

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 2019	
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
Apr-19	Chlorine (free residual)	milligrams per litre	Monthly	1	3/4/2019	0.05	0.05	0.05	0.2	No	
Apr-19	Temperature	degrees celsius	Continuous	100%	Apr-19	25.4	31.0	34.0	37.5	No	
Apr-19	Oil and Grease	Visible	Continuous	100%	Apr-19	NIL	NIL	NIL			No visible oil or grease detected during April 2019.

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
Apr-19	Ammonia	milligrams per litre	Quarterly	1	3/4/2019	0.16	0.16	0.16			
Apr-19	Cadmium	milligrams per litre	Quarterly	1	3/4/2019	<0.00021	<0.00021	<0.00021			
Apr-19	Copper	milligrams per litre	Quarterly	1	3/4/2019	0.0012	0.0012	0.0012			
Apr-19	Lead	milligrams per litre	Quarterly	1	3/4/2019	<0.0002	<0.0002	<0.0002			
Apr-19	Manganese	milligrams per litre	Quarterly	1	3/4/2019	0.0093	0.0093	0.0093			
Apr-19	Nitrate + nitrite (oxidised nitrogen)	milligrams per litre	Monthly	1	3/4/2019	0.02	0.02	0.02			
Apr-19	Nitrogen (total)	milligrams per litre	Quarterly	1	3/4/2019	1.1	1.1	1.1			
Apr-19	pH	pH	Monthly	1	3/4/2019	8.11	8.11	8.11	6.5 - 9.5	No	
Apr-19	Phosphorus (total)	milligrams per litre	Monthly	1	3/4/2019	0.13	0.13	0.13			
Apr-19	Reactive Phosphorus	milligrams per litre	Monthly	1	3/4/2019	0.08	0.08	0.08			
Apr-19	Selenium	milligrams per litre	Quarterly	1	3/4/2019	0.0334	0.0334	0.0334			
Apr-19	Total Kjeldahl Nitrogen	milligrams per litre	Quarterly	1	3/4/2019	1.1	1.1	1.1			
Apr-19	Total Suspended Solids	milligrams per litre	Fortnightly	8	Apr-19	<2	2	3	50	No	
Apr-19	Zinc	milligrams per litre	Quarterly	1	3/4/2019	<0.005	<0.005	<0.005			

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
Apr-19	Ammonia	milligrams per litre	Quarterly	1	3/4/2019						
Apr-19	Cadmium	milligrams per litre	Quarterly	1	3/4/2019						
Apr-19	Copper	milligrams per litre	Quarterly	1	3/4/2019						
Apr-19	Lead	milligrams per litre	Quarterly	1	3/4/2019						
Apr-19	Manganese	milligrams per litre	Quarterly	1	3/4/2019						
Apr-19	Nitrate + nitrite (oxidised nitrogen)	milligrams per litre	Monthly	1	3/4/2019						** Seepage water sampled is captured and pumped back to the ash dam. There was no licence 'discharge to waters' (i.e. to Mannering Bay) during April 2019.
Apr-19	Nitrogen (total)	milligrams per litre	Quarterly	1	3/4/2019						
Apr-19	pH	pH	Monthly	1	3/4/2019						
Apr-19	Phosphorus (total)	milligrams per litre	Monthly	1	3/4/2019						
Apr-19	Selenium	milligrams per litre	Quarterly	1	3/4/2019						
Apr-19	Total Kjeldahl Nitrogen	milligrams per litre	Quarterly	1	3/4/2019						
Apr-19	Total Suspended Solids	milligrams per litre	Monthly	1	3/4/2019				50	No	
Apr-19	Zinc	milligrams per litre	Quarterly	1	3/4/2019						

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
Apr-19	Ammonia	milligrams per litre	Daily for discharge >2 hrs								
Apr-19	Cadmium	milligrams per litre	Daily for discharge >2 hrs								
Apr-19	Copper	milligrams per litre	Daily for discharge >2 hrs								
Apr-19	Lead	milligrams per litre	Daily for discharge >2 hrs								
Apr-19	Manganese	milligrams per litre	Daily for discharge >2 hrs								
Apr-19	Nitrate + nitrite (oxidised nitrogen)	milligrams per litre	Daily for discharge >2 hrs								
Apr-19	Nitrogen (total)	milligrams per litre	Daily for discharge >2 hrs								No discharge from EPA Point 18 during April 2019
Apr-19	pH	pH	Daily for discharge >2 hrs						6.5 - 9.0		
Apr-19	Phosphorus (total)	milligrams per litre	Daily for discharge >2 hrs								
Apr-19	Selenium	milligrams per litre	Daily for discharge >2 hrs								
Apr-19	Total Kjeldahl Nitrogen	milligrams per litre	Daily for discharge >2 hrs								
Apr-19	Total Suspended Solids	milligrams per litre	Daily for discharge >2 hrs						50		
Apr-19	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
Apr-19	Arsenic	milligrams per litre	Quarterly	1	3/4/2019	0.0062	0.0062	0.0062			
Apr-19	Cadmium	milligrams per litre	Quarterly	1	3/4/2019	<0.00021	<0.00021	<0.00021			
Apr-19	Calcium	milligrams per litre	Quarterly	1	3/4/2019	856	856	856			
Apr-19	Chromium	milligrams per litre	Quarterly	1	3/4/2019	0.0015	0.0015	0.0015			
Apr-19	Copper	milligrams per litre	Quarterly	1	3/4/2019	0.0013	0.0013	0.0013			
Apr-19	Electrical conductivity	microsiemens per centimetre	Quarterly	1	3/4/2019	41400	41400	41400			
Apr-19	Iron	milligrams per litre	Quarterly	1	3/4/2019	46.6	46.6	46.6			
Apr-19	Lead	milligrams per litre	Quarterly	1	3/4/2019	0.0019	0.0019	0.0019			
Apr-19	Magnesium	milligrams per litre	Quarterly	1	3/4/2019	918	918	918			(next quarterly sample scheduled for July 2019)
Apr-19	Manganese	milligrams per litre	Quarterly	1	3/4/2019	4.39	4.39	4.39			
Apr-19	Nickel	milligrams per litre	Quarterly	1	3/4/2019	0.0216	0.0216	0.0216			
Apr-19	pH	pH	Quarterly	1	3/4/2019	5.36	5.36	5.36			
Apr-19	Potassium	milligrams per litre	Quarterly	1	3/4/2019	109	109	109			
Apr-19	Selenium	milligrams per litre	Quarterly	1	3/4/2019	<0.0021	<0.0021	<0.0021			
Apr-19	Sodium	milligrams per litre	Quarterly	1	3/4/2019	6160	6160	6160			
Apr-19	Standing Water Level	metres	Quarterly	1	3/4/2019	3.75	3.75	3.75			
Apr-19	Zinc	milligrams per litre	Quarterly	1	3/4/2019	35	35	35			
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
Apr-19	Arsenic	milligrams per litre	Quarterly	1	3/4/2019	0.0017	0.0017	0.0017			
Apr-19	Cadmium	milligrams per litre	Quarterly	1	3/4/2019	0.0001	0.0001	0.0001			
Apr-19	Calcium	milligrams per litre	Quarterly	1	3/4/2019	25	25	25			
Apr-19	Chromium	milligrams per litre	Quarterly	1	3/4/2019	0.003	0.003	0.003			
Apr-19	Copper	milligrams per litre	Quarterly	1	3/4/2019	0.0258	0.0258	0.0258			
Apr-19	Electrical conductivity	microsiemens per centimetre	Quarterly	1	3/4/2019	6740	6740	6740			
Apr-19	Iron	milligrams per litre	Quarterly	1	3/4/2019	0.658	0.658	0.658			
Apr-19	Lead	milligrams per litre	Quarterly	1	3/4/2019	0.0087	0.0087	0.0087			
Apr-19	Magnesium	milligrams per litre	Quarterly	1	3/4/2019	12	12	12			(next quarterly sample scheduled for July 2019)
Apr-19	Manganese	milligrams per litre	Quarterly	1	3/4/2019	0.0373	0.0373	0.0373			
Apr-19	Nickel	milligrams per litre	Quarterly	1	3/4/2019	0.0047	0.0047	0.0047			
Apr-19	pH	pH	Quarterly	1	3/4/2019	5.95	5.95	5.95			
Apr-19	Potassium	milligrams per litre	Quarterly	1	3/4/2019	3	3	3			
Apr-19	Selenium	milligrams per litre	Quarterly	1	3/4/2019	0.0009	0.0009	0.0009			
Apr-19	Sodium	milligrams per litre	Quarterly	1	3/4/2019	68	68	68			
Apr-19	Standing Water Level	metres	Quarterly	1	3/4/2019	0.57	0.57	0.57			
Apr-19	Zinc	milligrams per litre	Quarterly	1	3/4/2019	1.08	1.08	1.08			
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
Apr-19	Arsenic	milligrams per litre	Quarterly	1	3/4/2019	0.0004	0.0004	0.0004			
Apr-19	Cadmium	milligrams per litre	Quarterly	1	3/4/2019	<0.00005	<0.00005	<0.00005			
Apr-19	Calcium	milligrams per litre	Quarterly	1	3/4/2019	2	2	2			
Apr-19	Chromium	milligrams per litre	Quarterly	1	3/4/2019	0.003	0.003	0.003			
Apr-19	Copper	milligrams per litre	Quarterly	1	3/4/2019	0.004	0.004	0.004			
Apr-19	Electrical conductivity	microsiemens per centimetre	Quarterly	1	3/4/2019	266	266	266			
Apr-19	Iron	milligrams per litre	Quarterly	1	3/4/2019	0.225	0.225	0.225			
Apr-19	Lead	milligrams per litre	Quarterly	1	3/4/2019	0.0014	0.0014	0.0014			(next quarterly sample scheduled for July 2019)
Apr-19	Magnesium	milligrams per litre	Quarterly	1	3/4/2019	4	4	4			
Apr-19	Manganese	milligrams per litre	Quarterly	1	3/4/2019	0.0094	0.0094	0.0094			
Apr-19	Nickel	milligrams per litre	Quarterly	1	3/4/2019	0.0025	0.0025	0.0025			
Apr-19	pH	pH	Quarterly	1	3/4/2019	5.08	5.08	5.08			
Apr-19	Potassium	milligrams per litre	Quarterly	1	3/4/2019	2	2	2			
Apr-19	Selenium	milligrams per litre	Quarterly	1	3/4/2019	<0.0002	<0.0002	<0.0002			
Apr-19	Sodium	milligrams per litre	Quarterly	1	3/4/2019	35	35	35			
Apr-19	Standing Water Level	metres	Quarterly	1	3/4/2019	0.88	0.88	0.88			
Apr-19	Zinc	milligrams per litre	Quarterly	1	3/4/2019	0.028	0.028	0.028			

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
Apr-19	Arsenic	milligrams per litre	Quarterly	1	3/4/2019	0.0227	0.0227	0.0227			
Apr-19	Cadmium	milligrams per litre	Quarterly	1	3/4/2019	0.00053	0.00053	0.00053			
Apr-19	Calcium	milligrams per litre	Quarterly	1	3/4/2019	491	491	491			
Apr-19	Chromium	milligrams per litre	Quarterly	1	3/4/2019	0.0302	0.0302	0.0302			
Apr-19	Copper	milligrams per litre	Quarterly	1	3/4/2019	0.0217	0.0217	0.0217			
Apr-19	Electrical conductivity	microsiemens per centimetre	Quarterly	1	3/4/2019	53900	53900	53900			
Apr-19	Iron	milligrams per litre	Quarterly	1	3/4/2019	3.22	3.22	3.22			
Apr-19	Lead	milligrams per litre	Quarterly	1	3/4/2019	0.018	0.018	0.018			
Apr-19	Magnesium	milligrams per litre	Quarterly	1	3/4/2019	1260	1260	1260			(next quarterly sample scheduled for July 2019)
Apr-19	Manganese	milligrams per litre	Quarterly	1	3/4/2019	0.504	0.504	0.504			
Apr-19	Nickel	milligrams per litre	Quarterly	1	3/4/2019	0.023	0.023	0.023			
Apr-19	pH	pH	Quarterly	1	3/4/2019	6.39	6.39	6.39			
Apr-19	Potassium	milligrams per litre	Quarterly	1	3/4/2019	285	285	285			
Apr-19	Selenium	milligrams per litre	Quarterly	1	3/4/2019	0.004	0.004	0.004			
Apr-19	Sodium	milligrams per litre	Quarterly	1	3/4/2019	9640	9640	9640			
Apr-19	Standing Water Level	metres	Quarterly	1	3/4/2019	0.02	0.02	0.02			
Apr-19	Zinc	milligrams per litre	Quarterly	1	3/4/2019	0.147	0.147	0.147			

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
Apr-19	Arsenic	milligrams per litre	Quarterly	1	3/4/2019	0.0068	0.0068	0.0068			
Apr-19	Cadmium	milligrams per litre	Quarterly	1	3/4/2019	0.00017	0.00017	0.00017			
Apr-19	Calcium	milligrams per litre	Quarterly	1	3/4/2019	2	2	2			
Apr-19	Chromium	milligrams per litre	Quarterly	1	3/4/2019	0.0204	0.0204	0.0204			
Apr-19	Copper	milligrams per litre	Quarterly	1	3/4/2019	0.0135	0.0135	0.0135			
Apr-19	Electrical conductivity	microsiemens per centimetre	Quarterly	1	3/4/2019	865	865	865			
Apr-19	Iron	milligrams per litre	Quarterly	1	3/4/2019	1.73	1.73	1.73			
Apr-19	Lead	milligrams per litre	Quarterly	1	3/4/2019	0.0129	0.0129	0.0129			
Apr-19	Magnesium	milligrams per litre	Quarterly	1	3/4/2019	12	12	12			(next quarterly sample scheduled for July 2019)
Apr-19	Manganese	milligrams per litre	Quarterly	1	3/4/2019	0.0842	0.0842	0.0842			
Apr-19	Nickel	milligrams per litre	Quarterly	1	3/4/2019	0.0216	0.0216	0.0216			
Apr-19	pH	pH	Quarterly	1	3/4/2019	5.25	5.25	5.25			
Apr-19	Potassium	milligrams per litre	Quarterly	1	3/4/2019	2	2	2			
Apr-19	Selenium	milligrams per litre	Quarterly	1	3/4/2019	0.0007	0.0007	0.0007			
Apr-19	Sodium	milligrams per litre	Quarterly	1	3/4/2019	124	124	124			
Apr-19	Standing Water Level	metres	Quarterly	1	3/4/2019	-0.2	-0.2	-0.2			
Apr-19	Zinc	milligrams per litre	Quarterly	1	3/4/2019	0.089	0.089	0.089			

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
Apr-19	Cadmium	milligrams per cubic metre	Yearly						1	No	Unit 5 annual stack gas testing completed. Results will be published when they are received from the stack testing consultant.
Apr-19	Chlorine	milligrams per cubic metre	Yearly						200	No	
Apr-19	Copper	milligrams per cubic metre	Yearly							No	
Apr-19	Hydrogen chloride	milligrams per cubic metre	Yearly						100	No	
Apr-19	Mercury	milligrams per cubic metre	Yearly						1	No	
Apr-19	Moisture	percent	Yearly								
Apr-19	Molecular weight of stack gases	grams per gram mole	Yearly								
Apr-19	Nitrogen Oxides	milligrams per cubic metre	Continuous	100%	Apr-19	279	649	821	1500	No	
Apr-19	Sulfuric acid mist and sulfur trioxide (as SO3)	milligrams per cubic metre	Yearly						100	No	
Apr-19	Sulphur dioxide	parts per million	Continuous	100%	Apr-19	143	260	354	600	No	
Apr-19	Temperature	degrees Celsius	Yearly								
Apr-19	Total Fluoride	milligrams per cubic metre	Yearly						50	No	
Apr-19	Total Solid Particles	milligrams per cubic metre	Yearly						100	No	
Apr-19	Type 1 and Type 2 substances in aggregate	milligrams per cubic metre	Yearly						5	No	
Apr-19	Undifferentiated Particulates	milligrams per cubic metre	Continuous	100%	Apr-19	13.0	29.6	39.1			
Apr-19	Velocity	metres per second	Yearly								
Apr-19	Volatile organic compounds	parts per million	Yearly								
Apr-19	Volumetric flowrate	cubic metres per second	Yearly								

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
Apr-19	Cadmium	milligrams per cubic metre	Yearly						1	No	Unit 6 annual stack gas testing completed. Results will be published when they are received from the stack testing consultant.
Apr-19	Chlorine	milligrams per cubic metre	Yearly						200	No	
Apr-19	Copper	milligrams per cubic metre	Yearly								
Apr-19	Hydrogen chloride	milligrams per cubic metre	Yearly						100	No	
Apr-19	Mercury	milligrams per cubic metre	Yearly						1	No	
Apr-19	Moisture	percent	Yearly								
Apr-19	Molecular weight of stack gases	grams per gram mole	Yearly								
Apr-19	Nitrogen Oxides	milligrams per cubic metre	Continuous	100%	Apr-19	434	750	1012	1500	No	
Apr-19	Sulfuric acid mist and sulfur trioxide (as SO3)	milligrams per cubic metre	Yearly						100	No	
Apr-19	Sulphur dioxide	parts per million	Continuous	100%	Apr-19	165	253	347	600	No	
Apr-19	Temperature	degrees Celsius	Yearly								
Apr-19	Total Fluoride	milligrams per cubic metre	Yearly						50	No	
Apr-19	Total Solid Particles	milligrams per cubic metre	Yearly						100	No	
Apr-19	Type 1 and Type 2 substances in aggregate	milligrams per cubic metre	Yearly						5	No	
Apr-19	Undifferentiated Particulates	milligrams per cubic metre	Continuous	100%	Apr-19	4.0	6.7	10.6			
Apr-19	Velocity	metres per second	Yearly								
Apr-19	Volatile organic compounds	parts per million	Yearly								
Apr-19	Volumetric flowrate	cubic metres per second	Yearly								

GENERAL COMMENTS