

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	January 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
Jan-19	Chlorine (free residual)	milligrams per litre	Monthly	1	14/1/2019	0.13	0.13	0.13	0.2	No	
Jan-19	Temperature	degrees celsius	Continuous	100%	Jan-19	32.0	34.8	38.1	37.5	Yes*	*EPA granted permission to exceed 100 percentile temperature limit following AEMO declaring LOR 2 conditions on several occasions during January 2019.
Jan-19	Oil and Grease	Visible	Continuous	100%	Jan-19	NIL	NIL	NIL			No visible oil or grease detected during January 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
Jan-19	Ammonia	milligrams per litre	Quarterly	1	14/1/2019	<0.1	<0.1	<0.1			
Jan-19	Cadmium	milligrams per litre	Quarterly	1	14/1/2019	<0.00021	<0.00021	<0.00021			
Jan-19	Copper	milligrams per litre	Quarterly	1	14/1/2019	0.0011	0.0011	0.0011			
Jan-19	Lead	milligrams per litre	Quarterly	1	14/1/2019	<0.0002	<0.0002	<0.0002			
Jan-19	Manganese	milligrams per litre	Quarterly	1	14/1/2019	0.0062	0.0062	0.0062			
Jan-19	Nitrate + nitrite (oxidised nitrogen)	milligrams per litre	Monthly	1	14/1/2019	0.02	0.02	0.02			
Jan-19	Nitrogen (total)	milligrams per litre	Quarterly	1	14/1/2019	0.5	0.5	0.5			
Jan-19	pH	pH	Monthly	1	14/1/2019	8.35	8.35	8.35	6.5 - 9.5	No	
Jan-19	Phosphorus (total)	milligrams per litre	Monthly	1	14/1/2019	0.23	0.23	0.23			
Jan-19	Reactive Phosphorus	milligrams per litre	Monthly	1	14/1/2019	0.09	0.09	0.09			
Jan-19	Selenium	milligrams per litre	Quarterly	1	14/1/2019	0.0223	0.0223	0.0223			
Jan-19	Total Kjeldahl Nitrogen	milligrams per litre	Quarterly	1	14/1/2019	0.5	0.5	0.5			
Jan-19	Total Suspended Solids	milligrams per litre	Fortnightly	5	Jan-19	<2	7.2	16	50	No	
Jan-19	Zinc	milligrams per litre	Quarterly	1	14/1/2019	<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
Jan-19	Ammonia	milligrams per litre	Quarterly	1	14/1/2019						
Jan-19	Cadmium	milligrams per litre	Quarterly	1	14/1/2019						
Jan-19	Copper	milligrams per litre	Quarterly	1	14/1/2019						
Jan-19	Lead	milligrams per litre	Quarterly	1	14/1/2019						
Jan-19	Manganese	milligrams per litre	Quarterly	1	14/1/2019						
Jan-19	Nitrate + nitrite (oxidised nitrogen)	milligrams per litre	Monthly	1	14/1/2019						** 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 January 2019.
Jan-19	Nitrogen (total)	milligrams per litre	Quarterly	1	14/1/2019						
Jan-19	pH	pH	Monthly	1	14/1/2019						
Jan-19	Phosphorus (total)	milligrams per litre	Monthly	1	14/1/2019						
Jan-19	Selenium	milligrams per litre	Quarterly	1	14/1/2019						
Jan-19	Total Kjeldahl Nitrogen	milligrams per litre	Quarterly	1	14/1/2019						
Jan-19	Total Suspended Solids	milligrams per litre	Monthly	1	14/1/2019				50	No	
Jan-19	Zinc	milligrams per litre	Quarterly	1	14/1/2019						

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
Jan-19	Ammonia	milligrams per litre	Daily for discharge >2 hrs								
Jan-19	Cadmium	milligrams per litre	Daily for discharge >2 hrs								
Jan-19	Copper	milligrams per litre	Daily for discharge >2 hrs								
Jan-19	Lead	milligrams per litre	Daily for discharge >2 hrs								
Jan-19	Manganese	milligrams per litre	Daily for discharge >2 hrs								
Jan-19	Nitrate + nitrite (oxidised nitrogen)	milligrams per litre	Daily for discharge >2 hrs								
Jan-19	Nitrogen (total)	milligrams per litre	Daily for discharge >2 hrs								No discharge from EPA Point 18 during January 2019
Jan-19	pH	pH	Daily for discharge >2 hrs						6.5 - 9.0		
Jan-19	Phosphorus (total)	milligrams per litre	Daily for discharge >2 hrs								
Jan-19	Selenium	milligrams per litre	Daily for discharge >2 hrs								
Jan-19	Total Kjeldahl Nitrogen	milligrams per litre	Daily for discharge >2 hrs								
Jan-19	Total Suspended Solids	milligrams per litre	Daily for discharge >2 hrs						50		
Jan-19	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
Jan-19	Arsenic	milligrams per litre	Quarterly	1	14/1/2019	0.0082	0.0082	0.0082			(next quarterly sample scheduled for April 2019)
Jan-19	Cadmium	milligrams per litre	Quarterly	1	14/1/2019	0.00026	0.00026	0.00026			
Jan-19	Calcium	milligrams per litre	Quarterly	1	14/1/2019	948	948	948			
Jan-19	Chromium	milligrams per litre	Quarterly	1	14/1/2019	0.001	0.001	0.001			
Jan-19	Copper	milligrams per litre	Quarterly	1	14/1/2019	0.0026	0.0026	0.0026			
Jan-19	Electrical conductivity	microsiemens per centimetre	Quarterly	1	14/1/2019	37200	37200	37200			
Jan-19	Iron	milligrams per litre	Quarterly	1	14/1/2019	46	46	46			
Jan-19	Lead	milligrams per litre	Quarterly	1	14/1/2019	0.0012	0.0012	0.0012			
Jan-19	Magnesium	milligrams per litre	Quarterly	1	14/1/2019	983	983	983			
Jan-19	Manganese	milligrams per litre	Quarterly	1	14/1/2019	4.04	4.04	4.04			
Jan-19	Nickel	milligrams per litre	Quarterly	1	14/1/2019	0.0218	0.0218	0.0218			
Jan-19	pH	pH	Quarterly	1	14/1/2019	5.69	5.69	5.69			
Jan-19	Potassium	milligrams per litre	Quarterly	1	14/1/2019	116	116	116			
Jan-19	Selenium	milligrams per litre	Quarterly	1	14/1/2019	<0.0021	<0.0021	<0.0021			
Jan-19	Sodium	milligrams per litre	Quarterly	1	14/1/2019	6630	6630	6630			
Jan-19	Standing Water Level	metres	Quarterly	1	14/1/2019	3.81	3.81	3.81			
Jan-19	Zinc	milligrams per litre	Quarterly	1	14/1/2019	0.058	0.058	0.058			

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
Jan-19	Arsenic	milligrams per litre	Quarterly	1	14/1/2019	0.0023	0.0023	0.0023			(next quarterly sample scheduled for April 2019)
Jan-19	Cadmium	milligrams per litre	Quarterly	1	14/1/2019	0.00008	0.00008	0.00008			
Jan-19	Calcium	milligrams per litre	Quarterly	1	14/1/2019	63	63	63			
Jan-19	Chromium	milligrams per litre	Quarterly	1	14/1/2019	0.0022	0.0022	0.0022			
Jan-19	Copper	milligrams per litre	Quarterly	1	14/1/2019	0.0158	0.0158	0.0158			
Jan-19	Electrical conductivity	microsiemens per centimetre	Quarterly	1	14/1/2019	3760	3760	3760			
Jan-19	Iron	milligrams per litre	Quarterly	1	14/1/2019	21.1	21.1	21.1			
Jan-19	Lead	milligrams per litre	Quarterly	1	14/1/2019	0.0055	0.0055	0.0055			
Jan-19	Magnesium	milligrams per litre	Quarterly	1	14/1/2019	96	96	96			
Jan-19	Manganese	milligrams per litre	Quarterly	1	14/1/2019	0.254	0.254	0.254			
Jan-19	Nickel	milligrams per litre	Quarterly	1	14/1/2019	0.0122	0.0122	0.0122			
Jan-19	pH	pH	Quarterly	1	14/1/2019	5.8	5.8	5.8			
Jan-19	Potassium	milligrams per litre	Quarterly	1	14/1/2019	10	10	10			
Jan-19	Selenium	milligrams per litre	Quarterly	1	14/1/2019	0.0009	0.0009	0.0009			
Jan-19	Sodium	milligrams per litre	Quarterly	1	14/1/2019	788	788	788			
Jan-19	Standing Water Level	metres	Quarterly	1	14/1/2019	0.65	0.65	0.65			
Jan-19	Zinc	milligrams per litre	Quarterly	1	14/1/2019	0.592	0.592	0.592			

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
Jan-19	Arsenic	milligrams per litre	Quarterly	1	14/1/2019	0.0007	0.0007	0.0007			(next quarterly sample scheduled for April 2019)
Jan-19	Cadmium	milligrams per litre	Quarterly	1	14/1/2019	<0.00005	<0.00005	<0.00005			
Jan-19	Calcium	milligrams per litre	Quarterly	1	14/1/2019	5	5	5			
Jan-19	Chromium	milligrams per litre	Quarterly	1	14/1/2019	0.0015	0.0015	0.0015			
Jan-19	Copper	milligrams per litre	Quarterly	1	14/1/2019	0.0019	0.0019	0.0019			
Jan-19	Electrical conductivity	microsiemens per centimetre	Quarterly	1	14/1/2019	463	463	463			
Jan-19	Iron	milligrams per litre	Quarterly	1	14/1/2019	10.6	10.6	10.6			
Jan-19	Lead	milligrams per litre	Quarterly	1	14/1/2019	0.0017	0.0017	0.0017			
Jan-19	Magnesium	milligrams per litre	Quarterly	1	14/1/2019	10	10	10			
Jan-19	Manganese	milligrams per litre	Quarterly	1	14/1/2019	0.0807	0.0807	0.0807			
Jan-19	Nickel	milligrams per litre	Quarterly	1	14/1/2019	0.0073	0.0073	0.0073			
Jan-19	pH	pH	Quarterly	1	14/1/2019	5.97	5.97	5.97			
Jan-19	Potassium	milligrams per litre	Quarterly	1	14/1/2019	2	2	2			
Jan-19	Selenium	milligrams per litre	Quarterly	1	14/1/2019	0.0003	0.0003	0.0003			
Jan-19	Sodium	milligrams per litre	Quarterly	1	14/1/2019	83	83	83			
Jan-19	Standing Water Level	metres	Quarterly	1	14/1/2019	2.58	2.58	2.58			
Jan-19	Zinc	milligrams per litre	Quarterly	1	14/1/2019	0.006	0.006	0.006			

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
Jan-19	Arsenic	milligrams per litre	Quarterly	1	14/1/2019	0.0008	0.0008	0.0008			(next quarterly sample scheduled for April 2019)
Jan-19	Cadmium	milligrams per litre	Quarterly	1	14/1/2019	<0.00021	<0.00021	<0.00021			
Jan-19	Calcium	milligrams per litre	Quarterly	1	14/1/2019	454	454	454			
Jan-19	Chromium	milligrams per litre	Quarterly	1	14/1/2019	0.0006	0.0006	0.0006			
Jan-19	Copper	milligrams per litre	Quarterly	1	14/1/2019	<0.001	<0.001	<0.001			
Jan-19	Electrical conductivity	microsiemens per centimetre	Quarterly	1	14/1/2019	478	478	478			
Jan-19	Iron	milligrams per litre	Quarterly	1	14/1/2019	6.58	6.58	6.58			
Jan-19	Lead	milligrams per litre	Quarterly	1	14/1/2019	<0.0002	<0.0002	<0.0002			
Jan-19	Magnesium	milligrams per litre	Quarterly	1	14/1/2019	1200	1200	1200			
Jan-19	Manganese	milligrams per litre	Quarterly	1	14/1/2019	0.444	0.444	0.444			
Jan-19	Nickel	milligrams per litre	Quarterly	1	14/1/2019	0.003	0.003	0.003			
Jan-19	pH	pH	Quarterly	1	14/1/2019	6.8	6.8	6.8			
Jan-19	Potassium	milligrams per litre	Quarterly	1	14/1/2019	257	257	257			
Jan-19	Selenium	milligrams per litre	Quarterly	1	14/1/2019	<0.0021	<0.0021	<0.0021			
Jan-19	Sodium	milligrams per litre	Quarterly	1	14/1/2019	9120	9120	9120			
Jan-19	Standing Water Level	metres	Quarterly	1	14/1/2019	0.11	0.11	0.11			
Jan-19	Zinc	milligrams per litre	Quarterly	1	14/1/2019	0.018	0.018	0.018			

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
Jan-19	Arsenic	milligrams per litre	Quarterly	1	14/1/2019	0.0008	0.0008	0.0008			(next quarterly sample scheduled for April 2019)
Jan-19	Cadmium	milligrams per litre	Quarterly	1	14/1/2019	0.0001	0.0001	0.0001			
Jan-19	Calcium	milligrams per litre	Quarterly	1	14/1/2019	2	2	2			
Jan-19	Chromium	milligrams per litre	Quarterly	1	14/1/2019	0.0004	0.0004	0.0004			
Jan-19	Copper	milligrams per litre	Quarterly	1	14/1/2019	0.0022	0.0022	0.0022			
Jan-19	Electrical conductivity	microsiemens per centimetre	Quarterly	1	14/1/2019	933	933	933			
Jan-19	Iron	milligrams per litre	Quarterly	1	14/1/2019	1.7	1.7	1.7			
Jan-19	Lead	milligrams per litre	Quarterly	1	14/1/2019	0.0003	0.0003	0.0003			
Jan-19	Magnesium	milligrams per litre	Quarterly	1	14/1/2019	13	13	13			
Jan-19	Manganese	milligrams per litre	Quarterly	1	14/1/2019	0.0873	0.0873	0.0873			
Jan-19	Nickel	milligrams per litre	Quarterly	1	14/1/2019	0.0103	0.0103	0.0103			
Jan-19	pH	pH	Quarterly	1	14/1/2019	5.32	5.32	5.32			
Jan-19	Potassium	milligrams per litre	Quarterly	1	14/1/2019	3	3	3			
Jan-19	Selenium	milligrams per litre	Quarterly	1	14/1/2019	<0.0002	<0.0002	<0.0002			
Jan-19	Sodium	milligrams per litre	Quarterly	1	14/1/2019	137	137	137			
Jan-19	Standing Water Level	metres	Quarterly	1	14/1/2019	0.22	0.22	0.22			
Jan-19	Zinc	milligrams per litre	Quarterly	1	14/1/2019	0.053	0.053	0.053			

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
Jan-19	Cadmium	milligrams per cubic metre	Yearly						1	No	Annual stack gas testing to be undertaken before 1 July 2019
Jan-19	Chlorine	milligrams per cubic metre	Yearly						200	No	
Jan-19	Copper	milligrams per cubic metre	Yearly								
Jan-19	Hydrogen chloride	milligrams per cubic metre	Yearly						100	No	
Jan-19	Mercury	milligrams per cubic metre	Yearly						1	No	
Jan-19	Moisture	percent	Yearly								
Jan-19	Molecular weight of stack gases	grams per gram mole	Yearly								
Jan-19	Nitrogen Oxides	milligrams per cubic metre	Continuous	100%	Jan-19	403	584	899	1500	No	
Jan-19	Sulfuric acid mist and sulfur trioxide (as SO3)	milligrams per cubic metre	Yearly						100	No	
Jan-19	Sulphur dioxide	parts per million	Continuous	100%	Jan-19	189	276	360	600	No	
Jan-19	Temperature	degrees Celsius	Yearly								
Jan-19	Total Fluoride	milligrams per cubic metre	Yearly						50	No	
Jan-19	Total Solid Particles	milligrams per cubic metre	Yearly						100	No	
Jan-19	Type 1 and Type 2 substances in aggregate	milligrams per cubic metre	Yearly						5	No	
Jan-19	Undifferentiated Particulates	milligrams per cubic metre	Continuous	100%	Jan-19	15.0	32.5	69.9			
Jan-19	Velocity	metres per second	Yearly								
Jan-19	Volatile organic compounds	parts per million	Yearly								
Jan-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
Jan-19	Cadmium	milligrams per cubic metre	Yearly						1	No	Annual stack gas testing to be undertaken before 1 July 2019
Jan-19	Chlorine	milligrams per cubic metre	Yearly						200	No	
Jan-19	Copper	milligrams per cubic metre	Yearly								
Jan-19	Hydrogen chloride	milligrams per cubic metre	Yearly						100	No	
Jan-19	Mercury	milligrams per cubic metre	Yearly						1	No	
Jan-19	Moisture	percent	Yearly								
Jan-19	Molecular weight of stack gases	grams per gram mole	Yearly								
Jan-19	Nitrogen Oxides	milligrams per cubic metre	Continuous	100%	Jan-19	532	812	1108	1500	No	
Jan-19	Sulfuric acid mist and sulfur trioxide (as SO3)	milligrams per cubic metre	Yearly						100	No	
Jan-19	Sulphur dioxide	parts per million	Continuous	100%	Jan-19	205	271	342	600	No	
Jan-19	Temperature	degrees Celsius	Yearly								
Jan-19	Total Fluoride	milligrams per cubic metre	Yearly						50	No	
Jan-19	Total Solid Particles	milligrams per cubic metre	Yearly						100	No	
Jan-19	Type 1 and Type 2 substances in aggregate	milligrams per cubic metre	Yearly						5	No	
Jan-19	Undifferentiated Particulates	milligrams per cubic metre	Continuous	100%	Jan-19	36.4	55.7	83.8			
Jan-19	Velocity	metres per second	Yearly								
Jan-19	Volatile organic compounds	parts per million	Yearly								
Jan-19	Volumetric flowrate	cubic metres per second	Yearly								

GENERAL COMMENTS

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