

Jondaryan Rail Loading Facility Air Quality Monitoring Results

Issue Month: July 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: June 2014

Site	Dust Deposition (mg/m ² /day)	EA Criteria (mg/m ² /day) ^a	Compositional Analysis			Comments
			Major (>20%)	Minor (<20%>1%)	Trace (<1%)	
JD1	13.3	120	Mineral Material (70%)	Coal (10%), Insects (10%), Vegetation (10%)	N/A	Rail and Highway to the north. JRLF to east. Weeds, bare ground and rocks immediately surrounding, bare paddock to east. Residential to north and west. Road with unsealed edges immediately north, unsealed road to landfill to north-east.
JD2	20.0	120	Mineral Material (65%)	Coal (15%), Insects (10%), Vegetation (5%), Polysaccharide Slime (5%)	N/A	Rail and Highway to north. JRLF to east. Grass immediately surrounding. Stubble paddock to east, bare paddock to south and cropped paddocks to north. Residential to south and west. Road with unsealed edges immediately east, unsealed road to landfill to south.
JD3	16.7	120	Mineral Material (55%), Coal (20%), Vegetation (20%)	Polysaccharide Slime (5%)	Insects (<1%)	Highway and Rail to north. JRLF to the east. Residential surrounding. Grass and garden immediately surrounding. Road with unsealed edges to south.
JD4	13.3	120	Mineral Material (70%), Vegetation (20%)	Coal (10%)	Insects (<1%)	Rail, Highway and Jondaryan town to south. JRLF to the east. Residential to west. Grass immediately surrounding and cropped paddock immediately north-east, stubble paddock to south-east, cropped paddock to east.
JD5	10.0	120	Mineral Material (60%), Insects (20%)	Coal (10%), Vegetation (10%)	N/A	Rail and Highway immediately north. JRLF to the east. Grass immediately surrounding. Stubble paddock to north-west. Residential to east, south and west. Road with unsealed edges south-east.

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

^c 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 June 2014 were from the south-east (14.99%), south (14.98%), south-west (13.12%), east (12.01%) and west (11.84%). The predominant wind speed for June was calm to light winds.

Table 2: Quarterly PM₁₀ monitoring result for the period 13-14 May 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	21	23	50	"This site was within the downwind area of the Jondaryan coal stockpile for 68% of the sampling period"

*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*.

June 2014 TEOM Results



Figure 1: Jondaryan Township TSP continuous monitoring results for the period: June 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 June 2014 were from the south-east (14.99%), south (14.98%), south-west (13.12%), east (12.01%) and west (11.84%). The predominant wind speed for June was calm to light winds. The TEOM unit was operational for >97% 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

Date: 15/07/2014