

## Vales Point Power Station Monthly Environmental Data Summary



LICENCE NO	761	<a href="http://www.epa.nsw.gov.au/prpoeapp/">http://www.epa.nsw.gov.au/prpoeapp/</a>
LICENCE HOLDER	SUNSET POWER INTERNATIONAL PTY LTD	
REPORTING PERIOD	July 2016	
ADDRESS	VALES POINT ROAD, MANNERING PARK NSW	

POINT 1 Discharge to waters. Cooling water outlet at Wyee Bay approximately 1000m west of the premises. Labelled VPOC on plan of premises VX837351 15/11/13 DOC14/1645 EF 13/2865												
Month	Pollutant	Unit of Measure	Sample/Measurement Frequency	Samples Collected & Analysed	Date Sampled	Lowest Sample Value	Mean of Samples	Highest Sample Value	EPL Limit	98.5% limit	Exceedance (yes/no)	Comments
July 2016	Chlorine (free residual)	milligrams per litre	Monthly	1	5/07/2016	0.05	0.05	0.05	0.2		No	
July 2016	Temperature	degrees celsius	Continuous	100%	July 2016	16.3	22.7	27.0	37.5	35	No	98.5% limit not exceeded for year to date
July 2016	Oil and Grease	Visible	Continuous	100%	July 2016	NIL	NIL	NIL				No visible oil or grease detected during July 2016

POINT 2 Discharge to waters. Discharge from the ash water recycle system to the cooling water outlet canal. Labelled VPADB on plan of premises VX837351 15/11/13 DOC14/1645 EF 13/2865												
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	
July 2016	Ammonia	milligrams per litre	Quarterly	1	5/07/2016	0.17	0.17	0.17				
July 2016	Cadmium	milligrams per litre	Quarterly	1	5/07/2016	<0.00021	<0.00021	<0.00021				
July 2016	Copper	milligrams per litre	Quarterly	1	5/07/2016	0.0022	0.0022	0.0022				
July 2016	Lead	milligrams per litre	Quarterly	1	5/07/2016	0.0012	0.0012	0.0012				
July 2016	Manganese	milligrams per litre	Quarterly	1	5/07/2016	0.0385	0.0385	0.0385				
July 2016	Nitrate + nitrite (oxidised nitrogen)	milligrams per litre	Monthly	1	5/07/2016	0.03	0.03	0.03				
July 2016	Nitrogen (total)	milligrams per litre	Quarterly	1	5/07/2016	0.4	0.4	0.4				
July 2016	pH	pH	Monthly	1	5/07/2016	8.41	8.41	8.41	6.5 - 9.5	No		
July 2016	Phosphorus (total)	milligrams per litre	Monthly	1	5/07/2016	0.14	0.14	0.14				
July 2016	Reactive Phosphorus	milligrams per litre	Monthly	1	5/07/2016	0.09	0.09	0.09				
July 2016	Selenium	milligrams per litre	Quarterly	1	5/07/2016	0.0163	0.0163	0.0163				
July 2016	Total Kjeldahl Nitrogen	milligrams per litre	Quarterly	1	5/07/2016	1	0.4	0.4				
July 2016	Total Suspended Solids	milligrams per litre	Fortnightly	4	5, 5, 12, 18/07/2016	0.4	5.5	10	50	No		
July 2016	Zinc	milligrams per litre	Quarterly	1	5/07/2016	0.008	0.008	0.008				

POINT 4 Discharge to waters. Seepage from ash dam rehabilitated area. Labelled VPADS on plan of premises VX837351 15/11/13 DOC14/1645 EF 13/2865												
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	
July 2016	Ammonia	milligrams per litre	Quarterly	1	5/07/2016	1.14	1.14	1.14			No discharge to Mannering Bay during April 2016	
July 2016	Cadmium	milligrams per litre	Quarterly	1	5/07/2016	0.00047	0.00047	0.00047			No discharge to Mannering Bay during April 2016	
July 2016	Copper	milligrams per litre	Quarterly	1	5/07/2016	<0.001	<0.001	<0.001			No discharge to Mannering Bay during April 2016	
July 2016	Lead	milligrams per litre	Quarterly	1	5/07/2016	<0.0002	<0.0002	<0.0002			No discharge to Mannering Bay during April 2016	
July 2016	Manganese	milligrams per litre	Quarterly	1	5/07/2016	0.0874	0.0874	0.0874			No discharge to Mannering Bay during April 2016	
July 2016	Nitrate + nitrite (oxidised nitrogen)	milligrams per litre	Monthly	1	5/07/2016	0.22	0.22	0.22			No discharge to Mannering Bay during April 2016	
July 2016	Nitrogen (total)	milligrams per litre	Quarterly	1	5/07/2016	1.8	1.8	1.8			No discharge to Mannering Bay during April 2016	
July 2016	pH	pH	Monthly	1	5/07/2016	8.07	8.07	8.07			No discharge to Mannering Bay during April 2016	
July 2016	Phosphorus (total)	milligrams per litre	Monthly	1	5/07/2016	0.02	0.02	0.02			No discharge to Mannering Bay during April 2016	
July 2016	Selenium	milligrams per litre	Quarterly	1	5/07/2016	<0.0021	<0.0021	<0.0021			No discharge to Mannering Bay during April 2016	
July 2016	Total Kjeldahl Nitrogen	milligrams per litre	Quarterly	1	5/07/2016	1.6	1.6	1.6			No discharge to Mannering Bay during April 2016	
July 2016	Total Suspended Solids	milligrams per litre	Monthly	1	5/07/2016	8	8	8	50	No	No discharge to Mannering Bay during April 2016	
July 2016	Zinc	milligrams per litre	Quarterly	1	5/07/2016	<0.005	<0.005	<0.005			No discharge to Mannering Bay during April 2016	

POINT 18 Discharge to waters. Overboarding of Ash Dam at discharge point. Labelled as VPADD on plan of premises VX837351 15/11/13 DOC14/1645 EF 13/2865												
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	
July 2016	Ammonia	milligrams per litre	Daily for discharge >2 hrs								No discharge during July 2016	
July 2016	Cadmium	milligrams per litre	Daily for discharge >2 hrs								No discharge during July 2016	
July 2016	Copper	milligrams per litre	Daily for discharge >2 hrs								No discharge during July 2016	
July 2016	Lead	milligrams per litre	Daily for discharge >2 hrs								No discharge during July 2016	
July 2016	Manganese	milligrams per litre	Daily for discharge >2 hrs								No discharge during July 2016	
July 2016	Nitrate + nitrite (oxidised nitrogen)	milligrams per litre	Daily for discharge >2 hrs								No discharge during July 2016	
July 2016	Nitrogen (total)	milligrams per litre	Daily for discharge >2 hrs								No discharge during July 2016	
July 2016	pH	pH	Daily for discharge >2 hrs						6.5 - 9.0		No discharge during July 2016	
July 2016	Phosphorus (total)	milligrams per litre	Daily for discharge >2 hrs								No discharge during July 2016	
July 2016	Selenium	milligrams per litre	Daily for discharge >2 hrs								No discharge during July 2016	
July 2016	Total Kjeldahl Nitrogen	milligrams per litre	Daily for discharge >2 hrs								No discharge during July 2016	
July 2016	Total Suspended Solids	milligrams per litre	Daily for discharge >2 hrs						50		No discharge during July 2016	
July 2016	Zinc	milligrams per litre	Daily for discharge >2 hrs								No discharge during July 2016	

**POINT 11 Discharge to air. Stack serving boiler unit 5, labelled point 11 on plan of premises VX837351 15/11/13 DOC14/1645 EF 13/2865**

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
July 2016	Cadmium	milligrams per cubic metre	Yearly						1	No	
July 2016	Chlorine	milligrams per cubic metre	Yearly						200	No	
July 2016	Copper	milligrams per cubic metre	Yearly								
July 2016	Hydrogen chloride	milligrams per cubic metre	Yearly						100	No	
July 2016	Mercury	milligrams per cubic metre	Yearly						1	No	
July 2016	Moisture	percent	Yearly								
July 2016	Molecular weight of stack gases	grams per gram mole	Yearly								
July 2016	Nitrogen Oxides	milligrams per cubic metre	Continuous	100%	July 2016	436	598	657	1500	No	
July 2016	Sulfuric acid mist and sulfur trioxide (as SO3)	milligrams per cubic metre	Yearly						100	No	
July 2016	Sulphur dioxide	parts per million	Continuous	100%	July 2016	130	188	203	600	No	
July 2016	Temperature	degrees Celsius	Yearly								
July 2016	Total Fluoride	milligrams per cubic metre	Yearly						50	No	
July 2016	Total Solid Particles	milligrams per cubic metre	Yearly						100	No	
July 2016	Type 1 and Type 2 substances in aggregate	milligrams per cubic metre	Yearly						5	No	
July 2016	Undifferentiated Particulates	milligrams per cubic metre	Continuous	100%	July 2016	10.6	17.2	34.7			
July 2016	Velocity	metres per second	Yearly								
July 2016	Volatile organic compounds	parts per million	Yearly								
July 2016	Volumetric flowrate	cubic metres per second	Yearly								

**POINT 12 Discharge to air. Stack serving boiler unit 6, labelled point 12 on plan of premises VX837351 15/11/13 DOC14/1645 EF 13/2865**

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
July 2016	Cadmium	milligrams per cubic metre	Yearly						1	No	
July 2016	Chlorine	milligrams per cubic metre	Yearly						200	No	
July 2016	Copper	milligrams per cubic metre	Yearly								
July 2016	Hydrogen chloride	milligrams per cubic metre	Yearly						100	No	
July 2016	Mercury	milligrams per cubic metre	Yearly						1	No	
July 2016	Moisture	percent	Yearly								
July 2016	Molecular weight of stack gases	grams per gram mole	Yearly								
July 2016	Nitrogen Oxides	milligrams per cubic metre	Continuous	100%	July 2016	629	876	964	1500	No	
July 2016	Sulfuric acid mist and sulfur trioxide (as SO3)	milligrams per cubic metre	Yearly						100	No	
July 2016	Sulphur dioxide	parts per million	Continuous	100%	July 2016	139	181	209	600	No	
July 2016	Temperature	degrees Celsius	Yearly								
July 2016	Total Fluoride	milligrams per cubic metre	Yearly						50	No	
July 2016	Total Solid Particles	milligrams per cubic metre	Yearly						100	No	
July 2016	Type 1 and Type 2 substances in aggregate	milligrams per cubic metre	Yearly						5	No	
July 2016	Undifferentiated Particulates	milligrams per cubic metre	Continuous	100%	July 2016	5.3	9.5	20.3			
July 2016	Velocity	metres per second	Yearly								
July 2016	Volatile organic compounds	parts per million	Yearly								
July 2016	Volumetric flowrate	cubic metres per second	Yearly								

**GENERAL COMMENTS**

1. Last annual stack test on Points 11 & 12 completed in March 2016 and reported in April 2016. Next annual stack test scheduled for February/March 2017.