

Jondaryan Rail Loading Facility Air Quality Monitoring Results

Issue Month: January 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: December 2013

Site	Dust Deposition (mg/m ² /day)	DA Criteria (mg/m ² /day) [#]	Compositional Analysis			Comments
			Major (>20%)	Minor (<20%>1%)	Trace (<1%)	
JD1	26.7	120	Polysaccharide Slime (30%), Mineral Material (30%)	Insects (20%), Vegetation (10%), Coal (10%)	N/A	Rail and Highway to the north. Grass and rocks immediately surrounding, stubble paddock to east. JRLF to east. Residential to north, and west. Road with unsealed edges immediately north.
JD2	43.3	120	Mineral Material (35%)	Vegetation (20%), Insects (15%), Coal (15%), Polysaccharide Slime (10%), Copper Sludge (5%)	N/A	Rail and Highway to north. Grass immediately surrounding. JRLF to the east. Residential to south and west. Road with unsealed edges immediately east.
JD3	30.0	120	Mineral Material (50%)	Insects (20%), Coal (10%), Vegetation (10%), Polysaccharide Slime (10%)	N/A	Highway and rail to north. JRLF to the east. Residential surrounding. Road with unsealed edges immediately east and south. Grass and garden immediately surrounding. Stubble paddock to south.
JD4	150	120	Polysaccharide Slime (50%)	Insects (20%), Vegetation (15%), Coal (10%), Mineral Material (5%)	N/A	Residential to west. Rail, Highway and Jondaryan town to south. JRLF to the east. Stubble and bare dirt immediately surrounding, stubble paddock to south.
JD5	33.3	120	Copper Sludge (70%)	Mineral Material (10%), 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 southeast.

[#]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 Development Approval (DA). The dust deposition monitors do not distinguish between dust sources. The predominant wind directions for December 2013 were from the east (34.62%), north-east (26.68%), north-west (10.69%), and south-west (5.86%). The predominant wind speed for December was light winds.

Table 2: Quarterly PM₁₀ monitoring result for the period 22-23 October 2013

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* (µg/m ³)	Comments*
Corner of Lagoon and Earl Streets, Jondaryan	17	24	50	"This site was not within the downwind area of the Jondaryan coal stockpile sampling period during the sampling period"

*Taken from monitoring report, with respect to most recent result
^{*}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 2013 TEOM Results

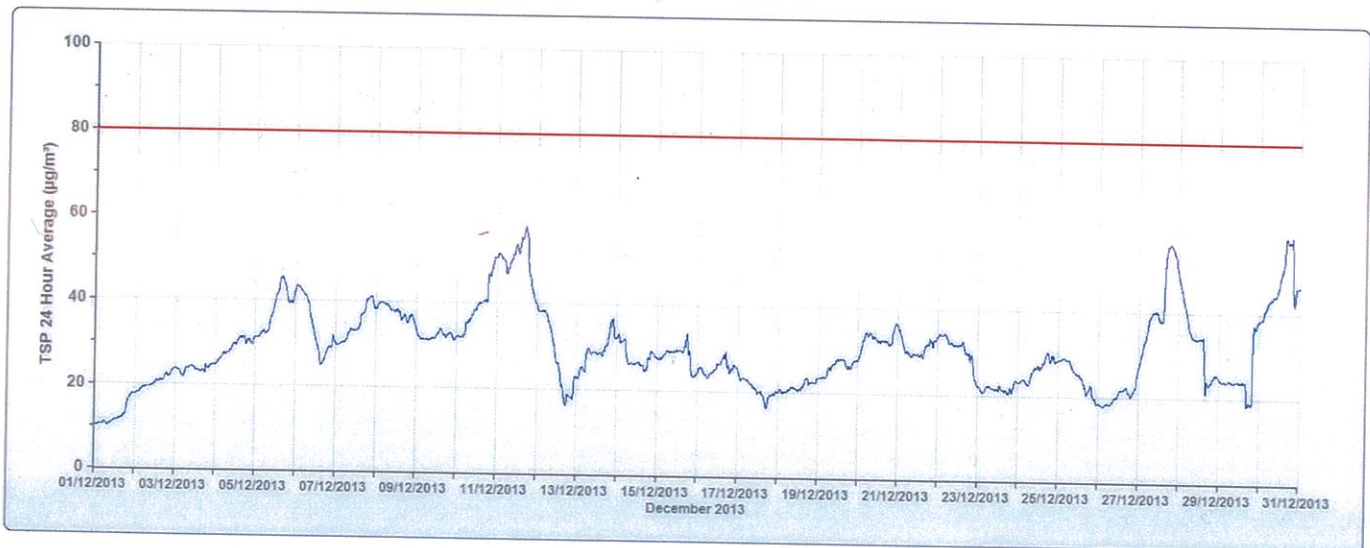


Figure 1: Jondaryan Township TSP continuous monitoring results for the period: December 2013

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 DA. The TEOM's do not distinguish between particulate matter sources. The predominant wind directions for December 2013 were from the east (34.62%), north-east (26.68%), north-west (10.69%), and south-west (5.86%). The predominant wind speed for December was 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:

Rob Rashleigh
 CHPP Superintendent
 New Acland Coal Pty Ltd

Date: 22/01/2014