams per litre	Quarterly								
Jun-20	Sodium	milligrams per litre	Quarterly								
Jun-20	Standing Water Level	metres	Quarterly								
Jun-20	Zinc	milligrams per litre	Quarterly								

POINT 20 Groundwater bore, marked and shown as "VPGM/D5" on the Plan (VX837351, 30.06.2015, DOC15/381265).											
Month	Pollutant	Unit of Measure	Sample/Measurement Frequency	Samples Collected & Analysed	Date Sampled	Lowest Sample Value	Mean of Samples	Highest Sample Value	EPL Limit	Exceedance (yes/no)	Comments
Jun-20	Arsenic	milligrams per litre	Quarterly								
Jun-20	Cadmium	milligrams per litre	Quarterly								
Jun-20	Calcium	milligrams per litre	Quarterly								
Jun-20	Chromium	milligrams per litre	Quarterly								
Jun-20	Copper	milligrams per litre	Quarterly								
Jun-20	Electrical conductivity	microsiemens per centimetre	Quarterly								
Jun-20	Iron	milligrams per litre	Quarterly								
Jun-20	Lead	milligrams per litre	Quarterly								
Jun-20	Magnesium	milligrams per litre	Quarterly								(next quarterly sample scheduled for July 2020)
Jun-20	Manganese	milligrams per litre	Quarterly								
Jun-20	Nickel	milligrams per litre	Quarterly								
Jun-20	pH	pH	Quarterly								
Jun-20	Potassium	milligrams per litre	Quarterly								
Jun-20	Selenium	milligrams per litre	Quarterly								
Jun-20	Sodium	milligrams per litre	Quarterly								
Jun-20	Standing Water Level	metres	Quarterly								
Jun-20	Zinc	milligrams per litre	Quarterly								

POINT 21 Groundwater bore, marked and shown as "VPGM/D6" on the Plan (VX837351, 30.06.2015, DOC15/381265).											
Month	Pollutant	Unit of Measure	Sample/Measurement Frequency	Samples Collected & Analysed	Date Sampled	Lowest Sample Value	Mean of Samples	Highest Sample Value	EPL Limit	Exceedance (yes/no)	Comments
Jun-20	Arsenic	milligrams per litre	Quarterly	1	10/6/2020	0.0003	0.0003	0.0003			
Jun-20	Cadmium	milligrams per litre	Quarterly	1	10/6/2020	<0.00005	<0.00005	<0.00005			
Jun-20	Calcium	milligrams per litre	Quarterly	1	10/6/2020	2	2	2			
Jun-20	Chromium	milligrams per litre	Quarterly	1	10/6/2020	0.0007	0.0007	0.0007			
Jun-20	Copper	milligrams per litre	Quarterly	1	10/6/2020	0.0006	0.0006	0.0006			
Jun-20	Electrical conductivity	microsiemens per centimetre	Quarterly	1	10/6/2020	1110	1110	1110			
Jun-20	Iron	milligrams per litre	Quarterly	1	10/6/2020	6.5	6.5	6.5			
Jun-20	Lead	milligrams per litre	Quarterly	1	10/6/2020	0.0002	0.0002	0.0002			Incorrect bore sampled twice during 19/20 reporting period. Additional samples taken in May and June 2020.
Jun-20	Magnesium	milligrams per litre	Quarterly	1	10/6/2020	12	12	12			
Jun-20	Manganese	milligrams per litre	Quarterly	1	10/6/2020	0.0772	0.0772	0.0772			
Jun-20	Nickel	milligrams per litre	Quarterly	1	10/6/2020	0.003	0.003	0.003			
Jun-20	pH	pH	Quarterly	1	10/6/2020	6.2	6.2	6.2			
Jun-20	Potassium	milligrams per litre	Quarterly	1	10/6/2020	3	3	3			
Jun-20	Selenium	milligrams per litre	Quarterly	1	10/6/2020	<0.0002	<0.0002	<0.0002			
Jun-20	Sodium	milligrams per litre	Quarterly	1	10/6/2020	60	60	60			
Jun-20	Standing Water Level	metres	Quarterly	1	10/6/2020	2.5	2.5	2.5			
Jun-20	Zinc	milligrams per litre	Quarterly	1	10/6/2020	0.017	0.017	0.017			

POINT 22 Groundwater bore, marked and shown as "VPGM/D8" on the Plan (VX837351, 30.06.2015, DOC15/381265).											
Month	Pollutant	Unit of Measure	Sample/Measurement Frequency	Samples Collected & Analysed	Date Sampled	Lowest Sample Value	Mean of Samples	Highest Sample Value	EPL Limit	Exceedance (yes/no)	Comments
Jun-20	Arsenic	milligrams per litre	Quarterly								
Jun-20	Cadmium	milligrams per litre	Quarterly								
Jun-20	Calcium	milligrams per litre	Quarterly								
Jun-20	Chromium	milligrams per litre	Quarterly								
Jun-20	Copper	milligrams per litre	Quarterly								
Jun-20	Electrical conductivity	microsiemens per centimetre	Quarterly								
Jun-20	Iron	milligrams per litre	Quarterly								
Jun-20	Lead	milligrams per litre	Quarterly								
Jun-20	Magnesium	milligrams per litre	Quarterly								(next quarterly sample scheduled for July 2020)
Jun-20	Manganese	milligrams per litre	Quarterly								
Jun-20	Nickel	milligrams per litre	Quarterly								
Jun-20	pH	pH	Quarterly								
Jun-20	Potassium	milligrams per litre	Quarterly								
Jun-20	Selenium	milligrams per litre	Quarterly								
Jun-20	Sodium	milligrams per litre	Quarterly								
Jun-20	Standing Water Level	metres	Quarterly								
Jun-20	Zinc	milligrams per litre	Quarterly								

POINT 23 Groundwater bore, marked and shown as "VPGM/D10" on the Plan (VX837351, 30.06.2015, DOC15/381265).											
Month	Pollutant	Unit of Measure	Sample/Measurement Frequency	Samples Collected & Analysed	Date Sampled	Lowest Sample Value	Mean of Samples	Highest Sample Value	EPL Limit	Exceedance (yes/no)	Comments
Jun-20	Arsenic	milligrams per litre	Quarterly								
Jun-20	Cadmium	milligrams per litre	Quarterly								
Jun-20	Calcium	milligrams per litre	Quarterly								
Jun-20	Chromium	milligrams per litre	Quarterly								
Jun-20	Copper	milligrams per litre	Quarterly								
Jun-20	Electrical conductivity	microsiemens per centimetre	Quarterly								
Jun-20	Iron	milligrams per litre	Quarterly								
Jun-20	Lead	milligrams per litre	Quarterly								
Jun-20	Magnesium	milligrams per litre	Quarterly								(next quarterly sample scheduled for July 2020)
Jun-20	Manganese	milligrams per litre	Quarterly								
Jun-20	Nickel	milligrams per litre	Quarterly								
Jun-20	pH	pH	Quarterly								
Jun-20	Potassium	milligrams per litre	Quarterly								
Jun-20	Selenium	milligrams per litre	Quarterly								
Jun-20	Sodium	milligrams per litre	Quarterly								
Jun-20	Standing Water Level	metres	Quarterly								
Jun-20	Zinc	milligrams per litre	Quarterly								

POINT 11 Stack serving Boiler Unit No. 5, marked and shown as "11" on the Plan (VX837351, 30.06.2015, DOC15/381265).											
Month	Pollutant	Unit of Measure	Sample/Measurement Frequency	Samples Collected & Analysed	Date Sampled	Lowest Sample Value	Mean of Samples	Highest Sample Value	EPL Limit	Exceedance (yes/no)	Comments
Jun-20	Cadmium	milligrams per cubic metre	Yearly	1	March/April 2020	0.00065	0.00065	0.00065	1	No	
Jun-20	Chlorine	milligrams per cubic metre	Yearly	1	March/April 2020	<0.19	<0.19	<0.19	200	No	
Jun-20	Copper	milligrams per cubic metre	Yearly	1	March/April 2020	0.00035	0.00035	0.00035			
Jun-20	Fine Particulate (PM10)	milligrams per cubic metre	Yearly	1	March/April 2020	1.2	1.2	1.2			
Jun-20	Hydrogen chloride	milligrams per cubic metre	Yearly	1	March/April 2020	0.71	0.71	0.71	100	No	
Jun-20	Mercury	milligrams per cubic metre	Yearly	1	March/April 2020	0.00049	0.00049	0.00049	1	No	
Jun-20	Moisture	percent	Yearly	1	March/April 2020	6.45	6.45	6.45			
Jun-20	Molecular weight of stack gases	grams per gram mole	Yearly	1	March/April 2020	30.4	30.4	30.4			
Jun-20	Nitrogen Oxides	milligrams per cubic metre	Continuous	100%	Jun-20	487	646	815	1500	No	2019/20 Stack Gas Testing Report received on 7/7/2020
Jun-20	Sulfuric acid mist and sulfur trioxide (as SO3)	milligrams per cubic metre	Yearly	1	March/April 2020	8.8	8.8	8.8	100	No	
Jun-20	Sulphur dioxide	parts per million	Continuous	100%	Jun-20	188	230	275	600	No	
Jun-20	Temperature	degrees Celsius	Yearly	1	March/April 2020	116.1	116.1	116.1			
Jun-20	Total Fluoride	milligrams per cubic metre	Yearly	1	March/April 2020	1.4	1.4	1.4	50	No	
Jun-20	Total Solid Particles	milligrams per cubic metre	Yearly	1	March/April 2020	1.9	1.9	1.9	100	No	
Jun-20	Type 1 and Type 2 substances in aggregate	milligrams per cubic metre	Yearly	1	March/April 2020	0.035	0.035	0.035	5	No	
Jun-20	Undifferentiated Particulates	milligrams per cubic metre	Continuous	100%	Jun-20	14.4	23.4	31.0			
Jun-20	Velocity	metres per second	Yearly	1	March/April 2020	15.8	15.8	15.8			
Jun-20	Volatile organic compounds	parts per million	Yearly	1	March/April 2020	0.05	0.05	0.05			
Jun-20	Volumetric flowrate	cubic metres per second	Yearly	1	March/April 2020	182	182	182			

**POINT 12** Stack serving Boiler Unit No. 6, marked and shown as "12" on the Plan (VX837351, 30.06.2015, DOC15/381265).

Month	Pollutant	Unit of Measure	Sample/Measurement Frequency	Samples Collected & Analysed	Date Sampled	Lowest Sample Value	Mean of Samples	Highest Sample Value	EPL Limit	Exceedance (yes/no)	Comments
Jun-20	Cadmium	milligrams per cubic metre	Yearly	1	March/June 2020	0.0055	0.0055	0.0055	1	No	
Jun-20	Chlorine	milligrams per cubic metre	Yearly	1	March/June 2020	<0.04	<0.04	<0.04	200	No	
Jun-20	Copper	milligrams per cubic metre	Yearly	1	March/June 2020	0.00036	0.00036	0.00036			
Jun-20	Fine Particulate (PM10)	milligrams per cubic metre	Yearly	1	March/June 2020	1.2	1.2	1.2			
Jun-20	Hydrogen chloride	milligrams per cubic metre	Yearly	1	March/June 2020	0.52	0.52	0.52	100	No	
Jun-20	Mercury	milligrams per cubic metre	Yearly	1	March/June 2020	0.000069	0.000069	0.000069	1	No	
Jun-20	Moisture	percent	Yearly	1	March/June 2020	5.15	5.15	5.15			
Jun-20	Molecular weight of stack gases	grams per gram mole	Yearly	1	March/June 2020	30.3	30.3	30.3			
Jun-20	Nitrogen Oxides	milligrams per cubic metre	Continuous	100%	Jun-20	382	716	928	1500	No	2019/20 Stack Gas Testing Report received on 7/7/2020
Jun-20	Sulfuric acid mist and sulfur trioxide (as SO3)	milligrams per cubic metre	Yearly	1	March/June 2020	9.2	9.2	9.2	100	No	
Jun-20	Sulphur dioxide	parts per million	Continuous	100%	Jun-20	156	216	281	600	No	
Jun-20	Temperature	degrees Celsius	Yearly	1	March/June 2020	128.6	128.6	128.6			
Jun-20	Total Fluoride	milligrams per cubic metre	Yearly	1	March/June 2020	2.2	2.2	2.2	50	No	
Jun-20	Total Solid Particles	milligrams per cubic metre	Yearly	1	March/June 2020	7.6	7.6	7.6	100	No	
Jun-20	Type 1 and Type 2 substances in aggregate	milligrams per cubic metre	Yearly	1	March/June 2020	0.01	0.01	0.01	5	No	
Jun-20	Undifferentiated Particulates	milligrams per cubic metre	Continuous	100%	Jun-20	4.1	8.0	11.6			
Jun-20	Velocity	metres per second	Yearly	1	March/June 2020	14.8	14.8	14.8			
Jun-20	Volatile organic compounds	parts per million	Yearly	1	March/June 2020	<0.08	<0.08	<0.08			
Jun-20	Volumetric flowrate	cubic metres per second	Yearly	1	March/June 2020	170	170	170			

**GENERAL COMMENTS**