BAYSWATER MONTHLY DATA SUMMARY JULY 2017

LICENCE NO	779
LICENCE HOLDER	AGL Macquarie
REPORTING PERIOD	JULY 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	o 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

Discharge & Monitoring Point 1

Discharge to waters

Effluent quality and volume monitoring, Discharge from main station oil separator hoBWing 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
JULY 2017	11/07/2017	Oil and Grease	milligrams per litre	Fortnightly	4	<5	2.5	< 5	10 mg/L
JULY 2017	11/07/2017	Total suspended solids	milligrams per litre	Fortnightly	4	6.0	6.8	7.0	20 mg/L
JULY 2017	11/07/2017	Volume discharge	kilolitres per week	Weekly during discharge	5	0	7,857	8,859	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
JULY 2017	11/07/2017	Conductivity	uS/cm	Continuous	99.6	1630	2941	3629	4500 uS/cm
JULY 2017	11/07/2017	рН	pH Units	Continuous	100	6.97	8.21	8.45	6.5 - 8.5
JULY 2017	11/07/2017	Volume discharge	Megalitres per month	Weekly during discharge	27		198.3		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	
JULY 2017	11/07/2017	Conductivity	uS/cm	Continuous during disharge	1	2400.0	2400.0	2400.0	-	
JULY 2017	11/07/2017	рН	pH Units	Daily during discharge	1	8.3	8.3	8.3	6.5 - 8.5	
JULY 2017	11/07/2017	Total suspended solids	milligrams per litre	Monthly	1	6.0	6.0	6.0	30 mg/L	
JULY 2017	11/07/2017	Volume discharge	Megalitres per day	Daily during discharge	-	-	-	-	700 ML	
Comments:	HRSTS discharge of	RSTS discharge did not occur during July 2017. Results from routine monthly sampling								

Discharge & Monitoring Point 17

Discharge to waters

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

Navelisword	i voia. Illiet	point located on t	ne voia 4 ponto	on pump system					
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
JULY 2017	11/07/2017	Conductivity	uS/cm	Continuous during disharge	1	6610.0	6610.0	6610.0	-
JULY 2017	11/07/2017	рН	pH Units	Daily during discharge	1	8.5	8.5	8.5	6.5 - 9.5
JULY 2017	11/07/2017	Total suspended solids	milligrams per litre	Monthly	1	8.0	8.0	8.0	30 mg/L
JULY 2017	11/07/2017	Boron	milligrams per litre	Weekly duirng discharge	1	2.6	2.6	2.6	0.81
JULY 2017	11/07/2017	Cadmium	milligrams per litre	Weekly duirng discharge	1	<0.0001	0.0	<0.0001	0.0003
JULY 2017	11/07/2017	Copper	milligrams per litre	Weekly duirng discharge	1	<0.001	0.0	<0.001	0.001
JULY 2017	11/07/2017	Iron	milligrams per litre	Weekly duirng discharge	1	0.1	0.1	0.1	0.27
JULY 2017	11/07/2017	Molybdenum	milligrams per litre	Weekly duirng discharge	1	0.3	0.3	0.3	0.29
JULY 2017	11/07/2017	Nickel	milligrams per litre	Weekly duirng discharge	1	0.0	0.0	0.0	0.19
JULY 2017	11/07/2017	Silver	milligrams per litre	Weekly duirng discharge	1	<0.0001	0.0	<0.0001	0.0005
JULY 2017	11/07/2017	Volume discharge	Megalitres per day	Daily during discharge	-	-	-	-	20 ML
Comments:	HRSTS discharge of	did not occur during July 2	017. Results from routing	e monthly sampling					

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 / measurment frequency	Averaging period	Data capture %	Lowest sample value	Mean of samples	Highest sample value	EPL Limit
JULY 2017	11/07/2017		parts per million				101.6	161.1	235.2	-
JULY 2017	11/07/2017	Nitrogen Oxides	milligrams per cubic metre	Continuous	One hour	92.7%	208.5	330.7	482.7	1500 mg/m ³
JULY 2017	11/07/2017	Code hore discoulde	parts per million	Continuous	One hour	100.0%	114.0	226.9	314.7	600 ppm
JULY 2017	11/07/2017	Sulphur dioxide	milligrams per cubic metre	Continuous	One nour	100.0%	325.8	648.4	899.4	-
JULY 2017	11/07/2017	Opacity -Undifferentiated particles	Percent	Continuous	One hour	99.8%	1.3%	4.6%	9.5%	•
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
omments:	Monitoring of emis 2016.	sion from each of the 4 bo	ilers for the substances in	n this table is required annu	ually. This table contain	ns the results from Bo	iler 1 tested on 19

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 / measurment frequency	Averaging period	Data capture %	Lowest sample value	Mean of samples	Highest sample value	EPL Limit
JULY 2017	11/07/2017	Opacity -Undifferentiated particles	Percent	Continuous	One hour	100.0%	3.3%	5.4%	9.4%	-
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/m³
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 emiss September 2016	sion from each of the 4 bo	lers for the substances in	n this table is required annu	ually. This table contain	ns the results from Bo	iler 2 tested on 27

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, Easments, Site Survey" dated 24/12/2004.

Month	Date of Publication	Pollutant	Unit of measure	Sampling / measurment frequency	Averaging period	Data capture %	Lowest sample value	Mean of samples	Highest sample value	EPL Limit
JULY 2017	11/07/2017	Opacity -Undifferentiated particles	Percent	Continuous	One hour	100.0%	2.6%	5.4%	11.3%	-
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, Easments, Site Survey" dated 24/12/2004.

Month	Date of Publication	Pollutant	Unit of measure	No. of samples required by licence	Samples collected and	Sample value	EPL Limit mg/m ³			
	Publication			required by licelice	analysed		mg/m			
May-17	3/07/2017	Cadmium	milligrams per cubic metre	1	1	<0.0002	1.0			
May-17	3/07/2017	Carbon monoxide	ppm	1	1	97				
May-17	3/07/2017	Chlorine	milligrams per cubic metre	1	1	<0.006	200			
May-17	3/07/2017	Copper	milligrams per cubic metre	1	1	#VALUE!				
May-17	3/07/2017	Hazardous substances (Metals)	milligrams per cubic metre	1	1	≤0.011	5			
May-17	3/07/2017	Hydrogen chloride	milligrams per cubic metre	1	1	22	100			
May-17	3/07/2017	Mercury	milligrams per cubic metre	1	1	#VALUE!	1.0			
May-17	3/07/2017	Nitrogen oxides	milligrams per cubic metre	1	1	1	1500			
May-17	3/07/2017	Solid particles	milligrams per cubic metre	1	1	24.0	100			
May-17	3/07/2017	Sulfuric acid mist and sulfur trioxide	milligrams per cubic metre	1	1	1.90	100			
May-17	3/07/2017	Sulphur dioxide	milligrams per cubic metre	1	1	1100				
May-17	3/07/2017	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 3 tested on 30 May 2017									

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, Easments, Site Survey" dated 24/12/2004.

Month	Date of Publication	Pollutant	Unit of measure	Sampling / measurment frequency	Averaging period	Data capture %	Lowest sample value	Mean of samples	Highest sample value	EPL Limit
JULY 2017	11/07/2017	Opacity -Undifferentiated particles	Percent	Continuous	One hour	99.7%	1.2%	5.1%	12.6%	-
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, 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	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 emiss 2016.	sion from each of the 4 box	ilers for the substances in	n this table is required annu	ually. This table contain	ns the results from Bo	oiler 4 tested on 17 May

Details of Non-Compliance with Licence Conditions	
Licence condition number not complied with	
N/A	
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	