

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	April 2020	
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
Apr-20	Chlorine (free residual)	milligrams per litre	Monthly	1	15/4/2020	0.05	0.05	0.05	0.2	No	
Apr-20	Temperature	degrees celsius	Continuous	100%	Apr-20	23.4	27.7	32.2	37.5	No	
Apr-20	Oil and Grease	Visible	Continuous	90%	Apr-20	NIL	NIL	NIL		No	No visible oil or grease detected during April 2020.

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
Apr-20	Ammonia	milligrams per litre	Quarterly	1	15/4/2020	<0.1	<0.1	<0.1			
Apr-20	Cadmium	milligrams per litre	Quarterly	1	15/4/2020	<0.0002	<0.0002	<0.0002			
Apr-20	Copper	milligrams per litre	Quarterly	1	15/4/2020	0.001	0.001	0.001			
Apr-20	Lead	milligrams per litre	Quarterly	1	15/4/2020	<0.0002	<0.0002	<0.0002			
Apr-20	Manganese	milligrams per litre	Quarterly	1	15/4/2020	0.0544	0.0544	0.0544			
Apr-20	Nitrate + nitrite (oxidised nitrogen)	milligrams per litre	Monthly	1	15/4/2020	0.06	0.06	0.06			
Apr-20	Nitrogen (total)	milligrams per litre	Quarterly	1	15/4/2020	6.1	6.1	6.1			
Apr-20	pH	pH	Monthly	1	15/4/2020	8.56	8.56	8.56	6.5 - 9.5	No	
Apr-20	Phosphorus (total)	milligrams per litre	Monthly	1	15/4/2020	0.49	0.49	0.49			
Apr-20	Reactive Phosphorus	milligrams per litre	Monthly	1	15/4/2020	0.04	0.04	0.04			
Apr-20	Selenium	milligrams per litre	Quarterly	1	15/4/2020	0.047	0.047	0.047			
Apr-20	Total Kjeldahl Nitrogen	milligrams per litre	Quarterly	1	15/4/2020	6	6	6			
Apr-20	Total Suspended Solids	milligrams per litre	Fortnightly	3	Apr-20	105	113	126	50	Yes	Background TSS concentration in Lake Macquarie higher than TSS concentration at EPA2 when exceedances occurred.
Apr-20	Zinc	milligrams per litre	Quarterly	1	15/4/2020	<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
Apr-20	Ammonia	milligrams per litre	Quarterly	1	15/4/2020						
Apr-20	Cadmium	milligrams per litre	Quarterly	1	15/4/2020						
Apr-20	Copper	milligrams per litre	Quarterly	1	15/4/2020						
Apr-20	Lead	milligrams per litre	Quarterly	1	15/4/2020						
Apr-20	Manganese	milligrams per litre	Quarterly	1	15/4/2020						
Apr-20	Nitrate + nitrite (oxidised nitrogen)	milligrams per litre	Monthly	1	15/4/2020						** Seepage water sampled is captured and pumped back to the ash dam. There was no licence 'discharge to waters' (Manning Bay) during April 2020.
Apr-20	Nitrogen (total)	milligrams per litre	Quarterly	1	15/4/2020						
Apr-20	pH	pH	Monthly	1	15/4/2020						
Apr-20	Phosphorus (total)	milligrams per litre	Monthly	1	15/4/2020						
Apr-20	Selenium	milligrams per litre	Quarterly	1	15/4/2020						
Apr-20	Total Kjeldahl Nitrogen	milligrams per litre	Quarterly	1	15/4/2020						
Apr-20	Total Suspended Solids	milligrams per litre	Monthly	1	15/4/2020				50	No	
Apr-20	Zinc	milligrams per litre	Quarterly	1	15/4/2020						

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
Apr-20	Ammonia	milligrams per litre	Daily for discharge >2 hrs								
Apr-20	Cadmium	milligrams per litre	Daily for discharge >2 hrs								
Apr-20	Copper	milligrams per litre	Daily for discharge >2 hrs								
Apr-20	Lead	milligrams per litre	Daily for discharge >2 hrs								
Apr-20	Manganese	milligrams per litre	Daily for discharge >2 hrs								
Apr-20	Nitrate + nitrite (oxidised nitrogen)	milligrams per litre	Daily for discharge >2 hrs								
Apr-20	Nitrogen (total)	milligrams per litre	Daily for discharge >2 hrs								No discharge from EPA Point 18 during April 2020
Apr-20	pH	pH	Daily for discharge >2 hrs						6.5 - 9.0		
Apr-20	Phosphorus (total)	milligrams per litre	Daily for discharge >2 hrs								
Apr-20	Selenium	milligrams per litre	Daily for discharge >2 hrs								
Apr-20	Total Kjeldahl Nitrogen	milligrams per litre	Daily for discharge >2 hrs								
Apr-20	Total Suspended Solids	milligrams per litre	Daily for discharge >2 hrs						50		
Apr-20	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
Apr-20	Arsenic	milligrams per litre	Quarterly	1	15/04/2020	0.0056	0.0056	0.0056			
Apr-20	Cadmium	milligrams per litre	Quarterly	1	15/04/2020	0.00006	0.00006	0.00006			
Apr-20	Calcium	milligrams per litre	Quarterly	1	15/04/2020	810	810	810			
Apr-20	Chromium	milligrams per litre	Quarterly	1	15/04/2020	<0.0002	<0.0002	<0.0002			
Apr-20	Copper	milligrams per litre	Quarterly	1	15/04/2020	<0.0005	<0.0005	<0.0005			
Apr-20	Electrical conductivity	microsiemens per centimetre	Quarterly	1	15/04/2020	34000	34000	34000			
Apr-20	Iron	milligrams per litre	Quarterly	1	15/04/2020	43.6	43.6	43.6			
Apr-20	Lead	milligrams per litre	Quarterly	1	15/04/2020	0.0001	0.0001	0.0001			
Apr-20	Magnesium	milligrams per litre	Quarterly	1	15/04/2020	831	831	831			(next quarterly sample scheduled for July 2020)
Apr-20	Manganese	milligrams per litre	Quarterly	1	15/04/2020	3.32	3.32	3.32			
Apr-20	Nickel	milligrams per litre	Quarterly	1	15/04/2020	0.0195	0.0195	0.0195			
Apr-20	pH	pH	Quarterly	1	15/04/2020	5.78	5.78	5.78			
Apr-20	Potassium	milligrams per litre	Quarterly	1	15/04/2020	106	106	106			
Apr-20	Selenium	milligrams per litre	Quarterly	1	15/04/2020	0.0012	0.0012	0.0012			
Apr-20	Sodium	milligrams per litre	Quarterly	1	15/04/2020	5870	5870	5870			
Apr-20	Standing Water Level	metres	Quarterly	1	15/04/2020	3.78	3.78	3.78			
Apr-20	Zinc	milligrams per litre	Quarterly	1	15/04/2020	0.044	0.044	0.044			

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
Apr-20	Arsenic	milligrams per litre	Quarterly	1	15/04/2020	0.0204	0.0204	0.0204			
Apr-20	Cadmium	milligrams per litre	Quarterly	1	15/04/2020	<0.00005	<0.00005	<0.00005			
Apr-20	Calcium	milligrams per litre	Quarterly	1	15/04/2020	524	524	524			
Apr-20	Chromium	milligrams per litre	Quarterly	1	15/04/2020	0.0016	0.0016	0.0016			
Apr-20	Copper	milligrams per litre	Quarterly	1	15/04/2020	<0.0005	<0.0005	<0.0005			
Apr-20	Electrical conductivity	microsiemens per centimetre	Quarterly	1	15/04/2020	25500	25500	25500			
Apr-20	Iron	milligrams per litre	Quarterly	1	15/04/2020	244	244	244			
Apr-20	Lead	milligrams per litre	Quarterly	1	15/04/2020	0.0002	0.0002	0.0002			
Apr-20	Magnesium	milligrams per litre	Quarterly	1	15/04/2020	443	443	443			(next quarterly sample scheduled for July 2020)
Apr-20	Manganese	milligrams per litre	Quarterly	1	15/04/2020	1.73	1.73	1.73			
Apr-20	Nickel	milligrams per litre	Quarterly	1	15/04/2020	0.0046	0.0046	0.0046			
Apr-20	pH	pH	Quarterly	1	15/04/2020	6.18	6.18	6.18			
Apr-20	Potassium	milligrams per litre	Quarterly	1	15/04/2020	69	69	69			
Apr-20	Selenium	milligrams per litre	Quarterly	1	15/04/2020	0.0025	0.0025	0.0025			
Apr-20	Sodium	milligrams per litre	Quarterly	1	15/04/2020	4210	4210	4210			
Apr-20	Standing Water Level	metres	Quarterly	1	15/04/2020	0.82	0.82	0.82			
Apr-20	Zinc	milligrams per litre	Quarterly	1	15/04/2020	0.119	0.119	0.119			

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
Apr-20	Arsenic	milligrams per litre	Quarterly	1	15/04/2020						
Apr-20	Cadmium	milligrams per litre	Quarterly	1	15/04/2020						
Apr-20	Calcium	milligrams per litre	Quarterly	1	15/04/2020						
Apr-20	Chromium	milligrams per litre	Quarterly	1	15/04/2020						
Apr-20	Copper	milligrams per litre	Quarterly	1	15/04/2020						
Apr-20	Electrical conductivity	microsiemens per centimetre	Quarterly	1	15/04/2020						
Apr-20	Iron	milligrams per litre	Quarterly	1	15/04/2020						
Apr-20	Lead	milligrams per litre	Quarterly	1	15/04/2020						
Apr-20	Magnesium	milligrams per litre	Quarterly	1	15/04/2020						Incorrect bore sampled by Delta's water quality consultant. Correct bore has now been sampled. Results will be published in May 2020 report.
Apr-20	Manganese	milligrams per litre	Quarterly	1	15/04/2020						
Apr-20	Nickel	milligrams per litre	Quarterly	1	15/04/2020						
Apr-20	pH	pH	Quarterly	1	15/04/2020						
Apr-20	Potassium	milligrams per litre	Quarterly	1	15/04/2020						
Apr-20	Selenium	milligrams per litre	Quarterly	1	15/04/2020						
Apr-20	Sodium	milligrams per litre	Quarterly	1	15/04/2020						
Apr-20	Standing Water Level	metres	Quarterly	1	15/04/2020						
Apr-20	Zinc	milligrams per litre	Quarterly	1	15/04/2020						

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
Apr-20	Arsenic	milligrams per litre	Quarterly	1	15/04/2020	<0.0005	<0.0005	<0.0005			
Apr-20	Cadmium	milligrams per litre	Quarterly	1	15/04/2020	<0.0002	<0.0002	<0.0002			
Apr-20	Calcium	milligrams per litre	Quarterly	1	15/04/2020	594	594	594			
Apr-20	Chromium	milligrams per litre	Quarterly	1	15/04/2020	<0.0005	<0.0005	<0.0005			
Apr-20	Copper	milligrams per litre	Quarterly	1	15/04/2020	<0.001	<0.001	<0.001			
Apr-20	Electrical conductivity	microsiemens per centimetre	Quarterly	1	15/04/2020	49100	49100	49100			
Apr-20	Iron	milligrams per litre	Quarterly	1	15/04/2020	263	263	263			
Apr-20	Lead	milligrams per litre	Quarterly	1	15/04/2020	<0.0002	<0.0002	<0.0002			
Apr-20	Magnesium	milligrams per litre	Quarterly	1	15/04/2020	1560	1560	1560			(next quarterly sample scheduled for July 2020)
Apr-20	Manganese	milligrams per litre	Quarterly	1	15/04/2020	0.619	0.619	0.619			
Apr-20	Nickel	milligrams per litre	Quarterly	1	15/04/2020	0.032	0.032	0.032			
Apr-20	pH	pH	Quarterly	1	15/04/2020	6.42	6.42	6.42			
Apr-20	Potassium	milligrams per litre	Quarterly	1	15/04/2020	340	340	340			
Apr-20	Selenium	milligrams per litre	Quarterly	1	15/04/2020	<0.002	<0.002	<0.002			
Apr-20	Sodium	milligrams per litre	Quarterly	1	15/04/2020	11200	11200	11200			
Apr-20	Standing Water Level	metres	Quarterly	1	15/04/2020	0.02	0.02	0.02			
Apr-20	Zinc	milligrams per litre	Quarterly	1	15/04/2020	0.062	0.062	0.062			

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
Apr-20	Arsenic	milligrams per litre	Quarterly	1	15/04/2020	0.0002	0.0002	0.0002			
Apr-20	Cadmium	milligrams per litre	Quarterly	1	15/04/2020	<0.00005	<0.00005	<0.00005			
Apr-20	Calcium	milligrams per litre	Quarterly	1	15/04/2020	1	1	1			
Apr-20	Chromium	milligrams per litre	Quarterly	1	15/04/2020	0.0003	0.0003	0.0003			
Apr-20	Copper	milligrams per litre	Quarterly	1	15/04/2020	0.0019	0.0019	0.0019			
Apr-20	Electrical conductivity	microsiemens per centimetre	Quarterly	1	15/04/2020	1920	1920	1920			
Apr-20	Iron	milligrams per litre	Quarterly	1	15/04/2020	0.154	0.154	0.154			
Apr-20	Lead	milligrams per litre	Quarterly	1	15/04/2020	0.0002	0.0002	0.0002			
Apr-20	Magnesium	milligrams per litre	Quarterly	1	15/04/2020	14	14	14			(next quarterly sample scheduled for July 2020)
Apr-20	Manganese	milligrams per litre	Quarterly	1	15/04/2020	0.0596	0.0596	0.0596			
Apr-20	Nickel	milligrams per litre	Quarterly	1	15/04/2020	0.0065	0.0065	0.0065			
Apr-20	pH	pH	Quarterly	1	15/04/2020	4.92	4.92	4.92			
Apr-20	Potassium	milligrams per litre	Quarterly	1	15/04/2020	2	2	2			
Apr-20	Selenium	milligrams per litre	Quarterly	1	15/04/2020	<0.0002	<0.0002	<0.0002			
Apr-20	Sodium	milligrams per litre	Quarterly	1	15/04/2020	134	134	134			
Apr-20	Standing Water Level	metres	Quarterly	1	15/04/2020	0.02	0.02	0.02			
Apr-20	Zinc	milligrams per litre	Quarterly	1	15/04/2020	0.045	0.045	0.045			

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
Apr-20	Cadmium	milligrams per cubic metre	Yearly						1	No	
Apr-20	Chlorine	milligrams per cubic metre	Yearly						200	No	
Apr-20	Copper	milligrams per cubic metre	Yearly								
Apr-20	Hydrogen chloride	milligrams per cubic metre	Yearly						100	No	
Apr-20	Mercury	milligrams per cubic metre	Yearly						1	No	
Apr-20	Moisture	percent	Yearly								
Apr-20	Molecular weight of stack gases	grams per gram mole	Yearly								
Apr-20	Nitrogen Oxides	milligrams per cubic metre	Continuous	100%	Apr-20	487	643	806	1500	No	
Apr-20	Sulfuric acid mist and sulfur trioxide (as SO3)	milligrams per cubic metre	Yearly						100	No	
Apr-20	Sulphur dioxide	parts per million	Continuous	100%	Apr-20	191	231	289	600	No	
Apr-20	Temperature	degrees Celsius	Yearly								
Apr-20	Total Fluoride	milligrams per cubic metre	Yearly						50	No	
Apr-20	Total Solid Particles	milligrams per cubic metre	Yearly						100	No	
Apr-20	Type 1 and Type 2 substances in aggregate	milligrams per cubic metre	Yearly						5	No	
Apr-20	Undifferentiated Particulates	milligrams per cubic metre	Continuous	100%	Apr-20	11.1	18.4	28.8			
Apr-20	Velocity	metres per second	Yearly								
Apr-20	Volatile organic compounds	parts per million	Yearly								
Apr-20	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
Apr-20	Cadmium	milligrams per cubic metre	Yearly						1	No	
Apr-20	Chlorine	milligrams per cubic metre	Yearly						200	No	
Apr-20	Copper	milligrams per cubic metre	Yearly								
Apr-20	Hydrogen chloride	milligrams per cubic metre	Yearly						100	No	
Apr-20	Mercury	milligrams per cubic metre	Yearly						1	No	
Apr-20	Moisture	percent	Yearly								
Apr-20	Molecular weight of stack gases	grams per gram mole	Yearly								
Apr-20	Nitrogen Oxides	milligrams per cubic metre	Continuous	100%	Apr-20	366	612	808	1500	No	
Apr-20	Sulfuric acid mist and sulfur trioxide (as SO3)	milligrams per cubic metre	Yearly						100	No	
Apr-20	Sulphur dioxide	parts per million	Continuous	100%	Apr-20	190	224	267	600	No	
Apr-20	Temperature	degrees Celsius	Yearly								
Apr-20	Total Fluoride	milligrams per cubic metre	Yearly						50	No	
Apr-20	Total Solid Particles	milligrams per cubic metre	Yearly						100	No	
Apr-20	Type 1 and Type 2 substances in aggregate	milligrams per cubic metre	Yearly						5	No	
Apr-20	Undifferentiated Particulates	milligrams per cubic metre	Continuous	100%	Apr-20	4.8	6.3	8.1			
Apr-20	Velocity	metres per second	Yearly								
Apr-20	Volatile organic compounds	parts per million	Yearly								
Apr-20	Volumetric flowrate	cubic metres per second	Yearly								

GENERAL COMMENTS