

## **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



## 4 AIR QUALITY

Table 1 Depositional Dust Monitoring Results

Premise: Invincible Colliery
Obtained: 16/05/2017 Licensee: Shoalhaven Coal

**Published:** 18/05/2017 **EPL number:** 1095

Exposure Period: 31 days							
Sampling Point	Start Date	End Date	Insoluble Solids (g/m²/month)	Rolling Annual Average (g/m²/month)			
ID-D1 (EPA Point 3)	11/04/2017	12/05/2017	3.4	0.7			
ID-D2 (EPA Point 4)	11/04/2017	12/05/2017	1.4	0.4			
ID-D3 (EPA Point 5)	11/04/2017	12/05/2017	0.4	0.7			
ID-D4 (EPA Point 6)	11/04/2017	12/05/2017	0.4	0.6			
ID-D5 (EPA Point 7)	11/04/2017	12/05/2017	0.5	1.6			
	4.0						

Required Frequency: Monthly - exposure period 30 ± 2 days

All depositional dust sampling locations were in compliance with the annual average limit (4g/m²/month) for the month of April 2017.

Table 2 High Volume Air Sampler Monitoring Results

		Premise:	Invincible	Invincible Colliery	
Obtained:	16/05/2017	Licensee:	Shoalhav	Shoalhaven Coal	
Published:	18/05/2017	EPL numl	ber: 1095		
Sampling Point		Run Date	PM <sub>10</sub> (μg/m³)	TSP (µg/m³)^	
		06-Apr-17	4	10	
HVAS1 (EPA Point 3)		12-Apr-17	3	8	
		18-Apr-17	14	35	
		24-Apr-17	19	48	
		30-Apr-17	3	8	
		Annual Average	8.4	21.0	
		24 Hour Limit	50		
		Annual Average Limit	25	90	

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

The 24 hour maximum  $PM_{10}$  allowable limit of  $50\mu g/m^3$  was not exceeded for the month of April 2017.

The TSP and PM<sub>10</sub> annual average results were in compliance with the annual average limit for the month of April 2017.

<sup>--</sup> No Limit

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



### 5 WATER QUALITY

Table 3 Discharge Water Quality Results

Sampled: 10	0/04/2017	Premise:	Invincible Colliery	
<b>Obtained:</b> 29/04/2017		Licensee:	Shoalhaven Coal	
<b>Published:</b> 18/05/2017		EPL number:	1095	
Sampling Point	Frequency	Pollutant	100 Percentile Concentration Limit	Sample Concentration
Main Dam	Monthly during discharge	pH (pH unit)	6.5 – 8.5	6.95
		TSS (mg/L)	30	<5
		Oil & Grease (mg/L)	10	<5
Discharge Point 2 (EPA Point 2)	Monthly during discharge	pH (pH unit)	6.5 – 8.5	6.98
		TSS (mg/L)	30	<5
		Oil & Grease (mg/L)	10	<5

During the site visit water was observed to be flowing from the Main Dam via the overflow channel, therefore a sample was collected at discharge point LD002 and Main Dam. Both samples were within the stipulated pH, total suspended solids and oil and grease EPL limits.

### **6 NOISE LIMITS**

Noise monitoring was not required to be undertaken at Invincible Colliery during the month of April 2017.

#### 7 BLASTING

No blasting was undertaken during April 2017. Invincible Colliery is not currently operating.

### 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**