

# Monthly Data Summary

## LIDDELL MONTHLY DATA SUMMARY MARCH 2016

LICENCE NO	2122
LICENCE HOLDER	AGL MACQUARIE
REPORTING PERIOD	MARCH 2016

### A1 Licence Holder

Licence Number 2122  
 Licence Holder AGL MACQUARIE  
 Trading Name (if applicable)  
 ABN 18 167 859 494

### A2 Premises to which Licence Applies (if applicable)

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

### A3 Activities to which Licence Applies

Electricity Generating Works  
 Coal Works

### A4 Other Activities (if applicable)

Helicopter-related facilities  
 Chemical storage  
 Operation of Emergency 1.5 MW diesel generator  
 Operation of Gas turbine  
 Sewage treatment  
 Waste storage

### 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
Coal works	> 5,000,000.00	T handled
Generation of electrical power from coal	> 4,000.00	Gwh generated

# Monthly Data Summary

## Discharge & Monitoring Point 7

301204 East 6416350 North

Discharge to Air

In the flue gases of unit 1 boiler labelled as "Unit 1 Boiler 1-2 Chimney Stack" on plan no. LD 800474 amended 03 and dated 6/5/2003

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
MARCH 2016	14/04/2016	Nitrogen Oxides	milligrams per cubic metre	Continuous	One hour	>99%	493.5	621.5	722.0	1500 mg/m <sup>3</sup>
MARCH 2016	14/04/2016		parts per million				240.4	302.8	351.8	700 ppm
MARCH 2016	14/04/2016	Sulphur dioxide	milligrams per cubic metre	Continuous	One hour	>99%	759.2	1037.2	1251.4	
MARCH 2016	14/04/2016		parts per million				265.6	362.9	437.9	600 ppm
MARCH 2016	14/04/2016	Opacity - Undifferentiated particles	Percent	Continuous	One hour	>99%	6.5	7.6	9.3	20%
Comments:										

## Annual monitoring of discharges to air

Air emission monitoring, Boiler 1 stack emissions, shown on plan no LD800474 amended 03 and dated 6/5/2003

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>			
Sep-15	14/10/2015	Cadmium	milligrams per cubic metre	1	1	<0.0001	1.0			
Sep-15	14/10/2015	Chlorine	milligrams per cubic metre	1	1	0.0	200			
Sep-15	14/10/2015	Copper	milligrams per cubic metre	1	1	0.0007				
Sep-15	14/10/2015	Hazardous substances (Metals)	milligrams per cubic metre	1	1	0.015	5			
Sep-15	14/10/2015	Hydrogen chloride	milligrams per cubic metre	1	1	10.0	100			
Sep-15	14/10/2015	Mercury	milligrams per cubic metre	1	1	0.00049	1.0			
Sep-15	14/10/2015	Nitrogen oxides	milligrams per cubic metre	1	1	1	1500			
Sep-15	14/10/2015	Solid particles	milligrams per cubic metre	1	1	24.0	100			
Sep-15	14/10/2015	Sulfuric acid mist and sulfur trioxide	milligrams per cubic metre	1	1	12.000	100			
Sep-15	14/10/2015	Sulphur dioxide	milligrams per cubic metre	1	1	1000				
Sep-15	14/10/2015	Total fluoride	milligrams per cubic metre	1	1	11.0	50			
Sep-15	14/10/2015	Volatile organic compounds	milligrams per cubic metre	1	1	<0.0087				
Comments:		Monitoring of emission from each of the 4 boilers for the substances in this table is required annually. This table contains the latest results from Boiler 1 tested 8 Sep 15.								

# Monthly Data Summary

## Discharge & Monitoring Point 8

301204 East 6416350 North

In the flue gases of unit 2 boiler labelled as "Unit 2 Boiler 1-2 Chimney Stack" on plan no LD800474 amended 03 and dated 6/5/2003

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
MARCH 2016	14/04/2016	Nitrogen Oxides	milligrams per cubic metre	Continuous	One hour	>99%	293	480	627	1500 mg/m <sup>3</sup>
MARCH 2016	14/04/2016		parts per million				143	234	306	700 ppm
MARCH 2016	14/04/2016	Sulphur dioxide	milligrams per cubic metre	Continuous	One hour	>99%	799	1169	1385	
MARCH 2016	14/04/2016		parts per million				280	409	485	600 ppm
MARCH 2016	14/04/2016	Opacity - Undifferentiated particles	Percent	Continuous	One hour	>99%	4.1	6.8	9.3	20%
Comments:										

## Annual monitoring of discharges to air

Air emission monitoring, Boiler 2 stack emissions, shown on plan no LD800474 amended 03 and dated 6/5/2003

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>			
Sep-15	14/10/2015	Cadmium	milligrams per cubic metre	1	1	0.0000	1.0			
Sep-15	14/10/2015	Chlorine	milligrams per cubic metre	1	1	<0.0042	200			
Sep-15	14/10/2015	Copper	milligrams per cubic metre	1	1	0.0013				
Sep-15	14/10/2015	Hazardous substances (Metals)	milligrams per cubic metre	1	1	0.014	5			
Sep-15	14/10/2015	Hydrogen chloride	milligrams per cubic metre	1	1	16.0	100			
Sep-15	14/10/2015	Mercury	milligrams per cubic metre	1	1	0.00033	1.0			
Sep-15	14/10/2015	Nitrogen oxides	milligrams per cubic metre	1	1	1	1500			
Sep-15	14/10/2015	Solid particles	milligrams per cubic metre	1	1	21.0	100			
Sep-15	14/10/2015	Sulfuric acid mist and sulfur trioxide	milligrams per cubic metre	1	1	7.200	100			
Sep-15	14/10/2015	Sulphur dioxide	milligrams per cubic metre	1	1	1100				
Sep-15	14/10/2015	Total fluoride	milligrams per cubic metre	1	1	9.6	50			
Sep-15	14/10/2015	Volatile organic compounds	milligrams per cubic metre	1	1	<0.013				
Comments:		Monitoring of emission from each of the 4 boilers for the substances in this table is required annually. This table contains the latest results from Boiler 2 tested 9 Sep 15.								

# Monthly Data Summary

## Discharge & Monitoring Point 9

301204 East 6416350 North

In the flue gases of unit 3 boiler labelled as "Unit 3 Boiler 3-4 Chimney Stack" on plan no LD800474 amended 03 and dated 6/5/2003

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
MARCH 2016	14/04/2016	Nitrogen Oxides	milligrams per cubic metre	Continuous	One hour	>99%	338.7	574.9	750.3	1500 mg/m <sup>3</sup>
MARCH 2016	14/04/2016		parts per million				165.0			280.1
MARCH 2016	14/04/2016	Sulphur dioxide	milligrams per cubic metre	Continuous	One hour	>99%	795.9	1085.0	1302.4	
MARCH 2016	14/04/2016		parts per million				278.5			379.6
MARCH 2016	14/04/2016	Opacity - Undifferentiated particles	Percent	Continuous	One hour	>99%	1.7	5.4	10.2	20%
Comments:										

## Annual monitoring of discharges to air

Air emission monitoring, Boiler 3 stack emissions, shown on plan no LD800474 amended 03 and dated 6/5/2003

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>
MARCH 2016	14/04/2016	Cadmium	milligrams per cubic metre	1	1	<0.00016	1.0
MARCH 2016	14/04/2016	Chlorine	milligrams per cubic metre	1	1	0.0	200
MARCH 2016	14/04/2016	Copper	milligrams per cubic metre	1	1	0.000	
MARCH 2016	14/04/2016	Hazardous substances (Metals)	milligrams per cubic metre	1	1	0.007	5
MARCH 2016	14/04/2016	Hydrogen chloride	milligrams per cubic metre	1	1	19.0	100
MARCH 2016	14/04/2016	Mercury	milligrams per cubic metre	1	1	0.000	1.0
MARCH 2016	14/04/2016	Nitrogen oxides	milligrams per cubic metre	1	1	610	1500
MARCH 2016	14/04/2016	Solid particles	milligrams per cubic metre	1	1	37.0	100
MARCH 2016	14/04/2016	Sulfuric acid mist and sulfur trioxide	milligrams per cubic metre	1	1	0.710	100
MARCH 2016	14/04/2016	Sulphur dioxide	milligrams per cubic metre	1	1	1400	
MARCH 2016	14/04/2016	Total fluoride	milligrams per cubic metre	1	1	11.0	50
MARCH 2016	14/04/2016	Volatile organic compounds	milligrams per cubic metre	1	1	<0.015	
Comments: Monitoring of emission from each of the 4 boilers for the substances in this table is required annually. Unit 3 was tested 2 December 2014. Due to be tested 3 May 2016							

# Monthly Data Summary

## Discharge & Monitoring Point 10

301204 East 6416350 North

In the flue gases of unit 4 boiler labelled as "Unit 4 Boiler 3-4 Chimney Stack" on plan no LD800474 amended 03 and dated 6/5/2003

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
MARCH 2016	14/04/2016	Nitrogen Oxides	milligrams per cubic metre	Continuous	One hour	>99%	285.9	433.7	594.0	1500 mg/m <sup>3</sup>
MARCH 2016	14/04/2016		parts per million				139.3	211.3	289.4	700 ppm
MARCH 2016	14/04/2016	Sulphur dioxide	milligrams per cubic metre	Continuous	One hour	>99%	746.0	915.5	1096.9	
MARCH 2016	14/04/2016		parts per million				261.0	320.3	383.8	600 ppm
MARCH 2016	14/04/2016	Opacity - Undifferentiated particles	Percent	Continuous	One hour	>99%	2.6	4.4	7.3	20%
Comments:										

## Annual monitoring of discharges to air

Air emission monitoring, Boiler 4 stack emissions, shown on plan no LD800474 amended 03 and dated 6/5/2003

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>			
Jan-16	23/02/2016	Cadmium	milligrams per cubic metre	1	1	<0.0001	1.0			
Jan-16	23/02/2016	Chlorine	milligrams per cubic metre	1	1	<0.02	200			
Jan-16	23/02/2016	Copper	milligrams per cubic metre	1	1	0.0011				
Jan-16	23/02/2016	Hazardous substances (Metals)	milligrams per cubic metre	1	1	<0.041	5			
Jan-16	23/02/2016	Hydrogen chloride	milligrams per cubic metre	1	1	11.0	100			
Jan-16	23/02/2016	Mercury	milligrams per cubic metre	1	1	0.00022	1.0			
Jan-16	23/02/2016	Nitrogen oxides	milligrams per cubic metre	1	1	1	1500			
Jan-16	23/02/2016	Solid particles	milligrams per cubic metre	1	1	58.0	100			
Jan-16	23/02/2016	Sulfuric acid mist and sulfur trioxide	milligrams per cubic metre	1	1	1.100	100			
Jan-16	23/02/2016	Sulphur dioxide	milligrams per cubic metre	1	1	660				
Jan-16	23/02/2016	Total fluoride	milligrams per cubic metre	1	1	8.6	50			
Jan-16	23/02/2016	Volatile organic compounds	milligrams per cubic metre	1	1	0.034				
Comments:		Monitoring of emission from each of the 4 boilers for the substances in this table is required annually. This table contains the latest results from Boiler 4 tested 19 Jan 16.								

# Monthly Data Summary

Details of Non-Compliance with Licence
Nil
Summary of particulars of the non-compliance <b>(NO MORE THAN 50 WORDS)</b>
NA
If required, further details on particulars of non-compliance
NA
Date(s) when the non-compliance occurred, if applicable
NA
If applicable, registration numbers of any vehicles or the chassis number of any mobile plant involved in the non-compliance
NA
Cause of non-compliance
NA
Action taken or that will be taken to mitigate any adverse effects of the non-compliance
NA
Action taken or that will be taken to prevent a recurrence of the non-compliance
NA