

Jondaryan Rail Loading Facility Air Quality Monitoring Results



**NEW HOPE**  
GROUP

Issue Month: March 2014

New Acland Coal Pty Ltd (NAC) undertakes air quality monitoring as part of the environmental monitoring program for the Jondaryan Rail Loading Facility (JRLF). The following air quality data is provided to the Jondaryan community.

Table 1: Dust deposition and compositional monitoring results for the period: February 2014

Site	Dust Deposition (mg/m <sup>2</sup> /day)	DA Criteria (mg/m <sup>2</sup> /day) <sup>#</sup>	Compositional Analysis			Comments
			Major (>20%)	Minor (<20%>1%)	Trace (<1%)	
JD1	16.7	120	Mineral Material (90%)	Coal (5%), Vegetation (5%)	Insects (<1%)	Rail and Highway to the north. Grass, bare ground and rocks immediately surrounding, stubble paddock to east. Bare paddock to north-east. JRLF to east. Residential to north, and west. Road with unsealed edges immediately north.
JD2	40.0	120	Mineral Material (35%), Insects (30%), Vegetation (30%)	Coal (5%)	N/A	Rail and Highway to north. Grass immediately surrounding. Bare paddocks to north-west, north and south. Stubble paddock to south-east. JRLF to the east. Residential to south and west. Road with unsealed edges immediately east.
JD3	40.0	120	Mineral Material (80%),	Vegetation (10%), Insects (5%), Coal (5%)	N/A	Highway and rail to north. JRLF to the east. Residential surrounding. Grass and garden immediately surrounding. Recently tarred road east of gauge. Road with unsealed edges immediately east and south.
JD4	16.7	120	Mineral Material (80%)	Coal (10%), Insects (5%), Vegetation (5%)	N/A	Rail, Highway and Jondaryan town to south. JRLF to the east. Residential to west. Bare paddock immediately surrounding, stubble paddock to north, north-east.
JD5	10.0	120	Mineral Material (90%)	Insects (5%), Vegetation (5%)	Coal (<1%)	Rail and Highway immediately north. JRLF to the east. Grass immediately surrounding. Bare paddock to the west. Residential to east, south and west. Road with unsealed edges south-east.

<sup>^</sup> Copper sludge is a by product of the necessary preservative (copper sulphate) in sample containers as directed by the laboratory  
<sup>\*</sup> Polysaccharide slime is a by product of the bio-degradation of insects and vegetation

<sup>#</sup>When measured at a sensitive place, the allowable maximum level of the release of dust from the JRLF is 120 milligrams per square metre per day (120mg/m<sup>2</sup>/day) as stated in the JRLF's Development Approval (DA). The dust deposition monitors do not distinguish between dust sources. The predominant wind directions for February 2014 were from the east (52.07%), north-east (15.99%) and south-east (9.97%). The predominant wind speed for February was light to fresh winds.

Table 2: Quarterly PM<sub>10</sub> monitoring result for the period 29-30 January 2014

Location	24 Hour PM <sub>10</sub> Result (µg/m <sup>3</sup> )	Long-Term PM <sub>10</sub> Average (µg/m <sup>3</sup> )	NEPM Criteria for 24 Hour PM <sub>10</sub> exposure <sup>#</sup> (µg/m <sup>3</sup> )	Comments <sup>*</sup>
Corner of Lagoon and Earl Streets, Jondaryan	8	23	50	"This site was within the downwind area of the Jondaryan coal stockpile sampling period during the sampling period"

<sup>\*</sup>Taken from monitoring report, with respect to most recent result

<sup>#</sup>PM<sub>10</sub> monitoring is undertaken on a quarterly basis for a nominal 24 hour period.

The national 24-hour exposure standard for PM<sub>10</sub> particulates stated in the National Environment Protection Measure for Ambient Air Quality is 50 micrograms per cubic metre (50µg/m<sup>3</sup>). The PM<sub>10</sub> monitors do not distinguish between particulate matter sources.

February 2014 TEOM Results

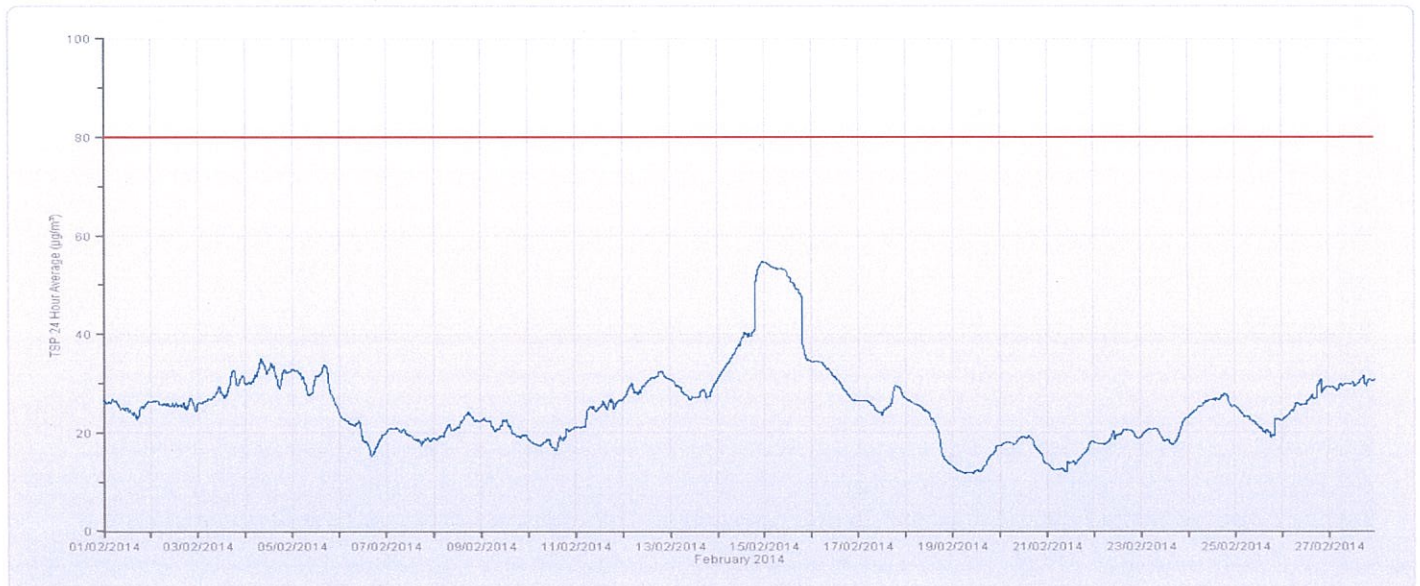


Figure 1: Jondaryan Township TSP continuous monitoring results for the period: February 2014

**Comments:** A TEOM located within the Jondaryan Township continuously measures Total Suspended Particulate (TSP) matter. When measured at a sensitive place, the maximum level of the release of TSP from the JRLF (24-hour average) is 80 micrograms per cubic metre (80µg/m<sup>3</sup>) as stated in the JRLF's DA. The TEOM's do not distinguish between particulate matter sources. The predominant wind directions for February 2014 were from the east (52.07%), north-east (15.99%) and south-east (9.97%). The predominant wind speed for February was light to fresh winds. The TEOM unit was operational for >99% of the sample period.

If there are any queries regarding the air quality monitoring undertaken for the Jondaryan Rail Loading Facility, please contact Rob Rashleigh at the New Acland Coal Mine during business hours on 4694 8888.

Issued by:

Rob Rashleigh  
CHPP Superintendent  
New Acland Coal Pty Ltd

*Rob Rashleigh*  
Date: 18/03/2014