

Monthly Data Summary

BAYSWATER MONTHLY DATA SUMMARY APRIL 2017

LICENCE NO	779
LICENCE HOLDER	AGL Macquarie
REPORTING PERIOD	APRIL 2017

A1 Licence Holder

Licence Number 779
Licence Holder AGL Macquarie
Trading Name (if applicable)
ABN 18 402 904 344

A2 Premises to which Licence Applies (if applicable)

Common Name (if any) BAYSWATER POWER STATION
Premises NEW ENGLAND HIGHWAY MUSWELLBROOK NSW 2333

A3 Activities to which Licence Applies

Electricity Generation

A4 Other Activities (if applicable) Crushing, Grinding or Separating Works Aircraft (helicopter) facilities

Crushing, Grinding or Separating Works
Sewage Treatment Systems
Chemical Storage Facilities
Aircraft (helicopter) facilities

A5 Fee-Based Activity Classifications

Note that the fee based activity classification is used to calculate the administrative fee.

Fee-based activity	Activity scale	Unit of measure
Generation of electrical power from coal	> 4,000.00	Gwh generated
Chemical Storage	> 100	Tonnes Generated or Stored
Coal Works	> 5000000	Tonnes handled

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Discharge & Monitoring Point 1

Discharge to waters

Effluent quality and volume monitoring, Discharge from main station oil separator hoBWinng basin and Treated Process Water Pond to Tinkers Creek, shown as "EPA ID No. 1" on plan titled "Bayswater Power Station Unit 1-4, Open Space, Easments, Site Survey" dated 24/12/2004

Month	Date of Publication	Pollutant	Unit of measure	Sampling / measurment frequency	Samples collected and analysed	Lowest sample value	Mean of samples	Highest sample value	EPL Limit
APRIL 2017	12/05/2017	Oil and Grease	milligrams per litre	Fortnightly	4	<5	2.5	<5	10 mg/L
APRIL 2017	12/05/2017	Total suspended solids	milligrams per litre	Fortnightly	4	3.0	5.3	8.0	20 mg/L
APRIL 2017	12/05/2017	Volume discharge	kilolitres per week	Weekly during discharge	4	0	13,453	18,695	36,400 KL
Comments:									

Discharge & Monitoring Point 7

Discharge to waters

Effluent quality and volume monitoring, Discharge from cooling towers to Tinkers Creek, shown as "EPA ID No. 7" on plan titled "Bayswater Power Station Unit 1-4, Open Space, Easments, Site Survey" dated 24/12/2004.

Month	Date of Publication	Pollutant	Unit of measure	Sampling / measurment frequency	Samples collected and analysed	Lowest sample value	Mean of samples	Highest sample value	EPL Limit
APRIL 2017	12/05/2017	Conductivity	uS/cm	Continuous	99.8	104.0	2329.0	2979.0	4500 uS/cm
APRIL 2017	12/05/2017	pH	pH Units	Continuous	99.8	7.1	8.1	8.6	6.5 - 8.5
APRIL 2017	12/05/2017	Volume discharge	Megalitres per month	Weekly during discharge	25	271.1			840 ML
Comments:									

Discharge & Monitoring Point 8

Discharge to waters

Discharge & monitoring point under the Hunter River Salinity Trading Scheme, Discharge pipe from Lake Liddel dam wall, shown as "EPA ID No. 8" on plan titled "Bayswater Power Station Unit 1-4, Open Space, Easments, Site Survey" dated 24/12/2004.

Month	Date of Publication	Pollutant	Unit of measure	Sampling / measurment frequency	Samples collected and analysed	Lowest sample value	Mean of samples	Highest sample value	EPL Limit
APRIL 2017	12/05/2017	Conductivity	uS/cm	Continuous during discharge	1	2340.0	2340.0	2340.0	-
APRIL 2017	12/05/2017	pH	pH Units	Daily during discharge	1	8.1	8.1	8.1	6.5 - 8.5
APRIL 2017	12/05/2017	Total suspended solids	milligrams per litre	Monthly	1	<5	2.5	<5	30 mg/L
APRIL 2017	12/05/2017	Volume discharge	Megalitres per day	Daily during discharge	-	-	-	-	700 ML
Comments: HRSTS discharge did not occur during the reporting period. Results from routine monthly sampling									

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Discharge & Monitoring Point 17

Discharge to waters

Ravensthorpe void. Inlet point located on the Void 4 pontoon pump system

Month	Date of Publication	Pollutant	Unit of measure	Sampling / measurement frequency	Samples collected and analysed	Lowest sample value	Mean of samples	Highest sample value	EPL Limit
APRIL 2017	12/05/2017	Conductivity	uS/cm	Continuous during discharge	1	6570.0	6570.0	6570.0	-
APRIL 2017	12/05/2017	pH	pH Units	Daily during discharge	1	8.7	8.7	8.7	6.5 - 9.5
APRIL 2017	12/05/2017	Total suspended solids	milligrams per litre	Monthly	1	18.0	18.0	18.0	30 mg/L
APRIL 2017	12/05/2017	Boron	milligrams per litre	Weekly during discharge	1	2.5	2.5	2.5	0.81
APRIL 2017	12/05/2017	Cadmium	milligrams per litre	Weekly during discharge	1	0.0	0.0	0.0	0.0003
APRIL 2017	12/05/2017	Copper	milligrams per litre	Weekly during discharge	1	<0.001	0.0	<0.001	0.001
APRIL 2017	12/05/2017	Iron	milligrams per litre	Weekly during discharge	1	<0.05	0.0	<0.05	0.27
APRIL 2017	12/05/2017	Molybdenum	milligrams per litre	Weekly during discharge	1	0.3	0.3	0.3	0.29
APRIL 2017	12/05/2017	Nickel	milligrams per litre	Weekly during discharge	1	0.0	0.0	0.0	0.19
APRIL 2017	12/05/2017	Silver	milligrams per litre	Weekly during discharge	1	<0.0001	0.0	<0.0001	0.0005
APRIL 2017	12/05/2017	Volume discharge	Megalitres per day	Daily during discharge	-	-	-	-	20 ML
Comments:	HRSTS discharge did not occur during the reporting period. Results from routine monthly sampling								

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Discharge & Monitoring Point 10

Discharge to air

Air emission monitoring, Boiler 1 stack emissions, shown as "EPA ID No. 10" on plan titled "Bayswater Power Station Unit 1-4, Open Space, Easments, Site Survey" dated 24/12/2004.

Month	Date of Publication	Pollutant	Unit of measure	Sampling / measurement frequency	Averaging period	Data capture %	Lowest sample value	Mean of samples	Highest sample value	EPL Limit
APRIL 2017	12/05/2017	Nitrogen Oxides	parts per million	Continuous	One hour	97.9%	102.9	198.2	327.4	700 ppm
APRIL 2017	12/05/2017		milligrams per cubic metre				211.1			406.8
APRIL 2017	12/05/2017	Sulphur dioxide	parts per million	Continuous	One hour	100.0%	104.6	207.8	263.3	600 ppm
APRIL 2017	12/05/2017		milligrams per cubic metre				299.0			594.0
APRIL 2017	12/05/2017	Opacity -Undifferentiated particles	Percent	Continuous	One hour	100.0%	1.7%	5.3%	10.1%	20%
Comments:										

Annual monitoring of discharges to air

Air emission monitoring, Boiler 1 stack emissions, shown as "EPA ID No. 13" on plan titled "Bayswater Power Station Unit 1-4, Open Space, Easments, Site Survey" dated 24/12/2004.

Month	Date of Publication	Pollutant	Unit of measure	No. of samples required by licence	Samples collected and analysed	Sample value	EPL Limit mg/m ³			
May-16	22/06/2016	Cadmium	milligrams per cubic metre	1	1	<0.0002	1.0			
May-16	22/06/2016	Carbon monoxide	ppm	1	1	390				
May-16	22/06/2016	Chlorine	milligrams per cubic metre	1	1	0.0	200			
May-16	22/06/2016	Copper	milligrams per cubic metre	1	1	0.0007				
May-16	22/06/2016	Hazardous substances (Metals)	milligrams per cubic metre	1	1	≤0.011	5			
May-16	22/06/2016	Hydrogen chloride	milligrams per cubic metre	1	1	5.1	100			
May-16	22/06/2016	Mercury	milligrams per cubic metre	1	1	<0.00040	1.0			
May-16	22/06/2016	Nitrogen oxides	milligrams per cubic metre	1	1	1	1500			
May-16	22/06/2016	Solid particles	milligrams per cubic metre	1	1	4.5	100			
May-16	22/06/2016	Sulfuric acid mist and sulfur trioxide	milligrams per cubic metre	1	1	0.51	100			
May-16	22/06/2016	Sulphur dioxide	milligrams per cubic metre	1	1	920				
May-16	22/06/2016	Total fluoride	milligrams per cubic metre	1	1	3.6	50			
Comments:		Monitoring of emission from each of the 4 boilers for the substances in this table is required annually. This table contains the results from Boiler 1 tested on 19 May 2016.								

Monthly Data Summary

Discharge & Monitoring Point 11

Discharge to air

Air emission monitoring, Boiler 2 stack emissions, shown as "EPA ID No. 11" on plan titled "Bayswater Power Station Unit 1-4, Open Space, Easements, Site Survey" dated 24/12/2004.

Month	Date of Publication	Pollutant	Unit of measure	Sampling / measurement frequency	Averaging period	Data capture %	Lowest sample value	Mean of samples	Highest sample value	EPL Limit
APRIL 2017	12/05/2017	Opacity -Undifferentiated particles	Percent	Continuous	One hour	100.0%	3.4%	6.7%	12.1%	20%
Comments:										

Annual monitoring of discharges to air

Air emission monitoring, Boiler 2 stack emissions, shown as "EPA ID No. 13" on plan titled "Bayswater Power Station Unit 1-4, Open Space, Easements, Site Survey" dated 24/12/2004.

Month	Date of Publication	Pollutant	Unit of measure	No. of samples required by licence	Samples collected and analysed	Sample value	EPL Limit mg/m ³
Sep-16	15/11/2016	Cadmium	milligrams per cubic metre	1	1	<0.0002	1.0
Sep-16	15/11/2016	Carbon monoxide	ppm	1	1	12	
Sep-16	15/11/2016	Chlorine	milligrams per cubic metre	1	1	<0.007	200
Sep-16	15/11/2016	Copper	milligrams per cubic metre	1	1	0.0016	
Sep-16	15/11/2016	Hazardous substances (Metals)	milligrams per cubic metre	1	1	≤0.031	5
Sep-16	15/11/2016	Hydrogen chloride	milligrams per cubic metre	1	1	11.0	100
Sep-16	15/11/2016	Mercury	milligrams per cubic metre	1	1	0.00320	1.0
Sep-16	15/11/2016	Nitrogen oxides	milligrams per cubic metre	1	1	1	1500
Sep-16	15/11/2016	Solid particles	milligrams per cubic metre	1	1	31.0	100
Sep-16	15/11/2016	Sulfuric acid mist and sulfur trioxide	milligrams per cubic metre	1	1	2.70	100
Sep-16	15/11/2016	Sulphur dioxide	milligrams per cubic metre	1	1	1100	
Sep-16	15/11/2016	Total fluoride	milligrams per cubic metre	1	1	11.0	50
Comments: Monitoring of emission from each of the 4 boilers for the substances in this table is required annually. This table contains the results from Boiler 2 tested on 27 September 2016							

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Discharge & Monitoring Point 12

Discharge to air

Air emission monitoring, Boiler 3 stack emissions, shown as "EPA ID No. 12" on plan titled "Bayswater Power Station Unit 1-4, Open Space, Easements, Site Survey" dated 24/12/2004.

Month	Date of Publication	Pollutant	Unit of measure	Sampling / measurement frequency	Averaging period	Data capture %	Lowest sample value	Mean of samples	Highest sample value	EPL Limit
APRIL 2017	12/05/2017	Opacity -Undifferentiated particles	Percent	Continuous	One hour	-	-	-	-	20%
Comments:		Boiler 3 out of service during the reporting period								

Annual monitoring of discharges to air

Air emission monitoring, Boiler 3 stack emissions, shown as "EPA ID No. 13" on plan titled "Bayswater Power Station Unit 1-4, Open Space, Easements, Site Survey" dated 24/12/2004.

Month	Date of Publication	Pollutant	Unit of measure	No. of samples required by licence	Samples collected and analysed	Sample value	EPL Limit mg/m ³			
-	-	Cadmium	milligrams per cubic metre	1	-	-	1.0			
-	-	Carbon monoxide	ppm	1	-	-				
-	-	Chlorine	milligrams per cubic metre	1	-	-	200			
-	-	Copper	milligrams per cubic metre	1	-	-				
-	-	Hazardous substances (Metals)	milligrams per cubic metre	1	-	-	5			
-	-	Hydrogen chloride	milligrams per cubic metre	1	-	-	100			
-	-	Mercury	milligrams per cubic metre	1	-	-	1.0			
-	-	Nitrogen oxides	milligrams per cubic metre	1	-	-	1500			
-	-	Solid particles	milligrams per cubic metre	1	-	-	100			
-	-	Sulfuric acid mist and sulfur trioxide	milligrams per cubic metre	1	-	-	100			
-	-	Sulphur dioxide	milligrams per cubic metre	1	-	-				
-	-	Total fluoride	milligrams per cubic metre	1	-	-	50			
Comments:		Boiler 3 out of service during the reporting period								

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Discharge & Monitoring Point 13

Discharge to air

Air emission monitoring, Boiler 4 stack emissions, shown as "EPA ID No. 12" on plan titled "Bayswater Power Station Unit 1-4, Open Space, Easements, Site Survey" dated 24/12/2004.

Month	Date of Publication	Pollutant	Unit of measure	Sampling / measurement frequency	Averaging period	Data capture %	Lowest sample value	Mean of samples	Highest sample value	EPL Limit
APRIL 2017	12/05/2017	Opacity -Undifferentiated particles	Percent	Continuous	One hour	100.0%	4.1%	6.8%	12.3%	20%
Comments:										

Annual monitoring of discharges to air

Air emission monitoring, Boiler 4 stack emissions, shown as "EPA ID No. 13" on plan titled "Bayswater Power Station Unit 1-4, Open Space, Easements, Site Survey" dated 24/12/2004.

Month	Date of Publication	Pollutant	Unit of measure	No. of samples required by licence	Samples collected and analysed	Sample value	EPL Limit mg/m ³
May-16	21/06/2016	Cadmium	milligrams per cubic metre	1	1	<0.0002	1.0
May-16	21/06/2016	Carbon monoxide	ppm	1	1	9	
May-16	21/06/2016	Chlorine	milligrams per cubic metre	1	1	0.0	200
May-16	21/06/2016	Copper	milligrams per cubic metre	1	1	0.0003	
May-16	21/06/2016	Hazardous substances (Metals)	milligrams per cubic metre	1	1	≤0.013	5
May-16	21/06/2016	Hydrogen chloride	milligrams per cubic metre	1	1	11.0	100
May-16	21/06/2016	Mercury	milligrams per cubic metre	1	1	0.00032	1.0
May-16	21/06/2016	Nitrogen oxides	milligrams per cubic metre	1	1	1	1500
May-16	21/06/2016	Solid particles	milligrams per cubic metre	1	1	6.2	100
May-16	21/06/2016	Sulfuric acid mist and sulfur trioxide	milligrams per cubic metre	1	1	2.50	100
May-16	21/06/2016	Sulphur dioxide	milligrams per cubic metre	1	1	900	
May-16	21/06/2016	Total fluoride	milligrams per cubic metre	1	1	12.0	50
Comments: Monitoring of emission from each of the 4 boilers for the substances in this table is required annually. This table contains the results from Boiler 4 tested on 17 May 2016.							

Monthly Data Summary

Details of Non-Compliance with Licence Conditions
Licence condition number not complied with
Condition L3.6
Summary of particulars of the non-compliance (NO MORE THAN 50 WORDS)
Elevated pH was recorded at EPL Point 7
If required, further details on particulars of non-compliance
-
Date(s) when the non-compliance occurred, if applicable
3-Apr-17
If relevant, precise location where the non-compliance occurred (attach a map or diagram)
-
If applicable, registration numbers of any vehicles or the chassis number of any mobile plant involved in the non-compliance
-
Cause of non-compliance
A blocked pH meter in the Unit 4 Cooling Tower resulted in a faulty pH reading in the Unit 4 cooling Tower and the acid dosing system did not activate and to correct the pH of Unit 4 cooling water prior to discharge. Discharge resulted in an increase in pH at EPL point 7 to a maximum of 8.56 at 2015hrs before trending down and returning to a pH of 8.45 at 2115hrs
Action taken or that will be taken to mitigate any adverse effects of the non-compliance
Source isolated upon discovery, water quality instruments fixed and cooling tower water quality corrected.
Action taken or that will be taken to prevent a recurrence of the non-compliance
Frequency of checking sample lines from the CWT to the monitoring probes to be increased and routines formalised.