

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	July 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
Jul-19	Chlorine (free residual)	milligrams per litre	Monthly	1	1/7/2019	0.06	0.06	0.06	0.2	No	
Jul-19	Temperature	degrees celsius	Continuous	100%	Jul-19	18.5	23.6	27.5	37.5	No	
Jul-19	Oil and Grease	Visible	Continuous	100%	Jul-19	NIL	NIL	NIL			No visible oil or grease detected during July 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
Jul-19	Ammonia	milligrams per litre	Quarterly	1	1/7/2019	0.03	0.03	0.03			
Jul-19	Cadmium	milligrams per litre	Quarterly	1	1/7/2019	<0.0002	<0.0002	<0.0002			
Jul-19	Copper	milligrams per litre	Quarterly	1	1/7/2019	<0.001	<0.001	<0.001			
Jul-19	Lead	milligrams per litre	Quarterly	1	1/7/2019	<0.0002	<0.0002	<0.0002			
Jul-19	Manganese	milligrams per litre	Quarterly	1	1/7/2019	0.0019	0.0019	0.0019			
Jul-19	Nitrate + nitrite (oxidised nitrogen)	milligrams per litre	Monthly	1	1/7/2019	<0.01	<0.01	<0.01			
Jul-19	Nitrogen (total)	milligrams per litre	Quarterly	1	1/7/2019	<0.5	<0.5	<0.5			
Jul-19	pH	pH	Monthly	1	1/7/2019	9.02	9.02	9.02	6.5 - 9.5	No	
Jul-19	Phosphorus (total)	milligrams per litre	Monthly	1	1/7/2019	0.14	0.14	0.14			
Jul-19	Reactive Phosphorus	milligrams per litre	Monthly	1	1/7/2019	<0.01	<0.01	<0.01			
Jul-19	Selenium	milligrams per litre	Quarterly	1	1/7/2019	0.051	0.051	0.051			
Jul-19	Total Kjeldahl Nitrogen	milligrams per litre	Quarterly	1	1/7/2019	<0.5	<0.5	<0.5			
Jul-19	Total Suspended Solids	milligrams per litre	Fortnightly	3	Jul-19	11	15	19	50	No	
Jul-19	Zinc	milligrams per litre	Quarterly	1	1/7/2019	<0.005	<0.005	<0.005			

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
Jul-19	Ammonia	milligrams per litre	Quarterly	1	1/7/2019						
Jul-19	Cadmium	milligrams per litre	Quarterly	1	1/7/2019						
Jul-19	Copper	milligrams per litre	Quarterly	1	1/7/2019						
Jul-19	Lead	milligrams per litre	Quarterly	1	1/7/2019						
Jul-19	Manganese	milligrams per litre	Quarterly	1	1/7/2019						
Jul-19	Nitrate + nitrite (oxidised nitrogen)	milligrams per litre	Monthly	1	1/7/2019						** Seepage water sampled is captured and pumped back to the ash dam. There was no licence 'discharge to waters' (i.e. to Mannerling Bay) during July 2019.
Jul-19	Nitrogen (total)	milligrams per litre	Quarterly	1	1/7/2019						
Jul-19	pH	pH	Monthly	1	1/7/2019						
Jul-19	Phosphorus (total)	milligrams per litre	Monthly	1	1/7/2019						
Jul-19	Selenium	milligrams per litre	Quarterly	1	1/7/2019						
Jul-19	Total Kjeldahl Nitrogen	milligrams per litre	Quarterly	1	1/7/2019						
Jul-19	Total Suspended Solids	milligrams per litre	Monthly	1	1/7/2019				50	No	
Jul-19	Zinc	milligrams per litre	Quarterly	1	1/7/2019						

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
Jul-19	Ammonia	milligrams per litre	Daily for discharge >2 hrs	1	1/7/2019						
Jul-19	Cadmium	milligrams per litre	Daily for discharge >2 hrs	1	1/7/2019						
Jul-19	Copper	milligrams per litre	Daily for discharge >2 hrs	1	1/7/2019						
Jul-19	Lead	milligrams per litre	Daily for discharge >2 hrs	1	1/7/2019						
Jul-19	Manganese	milligrams per litre	Daily for discharge >2 hrs	1	1/7/2019						
Jul-19	Nitrate + nitrite (oxidised nitrogen)	milligrams per litre	Daily for discharge >2 hrs	1	1/7/2019						
Jul-19	Nitrogen (total)	milligrams per litre	Daily for discharge >2 hrs	1	1/7/2019						No discharge from EPA Point 18 during July 2019
Jul-19	pH	pH	Daily for discharge >2 hrs	1	1/7/2019				6.5 - 9.0		
Jul-19	Phosphorus (total)	milligrams per litre	Daily for discharge >2 hrs	1	1/7/2019						
Jul-19	Selenium	milligrams per litre	Daily for discharge >2 hrs	1	1/7/2019						
Jul-19	Total Kjeldahl Nitrogen	milligrams per litre	Daily for discharge >2 hrs	1	1/7/2019						
Jul-19	Total Suspended Solids	milligrams per litre	Daily for discharge >2 hrs	1	1/7/2019				50		
Jul-19	Zinc	milligrams per litre	Daily for discharge >2 hrs	1	1/7/2019						

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
Jul-19	Arsenic	milligrams per litre	Quarterly	1	1/7/2019	0.0081	0.0081	0.0081			
Jul-19	Cadmium	milligrams per litre	Quarterly	1	1/7/2019	<0.0002	<0.0002	<0.0002			
Jul-19	Calcium	milligrams per litre	Quarterly	1	1/7/2019	853	853	853			
Jul-19	Chromium	milligrams per litre	Quarterly	1	1/7/2019	0.0009	0.0009	0.0009			
Jul-19	Copper	milligrams per litre	Quarterly	1	1/7/2019	0.003	0.003	0.003			
Jul-19	Electrical conductivity	microsiemens per centimetre	Quarterly	1	1/7/2019	37700	37700	37700			
Jul-19	Iron	milligrams per litre	Quarterly	1	1/7/2019	55.5	55.5	55.5			
Jul-19	Lead	milligrams per litre	Quarterly	1	1/7/2019	0.002	0.002	0.002			
Jul-19	Magnesium	milligrams per litre	Quarterly	1	1/7/2019	949	949	949			(next quarterly sample scheduled for October 2019)
Jul-19	Manganese	milligrams per litre	Quarterly	1	1/7/2019	4.67	4.67	4.67			
Jul-19	Nickel	milligrams per litre	Quarterly	1	1/7/2019	0.0206	0.0206	0.0206			
Jul-19	pH	pH	Quarterly	1	1/7/2019	5.5	5.5	5.5			
Jul-19	Potassium	milligrams per litre	Quarterly	1	1/7/2019	108	108	108			
Jul-19	Selenium	milligrams per litre	Quarterly	1	1/7/2019	<0.002	<0.002	<0.002			
Jul-19	Sodium	milligrams per litre	Quarterly	1	1/7/2019	6350	6350	6350			
Jul-19	Standing Water Level	metres	Quarterly	1	1/7/2019	3.82	3.82	3.82			
Jul-19	Zinc	milligrams per litre	Quarterly	1	1/7/2019	0.025	0.025	0.025			

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
Jul-19	Arsenic	milligrams per litre	Quarterly	1	1/7/2019	0.0122	0.0122	0.0122			
Jul-19	Cadmium	milligrams per litre	Quarterly	1	1/7/2019	0.00009	0.00009	0.00009			
Jul-19	Calcium	milligrams per litre	Quarterly	1	1/7/2019	21	21	21			
Jul-19	Chromium	milligrams per litre	Quarterly	1	1/7/2019	0.0021	0.0021	0.0021			
Jul-19	Copper	milligrams per litre	Quarterly	1	1/7/2019	0.0257	0.0257	0.0257			
Jul-19	Electrical conductivity	microsiemens per centimetre	Quarterly	1	1/7/2019	691	691	691			
Jul-19	Iron	milligrams per litre	Quarterly	1	1/7/2019	0.642	0.642	0.642			
Jul-19	Lead	milligrams per litre	Quarterly	1	1/7/2019	0.0098	0.0098	0.0098			
Jul-19	Magnesium	milligrams per litre	Quarterly	1	1/7/2019	11	11	11			(next quarterly sample scheduled for October 2019)
Jul-19	Manganese	milligrams per litre	Quarterly	1	1/7/2019	0.0232	0.0232	0.0232			
Jul-19	Nickel	milligrams per litre	Quarterly	1	1/7/2019	0.0036	0.0036	0.0036			
Jul-19	pH	pH	Quarterly	1	1/7/2019	6.18	6.18	6.18			
Jul-19	Potassium	milligrams per litre	Quarterly	1	1/7/2019	2	2	2			
Jul-19	Selenium	milligrams per litre	Quarterly	1	1/7/2019	0.0015	0.0015	0.0015			
Jul-19	Sodium	milligrams per litre	Quarterly	1	1/7/2019	80	80	80			
Jul-19	Standing Water Level	metres	Quarterly	1	1/7/2019	0.64	0.64	0.64			
Jul-19	Zinc	milligrams per litre	Quarterly	1	1/7/2019	0.83	0.83	0.83			

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
Jul-19	Arsenic	milligrams per litre	Quarterly	1	1/7/2019	0.0005	0.0005	0.0005			
Jul-19	Cadmium	milligrams per litre	Quarterly	1	1/7/2019	<0.00005	<0.00005	<0.00005			
Jul-19	Calcium	milligrams per litre	Quarterly	1	1/7/2019	0.001	0.001	0.001			
Jul-19	Chromium	milligrams per litre	Quarterly	1	1/7/2019	0.0022	0.0022	0.0022			
Jul-19	Copper	milligrams per litre	Quarterly	1	1/7/2019	0.004	0.004	0.004			
Jul-19	Electrical conductivity	microsiemens per centimetre	Quarterly	1	1/7/2019	276	276	276			
Jul-19	Iron	milligrams per litre	Quarterly	1	1/7/2019	0.446	0.446	0.446			
Jul-19	Lead	milligrams per litre	Quarterly	1	1/7/2019	0.002	0.002	0.002			(next quarterly sample scheduled for October 2019)
Jul-19	Magnesium	milligrams per litre	Quarterly	1	1/7/2019	4	4	4			
Jul-19	Manganese	milligrams per litre	Quarterly	1	1/7/2019	0.0107	0.0107	0.0107			
Jul-19	Nickel	milligrams per litre	Quarterly	1	1/7/2019	0.0033	0.0033	0.0033			
Jul-19	pH	pH	Quarterly	1	1/7/2019	5.44	5.44	5.44			
Jul-19	Potassium	milligrams per litre	Quarterly	1	1/7/2019	1	1	1			
Jul-19	Selenium	milligrams per litre	Quarterly	1	1/7/2019	0.0002	0.0002	0.0002			
Jul-19	Sodium	milligrams per litre	Quarterly	1	1/7/2019	34	34	34			
Jul-19	Standing Water Level	metres	Quarterly	1	1/7/2019	1.74	1.74	1.74			
Jul-19	Zinc	milligrams per litre	Quarterly	1	1/7/2019	0.02	0.02	0.02			

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
Jul-19	Arsenic	milligrams per litre	Quarterly	1	1/07/2019	0.0069	0.0069	0.0069			
Jul-19	Cadmium	milligrams per litre	Quarterly	1	1/07/2019	<0.0002	<0.0002	<0.0002			
Jul-19	Calcium	milligrams per litre	Quarterly	1	1/07/2019	544	544	544			
Jul-19	Chromium	milligrams per litre	Quarterly	1	1/07/2019	0.0075	0.0075	0.0075			
Jul-19	Copper	milligrams per litre	Quarterly	1	1/07/2019	0.005	0.005	0.005			
Jul-19	Electrical conductivity	microsiemens per centimetre	Quarterly	1	1/07/2019	51700	51700	51700			
Jul-19	Iron	milligrams per litre	Quarterly	1	1/07/2019	6.51	6.51	6.51			
Jul-19	Lead	milligrams per litre	Quarterly	1	1/07/2019	0.0045	0.0045	0.0045			
Jul-19	Magnesium	milligrams per litre	Quarterly	1	1/07/2019	1390	1390	1390			(next quarterly sample scheduled for October 2019)
Jul-19	Manganese	milligrams per litre	Quarterly	1	1/07/2019	0.93	0.93	0.93			
Jul-19	Nickel	milligrams per litre	Quarterly	1	1/07/2019	0.0062	0.0062	0.0062			
Jul-19	pH	pH	Quarterly	1	1/07/2019	6.81	6.81	6.81			
Jul-19	Potassium	milligrams per litre	Quarterly	1	1/07/2019	306	306	306			
Jul-19	Selenium	milligrams per litre	Quarterly	1	1/07/2019	0.002	0.002	0.002			
Jul-19	Sodium	milligrams per litre	Quarterly	1	1/07/2019	10300	10300	10300			
Jul-19	Standing Water Level	metres	Quarterly	1	1/07/2019	0.03	0.03	0.03			
Jul-19	Zinc	milligrams per litre	Quarterly	1	1/07/2019	0.055	0.055	0.055			

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
Jul-19	Arsenic	milligrams per litre	Quarterly	1	1/07/2019	0.0042	0.0042	0.0042			
Jul-19	Cadmium	milligrams per litre	Quarterly	1	1/07/2019	<0.00005	<0.00005	<0.00005			
Jul-19	Calcium	milligrams per litre	Quarterly	1	1/07/2019	2	2	2			
Jul-19	Chromium	milligrams per litre	Quarterly	1	1/07/2019	0.0052	0.0052	0.0052			
Jul-19	Copper	milligrams per litre	Quarterly	1	1/07/2019	0.0045	0.0045	0.0045			
Jul-19	Electrical conductivity	microsiemens per centimetre	Quarterly	1	1/07/2019	897	897	897			
Jul-19	Iron	milligrams per litre	Quarterly	1	1/07/2019	0.31	0.31	0.31			
Jul-19	Lead	milligrams per litre	Quarterly	1	1/07/2019	0.0034	0.0034	0.0034			
Jul-19	Magnesium	milligrams per litre	Quarterly	1	1/07/2019	13	13	13			(next quarterly sample scheduled for October 2019)
Jul-19	Manganese	milligrams per litre	Quarterly	1	1/07/2019	0.0672	0.0672	0.0672			
Jul-19	Nickel	milligrams per litre	Quarterly	1	1/07/2019	0.0071	0.0071	0.0071			
Jul-19	pH	pH	Quarterly	1	1/07/2019	5.01	5.01	5.01			
Jul-19	Potassium	milligrams per litre	Quarterly	1	1/07/2019	3	3	3			
Jul-19	Selenium	milligrams per litre	Quarterly	1	1/07/2019	0.0003	0.0003	0.0003			
Jul-19	Sodium	milligrams per litre	Quarterly	1	1/07/2019	138	138	138			
Jul-19	Standing Water Level	metres	Quarterly	1	1/07/2019	-0.13	-0.13	-0.13			
Jul-19	Zinc	milligrams per litre	Quarterly	1	1/07/2019	0.025	0.025	0.025			

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
Jul-19	Cadmium	milligrams per cubic metre	Yearly						1	No	
Jul-19	Chlorine	milligrams per cubic metre	Yearly						200	No	
Jul-19	Copper	milligrams per cubic metre	Yearly								
Jul-19	Hydrogen chloride	milligrams per cubic metre	Yearly						100	No	
Jul-19	Mercury	milligrams per cubic metre	Yearly						1	No	
Jul-19	Moisture	percent	Yearly								
Jul-19	Molecular weight of stack gases	grams per gram mole	Yearly								
Jul-19	Nitrogen Oxides	milligrams per cubic metre	Continuous	100%	Jul-19	459	665	839	1500	No	
Jul-19	Sulfuric acid mist and sulfur trioxide (as SO3)	milligrams per cubic metre	Yearly						100	No	
Jul-19	Sulphur dioxide	parts per million	Continuous	100%	Jul-19	171	255	332	600	No	
Jul-19	Temperature	degrees Celsius	Yearly								
Jul-19	Total Fluoride	milligrams per cubic metre	Yearly						50	No	
Jul-19	Total Solid Particles	milligrams per cubic metre	Yearly						100	No	
Jul-19	Type 1 and Type 2 substances in aggregate	milligrams per cubic metre	Yearly						5	No	
Jul-19	Undifferentiated Particulates	milligrams per cubic metre	Continuous	100%	Jul-19	26.8	33.0	43.8			
Jul-19	Velocity	metres per second	Yearly								
Jul-19	Volatile organic compounds	parts per million	Yearly								
Jul-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
Jul-19	Cadmium	milligrams per cubic metre	Yearly						1	No	
Jul-19	Chlorine	milligrams per cubic metre	Yearly						200	No	
Jul-19	Copper	milligrams per cubic metre	Yearly								
Jul-19	Hydrogen chloride	milligrams per cubic metre	Yearly						100	No	
Jul-19	Mercury	milligrams per cubic metre	Yearly						1	No	
Jul-19	Moisture	percent	Yearly								
Jul-19	Molecular weight of stack gases	grams per gram mole	Yearly								
Jul-19	Nitrogen Oxides	milligrams per cubic metre	Continuous	100%	Jul-19	524	779	942	1500	No	
Jul-19	Sulfuric acid mist and sulfur trioxide (as SO3)	milligrams per cubic metre	Yearly						100	No	
Jul-19	Sulphur dioxide	parts per million	Continuous	100%	Jul-19	186	245	310	600	No	
Jul-19	Temperature	degrees Celsius	Yearly								
Jul-19	Total Fluoride	milligrams per cubic metre	Yearly						50	No	
Jul-19	Total Solid Particles	milligrams per cubic metre	Yearly						100	No	
Jul-19	Type 1 and Type 2 substances in aggregate	milligrams per cubic metre	Yearly						5	No	
Jul-19	Undifferentiated Particulates	milligrams per cubic metre	Continuous	100%	Jul-19	6.7	7.8	9.5			
Jul-19	Velocity	metres per second	Yearly								
Jul-19	Volatile organic compounds	parts per million	Yearly								
Jul-19	Volumetric flowrate	cubic metres per second	Yearly								

GENERAL COMMENTS