

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	October 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
Oct-19	Chlorine (free residual)	milligrams per litre	Monthly	1	15/10/2019	0.03	0.03	0.03	0.2	No	
Oct-19	Temperature	degrees celsius	Continuous	100%	Oct-19	24.4	29.6	34.3	37.5	No	
Oct-19	Oil and Grease	Visible	Continuous	89.4%	Oct-19	NIL	NIL	NIL			No visible oil or grease detected during October 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
Oct-19	Ammonia	milligrams per litre	Quarterly	1	15/10/2019	0.09	0.09	0.09			
Oct-19	Cadmium	milligrams per litre	Quarterly	1	15/10/2019	<0.00005	<0.00005	<0.00005			
Oct-19	Copper	milligrams per litre	Quarterly	1	15/10/2019	0.0018	0.0018	0.0018			
Oct-19	Lead	milligrams per litre	Quarterly	1	15/10/2019	<0.0001	<0.0001	<0.0001			
Oct-19	Manganese	milligrams per litre	Quarterly	1	15/10/2019	0.0045	0.0045	0.0045			
Oct-19	Nitrate + nitrite (oxidised nitrogen)	milligrams per litre	Monthly	1	15/10/2019	<0.01	<0.01	<0.01			
Oct-19	Nitrogen (total)	milligrams per litre	Quarterly	1	15/10/2019	<0.5	<0.5	<0.5			
Oct-19	pH	pH	Monthly	1	15/10/2019	8.45	8.45	8.45	6.5 - 9.5	No	
Oct-19	Phosphorus (total)	milligrams per litre	Monthly	1	15/10/2019	0.08	0.08	0.08			
Oct-19	Reactive Phosphorus	milligrams per litre	Monthly	1	15/10/2019	<0.01	<0.01	<0.01			
Oct-19	Selenium	milligrams per litre	Quarterly	1	15/10/2019	0.031	0.031	0.031			
Oct-19	Total Kjeldahl Nitrogen	milligrams per litre	Quarterly	1	15/10/2019	<0.5	<0.5	<0.5			
Oct-19	Total Suspended Solids	milligrams per litre	Fortnightly	2	Oct-19	7	11	14	50	No	
Oct-19	Zinc	milligrams per litre	Quarterly	1	15/10/2019	0.002	0.002	0.002			

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
Oct-19	Ammonia	milligrams per litre	Quarterly	1	15/10/2019						
Oct-19	Cadmium	milligrams per litre	Quarterly	1	15/10/2019						
Oct-19	Copper	milligrams per litre	Quarterly	1	15/10/2019						
Oct-19	Lead	milligrams per litre	Quarterly	1	15/10/2019						
Oct-19	Manganese	milligrams per litre	Quarterly	1	15/10/2019						
Oct-19	Nitrate + nitrite (oxidised nitrogen)	milligrams per litre	Monthly	1	15/10/2019						** Seepage water sampled is captured and pumped back to the ash dam. There was no licence 'discharge to waters' (i.e. to Manning Bay) during October 2019.
Oct-19	Nitrogen (total)	milligrams per litre	Quarterly	1	15/10/2019						
Oct-19	pH	pH	Monthly	1	15/10/2019						
Oct-19	Phosphorus (total)	milligrams per litre	Monthly	1	15/10/2019						
Oct-19	Selenium	milligrams per litre	Quarterly	1	15/10/2019						
Oct-19	Total Kjeldahl Nitrogen	milligrams per litre	Quarterly	1	15/10/2019						
Oct-19	Total Suspended Solids	milligrams per litre	Monthly	1	15/10/2019				50	No	
Oct-19	Zinc	milligrams per litre	Quarterly	1	15/10/2019						

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
Oct-19	Ammonia	milligrams per litre	Daily for discharge >2 hrs								
Oct-19	Cadmium	milligrams per litre	Daily for discharge >2 hrs								
Oct-19	Copper	milligrams per litre	Daily for discharge >2 hrs								
Oct-19	Lead	milligrams per litre	Daily for discharge >2 hrs								
Oct-19	Manganese	milligrams per litre	Daily for discharge >2 hrs								
Oct-19	Nitrate + nitrite (oxidised nitrogen)	milligrams per litre	Daily for discharge >2 hrs								
Oct-19	Nitrogen (total)	milligrams per litre	Daily for discharge >2 hrs								
Oct-19	pH	pH	Daily for discharge >2 hrs						6.5 - 9.0		
Oct-19	Phosphorus (total)	milligrams per litre	Daily for discharge >2 hrs								
Oct-19	Selenium	milligrams per litre	Daily for discharge >2 hrs								
Oct-19	Total Kjeldahl Nitrogen	milligrams per litre	Daily for discharge >2 hrs								
Oct-19	Total Suspended Solids	milligrams per litre	Daily for discharge >2 hrs						50		
Oct-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	
Oct-19	Arsenic	milligrams per litre	Quarterly	1	15/10/2019	0.021	0.021	0.021				
Oct-19	Cadmium	milligrams per litre	Quarterly	1	15/10/2019	0.00114	0.00114	0.00114				
Oct-19	Calcium	milligrams per litre	Quarterly	1	15/10/2019	865	865	865				
Oct-19	Chromium	milligrams per litre	Quarterly	1	15/10/2019	0.0009	0.0009	0.0009				
Oct-19	Copper	milligrams per litre	Quarterly	1	15/10/2019	0.0026	0.0026	0.0026				
Oct-19	Electrical conductivity	microsiemens per centimetre	Quarterly	1	15/10/2019	26000	26000	26000				
Oct-19	Iron	milligrams per litre	Quarterly	1	15/10/2019	26.7	26.7	26.7				
Oct-19	Lead	milligrams per litre	Quarterly	1	15/10/2019	0.0041	0.0041	0.0041				
Oct-19	Magnesium	milligrams per litre	Quarterly	1	15/10/2019	329	329	329			(next quarterly sample scheduled for January 2020)	
Oct-19	Manganese	milligrams per litre	Quarterly	1	15/10/2019	2.03	2.03	2.03				
Oct-19	Nickel	milligrams per litre	Quarterly	1	15/10/2019	0.0392	0.0392	0.0392				
Oct-19	pH	pH	Quarterly	1	15/10/2019	5.56	5.56	5.56				
Oct-19	Potassium	milligrams per litre	Quarterly	1	15/10/2019	81	81	81				
Oct-19	Selenium	milligrams per litre	Quarterly	1	15/10/2019	0.0011	0.0011	0.0011				
Oct-19	Sodium	milligrams per litre	Quarterly	1	15/10/2019	4460	4460	4460				
Oct-19	Standing Water Level	metres	Quarterly	1	15/10/2019	3.78	3.78	3.78				
Oct-19	Zinc	milligrams per litre	Quarterly	1	15/10/2019	0.273	0.273	0.273				

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	
Oct-19	Arsenic	milligrams per litre	Quarterly	1	15/10/2019	0.0016	0.0016	0.0016				
Oct-19	Cadmium	milligrams per litre	Quarterly	1	15/10/2019	0.00007	0.00007	0.00007				
Oct-19	Calcium	milligrams per litre	Quarterly	1	15/10/2019	21	21	21				
Oct-19	Chromium	milligrams per litre	Quarterly	1	15/10/2019	0.0015	0.0015	0.0015				
Oct-19	Copper	milligrams per litre	Quarterly	1	15/10/2019	0.0168	0.0168	0.0168				
Oct-19	Electrical conductivity	microsiemens per centimetre	Quarterly	1	15/10/2019	1040	1040	1040				
Oct-19	Iron	milligrams per litre	Quarterly	1	15/10/2019	1.49	1.49	1.49				
Oct-19	Lead	milligrams per litre	Quarterly	1	15/10/2019	0.0041	0.0041	0.0041				
Oct-19	Magnesium	milligrams per litre	Quarterly	1	15/10/2019	15	15	15			(next quarterly sample scheduled for January 2020)	
Oct-19	Manganese	milligrams per litre	Quarterly	1	15/10/2019	0.0474	0.0474	0.0474				
Oct-19	Nickel	milligrams per litre	Quarterly	1	15/10/2019	0.0038	0.0038	0.0038				
Oct-19	pH	pH	Quarterly	1	15/10/2019	5.97	5.97	5.97				
Oct-19	Potassium	milligrams per litre	Quarterly	1	15/10/2019	2	2	2				
Oct-19	Selenium	milligrams per litre	Quarterly	1	15/10/2019	0.0006	0.0006	0.0006				
Oct-19	Sodium	milligrams per litre	Quarterly	1	15/10/2019	100	100	100				
Oct-19	Standing Water Level	metres	Quarterly	1	15/10/2019	0.73	0.73	0.73				
Oct-19	Zinc	milligrams per litre	Quarterly	1	15/10/2019	0.796	0.796	0.796				

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	
Oct-19	Arsenic	milligrams per litre	Quarterly	1	15/10/2019	0.0008	0.0008	0.0008				
Oct-19	Cadmium	milligrams per litre	Quarterly	1	15/10/2019	<0.00005	<0.00005	<0.00005				
Oct-19	Calcium	milligrams per litre	Quarterly	1	15/10/2019	6	6	6				
Oct-19	Chromium	milligrams per litre	Quarterly	1	15/10/2019	0.0028	0.0028	0.0028				
Oct-19	Copper	milligrams per litre	Quarterly	1	15/10/2019	0.003	0.003	0.003				
Oct-19	Electrical conductivity	microsiemens per centimetre	Quarterly	1	15/10/2019	523	523	523				
Oct-19	Iron	milligrams per litre	Quarterly	1	15/10/2019	0.808	0.808	0.808				
Oct-19	Lead	milligrams per litre	Quarterly	1	15/10/2019	0.0037	0.0037	0.0037			(next quarterly sample scheduled for January 2020)	
Oct-19	Magnesium	milligrams per litre	Quarterly	1	15/10/2019	6	6	6				
Oct-19	Manganese	milligrams per litre	Quarterly	1	15/10/2019	0.033	0.033	0.033				
Oct-19	Nickel	milligrams per litre	Quarterly	1	15/10/2019	0.0034	0.0034	0.0034				
Oct-19	pH	pH	Quarterly	1	15/10/2019	5.9	5.9	5.9				
Oct-19	Potassium	milligrams per litre	Quarterly	1	15/10/2019	2	2	2				
Oct-19	Selenium	milligrams per litre	Quarterly	1	15/10/2019	0.0002	0.0002	0.0002				
Oct-19	Sodium	milligrams per litre	Quarterly	1	15/10/2019	60	60	60				
Oct-19	Standing Water Level	metres	Quarterly	1	15/10/2019	2.26	2.26	2.26				
Oct-19	Zinc	milligrams per litre	Quarterly	1	15/10/2019	0.008	0.008	0.008				

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
Oct-19	Arsenic	milligrams per litre	Quarterly	1	15/10/2019	0.0136	0.0136	0.0136			
Oct-19	Cadmium	milligrams per litre	Quarterly	1	15/10/2019	0.0005	0.0005	0.0005			
Oct-19	Calcium	milligrams per litre	Quarterly	1	15/10/2019	470	470	470			
Oct-19	Chromium	milligrams per litre	Quarterly	1	15/10/2019	0.0179	0.0179	0.0179			
Oct-19	Copper	milligrams per litre	Quarterly	1	15/10/2019	0.019	0.019	0.019			
Oct-19	Electrical conductivity	microsiemens per centimetre	Quarterly	1	15/10/2019	54500	54500	54500			
Oct-19	Iron	milligrams per litre	Quarterly	1	15/10/2019	13.7	13.7	13.7			
Oct-19	Lead	milligrams per litre	Quarterly	1	15/10/2019	0.0181	0.0181	0.0181			
Oct-19	Magnesium	milligrams per litre	Quarterly	1	15/10/2019	1200	1200	1200			(next quarterly sample scheduled for January 2020)
Oct-19	Manganese	milligrams per litre	Quarterly	1	15/10/2019	0.544	0.544	0.544			
Oct-19	Nickel	milligrams per litre	Quarterly	1	15/10/2019	0.014	0.014	0.014			
Oct-19	pH	pH	Quarterly	1	15/10/2019	6.78	6.78	6.78			
Oct-19	Potassium	milligrams per litre	Quarterly	1	15/10/2019	263	263	263			
Oct-19	Selenium	milligrams per litre	Quarterly	1	15/10/2019	0.005	0.005	0.005			
Oct-19	Sodium	milligrams per litre	Quarterly	1	15/10/2019	9230	9230	9230			
Oct-19	Standing Water Level	metres	Quarterly	1	15/10/2019	0.1	0.1	0.1			
Oct-19	Zinc	milligrams per litre	Quarterly	1	15/10/2019	0.229	0.229	0.229			

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
Oct-19	Arsenic	milligrams per litre	Quarterly	1	15/10/2019	0.0136	0.0136	0.0136			
Oct-19	Cadmium	milligrams per litre	Quarterly	1	15/10/2019	0.00028	0.00028	0.00028			
Oct-19	Calcium	milligrams per litre	Quarterly	1	15/10/2019	3	3	3			
Oct-19	Chromium	milligrams per litre	Quarterly	1	15/10/2019	0.0478	0.0478	0.0478			
Oct-19	Copper	milligrams per litre	Quarterly	1	15/10/2019	0.0311	0.0311	0.0311			
Oct-19	Electrical conductivity	microsiemens per centimetre	Quarterly	1	15/10/2019	1400	1400	1400			
Oct-19	Iron	milligrams per litre	Quarterly	1	15/10/2019	1.08	1.08	1.08			
Oct-19	Lead	milligrams per litre	Quarterly	1	15/10/2019	0.025	0.025	0.025			
Oct-19	Magnesium	milligrams per litre	Quarterly	1	15/10/2019	16	16	16			(next quarterly sample scheduled for January 2020)
Oct-19	Manganese	milligrams per litre	Quarterly	1	15/10/2019	0.0762	0.0762	0.0762			
Oct-19	Nickel	milligrams per litre	Quarterly	1	15/10/2019	0.039	0.039	0.039			
Oct-19	pH	pH	Quarterly	1	15/10/2019	5.32	5.32	5.32			
Oct-19	Potassium	milligrams per litre	Quarterly	1	15/10/2019	3	3	3			
Oct-19	Selenium	milligrams per litre	Quarterly	1	15/10/2019	0.0018	0.0018	0.0018			
Oct-19	Sodium	milligrams per litre	Quarterly	1	15/10/2019	156	156	156			
Oct-19	Standing Water Level	metres	Quarterly	1	15/10/2019	-0.15	-0.15	-0.15			
Oct-19	Zinc	milligrams per litre	Quarterly	1	15/10/2019	0.103	0.103	0.103			

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
Oct-19	Cadmium	milligrams per cubic metre	Yearly						1	No	
Oct-19	Chlorine	milligrams per cubic metre	Yearly						200	No	
Oct-19	Copper	milligrams per cubic metre	Yearly								
Oct-19	Hydrogen chloride	milligrams per cubic metre	Yearly						100	No	
Oct-19	Mercury	milligrams per cubic metre	Yearly						1	No	
Oct-19	Moisture	percent	Yearly								
Oct-19	Molecular weight of stack gases	grams per gram mole	Yearly								
Oct-19	Nitrogen Oxides	milligrams per cubic metre	Continuous	99.46%	Oct-19	409	647	810	1500	No	
Oct-19	Sulfuric acid mist and sulfur trioxide (as SO3)	milligrams per cubic metre	Yearly						100	No	
Oct-19	Sulphur dioxide	parts per million	Continuous	99.46%	Oct-19	184	257	394	600	No	
Oct-19	Temperature	degrees Celsius	Yearly								
Oct-19	Total Fluoride	milligrams per cubic metre	Yearly						50	No	
Oct-19	Total Solid Particles	milligrams per cubic metre	Yearly						100	No	
Oct-19	Type 1 and Type 2 substances in aggregate	milligrams per cubic metre	Yearly						5	No	
Oct-19	Undifferentiated Particulates	milligrams per cubic metre	Continuous	100%	Oct-19	15.3	24.9	37.5			
Oct-19	Velocity	metres per second	Yearly								
Oct-19	Volatile organic compounds	parts per million	Yearly								
Oct-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
Oct-19	Cadmium	milligrams per cubic metre	Yearly						1	No	
Oct-19	Chlorine	milligrams per cubic metre	Yearly						200	No	
Oct-19	Copper	milligrams per cubic metre	Yearly								
Oct-19	Hydrogen chloride	milligrams per cubic metre	Yearly						100	No	
Oct-19	Mercury	milligrams per cubic metre	Yearly						1	No	
Oct-19	Moisture	percent	Yearly								
Oct-19	Molecular weight of stack gases	grams per gram mole	Yearly								
Oct-19	Nitrogen Oxides	milligrams per cubic metre	Continuous	99.73%	Oct-19	613	785	950	1500	No	
Oct-19	Sulfuric acid mist and sulfur trioxide (as SO3)	milligrams per cubic metre	Yearly						100	No	
Oct-19	Sulphur dioxide	parts per million	Continuous	99.73%	Oct-19	167	264	454	600	No	
Oct-19	Temperature	degrees Celsius	Yearly								
Oct-19	Total Fluoride	milligrams per cubic metre	Yearly						50	No	
Oct-19	Total Solid Particles	milligrams per cubic metre	Yearly						100	No	
Oct-19	Type 1 and Type 2 substances in aggregate	milligrams per cubic metre	Yearly						5	No	
Oct-19	Undifferentiated Particulates	milligrams per cubic metre	Continuous	100%	Oct-19	3.6	6.8	8.6			
Oct-19	Velocity	metres per second	Yearly								
Oct-19	Volatile organic compounds	parts per million	Yearly								
Oct-19	Volumetric flowrate	cubic metres per second	Yearly								

GENERAL COMMENTS