

Jondaryan Rail Loading Facility Air Quality Monitoring Results

Issue Month: September 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: August 2014

Site	Dust Deposition (mg/m <sup>2</sup> /day)	EA Criteria (mg/m <sup>2</sup> /day) <sup>a</sup>	Compositional Analysis			Comments
			Major (>20%)	Minor (<20%>1%)	Trace (<1%)	
JD1	16.6	120	Mineral Material (100%)	N/A	Coal (<1%), Insects (<1%), Vegetation (<1%)	Rail and Highway to the north. JRLF to east. Grass and gravel immediately surrounding, gravel drive to west, south-east, cropped paddock to north-east, east. Residential to north and west. Road with unsealed edges immediately north, unsealed road to landfill to north-east.
JD2	40.0	120	Mineral Material (60%)	Coal (10%), Vegetation (10%), Insects (10%), Polysaccharide Slime (10%)	N/A	Rail and Highway to north. JRLF to the east. Grass immediately surrounding. Copped paddock to south-east. Roadwork on highway to north-east. Residential to south and west. Road with unsealed edges immediately east, unsealed road to landfill to south.
JD3	26.6	120	Mineral Material (70%), Insects (20%)	Coal (10%)	Vegetation (<1%)	Highway and Rail to north. JRLF to the east. Residential surrounding. Grass and garden immediately surrounding. Road with unsealed edges to south. Stubble paddock to south.
JD4	40.0	120	Mineral Material (80%)	Coal (10%), Vegetation (10%)	Insects (<1%)	Rail, Highway and Jondaryan town to south. JRLF to the east. Residential to west. Immediate surround grass, stubble paddocks to south-west, west, north-west and north, cropped paddock to north. Roads to north-east, east and south-east
JD5	36.6	120	Mineral Material (80%)	Coal (10%), Vegetation (10%)	Insects (<1%)	Rail and Highway immediately north. JRLF to the east. Grass immediately surrounding. Residential to east, south and west. Road with unsealed edges south-east, road to east.

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

<sup>c</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 Environmental Authority (EA). The dust deposition monitors do not distinguish between dust sources. The predominant wind directions for August 2014 were from the east (27.64%), south-east (21.26%), south (13.51%), west (9.99%) and south-west (8.68%). The predominant wind speed for August was calm to light winds.

Table 2: Quarterly PM<sub>10</sub> monitoring result for the period 3-4 September 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>a</sup> (µg/m <sup>3</sup> )	Comments <sup>a</sup>
Corner of Lagoon and Earl Streets, Jondaryan	8	22	50	<sup>a</sup> This site was not within the downwind area of coal stockpile. Although there were road construction activities near to the sampling site, these were all downwind during sampling.

<sup>a</sup> Taken from monitoring report, with respect to most recent result  
<sup>b</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.

August 2014 TEOM Results

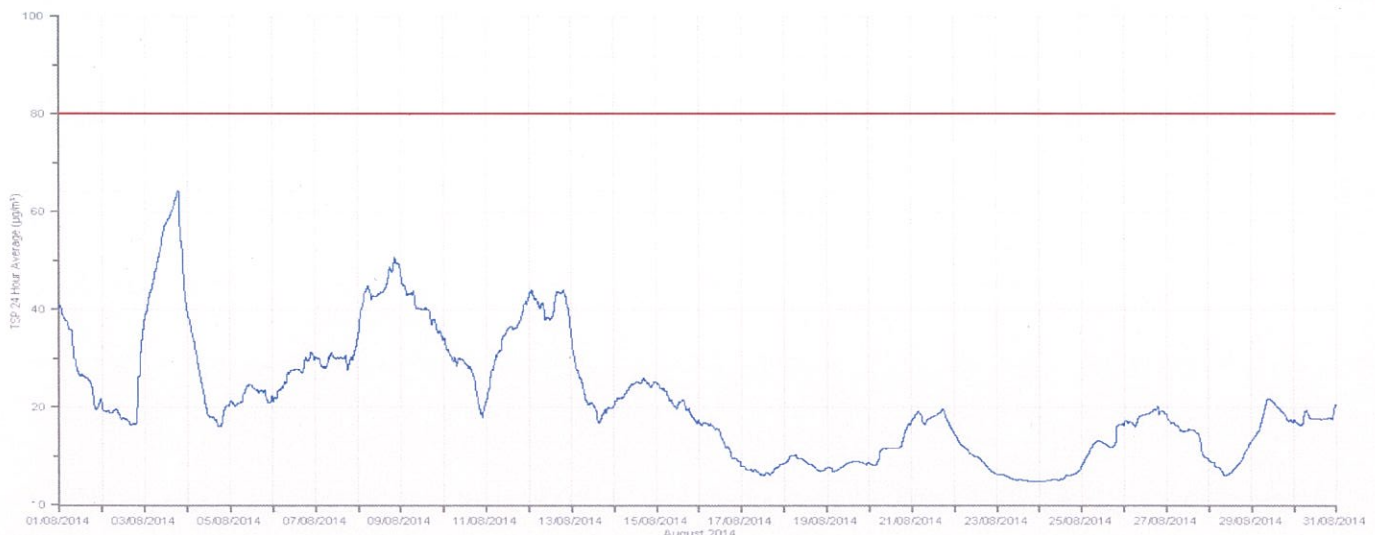


Figure 1: Jondaryan Township TSP continuous monitoring results for the period: August 2014

**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 EA. The TEOM's do not distinguish between particulate matter sources. The predominant wind directions for August 2014 were from the east (27.64%), south-east (21.26%), south (13.51%), west (9.99%) and south-west (8.68%). The predominant wind speed for August was calm to light 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:

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 CHPP Superintendent  
 New Acland Coal Pty Ltd

Date: 22/09/2014