

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	August 2018
ADDRESS	VALES POINT ROAD, MANNERING PARK NSW

POINT 1 Cooling water outlet at Wye 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
Aug-18	Chlorine (free residual)	milligrams per litre	Monthly	1		0.07	0.07	0.07	0.2		No	
Aug-18	Temperature	degrees celsius	Continuous	100%	Aug-18	20.0	24.5	26.6	37.5	35	No	
Aug-18	Oil and Grease	Visible	Continuous	100%	Aug-18	NIL	NIL	NIL				No visible oil or grease detected during August 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	
Aug-18	Ammonia	milligrams per litre	Quarterly									
Aug-18	Cadmium	milligrams per litre	Quarterly									
Aug-18	Copper	milligrams per litre	Quarterly									
Aug-18	Lead	milligrams per litre	Quarterly									
Aug-18	Manganese	milligrams per litre	Quarterly									
Aug-18	Nitrate + nitrite (oxidised nitrogen)	milligrams per litre	Monthly									
Aug-18	Nitrogen (total)	milligrams per litre	Quarterly									
Aug-18	pH	pH	Monthly	1	14/08/2018	9.08	9.08	9.08	6.5 - 9.5	No		
Aug-18	Phosphorus (total)	milligrams per litre	Monthly									
Aug-18	Reactive Phosphorus	milligrams per litre	Monthly									
Aug-18	Selenium	milligrams per litre	Quarterly									
Aug-18	Total Kjeldahl Nitrogen	milligrams per litre	Quarterly									
Aug-18	Total Suspended Solids	milligrams per litre	Fortnightly	4	Aug-18	8	19	47	50	Yes	samples taken on 8/8, 14/8, 21/8 & 28/8	
Aug-18	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	
Aug-18	Ammonia	milligrams per litre	Quarterly									
Aug-18	Cadmium	milligrams per litre	Quarterly									
Aug-18	Copper	milligrams per litre	Quarterly									
Aug-18	Lead	milligrams per litre	Quarterly									
Aug-18	Manganese	milligrams per litre	Quarterly									
Aug-18	Nitrate + nitrite (oxidised nitrogen)	milligrams per litre	Monthly	1	14/08/2018						** 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 August 2018.	
Aug-18	Nitrogen (total)	milligrams per litre	Quarterly									
Aug-18	pH	pH	Monthly	1	14/08/2018							
Aug-18	Phosphorus (total)	milligrams per litre	Monthly	1	14/08/2018							
Aug-18	Selenium	milligrams per litre	Quarterly									
Aug-18	Total Kjeldahl Nitrogen	milligrams per litre	Quarterly									
Aug-18	Total Suspended Solids	milligrams per litre	Monthly	1	14/08/2018				50	No		
Aug-18	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	
Aug-18	Ammonia	milligrams per litre	Daily for discharge >2 hrs									
Aug-18	Cadmium	milligrams per litre	Daily for discharge >2 hrs									
Aug-18	Copper	milligrams per litre	Daily for discharge >2 hrs									
Aug-18	Lead	milligrams per litre	Daily for discharge >2 hrs									
Aug-18	Manganese	milligrams per litre	Daily for discharge >2 hrs									
Aug-18	Nitrate + nitrite (oxidised nitrogen)	milligrams per litre	Daily for discharge >2 hrs									
Aug-18	Nitrogen (total)	milligrams per litre	Daily for discharge >2 hrs								No discharge from EPA Point 18 during August 2018	
Aug-18	pH	pH	Daily for discharge >2 hrs						6.5 - 9.0			
Aug-18	Phosphorus (total)	milligrams per litre	Daily for discharge >2 hrs									
Aug-18	Selenium	milligrams per litre	Daily for discharge >2 hrs									
Aug-18	Total Kjeldahl Nitrogen	milligrams per litre	Daily for discharge >2 hrs									
Aug-18	Total Suspended Solids	milligrams per litre	Daily for discharge >2 hrs						50			
Aug-18	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	
Aug-18	Arsenic	milligrams per litre	Quarterly									
Aug-18	Cadmium	milligrams per litre	Quarterly									
Aug-18	Calcium	milligrams per litre	Quarterly									
Aug-18	Chromium	milligrams per litre	Quarterly									
Aug-18	Copper	milligrams per litre	Quarterly									
Aug-18	Electrical conductivity	microsiemens per centimetre	Quarterly									
Aug-18	Iron	milligrams per litre	Quarterly									
Aug-18	Lead	milligrams per litre	Quarterly								(next quarterly sample scheduled for October 2018)	
Aug-18	Magnesium	milligrams per litre	Quarterly									
Aug-18	Manganese	milligrams per litre	Quarterly									
Aug-18	Nickel	milligrams per litre	Quarterly									
Aug-18	pH	pH	Quarterly									
Aug-18	Potassium	milligrams per litre	Quarterly									
Aug-18	Selenium	milligrams per litre	Quarterly									
Aug-18	Sodium	milligrams per litre	Quarterly									
Aug-18	Standing Water Level	metres	Quarterly									
Aug-18	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	
Aug-18	Arsenic	milligrams per litre	Quarterly									
Aug-18	Cadmium	milligrams per litre	Quarterly									
Aug-18	Calcium	milligrams per litre	Quarterly									
Aug-18	Chromium	milligrams per litre	Quarterly									
Aug-18	Copper	milligrams per litre	Quarterly									
Aug-18	Electrical conductivity	microsiemens per centimetre	Quarterly									
Aug-18	Iron	milligrams per litre	Quarterly									
Aug-18	Lead	milligrams per litre	Quarterly									
Aug-18	Magnesium	milligrams per litre	Quarterly								(next quarterly sample scheduled for October 2018)	
Aug-18	Manganese	milligrams per litre	Quarterly									
Aug-18	Nickel	milligrams per litre	Quarterly									
Aug-18	pH	pH	Quarterly									
Aug-18	Potassium	milligrams per litre	Quarterly									
Aug-18	Selenium	milligrams per litre	Quarterly									
Aug-18	Sodium	milligrams per litre	Quarterly									
Aug-18	Standing Water Level	metres	Quarterly									
Aug-18	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	
Aug-18	Arsenic	milligrams per litre	Quarterly									
Aug-18	Cadmium	milligrams per litre	Quarterly									
Aug-18	Calcium	milligrams per litre	Quarterly									
Aug-18	Chromium	milligrams per litre	Quarterly									
Aug-18	Copper	milligrams per litre	Quarterly									
Aug-18	Electrical conductivity	microsiemens per centimetre	Quarterly									
Aug-18	Iron	milligrams per litre	Quarterly									
Aug-18	Lead	milligrams per litre	Quarterly								(next quarterly sample scheduled for October 2018)	
Aug-18	Magnesium	milligrams per litre	Quarterly									
Aug-18	Manganese	milligrams per litre	Quarterly									
Aug-18	Nickel	milligrams per litre	Quarterly									
Aug-18	pH	pH	Quarterly									
Aug-18	Potassium	milligrams per litre	Quarterly									
Aug-18	Selenium	milligrams per litre	Quarterly									
Aug-18	Sodium	milligrams per litre	Quarterly									
Aug-18	Standing Water Level	metres	Quarterly									
Aug-18	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
Aug-18	Arsenic	milligrams per litre	Quarterly								
Aug-18	Cadmium	milligrams per litre	Quarterly								
Aug-18	Calcium	milligrams per litre	Quarterly								
Aug-18	Chromium	milligrams per litre	Quarterly								
Aug-18	Copper	milligrams per litre	Quarterly								
Aug-18	Electrical conductivity	microsiemens per centimetre	Quarterly								
Aug-18	Iron	milligrams per litre	Quarterly								
Aug-18	Lead	milligrams per litre	Quarterly								
Aug-18	Magnesium	milligrams per litre	Quarterly								(next quarterly sample scheduled for October 2018)
Aug-18	Manganese	milligrams per litre	Quarterly								
Aug-18	Nickel	milligrams per litre	Quarterly								
Aug-18	pH	pH	Quarterly								
Aug-18	Potassium	milligrams per litre	Quarterly								
Aug-18	Selenium	milligrams per litre	Quarterly								
Aug-18	Sodium	milligrams per litre	Quarterly								
Aug-18	Standing Water Level	metres	Quarterly								
Aug-18	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
Aug-18	Arsenic	milligrams per litre	Quarterly								
Aug-18	Cadmium	milligrams per litre	Quarterly								
Aug-18	Calcium	milligrams per litre	Quarterly								
Aug-18	Chromium	milligrams per litre	Quarterly								
Aug-18	Copper	milligrams per litre	Quarterly								
Aug-18	Electrical conductivity	microsiemens per centimetre	Quarterly								
Aug-18	Iron	milligrams per litre	Quarterly								
Aug-18	Lead	milligrams per litre	Quarterly								
Aug-18	Magnesium	milligrams per litre	Quarterly								(next quarterly sample scheduled for October 2018)
Aug-18	Manganese	milligrams per litre	Quarterly								
Aug-18	Nickel	milligrams per litre	Quarterly								
Aug-18	pH	pH	Quarterly								
Aug-18	Potassium	milligrams per litre	Quarterly								
Aug-18	Selenium	milligrams per litre	Quarterly								
Aug-18	Sodium	milligrams per litre	Quarterly								
Aug-18	Standing Water Level	metres	Quarterly								
Aug-18	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
Aug-18	Cadmium	milligrams per cubic metre	Yearly						1	No	Annual stack gas testing to be undertaken before 1 July 2019
Aug-18	Chlorine	milligrams per cubic metre	Yearly						200	No	
Aug-18	Copper	milligrams per cubic metre	Yearly								
Aug-18	Hydrogen chloride	milligrams per cubic metre	Yearly						100	No	
Aug-18	Mercury	milligrams per cubic metre	Yearly						1	No	
Aug-18	Moisture	percent	Yearly								
Aug-18	Molecular weight of stack gases	grams per gram mole	Yearly								
Aug-18	Nitrogen Oxides	milligrams per cubic metre	Continuous	100%	Aug-18	206	607	692	1500	No	Unit only operated from 1 to 3 August (see General Comments)
Aug-18	Sulfuric acid mist and sulfur trioxide (as SO3)	milligrams per cubic metre	Yearly						100	No	
Aug-18	Sulphur dioxide	parts per million	Continuous	100%	Aug-18	137	226	307	600	No	Unit only operated from 1 to 3 August (see General Comments)
Aug-18	Temperature	degrees Celsius	Yearly								
Aug-18	Total Fluoride	milligrams per cubic metre	Yearly						50	No	
Aug-18	Total Solid Particles	milligrams per cubic metre	Yearly						100	No	
Aug-18	Type 1 and Type 2 substances in aggregate	milligrams per cubic metre	Yearly						5	No	
Aug-18	Undifferentiated Particulates	milligrams per cubic metre	Continuous	100%	Aug-18	18.4	23.5	33.1			Unit only operated from 1 to 3 August (see General Comments)
Aug-18	Velocity	metres per second	Yearly								
Aug-18	Volatile organic compounds	parts per million	Yearly								
Aug-18	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
Aug-18	Cadmium	milligrams per cubic metre	Yearly						1	No	Annual stack gas testing to be undertaken before 1 July 2019
Aug-18	Chlorine	milligrams per cubic metre	Yearly						200	No	
Aug-18	Copper	milligrams per cubic metre	Yearly								
Aug-18	Hydrogen chloride	milligrams per cubic metre	Yearly						100	No	
Aug-18	Mercury	milligrams per cubic metre	Yearly						1	No	
Aug-18	Moisture	percent	Yearly								
Aug-18	Molecular weight of stack gases	grams per gram mole	Yearly								
Aug-18	Nitrogen Oxides	milligrams per cubic metre	Continuous	100%	Aug-18	572	889	1072	1500	No	
Aug-18	Sulfuric acid mist and sulfur trioxide (as SO3)	milligrams per cubic metre	Yearly						100	No	
Aug-18	Sulphur dioxide	parts per million	Continuous	100%	Aug-18	162	221	300	600	No	
Aug-18	Temperature	degrees Celsius	Yearly								
Aug-18	Total Fluoride	milligrams per cubic metre	Yearly						50	No	
Aug-18	Total Solid Particles	milligrams per cubic metre	Yearly						100	No	
Aug-18	Type 1 and Type 2 substances in aggregate	milligrams per cubic metre	Yearly						5	No	
Aug-18	Undifferentiated Particulates	milligrams per cubic metre	Continuous	100%	Aug-18	26.3	42.8	52.4			
Aug-18	Velocity	metres per second	Yearly								
Aug-18	Volatile organic compounds	parts per million	Yearly								
Aug-18	Volumetric flowrate	cubic metres per second	Yearly								

GENERAL COMMENTS

Unit 5 (Point 11) was taken out of service on Saturday 4 August 2018 for a scheduled outage between 4 August and 30 September 2018.