Monthly Data Summary

LIDDELL MONTHLY DATA SUMMARY DECEMBER 2015

LICENCE NO	**2122**
LICENCE HOLDER	AGL MACQUARIE
REPORTING PERIOD	DECEMBER 2015

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 1boiler 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 / measurment frequency	Averaging period	Data capture %	Lowest sample value	Mean of samples	Highest sample value	EPL Limit
DECEMBER 2015	15/01/2016	Nitrogen Oxides	milligrams per cubic metre	Continuous	One hour	>99%	395.3	579.1	824.8	1500 mg/m^3
DECEMBER 2015	15/01/2016		parts per million				192.6	282.1	401.9	700 ppm
DECEMBER 2015	15/01/2016	Sulphur dioxide	milligrams per cubic metre	Continuous	One hour	>99%	830.0	1110.5	1399.7	
DECEMBER 2015	15/01/2016		parts per million				290.4	388.6	489.7	600 ppm
DECEMBER 2015	15/01/2016	Opacity - Undifferentiated particles	Percent	Continuous	One hour	>99%	6.0	8.9	13.0	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^3
DECEMBER 2015	15/01/2016	Cadmium	milligrams per cubic metre	1	1	<0.00012	1.0
DECEMBER 2015	15/01/2016	Chlorine	milligrams per cubic metre	1	1	0.01	200
DECEMBER 2015	15/01/2016	Copper	milligrams per cubic metre	1	1	0.001	
DECEMBER 2015	15/01/2016	Hazardous substances (Metals)	milligrams per cubic metre	1	1	0.015	5
DECEMBER 2015	15/01/2016	Hydrogen chloride	milligrams per cubic metre	1	1	10.0	100
DECEMBER 2015	15/01/2016	Mercury	milligrams per cubic metre	1	1	0.0005	1.0
DECEMBER 2015	15/01/2016	Nitrogen oxides	milligrams per cubic metre	1	1	840	1500
DECEMBER 2015	15/01/2016	Solid particles	milligrams per cubic metre	1	1	24.0	100
DECEMBER 2015	15/01/2016	Sulfuric acid mist and sulfur trioxide	milligrams per cubic metre	1	1	12.000	100
DECEMBER 2015	15/01/2016	Sulphur dioxide	milligrams per cubic metre	1	1	1000	
DECEMBER 2015	15/01/2016	Total fluoride	milligrams per cubic metre	1	1	11.0	50
DECEMBER 2015	15/01/2016	Volatile organic compounds	milligrams per cubic metre	1	1	<0.018	
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. Tested 8-Sept-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 / measurment frequency	Averaging period	Data capture %	Lowest sample value	Mean of samples	Highest sample value	EPL Limit
DECEMBER 2015	15/01/2016	Nitrogen Oxides	milligrams per cubic metre	Continuous	One hour					1500 mg/m3
DECEMBER 2015	15/01/2016		parts per million							700 ppm
DECEMBER 2015	15/01/2016	Sulphur dioxide	milligrams per cubic metre	Continuous	One hour					
DECEMBER 2015	15/01/2016		parts per million							600 ppm
DECEMBER 2015	15/01/2016	Opacity - Undifferentiated particles	Percent	Continuous	One hour					20%
Comments:	**Unit Out of Service during December 2015**									

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^3
		Cadmium	milligrams per cubic metre	1	1		1.0
		Chlorine	milligrams per cubic metre	1	1		200
		Copper	milligrams per cubic metre	1	1		
		Hazardous substances (Metals)	milligrams per cubic metre	1	1		5
		Hydrogen chloride	milligrams per cubic metre	1	1		100
		Mercury	milligrams per cubic metre	1	1		1.0
		Nitrogen oxides	milligrams per cubic metre	1	1		1500
		Solid particles	milligrams per cubic metre	1	1		100
		Sulfuric acid mist and sulfur trioxide	milligrams per cubic metre	1	1		100
		Sulphur dioxide	milligrams per cubic metre	1	1		
		Total fluoride	milligrams per cubic metre	1	1		50
		Volatile organic compounds	milligrams per cubic metre	1	1		
Comments:	**Unit out of service during December 2015**						

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 / measurment frequency	Averaging period	Data capture %	Lowest sample value	Mean of samples	Highest sample value	EPL Limit
DECEMBER 2015	15/01/2016	Nitrogen Oxides	milligrams per cubic metre	Continuous	One hour	>99%	229.7	427.3	666.4	1500 mg/m3
DECEMBER 2015	15/01/2016		parts per million				111.9	208.2	324.7	700 ppm
DECEMBER 2015	15/01/2016	Sulphur dioxide	milligrams per cubic metre	Continuous	One hour	>99%	841.1	1118.2	1596.7	
DECEMBER 2015	15/01/2016		parts per million				294.3	391.3	558.7	600 ppm
DECEMBER 2015	15/01/2016	Opacity - Undifferentiated particles	Percent	Continuous	One hour	>99%	3.4	6.8	13.3	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^3
DECEMBER 2015	15/01/2016	Cadmium	milligrams per cubic metre	1	1	<0.00016	1.0
DECEMBER 2015	15/01/2016	Chlorine	milligrams per cubic metre	1	1	0.0	200
DECEMBER 2015	15/01/2016	Copper	milligrams per cubic metre	1	1	0.0003	
DECEMBER 2015	15/01/2016	Hazardous substances (Metals)	milligrams per cubic metre	1	1	0.007	5
DECEMBER 2015	15/01/2016	Hydrogen chloride	milligrams per cubic metre	1	1	19.0	100
DECEMBER 2015	15/01/2016	Mercury	milligrams per cubic metre	1	1	0.0004	1.0
DECEMBER 2015	15/01/2016	Nitrogen oxides	milligrams per cubic metre	1	1	610	1500
DECEMBER 2015	15/01/2016	Solid particles	milligrams per cubic metre	1	1	37.0	100
DECEMBER 2015	15/01/2016	Sulfuric acid mist and sulfur trioxide	milligrams per cubic metre	1	1	0.710	100
DECEMBER 2015	15/01/2016	Sulphur dioxide	milligrams per cubic metre	1	1	1400	
DECEMBER 2015	15/01/2016	Total fluoride	milligrams per cubic metre	1	1	11.0	50
DECEMBER 2015	15/01/2016	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. In most years one boiler is tested each quarter. Tested 2/12/14. Next testing due January 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 / measurment frequency	Averaging period	Data capture %	Lowest sample value	Mean of samples	Highest sample value	EPL Limit
DECEMBER 2015	15/01/2016	Nitrogen Oxides	milligrams per cubic metre	Continuous	One hour	>99%	237.3	499.6	809.1	1500 mg/m3
DECEMBER 2015	15/01/2016		parts per million				115.6	243.4	394.2	700 ppm
DECEMBER 2015	15/01/2016	Sulphur dioxide	milligrams per cubic metre	Continuous	One hour	>99%	630.4	933.5	1280.8	
DECEMBER 2015	15/01/2016		parts per million				220.6	326.6	448.1	600 ppm
DECEMBER 2015	15/01/2016	Opacity - Undifferentiated particles	Percent	Continuous	One hour	>99%	4.6	8.4	15.0	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^3
DECEMBER 2015	15/01/2016	Cadmium	milligrams per cubic metre	1	1	<0.00014	1.0
DECEMBER 2015	15/01/2016	Chlorine	milligrams per cubic metre	1	1	0.1	200
DECEMBER 2015	15/01/2016	Copper	milligrams per cubic metre	1	1	0.007	
DECEMBER 2015	15/01/2016	Hazardous substances (Metals)	milligrams per cubic metre	1	1	0.011	5
DECEMBER 2015	15/01/2016	Hydrogen chloride	milligrams per cubic metre	1	1	13.0	100
DECEMBER 2015	15/01/2016	Mercury	milligrams per cubic metre	1	1	0.0001	1.0
DECEMBER 2015	15/01/2016	Nitrogen oxides	milligrams per cubic metre	1	1	790	1500
DECEMBER 2015	15/01/2016	Solid particles	milligrams per cubic metre	1	1	31.0	100
DECEMBER 2015	15/01/2016	Sulfuric acid mist and sulfur trioxide	milligrams per cubic metre	1	1	1.300	100
DECEMBER 2015	15/01/2016	Sulphur dioxide	milligrams per cubic metre	1	1	890	
DECEMBER 2015	15/01/2016	Total fluoride	milligrams per cubic metre	1	1	7.7	50
DECEMBER 2015	15/01/2016	Volatile organic compounds	milligrams per cubic metre	1	1	<0.019	
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. Tested 12-May-15						

Monthly Data Summary

Details of Non-Compliance with Licence
Nil
Summary of particulars of the non-compliance **(NO MORE THAN 50 WORDS)**
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