

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	January 2017	
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	98.5% limit	Exceedance (yes/no)	Comments
January 2017	Chlorine (free residual)	milligrams per litre	Monthly	1	11/01/2017	0.07	0.07	0.07	0.2	37.5	No	
January 2017	Temperature	degrees celsius	Continuous	100%	January 2017	31.6	33.7	36.6			No	
January 2017	Oil and Grease	Visible	Continuous	100%	January 2017	NIL	NIL	NIL				No visible oil or grease detected during January 2017

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	
January 2017	Ammonia	milligrams per litre	Quarterly									
January 2017	Cadmium	milligrams per litre	Quarterly									
January 2017	Copper	milligrams per litre	Quarterly									
January 2017	Lead	milligrams per litre	Quarterly									
January 2017	Manganese	milligrams per litre	Quarterly									
January 2017	Nitrate + nitrite (oxidised nitrogen)	milligrams per litre	Monthly	1	11/01/2017	0.03	0.03	0.03				
January 2017	Nitrogen (total)	milligrams per litre	Quarterly								Quarterly Sampling for 'Point 2' has been undertaken in February.	
January 2017	pH	pH	Monthly	1	11/01/2017	8.65	8.65	8.65	6.5 - 9.5	No		
January 2017	Phosphorus (total)	milligrams per litre	Monthly	1	11/01/2017	0.16	0.16	0.16				
January 2017	Reactive Phosphorus	milligrams per litre	Monthly	1	11/01/2017	0.13	0.13	0.13				
January 2017	Selenium	milligrams per litre	Quarterly									
January 2017	Total Kjeldahl Nitrogen	milligrams per litre	Quarterly									
January 2017	Total Suspended Solids	milligrams per litre	Fortnightly	5	6, 11, 17, 24 & 31/1/17	7	27.4	49	50	No		
January 2017	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	
January 2017	Ammonia	milligrams per litre	Quarterly	1	11/01/2017	1.72	1.72	1.72				
January 2017	Cadmium	milligrams per litre	Quarterly	1	11/01/2017	0.00088	0.00088	0.00088				
January 2017	Copper	milligrams per litre	Quarterly	1	11/01/2017	<0.001	<0.001	<0.001				
January 2017	Lead	milligrams per litre	Quarterly	1	11/01/2017	<0.0002	<0.0002	<0.0002				
January 2017	Manganese	milligrams per litre	Quarterly	1	11/01/2017	0.0689	0.0689	0.0689				
January 2017	Nitrate + nitrite (oxidised nitrogen)	milligrams per litre	Monthly	1	11/01/2017	0.26	0.26	0.26				
January 2017	Nitrogen (total)	milligrams per litre	Quarterly	1	11/01/2017	2.3	2.3	2.3			No discharge to Mannering Bay during January 2017	
January 2017	pH	pH	Monthly	1	11/01/2017	6.7	6.7	6.7				
January 2017	Phosphorus (total)	milligrams per litre	Monthly	1	11/01/2017	<0.05	<0.05	<0.05				
January 2017	Selenium	milligrams per litre	Quarterly	1	11/01/2017	<0.0021	<0.0021	<0.0021				
January 2017	Total Kjeldahl Nitrogen	milligrams per litre	Quarterly	1	11/01/2017	2	2	2				
January 2017	Total Suspended Solids	milligrams per litre	Monthly	1	11/01/2017	3	3	3	50	No		
January 2017	Zinc	milligrams per litre	Quarterly	1	11/01/2017	<0.005	<0.005	<0.005				

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	
January 2017	Ammonia	milligrams per litre	Daily for discharge >2 hrs									
January 2017	Cadmium	milligrams per litre	Daily for discharge >2 hrs									
January 2017	Copper	milligrams per litre	Daily for discharge >2 hrs									
January 2017	Lead	milligrams per litre	Daily for discharge >2 hrs									
January 2017	Manganese	milligrams per litre	Daily for discharge >2 hrs									
January 2017	Nitrate + nitrite (oxidised nitrogen)	milligrams per litre	Daily for discharge >2 hrs									
January 2017	Nitrogen (total)	milligrams per litre	Daily for discharge >2 hrs								No discharge from EPA Point 18 during January 2017	
January 2017	pH	pH	Daily for discharge >2 hrs						6.5 - 9.0			
January 2017	Phosphorus (total)	milligrams per litre	Daily for discharge >2 hrs									
January 2017	Selenium	milligrams per litre	Daily for discharge >2 hrs									
January 2017	Total Kjeldahl Nitrogen	milligrams per litre	Daily for discharge >2 hrs									
January 2017	Total Suspended Solids	milligrams per litre	Daily for discharge >2 hrs						50			
January 2017	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
January 2017	Arsenic	milligrams per litre	Quarterly	1	11/01/2017	0.0395	0.0395	0.0395			
January 2017	Cadmium	milligrams per litre	Quarterly	1	11/01/2017	<0.00021	<0.00021	<0.00021			
January 2017	Calcium	milligrams per litre	Quarterly	1	11/01/2017	797	797	797			
January 2017	Chromium	milligrams per litre	Quarterly	1	11/01/2017	0.0062	0.0062	0.0062			
January 2017	Copper	milligrams per litre	Quarterly	1	11/01/2017	0.0076	0.0076	0.0076			
January 2017	Electrical conductivity	microsiemens per centimetre	Quarterly	1	11/01/2017	35900	35900	35900			
January 2017	Iron	milligrams per litre	Quarterly	1	11/01/2017	77.8	77.8	77.8			
January 2017	Lead	milligrams per litre	Quarterly	1	11/01/2017	0.0082	0.0082	0.0082			
January 2017	Magnesium	milligrams per litre	Quarterly	1	11/01/2017	951	951	951			
January 2017	Manganese	milligrams per litre	Quarterly	1	11/01/2017	5.68	5.68	5.68			
January 2017	Nickel	milligrams per litre	Quarterly	1	11/01/2017	0.0255	0.0255	0.0255			
January 2017	pH	pH	Quarterly	1	11/01/2017	5.24	5.24	5.24			
January 2017	Potassium	milligrams per litre	Quarterly	1	11/01/2017	97	97	97			
January 2017	Selenium	milligrams per litre	Quarterly	1	11/01/2017	0.0024	0.0024	0.0024			
January 2017	Sodium	milligrams per litre	Quarterly	1	11/01/2017	5900	5900	5900			
January 2017	Standing Water Level	metres	Quarterly	1	11/01/2017	3.81	3.81	3.81			
January 2017	Zinc	milligrams per litre	Quarterly	1	11/01/2017	0.028	0.028	0.028			

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
January 2017	Arsenic	milligrams per litre	Quarterly	1	11/01/2017	0.0122	0.0122	0.0122			
January 2017	Cadmium	milligrams per litre	Quarterly	1	11/01/2017	0.00006	0.00006	0.00006			
January 2017	Calcium	milligrams per litre	Quarterly	1	11/01/2017	324	324	324			
January 2017	Chromium	milligrams per litre	Quarterly	1	11/01/2017	0.0027	0.0027	0.0027			
January 2017	Copper	milligrams per litre	Quarterly	1	11/01/2017	0.0142	0.0142	0.0142			
January 2017	Electrical conductivity	microsiemens per centimetre	Quarterly	1	11/01/2017	17500	17500	17500			
January 2017	Iron	milligrams per litre	Quarterly	1	11/01/2017	125	125	125			
January 2017	Lead	milligrams per litre	Quarterly	1	11/01/2017	0.0086	0.0086	0.0086			
January 2017	Magnesium	milligrams per litre	Quarterly	1	11/01/2017	642	642	642			
January 2017	Manganese	milligrams per litre	Quarterly	1	11/01/2017	1.66	1.66	1.66			
January 2017	Nickel	milligrams per litre	Quarterly	1	11/01/2017	0.0808	0.0808	0.0808			
January 2017	pH	pH	Quarterly	1	11/01/2017	5.07	5.07	5.07			
January 2017	Potassium	milligrams per litre	Quarterly	1	11/01/2017	26	26	26			
January 2017	Selenium	milligrams per litre	Quarterly	1	11/01/2017	0.0043	0.0043	0.0043			
January 2017	Sodium	milligrams per litre	Quarterly	1	11/01/2017	3460	3460	3460			
January 2017	Standing Water Level	metres	Quarterly	1	11/01/2017	0.95	0.95	0.95			
January 2017	Zinc	milligrams per litre	Quarterly	1	11/01/2017	0.317	0.317	0.317			

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
January 2017	Arsenic	milligrams per litre	Quarterly	1	11/01/2017	0.0007	0.0007	0.0007			
January 2017	Cadmium	milligrams per litre	Quarterly	1	11/01/2017	<0.00005	<0.00005	<0.00005			
January 2017	Calcium	milligrams per litre	Quarterly	1	11/01/2017	6	6	6			
January 2017	Chromium	milligrams per litre	Quarterly	1	11/01/2017	0.004	0.004	0.004			
January 2017	Copper	milligrams per litre	Quarterly	1	11/01/2017	0.0039	0.0039	0.0039			
January 2017	Electrical conductivity	microsiemens per centimetre	Quarterly	1	11/01/2017	903	903	903			
January 2017	Iron	milligrams per litre	Quarterly	1	11/01/2017	8.27	8.27	8.27			
January 2017	Lead	milligrams per litre	Quarterly	1	11/01/2017	0.0086	0.0086	0.0086			
January 2017	Magnesium	milligrams per litre	Quarterly	1	11/01/2017	14	14	14			
January 2017	Manganese	milligrams per litre	Quarterly	1	11/01/2017	0.117	0.117	0.117			
January 2017	Nickel	milligrams per litre	Quarterly	1	11/01/2017	0.0086	0.0086	0.0086			
January 2017	pH	pH	Quarterly	1	11/01/2017	4.8	4.8	4.8			
January 2017	Potassium	milligrams per litre	Quarterly	1	11/01/2017	3	3	3			
January 2017	Selenium	milligrams per litre	Quarterly	1	11/01/2017	0.0002	0.0002	0.0002			
January 2017	Sodium	milligrams per litre	Quarterly	1	11/01/2017	94	94	94			
January 2017	Standing Water Level	metres	Quarterly	1	11/01/2017	2.97	2.97	2.97			
January 2017	Zinc	milligrams per litre	Quarterly	1	11/01/2017	0.026	0.026	0.026			

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
January 2017	Arsenic	milligrams per litre	Quarterly	1	11/01/2017	0.0353	0.0353	0.0353			
January 2017	Cadmium	milligrams per litre	Quarterly	1	11/01/2017	0.0007	0.0007	0.0007			
January 2017	Calcium	milligrams per litre	Quarterly	1	11/01/2017	524	524	524			
January 2017	Chromium	milligrams per litre	Quarterly	1	11/01/2017	0.0508	0.0508	0.0508			
January 2017	Copper	milligrams per litre	Quarterly	1	11/01/2017	0.0419	0.0419	0.0419			
January 2017	Electrical conductivity	microsiemens per centimetre	Quarterly	1	11/01/2017	47000	47000	47000			
January 2017	Iron	milligrams per litre	Quarterly	1	11/01/2017	15.8	15.8	15.8			
January 2017	Lead	milligrams per litre	Quarterly	1	11/01/2017	0.0525	0.0525	0.0525			
January 2017	Magnesium	milligrams per litre	Quarterly	1	11/01/2017	1380	1380	1380			
January 2017	Manganese	milligrams per litre	Quarterly	1	11/01/2017	0.588	0.588	0.588			
January 2017	Nickel	milligrams per litre	Quarterly	1	11/01/2017	0.0466	0.0466	0.0466			
January 2017	pH	pH	Quarterly	1	11/01/2017	6.64	6.64	6.64			
January 2017	Potassium	milligrams per litre	Quarterly	1	11/01/2017	336	336	336			
January 2017	Selenium	milligrams per litre	Quarterly	1	11/01/2017	0.0072	0.0072	0.0072			
January 2017	Sodium	milligrams per litre	Quarterly	1	11/01/2017	9000	9000	9000			
January 2017	Standing Water Level	metres	Quarterly	1	11/01/2017	0.21	0.21	0.21			
January 2017	Zinc	milligrams per litre	Quarterly	1	11/01/2017	0.462	0.462	0.462			

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
January 2017	Arsenic	milligrams per litre	Quarterly	1	11/01/2017	0.0051	0.0051	0.0051			
January 2017	Cadmium	milligrams per litre	Quarterly	1	11/01/2017	0.00008	0.00008	0.00008			
January 2017	Calcium	milligrams per litre	Quarterly	1	11/01/2017	3	3	3			
January 2017	Chromium	milligrams per litre	Quarterly	1	11/01/2017	0.0314	0.0314	0.0314			
January 2017	Copper	milligrams per litre	Quarterly	1	11/01/2017	0.0226	0.0226	0.0226			
January 2017	Electrical conductivity	microsiemens per centimetre	Quarterly	1	11/01/2017	918	918	918			
January 2017	Iron	milligrams per litre	Quarterly	1	11/01/2017	0.506	0.506	0.506			
January 2017	Lead	milligrams per litre	Quarterly	1	11/01/2017	0.0168	0.0168	0.0168			
January 2017	Magnesium	milligrams per litre	Quarterly	1	11/01/2017	19	19	19			
January 2017	Manganese	milligrams per litre	Quarterly	1	11/01/2017	0.0906	0.0906	0.0906			
January 2017	Nickel	milligrams per litre	Quarterly	1	11/01/2017	0.011	0.011	0.011			
January 2017	pH	pH	Quarterly	1	11/01/2017	4.06	4.06	4.06			
January 2017	Potassium	milligrams per litre	Quarterly	1	11/01/2017	5	5	5			
January 2017	Selenium	milligrams per litre	Quarterly	1	11/01/2017	0.0009	0.0009	0.0009			
January 2017	Sodium	milligrams per litre	Quarterly	1	11/01/2017	118	118	118			
January 2017	Standing Water Level	metres	Quarterly	1	11/01/2017	0.45	0.45	0.45			
January 2017	Zinc	milligrams per litre	Quarterly	1	11/01/2017	0.07	0.07	0.07			

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
January 2017	Cadmium	milligrams per cubic metre	Yearly						1	No	
January 2017	Chlorine	milligrams per cubic metre	Yearly						200	No	
January 2017	Copper	milligrams per cubic metre	Yearly								
January 2017	Hydrogen chloride	milligrams per cubic metre	Yearly						100	No	
January 2017	Mercury	milligrams per cubic metre	Yearly						1	No	
January 2017	Moisture	percent	Yearly								
January 2017	Molecular weight of stack gases	grams per gram mole	Yearly								
January 2017	Nitrogen Oxides	milligrams per cubic metre	Continuous	100%	January 2017	309	642	964	1500	No	
January 2017	Sulfuric acid mist and sulfur trioxide (as SO3)	milligrams per cubic metre	Yearly						100	No	
January 2017	Sulphur dioxide	parts per million	Continuous	100%	January 2017	147	187	226	600	No	
January 2017	Temperature	degrees Celsius	Yearly								
January 2017	Total Fluoride	milligrams per cubic metre	Yearly						50	No	
January 2017	Total Solid Particles	milligrams per cubic metre	Yearly						100	No	
January 2017	Type 1 and Type 2 substances in aggregate	milligrams per cubic metre	Yearly						5	No	
January 2017	Undifferentiated Particulates	milligrams per cubic metre	Continuous	100%	January 2017	6.9	15.7	54.7			
January 2017	Velocity	metres per second	Yearly								
January 2017	Volatile organic compounds	parts per million	Yearly								
January 2017	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
January 2017	Cadmium	milligrams per cubic metre	Yearly						1	No	
January 2017	Chlorine	milligrams per cubic metre	Yearly						200	No	
January 2017	Copper	milligrams per cubic metre	Yearly								
January 2017	Hydrogen chloride	milligrams per cubic metre	Yearly						100	No	
January 2017	Mercury	milligrams per cubic metre	Yearly						1	No	
January 2017	Moisture	percent	Yearly								
January 2017	Molecular weight of stack gases	grams per gram mole	Yearly								
January 2017	Nitrogen Oxides	milligrams per cubic metre	Continuous	100%	January 2017	488	855	1082	1500	No	
January 2017	Sulfuric acid mist and sulfur trioxide (as SO3)	milligrams per cubic metre	Yearly						100	No	
January 2017	Sulphur dioxide	parts per million	Continuous	100%	January 2017	98	157	212	600	No	
January 2017	Temperature	degrees Celsius	Yearly								
January 2017	Total Fluoride	milligrams per cubic metre	Yearly						50	No	
January 2017	Total Solid Particles	milligrams per cubic metre	Yearly						100	No	
January 2017	Type 1 and Type 2 substances in aggregate	milligrams per cubic metre	Yearly						5	No	
January 2017	Undifferentiated Particulates	milligrams per cubic metre	Continuous	100%	January 2017	13.8	23.5	37.7			
January 2017	Velocity	metres per second	Yearly								
January 2017	Volatile organic compounds	parts per million	Yearly								
January 2017	Volumetric flowrate	cubic metres per second	Yearly								

GENERAL COMMENTS

Last annual stack test on Points 11 & 12 completed in March 2016 and reported in April 2016.
 Due to a laboratory error, the quarterly LDP2 sample scheduled for January has been rescheduled to be undertaken in February for the quarter.