

# Monthly Data Summary

## LIDDELL MONTHLY DATA SUMMARY JULY 2019

|                  |               |
|------------------|---------------|
| LICENCE NO       | 2122          |
| LICENCE HOLDER   | AGL MACQUARIE |
| REPORTING PERIOD | JULY 2019     |

### 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              |
|-----------|---------------------|--------------------------------------|----------------------------|----------------------------------|------------------|----------------|---------------------|-----------------|----------------------|------------------------|
| JULY 2019 | 14/08/2019          | Nitrogen Oxides                      | milligrams per cubic metre | Continuous                       | One hour         | >99%           | 491.2               | 653.4           | 805.0                | 1500 mg/m <sup>3</sup> |
| JULY 2019 | 14/08/2019          |                                      | parts per million          |                                  |                  |                | 239.3               | 318.4           | 392.2                | 700 ppm                |
| JULY 2019 | 14/08/2019          | Sulphur dioxide                      | milligrams per cubic metre | Continuous                       | One hour         | >99%           | 726.3               | 940.2           | 1308.8               |                        |
| JULY 2019 | 14/08/2019          |                                      | parts per million          |                                  |                  |                | 254.1               | 329.0           | 457.9                | 600 ppm                |
| JULY 2019 | 14/08/2019          | Opacity - Undifferentiated particles | Percent                    | Continuous                       | One hour         | >99%           | 4.5                 | 6.2             | 9.2                  | 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> |
|--------|---------------------|--|----------------------------|------------------------------------|--------------------------------|--------------|-----------------------------|
| Oct-18 | 8/11/2018           | Cadmium                                | milligrams per cubic metre | 1                                  | 1                              | <0.0001      | 1.0                         |
| Oct-18 | 8/11/2018           | Chlorine                               | milligrams per cubic metre | 1                                  | 1                              | 0.0          | 200                         |
| Oct-18 | 8/11/2018           | Copper                                 | milligrams per cubic metre | 1                                  | 1                              | 0.0017       |                             |
| Oct-18 | 8/11/2018           | Hazardous substances (Metals)          | milligrams per cubic metre | 1                                  | 1                              | ≤0.058       | 5                           |
| Oct-18 | 8/11/2018           | Hydrogen chloride                      | milligrams per cubic metre | 1                                  | 1                              | 26.0         | 100                         |
| Oct-18 | 8/11/2018           | Mercury                                | milligrams per cubic metre | 1                                  | 1                              | 0.00330      | 1.0                         |
| Oct-18 | 8/11/2018           | Nitrogen oxides                        | milligrams per cubic metre | 1                                  | 1                              | 810          | 1500                        |
| Oct-18 | 8/11/2018           | Solid particles                        | milligrams per cubic metre | 1                                  | 1                              | 5.5          | 100                         |
| Oct-18 | 8/11/2018           | Sulfuric acid mist and sulfur trioxide | milligrams per cubic metre | 1                                  | 1                              | 2.000        | 100                         |
| Oct-18 | 8/11/2018           | Sulphur dioxide                        | milligrams per cubic metre | 1                                  | 1                              | 1200         |                             |
| Oct-18 | 8/11/2018           | Total fluoride                         | milligrams per cubic metre | 1                                  | 1                              | 12.0         | 50                          |
| Oct-18 | 8/11/2018           | Volatile organic compounds             | milligrams per cubic metre | 1                                  | 1                              | <0.03        |                             |

Comments:

Monitoring of emission from each of the 4 boilers for the substances in this table is required annually.

# 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              |
|-----------|---------------------|--------------------------------------|----------------------------|----------------------------------|------------------|----------------|---------------------|-----------------|----------------------|------------------------|
| JULY 2019 | 14/08/2019          | Nitrogen Oxides                      | milligrams per cubic metre | Continuous                       | One hour         | >99%           | 291                 | 634             | 773                  | 1500 mg/m <sup>3</sup> |
| JULY 2019 | 14/08/2019          |                                      | parts per million          |                                  |                  |                | 142                 | 309             | 377                  | 700 ppm                |
| JULY 2019 | 14/08/2019          | Sulphur dioxide                      | milligrams per cubic metre | Continuous                       | One hour         | >99%           | 752                 | 909             | 1169                 |                        |
| JULY 2019 | 14/08/2019          |                                      | parts per million          |                                  |                  |                | 263                 | 318             | 409                  | 600 ppm                |
| JULY 2019 | 14/08/2019          | Opacity - Undifferentiated particles | Percent                    | Continuous                       | One hour         | >99%           | 3.1                 | 6.3             | 11.5                 | 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> |
|--|---------------------|--|----------------------------|------------------------------------|--------------------------------|--------------|-----------------------------|
| Apr-19   | 14/05/2019          | Cadmium                                | milligrams per cubic metre | 1                                  | 1                              | <0.0002      | 1.0                         |
| Apr-19   | 14/05/2019          | Chlorine                               | milligrams per cubic metre | 1                                  | 1                              | <0.008       | 200                         |
| Apr-19   | 14/05/2019          | Copper                                 | milligrams per cubic metre | 1                                  | 1                              | 0.0029       |                             |
| Apr-19   | 14/05/2019          | Hazardous substances (Metals)          | milligrams per cubic metre | 1                                  | 1                              | ≤0.067       | 5                           |
| Apr-19   | 14/05/2019          | Hydrogen chloride                      | milligrams per cubic metre | 1                                  | 1                              | 27.0         | 100                         |
| Apr-19   | 14/05/2019          | Mercury                                | milligrams per cubic metre | 1                                  | 1                              | 0.00047      | 1.0                         |
| Apr-19   | 14/05/2019          | Nitrogen oxides                        | milligrams per cubic metre | 1                                  | 1                              | 800          | 1500                        |
| Apr-19   | 14/05/2019          | Solid particles                        | milligrams per cubic metre | 1                                  | 1                              | 30.0         | 100                         |
| Apr-19   | 14/05/2019          | Sulfuric acid mist and sulfur trioxide | milligrams per cubic metre | 1                                  | 1                              | 11.000       | 100                         |
| Apr-19   | 14/05/2019          | Sulphur dioxide                        | milligrams per cubic metre | 1                                  | 1                              | 1200         |                             |
| Apr-19   | 14/05/2019          | Total fluoride                         | milligrams per cubic metre | 1                                  | 1                              | 15.0         | 50                          |
| Apr-19   | 14/05/2019          | 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. |                     |  |                            |                                    |                                |              |                             |

# 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              |
|-----------|---------------------|--------------------------------------|----------------------------|----------------------------------|------------------|----------------|---------------------|-----------------|----------------------|------------------------|
| JULY 2019 | 14/08/2019          | Nitrogen Oxides                      | milligrams per cubic metre | Continuous                       | One hour         | >99%           | 334.9               | 701.5           | 902.4                | 1500 mg/m <sup>3</sup> |
| JULY 2019 | 14/08/2019          |                                      | parts per million          |                                  |                  |                | 163.2               | 341.8           | 439.7                | 700 ppm                |
| JULY 2019 | 14/08/2019          | Sulphur dioxide                      | milligrams per cubic metre | Continuous                       | One hour         | >99%           | 811.4               | 1029.0          | 1323.8               |                        |
| JULY 2019 | 14/08/2019          |                                      | parts per million          |                                  |                  |                | 283.9               | 360.0           | 463.2                | 600 ppm                |
| JULY 2019 | 14/08/2019          | Opacity - Undifferentiated particles | Percent                    | Continuous                       | One hour         | >99%           | 2.8                 | 4.9             | 14.3                 | 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 <sup>3</sup> |
|--------|---------------------|--|----------------------------|------------------------------------|--------------------------------|--------------|-----------------------------|
| Mar-19 | 9/05/2019           | Cadmium                                | milligrams per cubic metre | 1                                  | 1                              | <0.0002      | 1.0                         |
| Mar-19 | 9/05/2019           | Chlorine                               | milligrams per cubic metre | 1                                  | 1                              | 0.1          | 200                         |
| Mar-19 | 9/05/2019           | Copper                                 | milligrams per cubic metre | 1                                  | 1                              | 0.0009       |                             |
| Mar-19 | 9/05/2019           | Hazardous substances (Metals)          | milligrams per cubic metre | 1                                  | 1                              | ≤0.013       | 5                           |
| Mar-19 | 9/05/2019           | Hydrogen chloride                      | milligrams per cubic metre | 1                                  | 1                              | 25.0         | 100                         |
| Mar-19 | 9/05/2019           | Mercury                                | milligrams per cubic metre | 1                                  | 1                              | 0.00043      | 1.0                         |
| Mar-19 | 9/05/2019           | Nitrogen oxides                        | milligrams per cubic metre | 1                                  | 1                              | 690          | 1500                        |
| Mar-19 | 9/05/2019           | Solid particles                        | milligrams per cubic metre | 1                                  | 1                              | 9.7          | 100                         |
| Mar-19 | 9/05/2019           | Sulfuric acid mist and sulfur trioxide | milligrams per cubic metre | 1                                  | 1                              | 1.600        | 100                         |
| Mar-19 | 9/05/2019           | Sulphur dioxide                        | milligrams per cubic metre | 1                                  | 1                              | 1100         |                             |
| Mar-19 | 9/05/2019           | Total fluoride                         | milligrams per cubic metre | 1                                  | 1                              | 13.0         | 50                          |
| Mar-19 | 9/05/2019           | 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.

# 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              |
|------------------|---------------------|--------------------------------------|----------------------------|----------------------------------|------------------|----------------|---------------------|-----------------|----------------------|------------------------|
| JULY 2019        | 14/08/2019          | Nitrogen Oxides                      | milligrams per cubic metre | Continuous                       | One hour         | >99%           | 375.5               | 635.6           | 832.0                | 1500 mg/m <sup>3</sup> |
| JULY 2019        | 14/08/2019          |                                      | parts per million          |                                  |                  |                | 182.9               | 309.7           | 405.4                | 700 ppm                |
| JULY 2019        | 14/08/2019          | Sulphur dioxide                      | milligrams per cubic metre | Continuous                       | One hour         | >99%           | 870.3               | 1067.6          | 1491.4               |                        |
| JULY 2019        | 14/08/2019          |                                      | parts per million          |                                  |                  |                | 304.5               | 373.5           | 521.8                | 600 ppm                |
| JULY 2019        | 14/08/2019          | Opacity - Undifferentiated particles | Percent                    | Continuous                       | One hour         | >99%           | 4.3                 | 6.3             | 11.5                 | 20%                    |
| <b>Comments:</b> |                     |                                      |                            |                                  |                  |                |                     |                 |                      |                        |

## 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> |
|---|---------------------|--|----------------------------|------------------------------------|--------------------------------|--------------|-----------------------------|
| Oct-18  | 29/11/2018          | Cadmium                                | milligrams per cubic metre | 1                                  | 1                              | <0.0001      | 1.0                         |
| Oct-18  | 29/11/2018          | Chlorine                               | milligrams per cubic metre | 1                                  | 1                              | 0.0          | 200                         |
| Oct-18  | 29/11/2018          | Copper                                 | milligrams per cubic metre | 1                                  | 1                              | 0.0007       |                             |
| Oct-18  | 29/11/2018          | Hazardous substances (Metals)          | milligrams per cubic metre | 1                                  | 1                              | ≤0.013       | 5                           |
| Oct-18  | 29/11/2018          | Hydrogen chloride                      | milligrams per cubic metre | 1                                  | 1                              | 21.0         | 100                         |
| Oct-18  | 29/11/2018          | Mercury                                | milligrams per cubic metre | 1                                  | 1                              | 0.00037      | 1.0                         |
| Oct-18  | 29/11/2018          | Nitrogen oxides                        | milligrams per cubic metre | 1                                  | 1                              | 540          | 1500                        |
| Oct-18  | 29/11/2018          | Solid particles                        | milligrams per cubic metre | 1                                  | 1                              | 16.0         | 100                         |
| Oct-18  | 29/11/2018          | Sulfuric acid mist and sulfur trioxide | milligrams per cubic metre | 1                                  | 1                              | 0.900        | 100                         |
| Oct-18  | 29/11/2018          | Sulphur dioxide                        | milligrams per cubic metre | 1                                  | 1                              | 1100         |                             |
| Oct-18  | 29/11/2018          | Total fluoride                         | milligrams per cubic metre | 1                                  | 1                              | 11.0         | 50                          |
| Oct-18  | 29/11/2018          | Volatile organic compounds             | milligrams per cubic metre | 1                                  | 1                              | <0.2         |                             |
| <b>Comments:</b> Monitoring of emission from each of the 4 boilers for the substances in this table is required annually. |                     |  |                            |                                    |                                |              |                             |

# Monthly Data Summary

## Discharge & Monitoring Point 12

Discharge to waters <301204 East 6416350 North> Update

Liddell Outfall Canal

| 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 |
|-----------|---------------------|---------------------------------|----------------------|----------------------------------|--------------------------------|---------------------|-----------------|----------------------|-----------|
| JULY 2019 | 14/08/2019          | Ammonia                         | milligrams per litre | Fortnightly                      | 3                              | <0.01               | 0.055           | 0.13                 | -         |
| JULY 2019 | 14/08/2019          | Antimony                        | milligrams per litre | Fortnightly                      | 3                              | 0.008               | 0.009           | 0.009                |           |
| JULY 2019 | 14/08/2019          | Arsenic                         | milligrams per litre | Fortnightly                      | 3                              | 0.008               | 0.008           | 0.008                | -         |
| JULY 2019 | 14/08/2019          | Barium                          | milligrams per litre | Fortnightly                      | 3                              | 0.11                | 0.11            | 0.113                |           |
| JULY 2019 | 14/08/2019          | Beryllium                       | milligrams per litre | Fortnightly                      | 3                              | <0.001              | 0.0005          | <0.001               | -         |
| JULY 2019 | 14/08/2019          | Boron                           | milligrams per litre | Fortnightly                      | 3                              | 1.22                | 1.34            | 1.47                 |           |
| JULY 2019 | 14/08/2019          | Cadmium                         | milligrams per litre | Fortnightly                      | 3                              | <0.0001             | 0.00005         | <0.0001              | -         |
| JULY 2019 | 14/08/2019          | Chlorine                        | milligrams per litre | Fortnightly                      | 3                              | 0.07                | 0.15            | 0.21                 |           |
| JULY 2019 | 14/08/2019          | Chromium                        | milligrams per litre | Fortnightly                      | 3                              | <0.01               | 0.005           | <0.01                | -         |
| JULY 2019 | 14/08/2019          | Chromium (total)                | milligrams per litre | Fortnightly                      | 3                              | <0.001              | 0.0005          | <0.001               |           |
| JULY 2019 | 14/08/2019          | Cobalt                          | milligrams per litre | Fortnightly                      | 3                              | <0.001              | 0.0005          | <0.001               | -         |
| JULY 2019 | 14/08/2019          | Conductivity                    | uS/cm                | Fortnightly                      | 3                              | 2740                | 2863            | 3010                 |           |
| JULY 2019 | 14/08/2019          | Copper                          | milligrams per litre | Fortnightly                      | 3                              | 0.002               | 0.004           | 0.005                | -         |
| JULY 2019 | 14/08/2019          | Flouride                        | milligrams per litre | Fortnightly                      | 3                              | 1.32                | 1.39            | 1.48                 |           |
| JULY 2019 | 14/08/2019          | Lead                            | milligrams per litre | Fortnightly                      | 3                              | <0.001              | 0.0005          | <0.001               | -         |
| JULY 2019 | 14/08/2019          | Manganese                       | milligrams per litre | Fortnightly                      | 3                              | 0.004               | 0.005           | 0.007                |           |
| JULY 2019 | 14/08/2019          | Mercury                         | milligrams per litre | Fortnightly                      | 3                              | <0.0001             | 0.00005         | <0.0001              | -         |
| JULY 2019 | 14/08/2019          | Methylene Blue Active Substance | milligrams per litre | Fortnightly                      | 3                              | <0.1                | 0.05            | <0.1                 |           |
| JULY 2019 | 14/08/2019          | Molybdenum                      | milligrams per litre | Fortnightly                      | 3                              | 0.12                | 0.121           | 0.123                | -         |
| JULY 2019 | 14/08/2019          | Nickel                          | milligrams per litre | Fortnightly                      | 3                              | 0.004               | 0.005           | 0.005                |           |
| JULY 2019 | 14/08/2019          | Nitrogen (total)                | milligrams per litre | Fortnightly                      | 3                              | 0.4                 | 0.9             | 1.7                  | -         |
| JULY 2019 | 14/08/2019          | Oil and Grease                  | milligrams per litre | Weekly                           | 5                              | <5                  | 2.5             | <5                   |           |
| JULY 2019 | 14/08/2019          | pH                              | pH Units             | Daily                            | 31                             | 8.3                 | 8.5             | 8.7                  | -         |
| JULY 2019 | 14/08/2019          | Phosphorus                      | milligrams per litre | Fortnightly                      | 3                              | 0.03                | 0.04            | 0.05                 |           |

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| 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 |
|-----------|---------------------|------------------------|----------------------|----------------------------------|--------------------------------|---------------------|-----------------|----------------------|-----------|
| JULY 2019 | 14/08/2019          | Selenium               | milligrams per litre | Fortnightly                      | 3                              | <0.01               | 0.005           | <0.01                | -         |
| JULY 2019 | 14/08/2019          | Sulfur                 | milligrams per litre | Fortnightly                      | 3                              | 620                 | 647             | 700                  |           |
| JULY 2019 | 14/08/2019          | Temperature            | milligrams per litre | Fortnightly                      | 3                              | 19.2                | 19.9            | 20.3                 |           |
| JULY 2019 | 14/08/2019          | Tin                    | milligrams per litre | Fortnightly                      | 3                              | <0.001              | 0.0005          | <0.001               | -         |
| JULY 2019 | 14/08/2019          | Total Dissolved Solids | milligrams per litre | Fortnightly                      | 3                              | 1860                | 1897            | 1920                 |           |
| JULY 2019 | 14/08/2019          | Total Organic Carbon   | milligrams per litre | Fortnightly                      | 3                              | 6                   | 7               | 8                    | -         |
| JULY 2019 | 14/08/2019          | TSS                    | milligrams per litre | Fortnightly                      | 3                              | 4                   | 4               | 5                    |           |
| JULY 2019 | 14/08/2019          | Vanadium               | milligrams per litre | Fortnightly                      | 3                              | 0.01                | 0.01            | 0.02                 | -         |
| JULY 2019 | 14/08/2019          | Zinc                   | milligrams per litre | Fortnightly                      | 3                              | <0.005              | 0.0025          | <0.005               |           |
| Comments  |                     |                        |                      |                                  |                                |                     |                 |                      |           |

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| Comments   |                     |                                 |                      |                                  |                                |                     |                 |                      |           |
|--|---------------------|---------------------------------|----------------------|----------------------------------|--------------------------------|---------------------|-----------------|----------------------|-----------|
| <b>Discharge &amp; Monitoring Point 13</b>             |                     |                                 |                      |                                  |                                |                     |                 |                      |           |
| Discharge to waters <301204 East 6416350 North> Update |                     |                                 |                      |                                  |                                |                     |                 |                      |           |
| Liddell Oil and Grit Trap                              |                     |                                 |                      |                                  |                                |                     |                 |                      |           |
| 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 |
| JULY 2019  | 14/08/2019          | Ammonia                         | milligrams per litre | Fortnightly                      | 3                              | 0.02                | 0.17            | 0.47                 | -         |
| JULY 2019  | 14/08/2019          | Antimony                        | milligrams per litre | Fortnightly                      | 3                              | 0.01                | 0.01            | 0.011                |           |
| JULY 2019  | 14/08/2019          | Arsenic                         | milligrams per litre | Fortnightly                      | 3                              | 0.012               | 0.012           | 0.013                | -         |
| JULY 2019  | 14/08/2019          | Barium                          | milligrams per litre | Fortnightly                      | 3                              | 0.106               | 0.108           | 0.109                |           |
| JULY 2019  | 14/08/2019          | Beryllium                       | milligrams per litre | Fortnightly                      | 3                              | <0.001              | 0.0005          | <0.001               | -         |
| JULY 2019  | 14/08/2019          | Boron                           | milligrams per litre | Fortnightly                      | 3                              | 1.22                | 1.31            | 1.41                 |           |
| JULY 2019  | 14/08/2019          | Cadmium                         | milligrams per litre | Fortnightly                      | 3                              | <0.0001             | 0.00005         | <0.0001              | -         |
| JULY 2019  | 14/08/2019          | Chlorine                        | milligrams per litre | Fortnightly                      | 3                              | 0.05                | 0.11            | 0.18                 |           |
| JULY 2019  | 14/08/2019          | Chromium                        | milligrams per litre | Fortnightly                      | 3                              | <0.01               | 0.005           | <0.01                | -         |
| JULY 2019  | 14/08/2019          | Chromium (total)                | milligrams per litre | Fortnightly                      | 3                              | <0.001              | 0.0005          | <0.001               |           |
| JULY 2019  | 14/08/2019          | Cobalt                          | milligrams per litre | Fortnightly                      | 3                              | <0.001              | 0.0005          | <0.001               | -         |
| JULY 2019  | 14/08/2019          | Conductivity                    | uS/cm                | Fortnightly                      | 3                              | 2570                | 2697            | 2830                 |           |
| JULY 2019  | 14/08/2019          | Copper                          | milligrams per litre | Fortnightly                      | 3                              | 0.004               | 0.004           | 0.005                | -         |
| JULY 2019  | 14/08/2019          | Flouride                        | milligrams per litre | Fortnightly                      | 3                              | 1.31                | 1.447           | 1.55                 |           |
| JULY 2019  | 14/08/2019          | Lead                            | milligrams per litre | Fortnightly                      | 3                              | <0.001              | 0.0005          | <0.001               | -         |
| JULY 2019  | 14/08/2019          | Manganese                       | milligrams per litre | Fortnightly                      | 3                              | 0.005               | 0.006333333     | 0.007                |           |
| JULY 2019  | 14/08/2019          | Mercury                         | milligrams per litre | Fortnightly                      | 3                              | <0.0001             | 0.00005         | <0.0001              | -         |
| JULY 2019  | 14/08/2019          | Methylene Blue Active Substance | milligrams per litre | Fortnightly                      | 3                              | <0.1                | 0.05            | <0.1                 |           |
| JULY 2019  | 14/08/2019          | Molybdenum                      | milligrams per litre | Fortnightly                      | 3                              | 0.126               | 0.130           | 0.134                | -         |
| JULY 2019  | 14/08/2019          | Nickel                          | milligrams per litre | Fortnightly                      | 3                              | 0.004               | 0.004           | 0.005                |           |
| JULY 2019  | 14/08/2019          | Nitrogen (total)                | milligrams per litre | Fortnightly                      | 3                              | 0.4                 | 0.8             | 1.4                  | -         |
| JULY 2019  | 14/08/2019          | Oil and Grease                  | milligrams per litre | Weekly                           | 5                              | <5                  | 2.5             | <5                   |           |
| JULY 2019  | 14/08/2019          | pH                              | pH Units             | Daily                            | 31                             | 6.8                 | 7.9             | 8.8                  | -         |



# Monthly Data Summary

| 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 |
|-----------|---------------------|------------------------|----------------------|----------------------------------|--------------------------------|---------------------|-----------------|----------------------|-----------|
| JULY 2019 | 14/08/2019          | Phosphorus             | milligrams per litre | Fortnightly                      | 3                              | 0.03                | 0.04            | 0.05                 |           |
| JULY 2019 | 14/08/2019          | Selenium               | milligrams per litre | Fortnightly                      | 3                              | <0.01               | 0.005           | <0.01                | -         |
| JULY 2019 | 14/08/2019          | Sulfur                 | milligrams per litre | Fortnightly                      | 3                              | 610                 | 650             | 720                  |           |
| JULY 2019 | 14/08/2019          | Temperature            | milligrams per litre | Fortnightly                      | 3                              | 16.1                | 17.1            | 18                   |           |
| JULY 2019 | 14/08/2019          | Tin                    | milligrams per litre | Fortnightly                      | 3                              | <0.001              | 0.0005          | <0.001               | -         |
| JULY 2019 | 14/08/2019          | Total Dissolved Solids | milligrams per litre | Fortnightly                      | 3                              | 1710                | 1770            | 1820                 |           |
| JULY 2019 | 14/08/2019          | Total Organic Carbon   | milligrams per litre | Fortnightly                      | 3                              | 6                   | 7               | 8                    | -         |
| JULY 2019 | 14/08/2019          | TSS                    | milligrams per litre | Fortnightly                      | 3                              | 7                   | 11              | 20                   |           |
| JULY 2019 | 14/08/2019          | Vanadium               | milligrams per litre | Fortnightly                      | 3                              | 0.02                | 0.02            | 0.02                 | -         |
| JULY 2019 | 14/08/2019          | Zinc                   | milligrams per litre | Fortnightly                      | 3                              | <0.005              | 0.006           | 0.012                |           |
| Comments  |                     |                        |                      |                                  |                                |                     |                 |                      |           |

## Discharge & Monitoring Point 14

Discharge to waters <301204 East 6416350 North> Update

The skimmer dam overflow spillway, located at the left abutment of the skimmer dam.

| 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 |
|-----------|---------------------|------------------|----------------------|----------------------------------|--------------------------------|---------------------|-----------------|----------------------|-----------|
| JULY 2019 | 14/08/2019          | Arsenic          | milligrams per litre | Weekly                           | 5                              | 0.077               | 0.086           | 0.105                | -         |
| JULY 2019 | 14/08/2019          | Boron            | milligrams per litre | Weekly                           | 5                              | 2.04                | 2.27            | 2.52                 |           |
| JULY 2019 | 14/08/2019          | Cadmium          | milligrams per litre | Weekly                           | 5                              | 0.0001              | 0.00014         | 0.0002               | -         |
| JULY 2019 | 14/08/2019          | Chromium         | milligrams per litre | Weekly                           | 5                              | <0.01               | 0.005           | <0.01                | -         |
| JULY 2019 | 14/08/2019          | Chromium (total) | milligrams per litre | Weekly                           | 5                              | 0.004               | 0.005           | 0.006                |           |
| JULY 2019 | 14/08/2019          | Conductivity     | uS/cm                | Weekly                           | 5                              | 2920                | 3054            | 3130                 |           |
| JULY 2019 | 14/08/2019          | Copper           | milligrams per litre | Weekly                           | 5                              | <0.001              | 0.0009          | 0.002                | -         |
| JULY 2019 | 14/08/2019          | Flouride         | milligrams per litre | Weekly                           | 5                              | 2.6                 | 3.0             | 3.3                  |           |
| JULY 2019 | 14/08/2019          | Lead             | milligrams per litre | Weekly                           | 5                              | <0.001              | 0.0005          | <0.001               | -         |
| JULY 2019 | 14/08/2019          | Mercury          | milligrams per litre | Weekly                           | 5                              | <0.0001             | 0.0001          | 0.0003               | -         |
| JULY 2019 | 14/08/2019          | Oil and Grease   | milligrams per litre | Weekly                           | 5                              | <5                  | 2.5             | <5                   |           |

# Monthly Data Summary

| 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 |
|-----------|---------------------|-----------|----------------------|----------------------------------|--------------------------------|---------------------|-----------------|----------------------|-----------|
| JULY 2019 | 14/08/2019          | pH        | pH Units             | Weekly                           | 5                              | 8.1                 | 8.2             | 8.3                  | -         |
| JULY 2019 | 14/08/2019          | Selenium  | milligrams per litre | Weekly                           | 5                              | 0.04                | 0.054           | 0.08                 | -         |
| JULY 2019 | 14/08/2019          | TSS       | milligrams per litre | Weekly                           | 5                              | 3                   | 5               | 8                    |           |
| JULY 2019 | 14/08/2019          | Zinc      | milligrams per litre | Weekly                           | 5                              | <0.005              | 0.0025          | <0.005               |           |
| Comments  |                     |           |                      |                                  |                                |                     |                 |                      |           |

# Monthly Data Summary

## Details of Non-Compliance with Licence

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 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

# Monthly Data Summary

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