

## Vales Point Power Station Monthly Environmental Data Summary



LICENCE NO	761	<a href="http://www.epa.nsw.gov.au/prpoeaapp/">http://www.epa.nsw.gov.au/prpoeaapp/</a>
LICENCE HOLDER	SUNSET POWER INTERNATIONAL PTY LTD	
REPORTING PERIOD	June 2018	
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	97% limit	Exceedance (yes/no)	Comments
June 2018	Chlorine (free residual)	milligrams per litre	Monthly	1	13/06/2018	0.03	0.03	0.03	0.2	35	No	
June 2018	Temperature	degrees celsius	Continuous	100%	June 2018	20.2	25.2	28.1	37.5		No	
June 2018	Oil and Grease	Visible	Continuous	99.2%	June 2018	NIL	NIL	NIL				No visible oil or grease detected during June 2018

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	
June 2018	Ammonia	milligrams per litre	Quarterly									
June 2018	Cadmium	milligrams per litre	Quarterly									
June 2018	Copper	milligrams per litre	Quarterly									
June 2018	Lead	milligrams per litre	Quarterly									
June 2018	Manganese	milligrams per litre	Quarterly									
June 2018	Nitrate + nitrite (oxidised nitrogen)	milligrams per litre	Monthly	1	14/06/2018	0.01	0.01	0.01				
June 2018	Nitrogen (total)	milligrams per litre	Quarterly								(next quarterly samples scheduled for July/August 2018)	
June 2018	pH	pH	Monthly	1	14/06/2018	8.95	8.95	8.95	6.5 - 9.5	No		
June 2018	Phosphorus (total)	milligrams per litre	Monthly	1	14/06/2018	<0.10	<0.10	<0.10				
June 2018	Reactive Phosphorus	milligrams per litre	Monthly	1	14/06/2018	0.08	0.08	0.08				
June 2018	Selenium	milligrams per litre	Quarterly								TSS limit exceeded twice in June 2018 (4/6 and 19/6). However, lake TSS background levels measured around same time at the inlet canal were also higher than the licence limit and the levels measured at LDP2.	
June 2018	Total Kjeldahl Nitrogen	milligrams per litre	Quarterly									
June 2018	Total Suspended Solids	milligrams per litre	Fortnightly	4	4, 8, 14 & 19/6/2018	8	42.5	76	50	Yes		
June 2018	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	
June 2018	Ammonia	milligrams per litre	Quarterly									
June 2018	Cadmium	milligrams per litre	Quarterly									
June 2018	Copper	milligrams per litre	Quarterly									
June 2018	Lead	milligrams per litre	Quarterly									
June 2018	Manganese	milligrams per litre	Quarterly									
June 2018	Nitrate + nitrite (oxidised nitrogen)	milligrams per litre	Monthly	1	13/06/2018						** 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 June 2018.	
June 2018	Nitrogen (total)	milligrams per litre	Quarterly									
June 2018	pH	pH	Monthly	1	13/06/2018							
June 2018	Phosphorus (total)	milligrams per litre	Monthly	1	13/06/2018							
June 2018	Selenium	milligrams per litre	Quarterly									
June 2018	Total Kjeldahl Nitrogen	milligrams per litre	Quarterly									
June 2018	Total Suspended Solids	milligrams per litre	Monthly	1	13/06/2018				50	No		
June 2018	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	
June 2018	Ammonia	milligrams per litre	Daily for discharge >2 hrs									
June 2018	Cadmium	milligrams per litre	Daily for discharge >2 hrs									
June 2018	Copper	milligrams per litre	Daily for discharge >2 hrs									
June 2018	Lead	milligrams per litre	Daily for discharge >2 hrs									
June 2018	Manganese	milligrams per litre	Daily for discharge >2 hrs									
June 2018	Nitrate + nitrite (oxidised nitrogen)	milligrams per litre	Daily for discharge >2 hrs									
June 2018	Nitrogen (total)	milligrams per litre	Daily for discharge >2 hrs								No discharge from EPA Point 18 during June 2018	
June 2018	pH	pH	Daily for discharge >2 hrs						6.5 - 9.0			
June 2018	Phosphorus (total)	milligrams per litre	Daily for discharge >2 hrs									
June 2018	Selenium	milligrams per litre	Daily for discharge >2 hrs									
June 2018	Total Kjeldahl Nitrogen	milligrams per litre	Daily for discharge >2 hrs									
June 2018	Total Suspended Solids	milligrams per litre	Daily for discharge >2 hrs						50			
June 2018	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
June 2018	Arsenic	milligrams per litre	Quarterly								
June 2018	Cadmium	milligrams per litre	Quarterly								
June 2018	Calcium	milligrams per litre	Quarterly								
June 2018	Chromium	milligrams per litre	Quarterly								
June 2018	Copper	milligrams per litre	Quarterly								
June 2018	Electrical conductivity	microsiemens per centimetre	Quarterly								
June 2018	Iron	milligrams per litre	Quarterly								
June 2018	Lead	milligrams per litre	Quarterly								
June 2018	Magnesium	milligrams per litre	Quarterly								(next quarterly samples scheduled for July/August 2018)
June 2018	Manganese	milligrams per litre	Quarterly								
June 2018	Nickel	milligrams per litre	Quarterly								
June 2018	pH	pH	Quarterly								
June 2018	Potassium	milligrams per litre	Quarterly								
June 2018	Selenium	milligrams per litre	Quarterly								
June 2018	Sodium	milligrams per litre	Quarterly								
June 2018	Standing Water Level	metres	Quarterly								
June 2018	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
June 2018	Arsenic	milligrams per litre	Quarterly								
June 2018	Cadmium	milligrams per litre	Quarterly								
June 2018	Calcium	milligrams per litre	Quarterly								
June 2018	Chromium	milligrams per litre	Quarterly								
June 2018	Copper	milligrams per litre	Quarterly								
June 2018	Electrical conductivity	microsiemens per centimetre	Quarterly								
June 2018	Iron	milligrams per litre	Quarterly								
June 2018	Lead	milligrams per litre	Quarterly								
June 2018	Magnesium	milligrams per litre	Quarterly								(next quarterly samples scheduled for July/August 2018)
June 2018	Manganese	milligrams per litre	Quarterly								
June 2018	Nickel	milligrams per litre	Quarterly								
June 2018	pH	pH	Quarterly								
June 2018	Potassium	milligrams per litre	Quarterly								
June 2018	Selenium	milligrams per litre	Quarterly								
June 2018	Sodium	milligrams per litre	Quarterly								
June 2018	Standing Water Level	metres	Quarterly								
June 2018	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
June 2018	Arsenic	milligrams per litre	Quarterly								
June 2018	Cadmium	milligrams per litre	Quarterly								
June 2018	Calcium	milligrams per litre	Quarterly								
June 2018	Chromium	milligrams per litre	Quarterly								
June 2018	Copper	milligrams per litre	Quarterly								
June 2018	Electrical conductivity	microsiemens per centimetre	Quarterly								
June 2018	Iron	milligrams per litre	Quarterly								
June 2018	Lead	milligrams per litre	Quarterly								(next quarterly samples scheduled for July/August 2018)
June 2018	Magnesium	milligrams per litre	Quarterly								
June 2018	Manganese	milligrams per litre	Quarterly								
June 2018	Nickel	milligrams per litre	Quarterly								
June 2018	pH	pH	Quarterly								
June 2018	Potassium	milligrams per litre	Quarterly								
June 2018	Selenium	milligrams per litre	Quarterly								
June 2018	Sodium	milligrams per litre	Quarterly								
June 2018	Standing Water Level	metres	Quarterly								
June 2018	Zinc	milligrams per litre	Quarterly								

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
June 2018	Arsenic	milligrams per litre	Quarterly								
June 2018	Cadmium	milligrams per litre	Quarterly								
June 2018	Calcium	milligrams per litre	Quarterly								
June 2018	Chromium	milligrams per litre	Quarterly								
June 2018	Copper	milligrams per litre	Quarterly								
June 2018	Electrical conductivity	microsiemens per centimetre	Quarterly								
June 2018	Iron	milligrams per litre	Quarterly								
June 2018	Lead	milligrams per litre	Quarterly								
June 2018	Magnesium	milligrams per litre	Quarterly								(next quarterly samples scheduled for July/August 2018)
June 2018	Manganese	milligrams per litre	Quarterly								
June 2018	Nickel	milligrams per litre	Quarterly								
June 2018	pH	pH	Quarterly								
June 2018	Potassium	milligrams per litre	Quarterly								
June 2018	Selenium	milligrams per litre	Quarterly								
June 2018	Sodium	milligrams per litre	Quarterly								
June 2018	Standing Water Level	metres	Quarterly								
June 2018	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
June 2018	Arsenic	milligrams per litre	Quarterly								
June 2018	Cadmium	milligrams per litre	Quarterly								
June 2018	Calcium	milligrams per litre	Quarterly								
June 2018	Chromium	milligrams per litre	Quarterly								
June 2018	Copper	milligrams per litre	Quarterly								
June 2018	Electrical conductivity	microsiemens per centimetre	Quarterly								
June 2018	Iron	milligrams per litre	Quarterly								
June 2018	Lead	milligrams per litre	Quarterly								(next quarterly samples scheduled for July/August 2018)
June 2018	Magnesium	milligrams per litre	Quarterly								
June 2018	Manganese	milligrams per litre	Quarterly								
June 2018	Nickel	milligrams per litre	Quarterly								
June 2018	pH	pH	Quarterly								
June 2018	Potassium	milligrams per litre	Quarterly								
June 2018	Selenium	milligrams per litre	Quarterly								
June 2018	Sodium	milligrams per litre	Quarterly								
June 2018	Standing Water Level	metres	Quarterly								
June 2018	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
June 2018	Cadmium	milligrams per cubic metre	Yearly						1	No	
June 2018	Chlorine	milligrams per cubic metre	Yearly						200	No	
June 2018	Copper	milligrams per cubic metre	Yearly								
June 2018	Hydrogen chloride	milligrams per cubic metre	Yearly						100	No	
June 2018	Mercury	milligrams per cubic metre	Yearly						1	No	
June 2018	Moisture	percent	Yearly								
June 2018	Molecular weight of stack gases	grams per gram mole	Yearly								
June 2018	Nitrogen Oxides	milligrams per cubic metre	Continuous	100%	June 2018	479	590	851	1500	No	
June 2018	Sulfuric acid mist and sulfur trioxide (as SO3)	milligrams per cubic metre	Yearly						100	No	Annual stack gas testing to be undertaken before 1 July 2019
June 2018	Sulphur dioxide	parts per million	Continuous	100%	June 2018	182	249	370	600	No	
June 2018	Temperature	degrees Celsius	Yearly								
June 2018	Total Fluoride	milligrams per cubic metre	Yearly						50	No	
June 2018	Total Solid Particles	milligrams per cubic metre	Yearly						100	No	
June 2018	Type 1 and Type 2 substances in aggregate	milligrams per cubic metre	Yearly						5	No	
June 2018	Undifferentiated Particulates	milligrams per cubic metre	Continuous	100%	June 2018	14.5	28.9	76.1			
June 2018	Velocity	metres per second	Yearly								
June 2018	Volatile organic compounds	parts per million	Yearly								
June 2018	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
June 2018	Cadmium	milligrams per cubic metre	Yearly						1	No	
June 2018	Chlorine	milligrams per cubic metre	Yearly						200	No	
June 2018	Copper	milligrams per cubic metre	Yearly								
June 2018	Hydrogen chloride	milligrams per cubic metre	Yearly						100	No	
June 2018	Mercury	milligrams per cubic metre	Yearly						1	No	
June 2018	Moisture	percent	Yearly								
June 2018	Molecular weight of stack gases	grams per gram mole	Yearly								
June 2018	Nitrogen Oxides	milligrams per cubic metre	Continuous	100%	June 2018	441	816	970	1500	No	
June 2018	Sulfuric acid mist and sulfur trioxide (as SO3)	milligrams per cubic metre	Yearly						100	No	Annual stack gas testing to be undertaken before 1 July 2019
June 2018	Sulphur dioxide	parts per million	Continuous	100%	June 2018	155	235	353	600	No	
June 2018	Temperature	degrees Celsius	Yearly								
June 2018	Total Fluoride	milligrams per cubic metre	Yearly						50	No	
June 2018	Total Solid Particles	milligrams per cubic metre	Yearly						100	No	
June 2018	Type 1 and Type 2 substances in aggregate	milligrams per cubic metre	Yearly						5	No	
June 2018	Undifferentiated Particulates	milligrams per cubic metre	Continuous	100%	June 2018	35.6	55.7	85.5			
June 2018	Velocity	metres per second	Yearly								
June 2018	Volatile organic compounds	parts per million	Yearly								
June 2018	Volumetric flowrate	cubic metres per second	Yearly								

**GENERAL COMMENTS**

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