

Jondaryan Rail Loading Facility Air Quality Monitoring Results

Issue Month: January 2015



NEW HOPE GROUP

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: December 2014

Site	Dust Deposition (mg/m ² /day)	EA Criteria (mg/m ² /day) ^a	Compositional Analysis ^b			Comments
			Major (>20%)	Minor (<20%>1%)	Trace (<1%)	
JD1	32.2	120	Insects (65%)	Coal (5%), Vegetation (5%), Mineral Material (20%), Polysaccharide Slime (5%)	N/A	Rail and Highway to the north. JRLF to east. Grass and gravel immediately surrounding, stubble paddocks to north-east, east and south-east. Residential to north and west. Road with unsealed edges immediately north, unsealed road to landfill to north-east.
JD2	22.6	120	Mineral Material (75%)	Coal (10%), Insects (10%), Vegetation (5%)	N/A	Rail and Highway to north. JRLF to the north-east. Grass immediately surrounding. Residential to south and west. Road with unsealed edges immediately east.
JD3	41.9	120	Mineral Material (85%)	Coal (5%), Insects (5%), Vegetation (5%)	N/A	Highway and Rail to north. JRLF to the east. Residential surrounding. Grass and garden immediately surrounding. Road immediately east, road with unsealed edges to south.
JD4	80.6	120	Mineral Material (80%)	Coal (5%), Insects (5%), Vegetation (5%)	N/A	Rail, Highway and Jondaryan town to south. JRLF to the east. Immediate surround bare ground and grass, bare paddocks to north, west and south-west. Roads to east and south
JD5	29.0	120	Mineral Material (80%)	Coal (5%), Insects (10%), Vegetation (5%)	N/A	Rail and Highway north. JRLF to the north-east. Grass immediately surrounding. Gravel edge road to south-east and south. Residential to east, south and west.

⁺ A semi-qualitative visual analysis of a representative portion of the collected sample which is as consistent as possible (however potentially biased) to that of the complete sample

[^] Copper sludge is a by product of the necessary preservative (copper sulphate) in sample containers as directed by the laboratory

^{*} Polysaccharide slime is a by product of the bio-degradation of insects and vegetation

[¶] 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/m²/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 December 2014 were from the east (30.20%), north-east (22.31%), north-west (14.50%), south-east (8.45%) and south (5.36%). The predominant wind speed for December was calm to light winds.

Table 2: Quarterly PM₁₀ monitoring result for the period 3-4 September 2014

Location	24 Hour PM ₁₀ Result (µg/m ³)	Long-Term PM ₁₀ Average (µg/m ³)	NEPM Criteria for 24 Hour PM ₁₀ exposure ^a (µg/m ³)	Comments [*]
Corner of Lagoon and Earl Streets, Jondaryan	8	22	50	[*] 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.

^{*} Taken from monitoring report, with respect to most recent result

^a PM₁₀ monitoring is undertaken on a quarterly basis for a nominal 24 hour period.

The national 24-hour exposure standard for PM₁₀ particulates stated in the National Environment Protection Measure for Ambient Air Quality is 50 micrograms per cubic metre (**50µg/m³**). The PM₁₀ monitors do not distinguish between *particulate matter sources*.

December 2014 TEOM Results

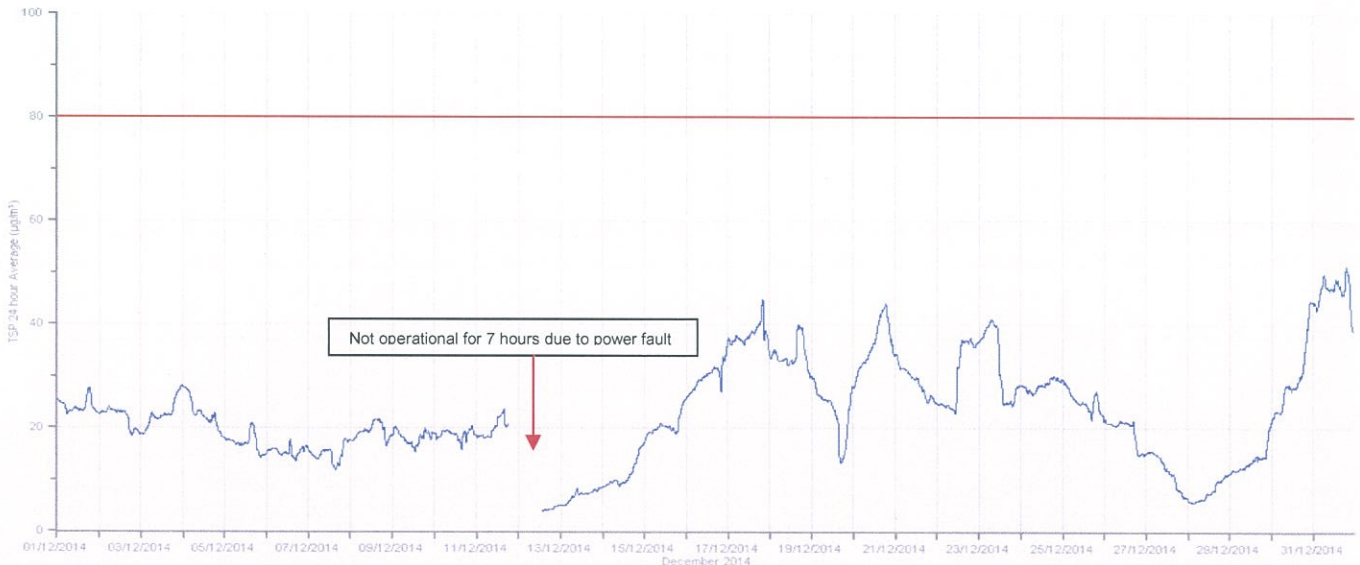


Figure 01: Jondaryan Township TSP continuous monitoring results for the period: December 2014

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/m³) as stated in the JRLF's EA. The TEOM's do not distinguish between particulate matter sources. The predominant wind directions for December 2014 were from the east (30.20%), north-east (22.31%), north-west (14.50%), south-east (8.45%) and south (5.36%). The predominant wind speed for December was calm to light winds. The TEOM unit was operational for >98% 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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