

Whitehaven Coal Limited ABN 68 124 425 396 10409 Kamilaroi Highway Gunnedah NSW 2380 PO Box 600, Gunnedah NSW 2380 Tel: 02 6742 4337 Fax: 02 6742 3607 www.whitehavencoal.com.au

15<sup>th</sup> August 2014

Mr Robert O'Hern Head – Regional Operations Unit – North West Environmental Protection Authority PO BOX 494 ARMIDALE, NSW 2350

Dear Mr O'Hern

# **Submission of Pollution Reduction Program U1 & U2 Reports**

In accordance with Conditions U1 and U2 of Environment Protection Licence 12365, Tarrawonga Coal (TC) has attached a report prepared by Pacific Environment Limited "Tarrawonga Coal PRP U1: Monitoring Results – Wheel Generated Dust" dated 29<sup>th</sup> July 2014 and enclosed with this letter "Tarrawonga Coal Letter Report on Disturbing and Handling Overburden under Adverse Weather".

Should you have any queries in relation to this matter, please do not hesitate to contact the undersigned on 0267434000 or 0488086827.

Yours sincerely,

**Tarrawonga Coal Pty Ltd** 

**Lachlan Johnson**Environmental Officer



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Mr Robert O'Hern Head – Regional Operations Unit – North West Environmental Protection Authority PO BOX 494 ARMIDALE, NSW 2350

Dear Mr O'Hern

# Tarrawonga Coal Letter Report on Disturbing and Handling Overburden under Adverse Weather

Tarrawonga Coal's (TC) Environment Protection Licence (EPL) 12365 includes the following Condition U2 Particulate Matter Control Best Practice Implementation – Disturbing and Handling Overburden under Adverse Weather Conditions:

- U2.1 The licensee must alter or cease the use of equipment on overburden and the loading and dumping of overburden during adverse weather conditions to minimise the generation of particulate matter from 22 March 2013.
- U2.2 To assess compliance with Condition U2.1, the Licensee must:
  - undertake daily visual dust level assessments, continuously record real-time PM<sub>10</sub> levels and continuously measure and record real-time meteorological conditions; and
  - record changes to mining activities due to adverse weather conditions.
- U2.3 The Licensee must submit a report to the EPA which documents the results of the actions taken in accordance with Condition U2.1. The report must include an assessment of the effectiveness of changes made to mining activities due to adverse weather and document meteorological conditions and the resultant dust levels. The report must be submitted by the Licensee to the Environment Protection Authority Regional Manager Armidale, at PO Box 494, ARMIDALE by 15 August 2014.
- U2.4 The report required by Condition U2.3 must be made publicly available by the Licensee on the Licensee's website by (two weeks from submission date in 2.3 above).

The following letter report has been prepared to satisfy the EPL 12365 Condition U2 by reporting the results completed by TC.

## 1 INTRODUCTION

TC engaged Pacific Environment Limited to prepare a report "Tarrawonga PRP – Identification of Adverse Weather Conditions for Overburden Handling" dated 10<sup>th</sup> February 2014 (**Appendix A**). The report identified the wind conditions that would generate excessive dust at the mine boundary from five mining locations representing;

- L1 Highest dumping area close to the southern boundary
- L2 Elevated dumping area close to the southern boundary
- L3 Elevated dumping area close to northern boundary
- L4 Highest dumping area close to western & northern boundaries
- L5 Elevated central dumping

Using this information for quantifying adverse weather, TC developed a trigger action response plan (TARP) for overburden handling during mining operations.

The various wind direction and wind speed triggers were integrated with the real time data as measured by onsite meteorological weather station (EPL ID#W1) for identification of adverse weather conditions.



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#### 2 RESULTS

From 1<sup>st</sup> January 2014 to 31<sup>st</sup> July 2014, TC documented daily visual dust level assessments, and if any changes to mining activities were undertaken in a spreadsheet titled "TC Daily Dust Inspections 2014" (**Appendix B**).

The below table summarises the information from **Appendix B** for the four (4) occasions that the adverse weather conditions were triggered and required action to manage overburden dust. The wind speed and direction listed in the table below is the peak at the 15 minutes intervals.

The PM<sub>10</sub> dust levels listed in the table below were calculated based on the 24 hour average PM<sub>10</sub> 1 hour prior to and 1 hour after the time of the alert.

Date	Time	Production Actions Taken to Adverse Weather Alert	Wind		Particulate Matter <10µm (PM <sub>10</sub> - µg/m³)	
			Direction	Speed m/s	PrePM <sub>10</sub>	PostPM <sub>10</sub>
4/2/14	19:30²	Dumping to 310 Levels. Wind speed not sustained above action level. 1	169	10.6	32.3	44.4
16/2/14	16:30	Sunday – Not operating	202	10	40.2	39.3
16/3/14	12:45	Sunday – Not operating	293	11	24.6	29.2
26/3/14	7:00	Rain affected. No operation except dozer push within pit	112	26.7	7.1	6.7

<sup>&</sup>lt;sup>1</sup> Pre "Tarrawonga PRP – Identification of Adverse Weather Conditions for Overburden Handling"

### 3 ASSESSMENT OF EFFECTIVENESS AND CONCLUSION

A review of the pre and post (resultant) dust levels to an adverse weather alert did not identify any air quality impacts prior to or after any actions were undertaken by TC as all measured  $PM_{10}$  24hr average levels were below the  $50\mu g/m^3$  daily average limit. The reasons that this occurred were:

- On 16<sup>th</sup> February and 16<sup>th</sup> March 2014; the adverse wind trigger was outside operating hours (Sunday); and
- On 26<sup>th</sup> March 2014; the adverse wind also coincided with rain.
- The adverse weather condition threshold was only exceeded on four occasions; of which only one occurred during normal production.

The dust modelling undertaken to develop the adverse weather TARP (**Appendix A**) indicates that on the occasion that operations were modified that negligible impact would have been apparent from modifying operations beyond in pit dumping.

Should you have any queries in relation to this matter, please do not hesitate to contact the undersigned on 0267636018 or 0488497701.

Yours sincerely,

**Tarrawonga Coal Pty Ltd** 

Lachlan Johnson

**Environmental Officer** 

<sup>&</sup>lt;sup>2</sup> Dust monitor located in proximity to unsealed road and influenced by traffic in particular at shift change; wind direction at time of adverse conditions tending had wind blowing from unsealed road towards Real Time PM<sub>10</sub> monitor and not from the direction of TC.



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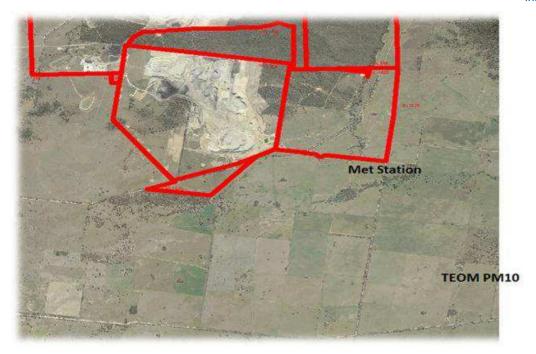


Figure 1 – Location of TC relative to the meteorological station and TEOM