

Monthly Data Summary

LIDDELL MONTHLY DATA SUMMARY JUNE 2017

| | |
|------------------|---------------|
| LICENCE NO | 2122 |
| LICENCE HOLDER | AGL MACQUARIE |
| REPORTING PERIOD | JUNE 2017 |

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 |
|-----------|---------------------|--------------------------------------|----------------------------|----------------------------------|------------------|----------------|---------------------|-----------------|----------------------|------------------------|
| JUNE 2017 | 7/07/2017 | Nitrogen Oxides | milligrams per cubic metre | Continuous | One hour | >99% | 401.6 | 572.3 | 784.6 | 1500 mg/m ³ |
| JUNE 2017 | 7/07/2017 | | parts per million | | | | 195.7 | 278.8 | 382.2 | 700 ppm |
| JUNE 2017 | 7/07/2017 | Sulphur dioxide | milligrams per cubic metre | Continuous | One hour | >99% | 799.4 | 990.7 | 1300.8 | |
| JUNE 2017 | 7/07/2017 | | parts per million | | | | 279.7 | 346.6 | 455.2 | 600 ppm |
| JUNE 2017 | 7/07/2017 | Opacity - Undifferentiated particles | Percent | Continuous | One hour | >99% | 0.1 | 2.9 | 7.8 | 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 |
|--------|---------------------|--|----------------------------|------------------------------------|--------------------------------|--------------|-----------------------------|
| Oct-16 | 15/11/2016 | Cadmium | milligrams per cubic metre | 1 | 1 | <0.0001 | 1.0 |
| Oct-16 | 15/11/2016 | Chlorine | milligrams per cubic metre | 1 | 1 | <0.006 | 200 |
| Oct-16 | 15/11/2016 | Copper | milligrams per cubic metre | 1 | 1 | 0.0180 | |
| Oct-16 | 15/11/2016 | Hazardous substances (Metals) | milligrams per cubic metre | 1 | 1 | ≤0.021 | 5 |
| Oct-16 | 15/11/2016 | Hydrogen chloride | milligrams per cubic metre | 1 | 1 | 17.0 | 100 |
| Oct-16 | 15/11/2016 | Mercury | milligrams per cubic metre | 1 | 1 | 0.00017 | 1.0 |
| Oct-16 | 15/11/2016 | Nitrogen oxides | milligrams per cubic metre | 1 | 1 | 560 | 1500 |
| Oct-16 | 15/11/2016 | Solid particles | milligrams per cubic metre | 1 | 1 | 36.0 | 100 |
| Oct-16 | 15/11/2016 | Sulfuric acid mist and sulfur trioxide | milligrams per cubic metre | 1 | 1 | 0.770 | 100 |
| Oct-16 | 15/11/2016 | Sulphur dioxide | milligrams per cubic metre | 1 | 1 | 770 | |
| Oct-16 | 15/11/2016 | Total fluoride | milligrams per cubic metre | 1 | 1 | 11.0 | 50 |
| Oct-16 | 15/11/2016 | Volatile organic compounds | milligrams per cubic metre | 1 | 1 | <0.02 | |

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 11 Oct 16.

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 |
|-----------|---------------------|--------------------------------------|----------------------------|----------------------------------|------------------|----------------|---------------------|-----------------|----------------------|------------------------|
| JUNE 2017 | 7/07/2017 | Nitrogen Oxides | milligrams per cubic metre | Continuous | One hour | >99% | 249 | 523 | 700 | 1500 mg/m ³ |
| JUNE 2017 | 7/07/2017 | | parts per million | | | | 121 | 255 | 341 | 700 ppm |
| JUNE 2017 | 7/07/2017 | Sulphur dioxide | milligrams per cubic metre | Continuous | One hour | >99% | 739 | 982 | 1380 | |
| JUNE 2017 | 7/07/2017 | | parts per million | | | | 259 | 343 | 483 | 600 ppm |
| JUNE 2017 | 7/07/2017 | Opacity - Undifferentiated particles | Percent | Continuous | One hour | >99% | 4.7 | 7.8 | 14.0 | 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 ³ |
|---|---------------------|--|----------------------------|------------------------------------|--------------------------------|--------------|-----------------------------|
| Oct-16 | 15/11/2016 | Cadmium | milligrams per cubic metre | 1 | 1 | <0.0002 | 1.0 |
| Oct-16 | 15/11/2016 | Chlorine | milligrams per cubic metre | 1 | 1 | <0.008 | 200 |
| Oct-16 | 15/11/2016 | Copper | milligrams per cubic metre | 1 | 1 | 0.0880 | |
| Oct-16 | 15/11/2016 | Hazardous substances (Metals) | milligrams per cubic metre | 1 | 1 | ≤0.019 | 5 |
| Oct-16 | 15/11/2016 | Hydrogen chloride | milligrams per cubic metre | 1 | 1 | 18.0 | 100 |
| Oct-16 | 15/11/2016 | Mercury | milligrams per cubic metre | 1 | 1 | 0.00066 | 1.0 |
| Oct-16 | 15/11/2016 | Nitrogen oxides | milligrams per cubic metre | 1 | 1 | 710 | 1500 |
| Oct-16 | 15/11/2016 | Solid particles | milligrams per cubic metre | 1 | 1 | 27.0 | 100 |
| Oct-16 | 15/11/2016 | Sulfuric acid mist and sulfur trioxide | milligrams per cubic metre | 1 | 1 | 1.300 | 100 |
| Oct-16 | 15/11/2016 | Sulphur dioxide | milligrams per cubic metre | 1 | 1 | 1000 | |
| Oct-16 | 15/11/2016 | Total fluoride | milligrams per cubic metre | 1 | 1 | 13.0 | 50 |
| Oct-16 | 15/11/2016 | Volatile organic compounds | milligrams per cubic metre | 1 | 1 | 0.110 | |
| 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 13 Oct 16. | | | | | | | |

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 |
|-----------|---------------------|--------------------------------------|----------------------------|----------------------------------|------------------|----------------|---------------------|-----------------|----------------------|------------------------|
| JUNE 2017 | 7/07/2017 | Nitrogen Oxides | milligrams per cubic metre | Continuous | One hour | >99% | 344.0 | 497.1 | 786.0 | 1500 mg/m ³ |
| JUNE 2017 | 7/07/2017 | | parts per million | | | | 167.6 | | | 242.2 |
| JUNE 2017 | 7/07/2017 | Sulphur dioxide | milligrams per cubic metre | Continuous | One hour | >99% | 751.3 | 960.0 | 1199.3 | |
| JUNE 2017 | 7/07/2017 | | parts per million | | | | 262.9 | | | 335.9 |
| JUNE 2017 | 7/07/2017 | Opacity - Undifferentiated particles | Percent | Continuous | One hour | >99% | 1.2 | 6.5 | 19.4 | 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 |
|--------|---------------------|--|----------------------------|------------------------------------|--------------------------------|--------------|-----------------------------|
| Apr-17 | 19/05/2017 | Cadmium | milligrams per cubic metre | 1 | 1 | <0.0002 | 1.0 |
| Apr-17 | 19/05/2017 | Chlorine | milligrams per cubic metre | 1 | 1 | 0.0 | 200 |
| Apr-17 | 19/05/2017 | Copper | milligrams per cubic metre | 1 | 1 | 0.0790 | |
| Apr-17 | 19/05/2017 | Hazardous substances (Metals) | milligrams per cubic metre | 1 | 1 | ≤0.02 | 5 |
| Apr-17 | 19/05/2017 | Hydrogen chloride | milligrams per cubic metre | 1 | 1 | 19.0 | 100 |
| Apr-17 | 19/05/2017 | Mercury | milligrams per cubic metre | 1 | 1 | 0.00079 | 1.0 |
| Apr-17 | 19/05/2017 | Nitrogen oxides | milligrams per cubic metre | 1 | 1 | 650 | 1500 |
| Apr-17 | 19/05/2017 | Solid particles | milligrams per cubic metre | 1 | 1 | 15.0 | 100 |
| Apr-17 | 19/05/2017 | Sulfuric acid mist and sulfur trioxide | milligrams per cubic metre | 1 | 1 | 1.300 | 100 |
| Apr-17 | 19/05/2017 | Sulphur dioxide | milligrams per cubic metre | 1 | 1 | 980 | |
| Apr-17 | 19/05/2017 | Total fluoride | milligrams per cubic metre | 1 | 1 | 11.0 | 50 |
| Apr-17 | 19/05/2017 | Volatile organic compounds | milligrams per cubic metre | 1 | 1 | <0.2 | |

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 3 tested 4 April 2017.

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 |
|------------------|---------------------|--------------------------------------|----------------------------|----------------------------------|------------------|----------------|---------------------|-----------------|----------------------|------------------------|
| JUNE 2017 | 7/07/2017 | Nitrogen Oxides | milligrams per cubic metre | Continuous | One hour | >99% | 317.4 | 509.4 | 735.1 | 1500 mg/m ³ |
| JUNE 2017 | 7/07/2017 | | parts per million | | | | 154.6 | 248.2 | 358.2 | 700 ppm |
| JUNE 2017 | 7/07/2017 | Sulphur dioxide | milligrams per cubic metre | Continuous | One hour | >99% | 764.1 | 921.9 | 1058.5 | |
| JUNE 2017 | 7/07/2017 | | parts per million | | | | 267.4 | 322.6 | 370.4 | 600 ppm |
| JUNE 2017 | 7/07/2017 | Opacity - Undifferentiated particles | Percent | Continuous | One hour | >99% | 2.3 | 3.9 | 13.4 | 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 | | | |
|---|---------------------|--|----------------------------|------------------------------------|--------------------------------|--------------|-----------------------------|--|--|--|
| Apr-17 | 19/05/2017 | Cadmium | milligrams per cubic metre | 1 | 1 | <0.0001 | 1.0 | | | |
| Apr-17 | 19/05/2017 | Chlorine | milligrams per cubic metre | 1 | 1 | 0.0 | 200 | | | |
| Apr-17 | 19/05/2017 | Copper | milligrams per cubic metre | 1 | 1 | 0.0051 | | | | |
| Apr-17 | 19/05/2017 | Hazardous substances (Metals) | milligrams per cubic metre | 1 | 1 | ≤0.026 | 5 | | | |
| Apr-17 | 19/05/2017 | Hydrogen chloride | milligrams per cubic metre | 1 | 1 | 18.0 | 100 | | | |
| Apr-17 | 19/05/2017 | Mercury | milligrams per cubic metre | 1 | 1 | 0.00330 | 1.0 | | | |
| Apr-17 | 19/05/2017 | Nitrogen oxides | milligrams per cubic metre | 1 | 1 | 1000 | 1500 | | | |
| Apr-17 | 19/05/2017 | Solid particles | milligrams per cubic metre | 1 | 1 | 44.0 | 100 | | | |
| Apr-17 | 19/05/2017 | Sulfuric acid mist and sulfur trioxide | milligrams per cubic metre | 1 | 1 | 1.300 | 100 | | | |
| Apr-17 | 19/05/2017 | Sulphur dioxide | milligrams per cubic metre | 1 | 1 | 1000 | | | | |
| Apr-17 | 19/05/2017 | Total fluoride | milligrams per cubic metre | 1 | 1 | 11.0 | 50 | | | |
| Apr-17 | 19/05/2017 | Volatile organic compounds | milligrams per cubic metre | 1 | 1 | <0.2 | | | | |
| 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 6 April 2017. | | | | | | | | | | |

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 |

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