

Jondaryan Rail Loading Facility Air Quality Monitoring Results

Issue Month: September 2014



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: July 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 (90%)	Coal (10%)	Insects (<1%), Vegetation (<1%)	Rail and Highway to the north. JRLF to east. Weeds, bare ground and rocks immediately surrounding, cropped paddock to east. Residential to north and west. Road with unsealed edges immediately north, unsealed road to landfill to north-east.
JD2	36.7	120	Mineral Material (40%), Coal (40%), Vegetation (20%)	N/A	Insects (<1%)	Rail and Highway to north. JRLF to the east. Stubble grass immediately surrounding. Turn out loop for highway work and parking area with bare ground 50 m east. Residential to south and west. Road with unsealed edges immediately east, unsealed road to landfill to south.
JD3	16.7	120	Mineral Material (70%), Coal (30%)	N/A	Insects (<1%), Vegetation (<1%)	Highway and Rail to north. JRLF to the east. Residential surrounding. Grass and garden immediately surrounding. Road with unsealed edges to south.
JD4	26.7	120	Mineral Material (50%), Coal (40%)	Vegetation (10%)	Insects (<1%)	Rail, Highway and Jondaryan town to south. JRLF to the east. Residential to west. Immediate surround stubble paddock to east and cropped paddock to north. Roadwork's on highway with exposed ground to south-east
JD5	10.0	120	Mineral Material (70%), Vegetation (20%)	Coal (10%)	Insects (<1%)	Rail and Highway immediately north. JRLF to the east. Grass immediately surrounding. Bare paddock to north. 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 July 2014 were from the south-west (18.86%), south (15.26%), west (13.09%), east (12.01%), south-east (10.78%) and north-west (9.24%). The predominant wind speed for July was calm to light winds.

Table 2: Quarterly PM₁₀ monitoring result for the period 13-14 May 2014

Location	24 Hour PM10 Result (µg/m ³)	Long-Term PM10 Average (µg/m ³)	NEPM Criteria for 24 Hour PM10 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
^aPM₁₀ 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*.

July 2014 TEOM Results



Figure 1: Jondaryan Township TSP continuous monitoring results for the period: July 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 July 2014 were from the south-west (18.86%), south (15.26%), west (13.09%), east (12.01%), south-east (10.78%) and north-west (9.24%). The predominant wind speed for July 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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 New Acland Coal Pty Ltd

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