

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	March 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
Mar-20	Chlorine (free residual)	milligrams per litre	Monthly	1	4/03/2020	0.14	0.14	0.14	0.2	No	
Mar-20	Temperature	degrees celsius	Continuous	100%	Mar-20	25.0	30.7	34.7	37.5	No	
Mar-20	Oil and Grease	Visible	Continuous	100%	Mar-20	NIL	NIL	NIL			No visible oil or grease detected during March 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
Mar-20	Ammonia	milligrams per litre	Quarterly								
Mar-20	Cadmium	milligrams per litre	Quarterly								
Mar-20	Copper	milligrams per litre	Quarterly								
Mar-20	Lead	milligrams per litre	Quarterly								
Mar-20	Manganese	milligrams per litre	Quarterly								
Mar-20	Nitrate + nitrite (oxidised nitrogen)	milligrams per litre	Monthly	1	4/03/2020	0.05	0.05	0.05			
Mar-20	Nitrogen (total)	milligrams per litre	Quarterly								
Mar-20	pH	pH	Monthly	1	4/03/2020	8.49	8.49	8.49	6.5 - 9.5	No	
Mar-20	Phosphorus (total)	milligrams per litre	Monthly	1	4/03/2020	0.12	0.12	0.12			
Mar-20	Reactive Phosphorus	milligrams per litre	Monthly	1	4/03/2020	<0.01	<0.01	<0.01			
Mar-20	Selenium	milligrams per litre	Quarterly								
Mar-20	Total Kjeldahl Nitrogen	milligrams per litre	Quarterly								
Mar-20	Total Suspended Solids	milligrams per litre	Fortnightly	2	Mar-20	51	67	83	50	Yes	Background TSS concentration in Lake Macquarie higher than TSS concentration at EPA2 when exceedances occurred.
Mar-20	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
Mar-20	Ammonia	milligrams per litre	Quarterly								
Mar-20	Cadmium	milligrams per litre	Quarterly								
Mar-20	Copper	milligrams per litre	Quarterly								
Mar-20	Lead	milligrams per litre	Quarterly								
Mar-20	Manganese	milligrams per litre	Quarterly								
Mar-20	Nitrate + nitrite (oxidised nitrogen)	milligrams per litre	Monthly	1	4/03/2020						** Seepage water sampled is captured and pumped back to the ash dam. There was no licence 'discharge to waters' (Manning Bay) during March 2020.
Mar-20	Nitrogen (total)	milligrams per litre	Quarterly								
Mar-20	pH	pH	Monthly	1	4/03/2020						
Mar-20	Phosphorus (total)	milligrams per litre	Monthly	1	4/03/2020						
Mar-20	Selenium	milligrams per litre	Quarterly								
Mar-20	Total Kjeldahl Nitrogen	milligrams per litre	Quarterly								
Mar-20	Total Suspended Solids	milligrams per litre	Monthly	1	4/03/2020				50	No	
Mar-20	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
Mar-20	Ammonia	milligrams per litre	Daily for discharge >2 hrs								
Mar-20	Cadmium	milligrams per litre	Daily for discharge >2 hrs								
Mar-20	Copper	milligrams per litre	Daily for discharge >2 hrs								
Mar-20	Lead	milligrams per litre	Daily for discharge >2 hrs								
Mar-20	Manganese	milligrams per litre	Daily for discharge >2 hrs								
Mar-20	Nitrate + nitrite (oxidised nitrogen)	milligrams per litre	Daily for discharge >2 hrs								
Mar-20	Nitrogen (total)	milligrams per litre	Daily for discharge >2 hrs								No discharge from EPA Point 18 during March 2020
Mar-20	pH	pH	Daily for discharge >2 hrs						6.5 - 9.0		
Mar-20	Phosphorus (total)	milligrams per litre	Daily for discharge >2 hrs								
Mar-20	Selenium	milligrams per litre	Daily for discharge >2 hrs								
Mar-20	Total Kjeldahl Nitrogen	milligrams per litre	Daily for discharge >2 hrs								
Mar-20	Total Suspended Solids	milligrams per litre	Daily for discharge >2 hrs						50		
Mar-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
Mar-20	Arsenic	milligrams per litre	Quarterly								
Mar-20	Cadmium	milligrams per litre	Quarterly								
Mar-20	Calcium	milligrams per litre	Quarterly								
Mar-20	Chromium	milligrams per litre	Quarterly								
Mar-20	Copper	milligrams per litre	Quarterly								
Mar-20	Electrical conductivity	microsiemens per centimetre	Quarterly								
Mar-20	Iron	milligrams per litre	Quarterly								
Mar-20	Lead	milligrams per litre	Quarterly								
Mar-20	Magnesium	milligrams per litre	Quarterly								(next quarterly sample scheduled for April 2020)
Mar-20	Manganese	milligrams per litre	Quarterly								
Mar-20	Nickel	milligrams per litre	Quarterly								
Mar-20	pH	pH	Quarterly								
Mar-20	Potassium	milligrams per litre	Quarterly								
Mar-20	Selenium	milligrams per litre	Quarterly								
Mar-20	Sodium	milligrams per litre	Quarterly								
Mar-20	Standing Water Level	metres	Quarterly								
Mar-20	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
Mar-20	Arsenic	milligrams per litre	Quarterly								
Mar-20	Cadmium	milligrams per litre	Quarterly								
Mar-20	Calcium	milligrams per litre	Quarterly								
Mar-20	Chromium	milligrams per litre	Quarterly								
Mar-20	Copper	milligrams per litre	Quarterly								
Mar-20	Electrical conductivity	microsiemens per centimetre	Quarterly								
Mar-20	Iron	milligrams per litre	Quarterly								
Mar-20	Lead	milligrams per litre	Quarterly								
Mar-20	Magnesium	milligrams per litre	Quarterly								(next quarterly sample scheduled for April 2020)
Mar-20	Manganese	milligrams per litre	Quarterly								
Mar-20	Nickel	milligrams per litre	Quarterly								
Mar-20	pH	pH	Quarterly								
Mar-20	Potassium	milligrams per litre	Quarterly								
Mar-20	Selenium	milligrams per litre	Quarterly								
Mar-20	Sodium	milligrams per litre	Quarterly								
Mar-20	Standing Water Level	metres	Quarterly								
Mar-20	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
Mar-20	Arsenic	milligrams per litre	Quarterly								
Mar-20	Cadmium	milligrams per litre	Quarterly								
Mar-20	Calcium	milligrams per litre	Quarterly								
Mar-20	Chromium	milligrams per litre	Quarterly								
Mar-20	Copper	milligrams per litre	Quarterly								
Mar-20	Electrical conductivity	microsiemens per centimetre	Quarterly								
Mar-20	Iron	milligrams per litre	Quarterly								
Mar-20	Lead	milligrams per litre	Quarterly								
Mar-20	Magnesium	milligrams per litre	Quarterly								(next quarterly sample scheduled for April 2020)
Mar-20	Manganese	milligrams per litre	Quarterly								
Mar-20	Nickel	milligrams per litre	Quarterly								
Mar-20	pH	pH	Quarterly								
Mar-20	Potassium	milligrams per litre	Quarterly								
Mar-20	Selenium	milligrams per litre	Quarterly								
Mar-20	Sodium	milligrams per litre	Quarterly								
Mar-20	Standing Water Level	metres	Quarterly								
Mar-20	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
Mar-20	Arsenic	milligrams per litre	Quarterly								
Mar-20	Cadmium	milligrams per litre	Quarterly								
Mar-20	Calcium	milligrams per litre	Quarterly								
Mar-20	Chromium	milligrams per litre	Quarterly								
Mar-20	Copper	milligrams per litre	Quarterly								
Mar-20	Electrical conductivity	microsiemens per centimetre	Quarterly								
Mar-20	Iron	milligrams per litre	Quarterly								
Mar-20	Lead	milligrams per litre	Quarterly								
Mar-20	Magnesium	milligrams per litre	Quarterly								(next quarterly sample scheduled for April 2020)
Mar-20	Manganese	milligrams per litre	Quarterly								
Mar-20	Nickel	milligrams per litre	Quarterly								
Mar-20	pH	pH	Quarterly								
Mar-20	Potassium	milligrams per litre	Quarterly								
Mar-20	Selenium	milligrams per litre	Quarterly								
Mar-20	Sodium	milligrams per litre	Quarterly								
Mar-20	Standing Water Level	metres	Quarterly								
Mar-20	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
Mar-20	Arsenic	milligrams per litre	Quarterly								
Mar-20	Cadmium	milligrams per litre	Quarterly								
Mar-20	Calcium	milligrams per litre	Quarterly								
Mar-20	Chromium	milligrams per litre	Quarterly								
Mar-20	Copper	milligrams per litre	Quarterly								
Mar-20	Electrical conductivity	microsiemens per centimetre	Quarterly								
Mar-20	Iron	milligrams per litre	Quarterly								
Mar-20	Lead	milligrams per litre	Quarterly								
Mar-20	Magnesium	milligrams per litre	Quarterly								(next quarterly sample scheduled for April 2020)
Mar-20	Manganese	milligrams per litre	Quarterly								
Mar-20	Nickel	milligrams per litre	Quarterly								
Mar-20	pH	pH	Quarterly								
Mar-20	Potassium	milligrams per litre	Quarterly								
Mar-20	Selenium	milligrams per litre	Quarterly								
Mar-20	Sodium	milligrams per litre	Quarterly								
Mar-20	Standing Water Level	metres	Quarterly								
Mar-20	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
Mar-20	Cadmium	milligrams per cubic metre	Yearly						1	No	
Mar-20	Chlorine	milligrams per cubic metre	Yearly						200	No	
Mar-20	Copper	milligrams per cubic metre	Yearly								
Mar-20	Hydrogen chloride	milligrams per cubic metre	Yearly						100	No	
Mar-20	Mercury	milligrams per cubic metre	Yearly						1	No	
Mar-20	Moisture	percent	Yearly								
Mar-20	Molecular weight of stack gases	grams per gram mole	Yearly								
Mar-20	Nitrogen Oxides	milligrams per cubic metre	Continuous	100%	Mar-20	390	626	968	1500	No	
Mar-20	Sulfuric acid mist and sulfur trioxide (as SO3)	milligrams per cubic metre	Yearly						100	No	
Mar-20	Sulphur dioxide	parts per million	Continuous	100%	Mar-20	181	249	287	600	No	
Mar-20	Temperature	degrees Celsius	Yearly								
Mar-20	Total Fluoride	milligrams per cubic metre	Yearly						50	No	
Mar-20	Total Solid Particles	milligrams per cubic metre	Yearly						100	No	
Mar-20	Type 1 and Type 2 substances in aggregate	milligrams per cubic metre	Yearly						5	No	
Mar-20	Undifferentiated Particulates	milligrams per cubic metre	Continuous	100%	Mar-20	4.5	18.1	32.5			
Mar-20	Velocity	metres per second	Yearly								
Mar-20	Volatile organic compounds	parts per million	Yearly								
Mar-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
Mar-20	Cadmium	milligrams per cubic metre	Yearly						1	No	
Mar-20	Chlorine	milligrams per cubic metre	Yearly						200	No	
Mar-20	Copper	milligrams per cubic metre	Yearly								
Mar-20	Hydrogen chloride	milligrams per cubic metre	Yearly						100	No	
Mar-20	Mercury	milligrams per cubic metre	Yearly						1	No	
Mar-20	Moisture	percent	Yearly								
Mar-20	Molecular weight of stack gases	grams per gram mole	Yearly								
Mar-20	Nitrogen Oxides	milligrams per cubic metre	Continuous	100%	Mar-20	409	736	975	1500	No	
Mar-20	Sulfuric acid mist and sulfur trioxide (as SO3)	milligrams per cubic metre	Yearly						100	No	
Mar-20	Sulphur dioxide	parts per million	Continuous	100%	Mar-20	193	262	305	600	No	
Mar-20	Temperature	degrees Celsius	Yearly								
Mar-20	Total Fluoride	milligrams per cubic metre	Yearly						50	No	
Mar-20	Total Solid Particles	milligrams per cubic metre	Yearly						100	No	
Mar-20	Type 1 and Type 2 substances in aggregate	milligrams per cubic metre	Yearly						5	No	
Mar-20	Undifferentiated Particulates	milligrams per cubic metre	Continuous	100%	Mar-20	5.5	7.6	9.3			
Mar-20	Velocity	metres per second	Yearly								
Mar-20	Volatile organic compounds	parts per million	Yearly								
Mar-20	Volumetric flowrate	cubic metres per second	Yearly								

GENERAL COMMENTS