

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 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
April 2017	Chlorine (free residual)	milligrams per litre	Monthly	1	06/04/2017	0.03	0.03	0.03	0.2		No	
April 2017	Temperature	degrees celsius	Continuous	100%	April 2017	24.8	30.5	33.7	37.5	35	No	
April 2017	Oil and Grease	Visible	Continuous	100%	April 2017	NIL	NIL	NIL				No visible oil or grease detected during April 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	
April 2017	Ammonia	milligrams per litre	Quarterly	1	06/04/2017	0.03	0.03	0.03				
April 2017	Cadmium	milligrams per litre	Quarterly	1	06/04/2017	<0.00021	<0.00021	<0.00021				
April 2017	Copper	milligrams per litre	Quarterly	1	06/04/2017	<0.001	<0.001	<0.001				
April 2017	Lead	milligrams per litre	Quarterly	1	06/04/2017	<0.0002	<0.0002	<0.0002				
April 2017	Manganese	milligrams per litre	Quarterly	1	06/04/2017	0.004	0.004	0.004				
April 2017	Nitrate + nitrite (oxidised nitrogen)	milligrams per litre	Monthly	1	06/04/2017	0.03	0.03	0.03				
April 2017	Nitrogen (total)	milligrams per litre	Quarterly	1	06/04/2017	0.5	0.5	0.5				
April 2017	pH	pH	Monthly	1	06/04/2017	8.7	8.7	8.7	6.5 - 9.5	No		
April 2017	Phosphorus (total)	milligrams per litre	Monthly	1	06/04/2017	0.35	0.35	0.35				
April 2017	Reactive Phosphorus	milligrams per litre	Monthly	1	06/04/2017	<0.01	<0.01	<0.01				
April 2017	Selenium	milligrams per litre	Quarterly	1	06/04/2017	0.0255	0.0255	0.0255				
April 2017	Total Kjeldahl Nitrogen	milligrams per litre	Quarterly	1	06/04/2017	0.5	0.5	0.5				
April 2017	Total Suspended Solids	milligrams per litre	Fortnightly		6, 11, 19 & 27/04/2017	5	10.3	15	50	No		
April 2017	Zinc	milligrams per litre	Quarterly	1	06/04/2017	0.007	0.007	0.007				

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	
April 2017	Ammonia	milligrams per litre	Quarterly	1	06/04/2017	1.69	1.69	1.69				
April 2017	Cadmium	milligrams per litre	Quarterly	1	06/04/2017	0.00067	0.00067	0.00067				
April 2017	Copper	milligrams per litre	Quarterly	1	06/04/2017	<0.001	<0.001	<0.001				
April 2017	Lead	milligrams per litre	Quarterly	1	06/04/2017	0.0008	0.0008	0.0008				
April 2017	Manganese	milligrams per litre	Quarterly	1	06/04/2017	0.111	0.111	0.111				
April 2017	Nitrate + nitrite (oxidised nitrogen)	milligrams per litre	Monthly	1	06/04/2017	0.18	0.18	0.18				
April 2017	Nitrogen (total)	milligrams per litre	Quarterly	1	06/04/2017	2	2	2			No discharge to Mannering Bay during April 2017	
April 2017	pH	pH	Monthly	1	06/04/2017	7.87	7.87	7.87				
April 2017	Phosphorus (total)	milligrams per litre	Monthly	1	06/04/2017	<0.02	<0.02	<0.02				
April 2017	Selenium	milligrams per litre	Quarterly	1	06/04/2017	<0.021	<0.021	<0.021				
April 2017	Total Kjeldahl Nitrogen	milligrams per litre	Quarterly	1	06/04/2017	1.8	1.8	1.8				
April 2017	Total Suspended Solids	milligrams per litre	Monthly	1	06/04/2017	12	12	12	50	No		
April 2017	Zinc	milligrams per litre	Quarterly	1	06/04/2017	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	
April 2017	Ammonia	milligrams per litre	Daily for discharge >2 hrs									
April 2017	Cadmium	milligrams per litre	Daily for discharge >2 hrs									
April 2017	Copper	milligrams per litre	Daily for discharge >2 hrs									
April 2017	Lead	milligrams per litre	Daily for discharge >2 hrs									
April 2017	Manganese	milligrams per litre	Daily for discharge >2 hrs									
April 2017	Nitrate + nitrite (oxidised nitrogen)	milligrams per litre	Daily for discharge >2 hrs									
April 2017	Nitrogen (total)	milligrams per litre	Daily for discharge >2 hrs								No discharge from EPA Point 18 during April 2017	
April 2017	pH	pH	Daily for discharge >2 hrs						6.5 - 9.0			
April 2017	Phosphorus (total)	milligrams per litre	Daily for discharge >2 hrs									
April 2017	Selenium	milligrams per litre	Daily for discharge >2 hrs									
April 2017	Total Kjeldahl Nitrogen	milligrams per litre	Daily for discharge >2 hrs									
April 2017	Total Suspended Solids	milligrams per litre	Daily for discharge >2 hrs						50			
April 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
April 2017	Arsenic	milligrams per litre	Quarterly	1	06/04/2017	0.0095	0.0095	0.0095			
April 2017	Cadmium	milligrams per litre	Quarterly	1	06/04/2017	<0.00021	<0.00021	<0.00021			
April 2017	Calcium	milligrams per litre	Quarterly	1	06/04/2017	632	632	632			
April 2017	Chromium	milligrams per litre	Quarterly	1	06/04/2017	0.0024	0.0024	0.0024			
April 2017	Copper	milligrams per litre	Quarterly	1	06/04/2017	0.003	0.003	0.003			
April 2017	Electrical conductivity	microsiemens per centimetre	Quarterly	1	06/04/2017	30500	30500	30500			
April 2017	Iron	milligrams per litre	Quarterly	1	06/04/2017	45.2	45.2	45.2			
April 2017	Lead	milligrams per litre	Quarterly	1	06/04/2017	0.0016	0.0016	0.0016			
April 2017	Magnesium	milligrams per litre	Quarterly	1	06/04/2017	739	739	739			(next quarterly samples scheduled for July/August 2017)
April 2017	Manganese	milligrams per litre	Quarterly	1	06/04/2017	3.74	3.74	3.74			
April 2017	Nickel	milligrams per litre	Quarterly	1	06/04/2017	0.0163	0.0163	0.0163			
April 2017	pH	pH	Quarterly	1	06/04/2017	5.69	5.69	5.69			
April 2017	Potassium	milligrams per litre	Quarterly	1	06/04/2017	83	83	83			
April 2017	Selenium	milligrams per litre	Quarterly	1	06/04/2017	<0.021	<0.021	<0.021			
April 2017	Sodium	milligrams per litre	Quarterly	1	06/04/2017	4780	4780	4780			
April 2017	Standing Water Level	metres	Quarterly	1	06/04/2017	3.65	3.65	3.65			
April 2017	Zinc	milligrams per litre	Quarterly	1	06/04/2017	0.03	0.03	0.03			

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
April 2017	Arsenic	milligrams per litre	Quarterly	1	06/04/2017	0.0025	0.0025	0.0025			
April 2017	Cadmium	milligrams per litre	Quarterly	1	06/04/2017	0.00007	0.00007	0.00007			
April 2017	Calcium	milligrams per litre	Quarterly	1	06/04/2017	25	25	25			
April 2017	Chromium	milligrams per litre	Quarterly	1	06/04/2017	0.0032	0.0032	0.0032			
April 2017	Copper	milligrams per litre	Quarterly	1	06/04/2017	0.023	0.023	0.023			
April 2017	Electrical conductivity	microsiemens per centimetre	Quarterly	1	06/04/2017	461	461	461			
April 2017	Iron	milligrams per litre	Quarterly	1	06/04/2017	0.598	0.598	0.598			
April 2017	Lead	milligrams per litre	Quarterly	1	06/04/2017	0.009	0.009	0.009			
April 2017	Magnesium	milligrams per litre	Quarterly	1	06/04/2017	9	9	9			(next quarterly samples scheduled for July/August 2017)
April 2017	Manganese	milligrams per litre	Quarterly	1	06/04/2017	0.0815	0.0815	0.0815			
April 2017	Nickel	milligrams per litre	Quarterly	1	06/04/2017	0.0037	0.0037	0.0037			
April 2017	pH	pH	Quarterly	1	06/04/2017	6	6	6			
April 2017	Potassium	milligrams per litre	Quarterly	1	06/04/2017	2	2	2			
April 2017	Selenium	milligrams per litre	Quarterly	1	06/04/2017	0.0009	0.0009	0.0009			
April 2017	Sodium	milligrams per litre	Quarterly	1	06/04/2017	49	49	49			
April 2017	Standing Water Level	metres	Quarterly	1	06/04/2017	0.5	0.5	0.5			
April 2017	Zinc	milligrams per litre	Quarterly	1	06/04/2017	0.892	0.892	0.892			

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
April 2017	Arsenic	milligrams per litre	Quarterly	1	06/04/2017	0.0004	0.0004	0.0004			
April 2017	Cadmium	milligrams per litre	Quarterly	1	06/04/2017	<0.00005	<0.00005	<0.00005			
April 2017	Calcium	milligrams per litre	Quarterly	1	06/04/2017	1	1	1			
April 2017	Chromium	milligrams per litre	Quarterly	1	06/04/2017	0.0034	0.0034	0.0034			
April 2017	Copper	milligrams per litre	Quarterly	1	06/04/2017	0.0018	0.0018	0.0018			
April 2017	Electrical conductivity	microsiemens per centimetre	Quarterly	1	06/04/2017	217	217	217			
April 2017	Iron	milligrams per litre	Quarterly	1	06/04/2017	0.239	0.239	0.239			
April 2017	Lead	milligrams per litre	Quarterly	1	06/04/2017	0.0009	0.0009	0.0009			
April 2017	Magnesium	milligrams per litre	Quarterly	1	06/04/2017	3	3	3			(next quarterly samples scheduled for July/August 2017)
April 2017	Manganese	milligrams per litre	Quarterly	1	06/04/2017	0.006	0.006	0.006			
April 2017	Nickel	milligrams per litre	Quarterly	1	06/04/2017	0.002	0.002	0.002			
April 2017	pH	pH	Quarterly	1	06/04/2017	4.89	4.89	4.89			
April 2017	Potassium	milligrams per litre	Quarterly	1	06/04/2017	2	2	2			
April 2017	Selenium	milligrams per litre	Quarterly	1	06/04/2017	<0.0002	<0.0002	<0.0002			
April 2017	Sodium	milligrams per litre	Quarterly	1	06/04/2017	23	23	23			
April 2017	Standing Water Level	metres	Quarterly	1	06/04/2017	0.84	0.84	0.84			
April 2017	Zinc	milligrams per litre	Quarterly	1	06/04/2017	0.022	0.022	0.022			

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
April 2017	Arsenic	milligrams per litre	Quarterly	1	06/04/2017	0.0039	0.0039	0.0039			
April 2017	Cadmium	milligrams per litre	Quarterly	1	06/04/2017	<0.00021	<0.00021	<0.00021			
April 2017	Calcium	milligrams per litre	Quarterly	1	06/04/2017	256	256	256			
April 2017	Chromium	milligrams per litre	Quarterly	1	06/04/2017	0.0055	0.0055	0.0055			
April 2017	Copper	milligrams per litre	Quarterly	1	06/04/2017	0.0089	0.0089	0.0089			
April 2017	Electrical conductivity	microsiemens per centimetre	Quarterly	1	06/04/2017	43900	43900	43900			
April 2017	Iron	milligrams per litre	Quarterly	1	06/04/2017	7.67	7.67	7.67			
April 2017	Lead	milligrams per litre	Quarterly	1	06/04/2017	0.0044	0.0044	0.0044			
April 2017	Magnesium	milligrams per litre	Quarterly	1	06/04/2017	590	590	590			(next quarterly samples scheduled for July/August 2017)
April 2017	Manganese	milligrams per litre	Quarterly	1	06/04/2017	0.133	0.133	0.133			
April 2017	Nickel	milligrams per litre	Quarterly	1	06/04/2017	0.0058	0.0058	0.0058			
April 2017	pH	pH	Quarterly	1	06/04/2017	6.73	6.73	6.73			
April 2017	Potassium	milligrams per litre	Quarterly	1	06/04/2017	153	153	153			
April 2017	Selenium	milligrams per litre	Quarterly	1	06/04/2017	<0.0021	<0.0021	<0.0021			
April 2017	Sodium	milligrams per litre	Quarterly	1	06/04/2017	4690	4690	4690			
April 2017	Standing Water Level	metres	Quarterly	1	06/04/2017	0.01	0.01	0.01			
April 2017	Zinc	milligrams per litre	Quarterly	1	06/04/2017	0.065	0.065	0.065			

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
April 2017	Arsenic	milligrams per litre	Quarterly	1	06/04/2017	0.0063	0.0063	0.0063			
April 2017	Cadmium	milligrams per litre	Quarterly	1	06/04/2017	0.00012	0.00012	0.00012			
April 2017	Calcium	milligrams per litre	Quarterly	1	06/04/2017	2	2	2			
April 2017	Chromium	milligrams per litre	Quarterly	1	06/04/2017	0.0475	0.0475	0.0475			
April 2017	Copper	milligrams per litre	Quarterly	1	06/04/2017	0.0388	0.0388	0.0388			
April 2017	Electrical conductivity	microsiemens per centimetre	Quarterly	1	06/04/2017	777	777	777			
April 2017	Iron	milligrams per litre	Quarterly	1	06/04/2017	1.56	1.56	1.56			
April 2017	Lead	milligrams per litre	Quarterly	1	06/04/2017	0.0312	0.0312	0.0312			
April 2017	Magnesium	milligrams per litre	Quarterly	1	06/04/2017	12	12	12			(next quarterly samples scheduled for July/August 2017)
April 2017	Manganese	milligrams per litre	Quarterly	1	06/04/2017	0.0951	0.0951	0.0951			
April 2017	Nickel	milligrams per litre	Quarterly	1	06/04/2017	0.0168	0.0168	0.0168			
April 2017	pH	pH	Quarterly	1	06/04/2017	5.03	5.03	5.03			
April 2017	Potassium	milligrams per litre	Quarterly	1	06/04/2017	2	2	2			
April 2017	Selenium	milligrams per litre	Quarterly	1	06/04/2017	0.0014	0.0014	0.0014			
April 2017	Sodium	milligrams per litre	Quarterly	1	06/04/2017	112	112	112			
April 2017	Standing Water Level	metres	Quarterly	1	06/04/2017	0.41	0.41	0.41			
April 2017	Zinc	milligrams per litre	Quarterly	1	06/04/2017	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
April 2017	Cadmium	milligrams per cubic metre	Yearly						1	No	Refer Note in 'General Comments' re annual stack tests
April 2017	Chlorine	milligrams per cubic metre	Yearly						200	No	
April 2017	Copper	milligrams per cubic metre	Yearly								
April 2017	Hydrogen chloride	milligrams per cubic metre	Yearly						100	No	
April 2017	Mercury	milligrams per cubic metre	Yearly						1	No	
April 2017	Moisture	percent	Yearly								
April 2017	Molecular weight of stack gases	grams per gram mole	Yearly								
April 2017	Nitrogen Oxides	milligrams per cubic metre	Continuous	100%	April 2017	419	540	701	1500	No	
April 2017	Sulfuric acid mist and sulfur trioxide (as SO3)	milligrams per cubic metre	Yearly						100	No	
April 2017	Sulphur dioxide	parts per million	Continuous	100%	April 2017	192	217	245	600	No	
April 2017	Temperature	degrees Celsius	Yearly								
April 2017	Total Fluoride	milligrams per cubic metre	Yearly						50	No	
April 2017	Total Solid Particles	milligrams per cubic metre	Yearly						100	No	
April 2017	Type 1 and Type 2 substances in aggregate	milligrams per cubic metre	Yearly						5	No	
April 2017	Undifferentiated Particulates	milligrams per cubic metre	Continuous	100%	April 2017	12.6	22.5	58.6			
April 2017	Velocity	metres per second	Yearly								
April 2017	Volatile organic compounds	parts per million	Yearly								
April 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
April 2017	Cadmium	milligrams per cubic metre	Yearly						1	No	Refer Note in 'General Comments' re annual stack tests
April 2017	Chlorine	milligrams per cubic metre	Yearly						200	No	
April 2017	Copper	milligrams per cubic metre	Yearly								
April 2017	Hydrogen chloride	milligrams per cubic metre	Yearly						100	No	
April 2017	Mercury	milligrams per cubic metre	Yearly						1	No	
April 2017	Moisture	percent	Yearly								
April 2017	Molecular weight of stack gases	grams per gram mole	Yearly								
April 2017	Nitrogen Oxides	milligrams per cubic metre	Continuous	100%	April 2017	458	709	1033	1500	No	
April 2017	Sulfuric acid mist and sulfur trioxide (as SO3)	milligrams per cubic metre	Yearly						100	No	
April 2017	Sulphur dioxide	parts per million	Continuous	100%	April 2017	124	205	241	600	No	
April 2017	Temperature	degrees Celsius	Yearly								
April 2017	Total Fluoride	milligrams per cubic metre	Yearly						50	No	
April 2017	Total Solid Particles	milligrams per cubic metre	Yearly						100	No	
April 2017	Type 1 and Type 2 substances in aggregate	milligrams per cubic metre	Yearly						5	No	
April 2017	Undifferentiated Particulates	milligrams per cubic metre	Continuous	100%	April 2017	12.8	21.9	31.4			
April 2017	Velocity	metres per second	Yearly								
April 2017	Volatile organic compounds	parts per million	Yearly								
April 2017	Volumetric flowrate	cubic metres per second	Yearly								

GENERAL COMMENTS

Last annual stack test on Points 11 & 12 completed in March 2017. Report has not yet been received from consultants.