

# Monthly Data Summary

## BAYSWATER MONTHLY DATA SUMMARY JANUARY 2016

LICENCE NO	779
LICENCE HOLDER	AGL Macquarie
REPORTING PERIOD	JANUARY 2016

### 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

# Monthly Data Summary

## Discharge & Monitoring Point 1

### Discharge to waters

Effluent quality and volume monitoring, Discharge from main station oil separator hoB Wing 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 / measurement frequency	Samples collected and analysed	Lowest sample value	Mean of samples	Highest sample value	EPL Limit
JANUARY 2016	5/02/2016	Oil and Grease	milligrams per litre	Fortnightly	4	<5	2.5	<5	10 mg/L
JANUARY 2016	5/02/2016	Total suspended solids	milligrams per litre	Fortnightly	4	2.0	5.8	10.0	20 mg/L
JANUARY 2016	5/02/2016	Volume discharge	kilolitres per week	Weekly during discharge	4	0	9,357	11,476	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 / measurement frequency	Samples collected and analysed	Lowest sample value	Mean of samples	Highest sample value	EPL Limit
JANUARY 2016	5/02/2016	Conductivity	uS/cm	Weekly	4	3300	3545	3960	4500 uS/cm
JANUARY 2016	5/02/2016	pH	pH Units	Weekly	4	8.1	8.3	8.4	6.5 - 8.5
JANUARY 2016	5/02/2016	Volume discharge	Megalitres per month	Weekly during discharge	1	610.2			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 / measurement frequency	Samples collected and analysed	Lowest sample value	Mean of samples	Highest sample value	EPL Limit
JANUARY 2016	5/02/2016	Conductivity	uS/cm	Continuous during discharge	6	2130	2257	2320	-
JANUARY 2016	5/02/2016	pH	pH Units	Daily during discharge	6	8.0	8.2	8.4	6.5 - 8.5
JANUARY 2016	5/02/2016	Total suspended solids	milligrams per litre	Monthly	6	<5	4.9	16	30 mg/L
JANUARY 2016	5/02/2016	Volume discharge	Megalitres per day	Daily during discharge	5	42.3	295.6	588.5	700 ML
Comments: These results were obtained from daily grab samples during the discharge blocks and the regular monthly sampling regime.									

# Monthly Data Summary

## 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
JANUARY 2016	5/02/2016	Nitrogen Oxides	parts per million	Continuous	One hour	98.4%	101.5	263.8	455.0	700 ppm
JANUARY 2016	5/02/2016		milligrams per cubic metre				208.4	541.5	933.9	1500 mg/m <sup>3</sup>
JANUARY 2016	5/02/2016	Sulphur dioxide	parts per million	Continuous	One hour	100.0%	162.8	311.2	401.4	600 ppm
JANUARY 2016	5/02/2016		milligrams per cubic metre				465.3	889.5	1147.2	-
JANUARY 2016	5/02/2016	Opacity -Undifferentiated particles	Percent	Continuous	One hour	100.0%	3.1%	7.1%	12.8%	20%
<b>Comments:</b>										

### 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 <sup>3</sup>			
JANUARY 2016	5/02/2016	Cadmium	milligrams per cubic metre	1	1	0.00003	1.0			
JANUARY 2016	5/02/2016	Carbon monoxide	ppm	1	1	23				
JANUARY 2016	5/02/2016	Chlorine	milligrams per cubic metre	1	1	0.01	200			
JANUARY 2016	5/02/2016	Copper	milligrams per cubic metre	1	1	0.0005				
JANUARY 2016	5/02/2016	Hazardous substances (Metals)	milligrams per cubic metre	1	1	0.007	5			
JANUARY 2016	5/02/2016	Hydrogen chloride	milligrams per cubic metre	1	1	16.0	100			
JANUARY 2016	5/02/2016	Mercury	milligrams per cubic metre	1	1	0.0016	1.0			
JANUARY 2016	5/02/2016	Nitrogen oxides	milligrams per cubic metre	1	1	830	1500			
JANUARY 2016	5/02/2016	Solid particles	milligrams per cubic metre	1	1	9.5	100			
JANUARY 2016	5/02/2016	Sulfuric acid mist and sulfur trioxide	milligrams per cubic metre	1	1	8.90	100			
JANUARY 2016	5/02/2016	Sulphur dioxide	milligrams per cubic metre	1	1	1100				
JANUARY 2016	5/02/2016	Total fluoride	milligrams per cubic metre	1	1	9.3	50			
<b>Comments:</b>		Monitoring of emission from each of the 4 boilers for the substances in this table is required annually. In most years one boiler is tested each quarter. This table contains the latest results from Boiler 1 tested 27 October 2015.								

# 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, 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
JANUARY 2016	5/02/2016	Opacity -Undifferentiated particles	Percent	Continuous	One hour	100.0%	0.7%	5.4%	12.0%	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, 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 <sup>3</sup>
JANUARY 2016	5/02/2016	Cadmium	milligrams per cubic metre	1	1	0.00005	1.0
JANUARY 2016	5/02/2016	Carbon monoxide	ppm	1	1	27	
JANUARY 2016	5/02/2016	Chlorine	milligrams per cubic metre	1	1	0.0	200
JANUARY 2016	5/02/2016	Copper	milligrams per cubic metre	1	1	0.0011	
JANUARY 2016	5/02/2016	Hazardous substances (Metals)	milligrams per cubic metre	1	1	0.037	5
JANUARY 2016	5/02/2016	Hydrogen chloride	milligrams per cubic metre	1	1	16.0	100
JANUARY 2016	5/02/2016	Mercury	milligrams per cubic metre	1	1	0.00140	1.0
JANUARY 2016	5/02/2016	Nitrogen oxides	milligrams per cubic metre	1	1	670	1500
JANUARY 2016	5/02/2016	Solid particles	milligrams per cubic metre	1	1	8.2	100
JANUARY 2016	5/02/2016	Sulfuric acid mist and sulfur trioxide	milligrams per cubic metre	1	1	55	100
JANUARY 2016	5/02/2016	Sulphur dioxide	milligrams per cubic metre	1	1	810	
JANUARY 2016	5/02/2016	Total fluoride	milligrams per cubic metre	1	1	6.7	50
Comments: Monitoring of emission from each of the 4 boilers for the substances in this table is required annually. In most years one boiler is tested each quarter. This table contains the latest results from Boiler 2 tested on 16 and 17 July 2015.							

# Monthly Data Summary

## 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
JANUARY 2016	5/02/2016	Opacity -Undifferentiated particles	Percent	Continuous	One hour	100.0%	3.5%	7.7%	14.2%	20%
Comments:										

## 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 <sup>3</sup>
JANUARY 2016	5/02/2016	Cadmium	milligrams per cubic metre	1	1	0.00002	1.0
JANUARY 2016	5/02/2016	Carbon monoxide	ppm	1	1	5	
JANUARY 2016	5/02/2016	Chlorine	milligrams per cubic metre	1	1	0.005	200
JANUARY 2016	5/02/2016	Copper	milligrams per cubic metre	1	1	0.0011	
JANUARY 2016	5/02/2016	Hazardous substances (Metals)	milligrams per cubic metre	1	1	0.01	5
JANUARY 2016	5/02/2016	Hydrogen chloride	milligrams per cubic metre	1	1	12.0	100
JANUARY 2016	5/02/2016	Mercury	milligrams per cubic metre	1	1	0.0017	1.0
JANUARY 2016	5/02/2016	Nitrogen oxides	milligrams per cubic metre	1	1	780	1500
JANUARY 2016	5/02/2016	Solid particles	milligrams per cubic metre	1	1	20.0	100
JANUARY 2016	5/02/2016	Sulfuric acid mist and sulfur trioxide	milligrams per cubic metre	1	1	37.00	100
JANUARY 2016	5/02/2016	Sulphur dioxide	milligrams per cubic metre	1	1	960	
JANUARY 2016	5/02/2016	Total fluoride	milligrams per cubic metre	1	1	13.0	50
Comments: Monitoring of emission from each of the 4 boilers for the substances in this table is required annually. In most years one boiler is tested each quarter. This table contains the latest results from Boiler 3 sampled on 14 and 15 July 2015.							

# Monthly Data Summary

## 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
JANUARY 2016	5/02/2016	Opacity -Undifferentiated particles	Percent	Continuous	One hour	100.0%	0.6%	3.3%	18.6%	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 <sup>3</sup>
JANUARY 2016	5/02/2016	Cadmium	milligrams per cubic metre	1	1	0.00002	1.0
JANUARY 2016	5/02/2016	Carbon monoxide	ppm	1	1	<0.0029	
JANUARY 2016	5/02/2016	Chlorine	milligrams per cubic metre	1	1	0.02	200
JANUARY 2016	5/02/2016	Copper	milligrams per cubic metre	1	1	0.0018	
JANUARY 2016	5/02/2016	Hazardous substances (Metals)	milligrams per cubic metre	1	1	0.012	5
JANUARY 2016	5/02/2016	Hydrogen chloride	milligrams per cubic metre	1	1	22.0	100
JANUARY 2016	5/02/2016	Mercury	milligrams per cubic metre	1	1	0.0011	1.0
JANUARY 2016	5/02/2016	Nitrogen oxides	milligrams per cubic metre	1	1	940	1500
JANUARY 2016	5/02/2016	Solid particles	milligrams per cubic metre	1	1	17.0	100
JANUARY 2016	5/02/2016	Sulfuric acid mist and sulfur trioxide	milligrams per cubic metre	1	1	9.30	100
JANUARY 2016	5/02/2016	Sulphur dioxide	milligrams per cubic metre	1	1	930	
JANUARY 2016	5/02/2016	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. In most years one boiler is tested each quarter. This table contains the latest results from Boiler 4 sampled on 21 and 22 May 2015.							

# Monthly Data Summary

Details of Non-Compliance with Licence Conditions	
Licence condition number not complied with	
NA	
Summary of particulars of the non-compliance (NO MORE THAN 50 WORDS)	
If required, further details on particulars of non-compliance	
Date(s) when the non-compliance occurred, if applicable	
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	
Action taken or that will be taken to mitigate any adverse effects of the non-compliance	
Action taken or that will be taken to prevent a recurrence of the non-compliance	