

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	February 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
Feb-19	Chlorine (free residual)	milligrams per litre	Monthly	1	6/2/2019	0.09	0.09	0.09	0.2	No	
Feb-19	Temperature	degrees celsius	Continuous	100%	Feb-19	29.6	33.7	36.7	37.5	No	
Feb-19	Oil and Grease	Visible	Continuous	100%	Feb-19	NIL	NIL	NIL			No visible oil or grease detected during February 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
Feb-19	Ammonia	milligrams per litre	Quarterly								
Feb-19	Cadmium	milligrams per litre	Quarterly								
Feb-19	Copper	milligrams per litre	Quarterly								
Feb-19	Lead	milligrams per litre	Quarterly								
Feb-19	Manganese	milligrams per litre	Quarterly								
Feb-19	Nitrate + nitrite (oxidised nitrogen)	milligrams per litre	Monthly	1	6/2/2019	0.08	0.08	0.08			
Feb-19	Nitrogen (total)	milligrams per litre	Quarterly								
Feb-19	pH	pH	Monthly	1	6/2/2019	8.3	8.3	8.3	6.5 - 9.5	No	
Feb-19	Phosphorus (total)	milligrams per litre	Monthly	1	6/2/2019	0.09	0.09	0.09			
Feb-19	Reactive Phosphorus	milligrams per litre	Monthly	1	6/2/2019	0.09	0.09	0.09			
Feb-19	Selenium	milligrams per litre	Quarterly								
Feb-19	Total Kjeldahl Nitrogen	milligrams per litre	Quarterly								
Feb-19	Total Suspended Solids	milligrams per litre	Fortnightly	4	Feb-19	3	5	8	50	No	
Feb-19	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
Feb-19	Ammonia	milligrams per litre	Quarterly								
Feb-19	Cadmium	milligrams per litre	Quarterly								
Feb-19	Copper	milligrams per litre	Quarterly								
Feb-19	Lead	milligrams per litre	Quarterly								
Feb-19	Manganese	milligrams per litre	Quarterly								
Feb-19	Nitrate + nitrite (oxidised nitrogen)	milligrams per litre	Monthly	1	6/2/2019						** 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 February 2019.
Feb-19	Nitrogen (total)	milligrams per litre	Quarterly								
Feb-19	pH	pH	Monthly	1	6/2/2019						
Feb-19	Phosphorus (total)	milligrams per litre	Monthly	1	6/2/2019						
Feb-19	Selenium	milligrams per litre	Quarterly								
Feb-19	Total Kjeldahl Nitrogen	milligrams per litre	Quarterly								
Feb-19	Total Suspended Solids	milligrams per litre	Monthly	1	6/2/2019				50	No	
Feb-19	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
Feb-19	Ammonia	milligrams per litre	Daily for discharge >2 hrs								
Feb-19	Cadmium	milligrams per litre	Daily for discharge >2 hrs								
Feb-19	Copper	milligrams per litre	Daily for discharge >2 hrs								
Feb-19	Lead	milligrams per litre	Daily for discharge >2 hrs								
Feb-19	Manganese	milligrams per litre	Daily for discharge >2 hrs								
Feb-19	Nitrate + nitrite (oxidised nitrogen)	milligrams per litre	Daily for discharge >2 hrs								
Feb-19	Nitrogen (total)	milligrams per litre	Daily for discharge >2 hrs								
Feb-19	pH	pH	Daily for discharge >2 hrs						6.5 - 9.0		
Feb-19	Phosphorus (total)	milligrams per litre	Daily for discharge >2 hrs								
Feb-19	Selenium	milligrams per litre	Daily for discharge >2 hrs								
Feb-19	Total Kjeldahl Nitrogen	milligrams per litre	Daily for discharge >2 hrs								
Feb-19	Total Suspended Solids	milligrams per litre	Daily for discharge >2 hrs						50		No discharge from EPA Point 18 during February 2019
Feb-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
Feb-19	Arsenic	milligrams per litre	Quarterly								
Feb-19	Cadmium	milligrams per litre	Quarterly								
Feb-19	Calcium	milligrams per litre	Quarterly								
Feb-19	Chromium	milligrams per litre	Quarterly								
Feb-19	Copper	milligrams per litre	Quarterly								
Feb-19	Electrical conductivity	microsiemens per centimetre	Quarterly								
Feb-19	Iron	milligrams per litre	Quarterly								
Feb-19	Lead	milligrams per litre	Quarterly								
Feb-19	Magnesium	milligrams per litre	Quarterly								
Feb-19	Manganese	milligrams per litre	Quarterly								
Feb-19	Nickel	milligrams per litre	Quarterly								
Feb-19	pH	pH	Quarterly								
Feb-19	Potassium	milligrams per litre	Quarterly								
Feb-19	Selenium	milligrams per litre	Quarterly								
Feb-19	Sodium	milligrams per litre	Quarterly								
Feb-19	Standing Water Level	metres	Quarterly								
Feb-19	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
Feb-19	Arsenic	milligrams per litre	Quarterly								
Feb-19	Cadmium	milligrams per litre	Quarterly								
Feb-19	Calcium	milligrams per litre	Quarterly								
Feb-19	Chromium	milligrams per litre	Quarterly								
Feb-19	Copper	milligrams per litre	Quarterly								
Feb-19	Electrical conductivity	microsiemens per centimetre	Quarterly								
Feb-19	Iron	milligrams per litre	Quarterly								
Feb-19	Lead	milligrams per litre	Quarterly								
Feb-19	Magnesium	milligrams per litre	Quarterly								
Feb-19	Manganese	milligrams per litre	Quarterly								
Feb-19	Nickel	milligrams per litre	Quarterly								
Feb-19	pH	pH	Quarterly								
Feb-19	Potassium	milligrams per litre	Quarterly								
Feb-19	Selenium	milligrams per litre	Quarterly								
Feb-19	Sodium	milligrams per litre	Quarterly								
Feb-19	Standing Water Level	metres	Quarterly								
Feb-19	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
Feb-19	Arsenic	milligrams per litre	Quarterly								
Feb-19	Cadmium	milligrams per litre	Quarterly								
Feb-19	Calcium	milligrams per litre	Quarterly								
Feb-19	Chromium	milligrams per litre	Quarterly								
Feb-19	Copper	milligrams per litre	Quarterly								
Feb-19	Electrical conductivity	microsiemens per centimetre	Quarterly								
Feb-19	Iron	milligrams per litre	Quarterly								
Feb-19	Lead	milligrams per litre	Quarterly								
Feb-19	Magnesium	milligrams per litre	Quarterly								
Feb-19	Manganese	milligrams per litre	Quarterly								
Feb-19	Nickel	milligrams per litre	Quarterly								
Feb-19	pH	pH	Quarterly								
Feb-19	Potassium	milligrams per litre	Quarterly								
Feb-19	Selenium	milligrams per litre	Quarterly								
Feb-19	Sodium	milligrams per litre	Quarterly								
Feb-19	Standing Water Level	metres	Quarterly								
Feb-19	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
Feb-19	Arsenic	milligrams per litre	Quarterly								
Feb-19	Cadmium	milligrams per litre	Quarterly								
Feb-19	Calcium	milligrams per litre	Quarterly								
Feb-19	Chromium	milligrams per litre	Quarterly								
Feb-19	Copper	milligrams per litre	Quarterly								
Feb-19	Electrical conductivity	microsiemens per centimetre	Quarterly								
Feb-19	Iron	milligrams per litre	Quarterly								
Feb-19	Lead	milligrams per litre	Quarterly								
Feb-19	Magnesium	milligrams per litre	Quarterly								
Feb-19	Manganese	milligrams per litre	Quarterly								
Feb-19	Nickel	milligrams per litre	Quarterly								
Feb-19	pH	pH	Quarterly								
Feb-19	Potassium	milligrams per litre	Quarterly								
Feb-19	Selenium	milligrams per litre	Quarterly								
Feb-19	Sodium	milligrams per litre	Quarterly								
Feb-19	Standing Water Level	metres	Quarterly								
Feb-19	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
Feb-19	Arsenic	milligrams per litre	Quarterly								
Feb-19	Cadmium	milligrams per litre	Quarterly								
Feb-19	Calcium	milligrams per litre	Quarterly								
Feb-19	Chromium	milligrams per litre	Quarterly								
Feb-19	Copper	milligrams per litre	Quarterly								
Feb-19	Electrical conductivity	microsiemens per centimetre	Quarterly								
Feb-19	Iron	milligrams per litre	Quarterly								
Feb-19	Lead	milligrams per litre	Quarterly								
Feb-19	Magnesium	milligrams per litre	Quarterly								
Feb-19	Manganese	milligrams per litre	Quarterly								
Feb-19	Nickel	milligrams per litre	Quarterly								
Feb-19	pH	pH	Quarterly								
Feb-19	Potassium	milligrams per litre	Quarterly								
Feb-19	Selenium	milligrams per litre	Quarterly								
Feb-19	Sodium	milligrams per litre	Quarterly								
Feb-19	Standing Water Level	metres	Quarterly								
Feb-19	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
Feb-19	Cadmium	milligrams per cubic metre	Yearly						1	No	Annual stack gas testing scheduled for March 2019
Feb-19	Chlorine	milligrams per cubic metre	Yearly						200	No	
Feb-19	Copper	milligrams per cubic metre	Yearly								
Feb-19	Hydrogen chloride	milligrams per cubic metre	Yearly						100	No	
Feb-19	Mercury	milligrams per cubic metre	Yearly						1	No	
Feb-19	Moisture	percent	Yearly								
Feb-19	Molecular weight of stack gases	grams per gram mole	Yearly								
Feb-19	Nitrogen Oxides	milligrams per cubic metre	Continuous	100%	Feb-19	438	610	789	1500	No	
Feb-19	Sulfuric acid mist and sulfur trioxide (as SO3)	milligrams per cubic metre	Yearly						100	No	
Feb-19	Sulphur dioxide	parts per million	Continuous	100%	Feb-19	189	253	308	600	No	
Feb-19	Temperature	degrees Celsius	Yearly								
Feb-19	Total Fluoride	milligrams per cubic metre	Yearly						50	No	
Feb-19	Total Solid Particles	milligrams per cubic metre	Yearly						100	No	
Feb-19	Type 1 and Type 2 substances in aggregate	milligrams per cubic metre	Yearly						5	No	
Feb-19	Undifferentiated Particulates	milligrams per cubic metre	Continuous	100%	Feb-19	9.9	13.9	26.4			*Update of factors used to convert opacity to dust density. Factors calculated using data recorded post fabric filter installation.
Feb-19	Velocity	metres per second	Yearly								
Feb-19	Volatile organic compounds	parts per million	Yearly								
Feb-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
Feb-19	Cadmium	milligrams per cubic metre	Yearly						1	No	Annual stack gas testing scheduled for March 2019
Feb-19	Chlorine	milligrams per cubic metre	Yearly						200	No	
Feb-19	Copper	milligrams per cubic metre	Yearly								
Feb-19	Hydrogen chloride	milligrams per cubic metre	Yearly						100	No	
Feb-19	Mercury	milligrams per cubic metre	Yearly						1	No	
Feb-19	Moisture	percent	Yearly								
Feb-19	Molecular weight of stack gases	grams per gram mole	Yearly								
Feb-19	Nitrogen Oxides	milligrams per cubic metre	Continuous	100%	Feb-19	515	805	997	1500	No	
Feb-19	Sulfuric acid mist and sulfur trioxide (as SO3)	milligrams per cubic metre	Yearly						100	No	
Feb-19	Sulphur dioxide	parts per million	Continuous	100%	Feb-19	190	249	335	600	No	
Feb-19	Temperature	degrees Celsius	Yearly								
Feb-19	Total Fluoride	milligrams per cubic metre	Yearly						50	No	
Feb-19	Total Solid Particles	milligrams per cubic metre	Yearly						100	No	
Feb-19	Type 1 and Type 2 substances in aggregate	milligrams per cubic metre	Yearly						5	No	
Feb-19	Undifferentiated Particulates	milligrams per cubic metre	Continuous	100%	Feb-19	5.8	7.9	9.1			*Update of factors used to convert opacity to dust density. Factors calculated using data recorded post fabric filter installation.
Feb-19	Velocity	metres per second	Yearly								
Feb-19	Volatile organic compounds	parts per million	Yearly								
Feb-19	Volumetric flowrate	cubic metres per second	Yearly								

GENERAL COMMENTS

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