

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	December 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	97% limit	Exceedance (yes/no)	Comments
December 2017	Chlorine (free residual)	milligrams per litre	Monthly	1	07/12/2017	0.10	0.10	0.10	0.2		No	
December 2017	Temperature	degrees celsius	Continuous	100%	December 2017	29.7	33.1	36.7	37.5	35	No	
December 2017	Oil and Grease	Visible	Continuous	100%	December 2017	NIL	NIL	NIL				No visible oil or grease detected during December 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	
December 2017	Ammonia	milligrams per litre	Quarterly									
December 2017	Cadmium	milligrams per litre	Quarterly									
December 2017	Copper	milligrams per litre	Quarterly									
December 2017	Lead	milligrams per litre	Quarterly									
December 2017	Manganese	milligrams per litre	Quarterly									
December 2017	Nitrate + nitrite (oxidised nitrogen)	milligrams per litre	Monthly	1	07/12/2017	0.03	0.03	0.03				
December 2017	Nitrogen (total)	milligrams per litre	Quarterly								(next quarterly samples scheduled for January/February 2018)	
December 2017	pH	pH	Monthly	1	07/12/2017	8.84	8.84	8.84	6.5 - 9.5	No		
December 2017	Phosphorus (total)	milligrams per litre	Monthly	1	07/12/2017	0.19	0.19	0.19				
December 2017	Reactive Phosphorus	milligrams per litre	Monthly	1	07/12/2017	0.15	0.15	0.15				
December 2017	Selenium	milligrams per litre	Quarterly									
December 2017	Total Kjeldahl Nitrogen	milligrams per litre	Quarterly									
December 2017	Total Suspended Solids	milligrams per litre	Fortnightly	3	4, 7 & 19/12/2017	6	12.7	20	50	No		
December 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	
December 2017	Ammonia	milligrams per litre	Quarterly									
December 2017	Cadmium	milligrams per litre	Quarterly									
December 2017	Copper	milligrams per litre	Quarterly									
December 2017	Lead	milligrams per litre	Quarterly									
December 2017	Manganese	milligrams per litre	Quarterly									
December 2017	Nitrate + nitrite (oxidised nitrogen)	milligrams per litre	Monthly	1	07/12/2017						** Seepage water sampled is captured and pumped back to the ash dam.	
December 2017	Nitrogen (total)	milligrams per litre	Quarterly								There was no licence 'discharge to waters' (i.e. to Manning Bay) during December 2017.	
December 2017	pH	pH	Monthly	1	07/12/2017							
December 2017	Phosphorus (total)	milligrams per litre	Monthly	1	07/12/2017							
December 2017	Selenium	milligrams per litre	Quarterly									
December 2017	Total Kjeldahl Nitrogen	milligrams per litre	Quarterly									
December 2017	Total Suspended Solids	milligrams per litre	Monthly	1	07/12/2017				50			
December 2017	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	
December 2017	Ammonia	milligrams per litre	Daily for discharge >2 hrs									
December 2017	Cadmium	milligrams per litre	Daily for discharge >2 hrs									
December 2017	Copper	milligrams per litre	Daily for discharge >2 hrs									
December 2017	Lead	milligrams per litre	Daily for discharge >2 hrs									
December 2017	Manganese	milligrams per litre	Daily for discharge >2 hrs									
December 2017	Nitrate + nitrite (oxidised nitrogen)	milligrams per litre	Daily for discharge >2 hrs									
December 2017	Nitrogen (total)	milligrams per litre	Daily for discharge >2 hrs								No discharge from EPA Point 18 during December 2017	
December 2017	pH	pH	Daily for discharge >2 hrs						6.5 - 9.0			
December 2017	Phosphorus (total)	milligrams per litre	Daily for discharge >2 hrs									
December 2017	Selenium	milligrams per litre	Daily for discharge >2 hrs									
December 2017	Total Kjeldahl Nitrogen	milligrams per litre	Daily for discharge >2 hrs									
December 2017	Total Suspended Solids	milligrams per litre	Daily for discharge >2 hrs						50			
December 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
December 2017	Arsenic	milligrams per litre	Quarterly								
December 2017	Cadmium	milligrams per litre	Quarterly								
December 2017	Calcium	milligrams per litre	Quarterly								
December 2017	Chromium	milligrams per litre	Quarterly								
December 2017	Copper	milligrams per litre	Quarterly								
December 2017	Electrical conductivity	microsiemens per centimetre	Quarterly								
December 2017	Iron	milligrams per litre	Quarterly								
December 2017	Lead	milligrams per litre	Quarterly								
December 2017	Magnesium	milligrams per litre	Quarterly								(next quarterly samples scheduled for January/February 2018)
December 2017	Manganese	milligrams per litre	Quarterly								
December 2017	Nickel	milligrams per litre	Quarterly								
December 2017	pH	pH	Quarterly								
December 2017	Potassium	milligrams per litre	Quarterly								
December 2017	Selenium	milligrams per litre	Quarterly								
December 2017	Sodium	milligrams per litre	Quarterly								
December 2017	Standing Water Level	metres	Quarterly								
December 2017	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
December 2017	Arsenic	milligrams per litre	Quarterly								
December 2017	Cadmium	milligrams per litre	Quarterly								
December 2017	Calcium	milligrams per litre	Quarterly								
December 2017	Chromium	milligrams per litre	Quarterly								
December 2017	Copper	milligrams per litre	Quarterly								
December 2017	Electrical conductivity	microsiemens per centimetre	Quarterly								
December 2017	Iron	milligrams per litre	Quarterly								
December 2017	Lead	milligrams per litre	Quarterly								
December 2017	Magnesium	milligrams per litre	Quarterly								(next quarterly samples scheduled for January/February 2018)
December 2017	Manganese	milligrams per litre	Quarterly								
December 2017	Nickel	milligrams per litre	Quarterly								
December 2017	pH	pH	Quarterly								
December 2017	Potassium	milligrams per litre	Quarterly								
December 2017	Selenium	milligrams per litre	Quarterly								
December 2017	Sodium	milligrams per litre	Quarterly								
December 2017	Standing Water Level	metres	Quarterly								
December 2017	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
December 2017	Arsenic	milligrams per litre	Quarterly								
December 2017	Cadmium	milligrams per litre	Quarterly								
December 2017	Calcium	milligrams per litre	Quarterly								
December 2017	Chromium	milligrams per litre	Quarterly								
December 2017	Copper	milligrams per litre	Quarterly								
December 2017	Electrical conductivity	microsiemens per centimetre	Quarterly								
December 2017	Iron	milligrams per litre	Quarterly								
December 2017	Lead	milligrams per litre	Quarterly								(next quarterly samples scheduled for January/February 2018)
December 2017	Magnesium	milligrams per litre	Quarterly								
December 2017	Manganese	milligrams per litre	Quarterly								
December 2017	Nickel	milligrams per litre	Quarterly								
December 2017	pH	pH	Quarterly								
December 2017	Potassium	milligrams per litre	Quarterly								
December 2017	Selenium	milligrams per litre	Quarterly								
December 2017	Sodium	milligrams per litre	Quarterly								
December 2017	Standing Water Level	metres	Quarterly								
December 2017	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
December 2017	Arsenic	milligrams per litre	Quarterly								
December 2017	Cadmium	milligrams per litre	Quarterly								
December 2017	Calcium	milligrams per litre	Quarterly								
December 2017	Chromium	milligrams per litre	Quarterly								
December 2017	Copper	milligrams per litre	Quarterly								
December 2017	Electrical conductivity	microsiemens per centimetre	Quarterly								
December 2017	Iron	milligrams per litre	Quarterly								
December 2017	Lead	milligrams per litre	Quarterly								
December 2017	Magnesium	milligrams per litre	Quarterly								(next quarterly samples scheduled for January/February 2018)
December 2017	Manganese	milligrams per litre	Quarterly								
December 2017	Nickel	milligrams per litre	Quarterly								
December 2017	pH	pH	Quarterly								
December 2017	Potassium	milligrams per litre	Quarterly								
December 2017	Selenium	milligrams per litre	Quarterly								
December 2017	Sodium	milligrams per litre	Quarterly								
December 2017	Standing Water Level	metres	Quarterly								
December 2017	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
December 2017	Arsenic	milligrams per litre	Quarterly								
December 2017	Cadmium	milligrams per litre	Quarterly								
December 2017	Calcium	milligrams per litre	Quarterly								
December 2017	Chromium	milligrams per litre	Quarterly								
December 2017	Copper	milligrams per litre	Quarterly								
December 2017	Electrical conductivity	microsiemens per centimetre	Quarterly								
December 2017	Iron	milligrams per litre	Quarterly								
December 2017	Lead	milligrams per litre	Quarterly								
December 2017	Magnesium	milligrams per litre	Quarterly								(next quarterly samples scheduled for January/February 2018)
December 2017	Manganese	milligrams per litre	Quarterly								
December 2017	Nickel	milligrams per litre	Quarterly								
December 2017	pH	pH	Quarterly								
December 2017	Potassium	milligrams per litre	Quarterly								
December 2017	Selenium	milligrams per litre	Quarterly								
December 2017	Sodium	milligrams per litre	Quarterly								
December 2017	Standing Water Level	metres	Quarterly								
December 2017	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
December 2017	Cadmium	milligrams per cubic metre	Yearly	1	11/12/2017 - 15/12/2017	0.004	0.004	0.004	1	No	
December 2017	Chlorine	milligrams per cubic metre	Yearly	1	11/12/2017 - 15/12/2017	<0.2	<0.2	<0.2	200	No	
December 2017	Copper	milligrams per cubic metre	Yearly	1	11/12/2017 - 15/12/2017	0.016	0.016	0.016			
December 2017	Hydrogen chloride	milligrams per cubic metre	Yearly	1	11/12/2017 - 15/12/2017	0.79	0.79	0.79	100	No	
December 2017	Mercury	milligrams per cubic metre	Yearly	1	11/12/2017 - 15/12/2017	<0.000079	<0.000079	<0.000079	1	No	
December 2017	Moisture	percent	Yearly	1	11/12/2017 - 15/12/2017	6.57	6.57	6.57			
December 2017	Molecular weight of stack gases	grams per gram mole	Yearly	1	11/12/2017 - 15/12/2017	30.4	30.4	30.4			
December 2017	Nitrogen Oxides	milligrams per cubic metre	Continuous	100%	December 2017	435	613	1055	1500	No	
December 2017	Sulfuric acid mist and sulfur trioxide (as SO3)	milligrams per cubic metre	Yearly	1	11/12/2017 - 15/12/2017	4.9	4.9	4.9	100	No	
December 2017	Sulphur dioxide	parts per million	Continuous	100%	December 2017	188	284	447	600	No	
December 2017	Temperature	degrees Celsius	Yearly	1	11/12/2017 - 15/12/2017	131	131	131			
December 2017	Total Fluoride	milligrams per cubic metre	Yearly	1	11/12/2017 - 15/12/2017	1.37	1.37	1.37	50	No	
December 2017	Total Solid Particles	milligrams per cubic metre	Yearly	2	11/12/2017 - 15/12/2017	9.15	9.15	9.15	100	No	
December 2017	Type 1 and Type 2 substances in aggregate	milligrams per cubic metre	Yearly	1	11/12/2017 - 15/12/2017	0.012	0.012	0.012	5	No	
December 2017	Undifferentiated Particulates	milligrams per cubic metre	Continuous	100%	December 2017	17.0	30.8	74.9			
December 2017	Velocity	metres per second	Yearly	1	11/12/2017 - 15/12/2017	19.2	19.2	19.2			
December 2017	Volatile organic compounds	parts per million	Yearly	1	11/12/2017 - 15/12/2017	0.08	0.08	0.08			
December 2017	Volumetric flowrate	cubic metres per second	Yearly	1	11/12/2017 - 15/12/2017	208	208	208			

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
December 2017	Cadmium	milligrams per cubic metre	Yearly	1	18/12/2017 - 21/12/2017	0.0016	0.0016	0.0016	1	No	
December 2017	Chlorine	milligrams per cubic metre	Yearly	1	18/12/2017 - 21/12/2017	0.3	0.3	0.3	200	No	
December 2017	Copper	milligrams per cubic metre	Yearly	1	18/12/2017 - 21/12/2017	0.00057	0.00057	0.00057			
December 2017	Hydrogen chloride	milligrams per cubic metre	Yearly	1	18/12/2017 - 21/12/2017	6.5	6.5	6.5	100	No	
December 2017	Mercury	milligrams per cubic metre	Yearly	1	18/12/2017 - 21/12/2017	0.00018	0.00018	0.00018	1	No	
December 2017	Moisture	percent	Yearly	1	18/12/2017 - 21/12/2017	7.1	7.1	7.1			
December 2017	Molecular weight of stack gases	grams per gram mole	Yearly	1	18/12/2017 - 21/12/2017	30.5	30.5	30.5			
December 2017	Nitrogen Oxides	milligrams per cubic metre	Continuous	100%	December 2017	354	735	1071	1500	No	
December 2017	Sulfuric acid mist and sulfur trioxide (as SO ₃)	milligrams per cubic metre	Yearly	1	18/12/2017 - 21/12/2017	27	27	27	100	No	
December 2017	Sulphur dioxide	parts per million	Continuous	100%	December 2017	157	257	394	600	No	
December 2017	Temperature	degrees Celsius	Yearly	1	18/12/2017 - 21/12/2017	130	130	130			
December 2017	Total Fluoride	milligrams per cubic metre	Yearly	1	18/12/2017 - 21/12/2017	2.01	2.01	2.01	50	No	
December 2017	Total Solid Particles	milligrams per cubic metre	Yearly	1	18/12/2017 - 21/12/2017	2.67	2.67	2.67	100	No	
December 2017	Type 1 and Type 2 substances in aggregate	milligrams per cubic metre	Yearly	1	18/12/2017 - 21/12/2017	0.004	0.004	0.004	5	No	
December 2017	Undifferentiated Particulates	milligrams per cubic metre	Continuous	100%	December 2017	31.2	44.6	60.4			
December 2017	Velocity	metres per second	Yearly	1	18/12/2017 - 21/12/2017	18	18	18			
December 2017	Volatile organic compounds	parts per million	Yearly	1	18/12/2017 - 21/12/2017	<0.08	<0.08	<0.08			
December 2017	Volumetric flowrate	cubic metres per second	Yearly	1	18/12/2017 - 21/12/2017	200	200	200			

GENERAL COMMENTS