



# Monthly Website Report

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| <b>Site:</b>         | <b>Chain Valley Colliery</b>                            |
| <b>Department:</b>   | <b>Technical Services</b>                               |
| <b>Report Title:</b> | <b>Monthly Environmental Website Report - June 2019</b> |
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| <b>Distribution:</b> | <b>Delta Coal website</b>                               |

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## CVC Monthly Environmental Report

### Introduction

Great Southern Energy Pty Ltd (trading as Delta Coal) operates the Chain Valley Colliery, an underground coal mine at the southern end of Lake Macquarie.

Chain Valley Colliery operates under the following regulatory instruments;

- A Development Consent, SSD-5465 (as modified) issued under the Environmental Planning and Assessment Act, 1979.
- An Environment Protection Licence (1770) issued under the Protection of the Environment Operations Act, 1997.
- A Water Access Licence 20AL217069 (WAL41508), Aquifer (4,443 megalitres)

The above development consent/approval and licences require various monitoring and reporting to be undertaken by Delta Coal for Chain Valley Colliery.

This report provides environmental monitoring data from Chain Valley Colliery for the period 1 June to 30 June 2019.

Details of the Chain Valley Colliery EPL 1770 are provided below.

| Chain Valley Colliery Information |   |
|-----------------------------------|---|
| Premises name                     | Chain Valley Colliery   |
| Address                           | Construction Road, Chain Valley Bay, NSW, 2259  |
| Licensee                          | Great Southern Energy Pty Ltd   |
| EPL #                             | 1770  |
| EPL location                      | <a href="http://www.epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=50980&amp;SYSUID=1&amp;LICID=1770">http://www.epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=50980&amp;SYSUID=1&amp;LICID=1770</a> |

The overall purpose of this report is to keep stakeholders informed of the environmental monitoring results at Chain Valley Colliery and maintain a transparent and accountable reporting system.

### Scope

This report presents the results from the various environmental monitoring programs undertaken for Chain Valley Colliery.

Results in this report are typically only a single month of data, which is due to a legislative requirement introduced by the *Protection of the Environment Legislation Amendment Act 2011*, which requires publishing data publically within 14 days. As Delta Coal is required to undertake monitoring on a monthly basis, each report generally cover a single month of environmental monitoring data.

Where applicable, the results of the monitoring programs are compared with the relevant criteria (from the EPL or Development Consent) to determine compliance.

Monitoring results presented include;

- Water – quality
- Water – volume
- Depositional dust
- Operational noise
- Weather data

### Definitions

dB– decibels

dB(A) – noise level measurement units are decibels (dB). The A-weighting scale is used to approximate human perception of noise

g/m<sup>2</sup>/month – grams per square metre per month

kL– kilolitres

L<sub>Aeq</sub>–the average A-weighted noise energy (in dB) for a measurement period

mg/L – milligrams per litre

µg/L – micrograms per litre

µS/cm – microSiemens per centimetre

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## References

ALS Group - Monthly Water Monitoring Results **June** 2019

ALS Water - Report of Analysis

Steel River Testing - Dust Deposition Report **June** 2019

Development Consent SSD-5465 (as modified)

Environment Protection Licence 1770 (Licence version date: 2 April 2019)

## Monitoring Results

Water – Quality

| June 2019      |                       |
|----------------|-----------------------|
| EPL            | 1770                  |
| Licensee       | LakeCoal Pty Ltd      |
| Premises       | Chain Valley Colliery |
| Date Sampled   | June                  |
| Date Obtained  | June                  |
| Date Reported  | June                  |
| Sampling Point | 1                     |

| Parameter              | Units     | Limit   | Result |
|------------------------|-----------|---------|--------|
| Biochem. Oxygen Demand | mg/L      | -       | <2     |
| Enterococci            | col/100mL | -       | 18     |
| Faecal Coliforms       | CFU/100mL | 200     | 80     |
| pH                     | pH        | 6.5-8.5 | 7.61   |
| Total Sus. Solids      | mg/L      | 50      | <5     |

There was no exceedance of water quality criteria during the month.

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### Water – Volume

| June 2019              |                          |
|------------------------|--------------------------|
| EPL                    | 1770                     |
| Licensee               | LakeCoal Pty Ltd         |
| Premises               | Chain Valley Colliery    |
| Date Sampled           | Daily                    |
| Date Reported          | Refer report date        |
| Discharge volume limit | 12161 kilolitres per day |
| Sampling Point         | 1                        |

| Date (24 hour period) | Unit | Volume |
|-----------------------|------|--------|
| 01/06/2019            | kL   | 5903   |
| 02/06/2019            | kL   | 6959   |
| 03/06/2019            | kL   | 7293   |
| 04/06/2019            | kL   | 5641   |
| 05/06/2019            | kL   | 7132   |
| 06/06/2019            | kL   | 5699   |
| 07/06/2019            | kL   | 4905   |
| 08/06/2019            | kL   | 6999   |
| 09/06/2019            | kL   | 7429   |
| 10/06/2019            | kL   | 7449   |
| 11/06/2019            | kL   | 7369   |
| 12/06/2019            | kL   | 6658   |
| 13/06/2019            | kL   | 7413   |
| 14/06/2019            | kL   | 7551   |
| 15/06/2019            | kL   | 7317   |
| 16/06/2019            | kL   | 7305   |
| 17/06/2019            | kL   | 7796   |
| 18/06/2019            | kL   | 7534   |
| 19/06/2019            | kL   | 6712   |
| 20/06/2019            | kL   | 6603   |
| 21/06/2019            | kL   | 6587   |
| 22/06/2019            | kL   | 6374   |
| 23/06/2019            | kL   | 7214   |
| 24/06/2019            | kL   | 8996   |
| 25/06/2019            | kL   | 8373   |
| 26/06/2019            | kL   | 8086   |
| 27/06/2019            | kL   | 6677   |
| 28/06/2019            | kL   | 4897   |
| 29/06/2019            | kL   | 5915   |
| 30/06/2019            | kL   | 4548   |

|         |    |      |
|---------|----|------|
| Average | kL | 6844 |
| Minimum | kL | 4548 |
| Maximum | kL | 8996 |

There were no exceedances of the volumetric limits at the Licenced Discharge Point during the month.

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### Depositional Dust

| June 2019     |  |
|---------------|--|
| EPL           | 191  |
| Limit         | 4g/m <sup>2</sup> /month                   |
| Sampling Date | 10/05/2019 to 07/06/2019                   |
| Site          | Insoluble Matter (g/m <sup>2</sup> /month) |
| DDG001        | 0.6  |
| DDG002        | 0.4  |
| DDG003        | 0.8  |
| DDG004        | 0.5  |
| DDG005        | 2.5  |
| Notes:        |  |

There were no exceedances of the annual average air quality limits during the reporting period.

### Operational Noise

Operational noise monitoring undertaken in June and displayed compliance.

### Weather Data

A summary of weather data recorded by an adjacent site meteorological monitoring station at Mannering Colliery is presented below for the year to date.

| Monthly Weather Data |                              |          |          |
|----------------------|------------------------------|----------|----------|
| 2019                 |                              |          |          |
| EPL                  | 191                          |          |          |
| Licensee             | LakeCoal Pty Ltd             |          |          |
| Premises             | Mannering Colliery           |          |          |
| Location             | W1 (on-site weather station) |          |          |
| Date published       | Refer report date            |          |          |
| Date sampled         | Daily                        |          |          |
| Date obtained        |                              |          |          |
| Month                | Total Rainfall/Month mm      | Min Temp | Max Temp |
| Jan-19               | 60.6                         | 18.6     | 39.6     |
| Feb-19               | 88.6                         | 22.7     | 37.4     |
| Mar-19               | 204                          | 10.1     | 37.1     |
| Apr-19               | 73.2                         | 8.3      | 32.8     |
| May-19               | 11.0                         | 3.9      | 26.3     |
| Jun-19               | 158.8                        | 3.9      | 25.0     |
| Jul-19               |                              |          |          |
| Aug-19               |                              |          |          |
| Sep-19               |                              |          |          |
| Oct-19               |                              |          |          |
| Nov-19               |                              |          |          |
| Dec-19               |                              |          |          |