

**INVINCIBLE COLLIERY**

**Monthly Environmental Monitoring data**

**for**

***Castlereagh Coal***

**1 INTRODUCTION**

Castlereagh Coal owns and operates Invincible Colliery located near Cullen Bullen in the Central West district of New South Wales. This report has been prepared pursuant to Chapter 2, Part 3.5, Condition 66(6) of the *Protection of the Environment operations Act 1997* for the publication of results of monitoring and the NSW Environmental Protection Authority guideline titled *Requirements for publish pollution monitoring data 2012*.

**2 ENVIRONMENT PROTECTION LICENCE DETAILS**

**Invincible Colliery (EPL 1095)**

Licensee: Shoalhaven Coal Pty Ltd

Address: Invincible Colliery, Castlereagh Highway, Cullen Bullen, NSW 2790

Link: <http://www.epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=50798&SYSUID=1&LICID=1095>

# MONTHLY ENVIRONMENTAL MONITORING DATA

June 2016

## 4 AIR QUALITY

**Table 1** *Depositional Dust Monitoring Results*

<b>Obtained:</b> 14/07/2016		<b>Premise:</b> Invincible Colliery		
<b>Published:</b> 15/07/2016		<b>Licensee:</b> Shoalhaven Coal		
		<b>EPL number:</b> 1095		
		<b>Exposure Period:</b> 30 days		
Sampling Point	Start Date	End Date	Insoluble Solids (g/m <sup>2</sup> /month)	Rolling Annual Average (g/m <sup>2</sup> /month)
ID-D1 (EPA Point 3)	7/06/2016	7/07/2016	0.1	1.3
ID-D2 (EPA Point 4)	7/06/2016	7/07/2016	0.1	0.3
ID-D3 (EPA Point 5)	7/06/2016	7/07/2016	0.3	0.7
ID-D4 (EPA Point 6)	7/06/2016	7/07/2016	0.1	0.5
ID-D5 (EPA Point 7)	7/06/2016	7/07/2016	0.9	1.2
Annual Average Limit				4.0

Required Frequency: Monthly - exposure period 30 ± 2 days

All depositional dust sampling locations were in compliance with the annual average limit (4g/m<sup>2</sup>/month) for the month of June 2016.

**Table 2** *High Volume Air Sampler Monitoring Results*

<b>Obtained:</b> 15/07/2016		<b>Premise:</b> Invincible Colliery	
<b>Published:</b> 15/07/2016		<b>Licensee:</b> Shoalhaven Coal	
		<b>EPL number:</b> 1095	
Sampling Point	Run Date	PM <sub>10</sub> (µg/m <sup>3</sup> )	TSP (µg/m <sup>3</sup> ) <sup>^</sup>
HVAS1 (EPA Point 3)	061611508012	3	8
	061611508013	2	5
	061611508014	3	8
	061611508015	1	3
	061611508016	1	3
Annual Average		8.4	21.0
<b>24 Hour Limit</b>		<b>50</b>	<b>--</b>
<b>Annual Average Limit</b>		<b>30</b>	<b>90</b>

Required Frequency: Weekly – High Volume Air Sample run event every six days for 24 hours.

-- No Limit

<sup>^</sup> TSP result is an estimate obtained from a calculation of the PM<sub>10</sub> concentration.

The 24 hour maximum PM<sub>10</sub> allowable limit of 50µg/m<sup>3</sup> was not exceeded for the month of June 2016.

The TSP and PM<sub>10</sub> annual average results were in compliance with the annual average limit for the month of June 2016.

## 5 WATER QUALITY

**Table 3** *Discharge Water Quality Results*

<b>Sampled:</b> 7/06/2016		<b>Premise:</b> Invincible Colliery		
<b>Obtained:</b> 24/06/2016		<b>Licensee:</b> Shoalhaven Coal		
<b>Published:</b> 15/07/2016		<b>EPL number:</b> 1095		
Sampling Point	Frequency	Pollutant	100 Percentile Concentration Limit	Sample Concentration
Main Dam	Monthly during discharge	pH (pH unit)	6.5 – 8.5	7.50
		TSS (mg/L)	30	12
		Oil & Grease (mg/L)	10	<2
Discharge Point 2 (EPA Point 2)	Monthly during discharge	pH (pH unit)	6.5 – 8.5	7.43
		TSS (mg/L)	30	15
		Oil & Grease (mg/L)	10	<2

The samples collected from Main Dam and discharge location LD002 was within the stipulated EPL limits.

## 6 NOISE LIMITS

Noise monitoring results were not available at the time of publication of this document.

## 7 BLASTING

Invincible Colliery complied with the relevant consent LAeq,15minute noise limits, where applicable, during Quarter 2, 2016 monitoring [refer Global Acoustics Pty Ltd report 16132\_R01, 7 July 2016].

## 8 DISCLAIMER

This report is considered accurate at the date of issue with regard to current environmental conditions. Monitoring results may vary from those presented in this report following further assessment. This report must not be reproduced except in full. Results or figures from this report must not be used without acknowledgment.

Yours Faithfully,

**CASTLEREAGH COAL**