

Jondaryan Rail Loading Facility Air Quality Monitoring Results

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 January 2020

Site	Dust Deposition (mg/m ² /day)	EA Criteria (mg/m ² /day)	Compositional Analysis ¹			Comments
			Major (>20%)	Minor (5% - 20%)	Trace (<5%)	
JD1	50	120	Mineral Material (50%), Vegetation (35%)	Coal (10%), Copper Sludge (5%)	Insects (<5%)	JRLF to north-east. Dirt & gravel immediately surrounding. Gravel driveways to west, north-west, north & north-east. Road to south-west, west & north-west. Gravel edge road to north-west, north & north-east. Highway & rail to north-west, north & north-east. Bare paddock to north-east, east & south-east. Gravel road to north, north-east, east & south-east.
JD2	60	120	Mineral Material (50%)	Vegetation (20%), Copper Sludge (20%), Coal (10%)	Insects (<5%)	JRLF to north-east. Grass immediately surrounding. Highway & rail to north-west, north & north-east. Gravel edge road to north-east, east, south-east & south. Gravel road to south-east, south & south-west. Bare paddock to north, south-east & south. Road to south-west & west.
JD3	86	120	Mineral Material (50%), Insects (25%)	Polysaccharide Slime (10%), Copper Sludge (10%), Coal (5%)	Vegetation (<5%)	JRLF to north-east. Grass, dirt & garden immediately surrounding. Highway & rail to north-west, north & north-east. Gravel driveways to north, north-east, east, south-east & south. Road to north, north-east, east, south-east, south & south-west. Gravel edge road to south-east. Bare paddock to north.
JD4	133*	120	Vegetation (60%), Insects (30%)	Mineral Material (10%)	Coal (<5%)	JRLF to east. Grass immediately surrounding. Bare paddock to north & north-east. Road to north-east, east, south-east, south & south-west. Highway & rail to south-east, south & south-west.
JD5	40	120	Mineral Material (75%)	Coal (10%), Vegetation (10%), Copper Sludge (5%)	Insects (<5%)	JRLF to north-east. Grass immediately surrounding. Highway & rail to north-west, north & north-east. Road to north-east, east, south-east & south.

¹ 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. When measured at a sensitive place, the allowable maximum level of the release of dust from JRLF is 120 milligrams per square metre per day (120 mg/m²/day as stated in JRLF's Environmental Authority (EA). The dust deposition monitors do not distinguish between dust sources. *Elevated Dust Deposition results were recorded at JD4 (133mg/m²/day). A dust deposition gauge located between the JRLF & JD4 recorded a result of 50mg/m²/day. This combined with compositional analysis that determined coal made up <5% of the sample indicates that the JRLF was not the major contributor to the elevated result. The predominant wind directions for January 2020 were North East (43.4%), East (30.5%) and North West (9.4%). The predominant wind speeds were light air to gentle breeze.²

²Wind speed classification uses the Beaufort scale

Table 2: Quarterly PM₁₀ monitoring result for 22-23 October 2019

Location	24 Hour PM ₁₀ Result (µg/m ³) ¹	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	15	22	50	The site was downwind of stockpile operations for approximately 32% of the monitoring period

¹Taken from monitoring report, with respect to most recent result

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

TSP 24 Hour Average January 2020

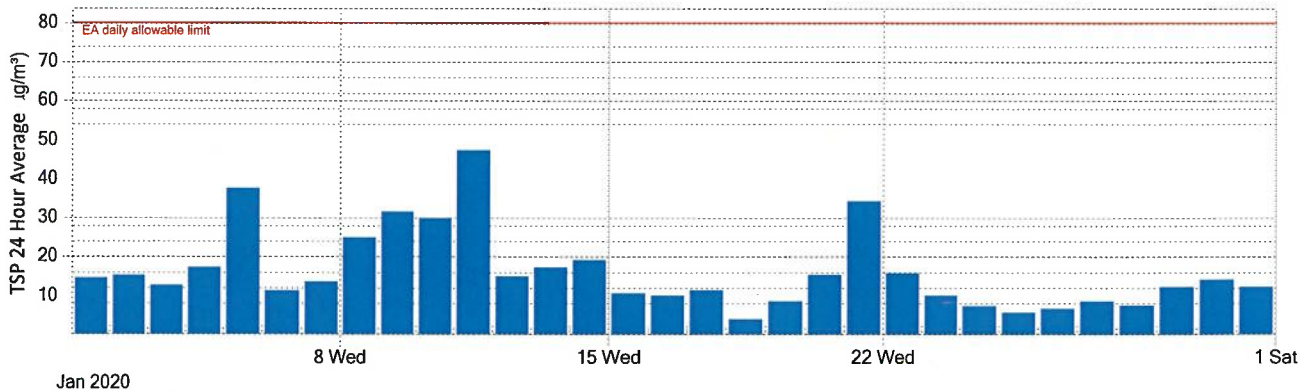



Figure 1: Jondaryan Township TSP continuous monitoring 24 Hr average results for January 2020

Comments: Ecotech Pty Ltd has been contracted by NAC for the maintenance and data collection at a TEOM site located in the Jondaryan Township which 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 rolling average) is 80 micrograms per cubic metre (80 µg/m³) as stated in the JRLF's EA. Any exceedances of this limit are displayed in Figure 1 above. The TEOM does not distinguish between particulate matter sources. The predominant wind directions for January 2020 were North East (43.4%), East (30.5%) and North West (9.4%). The predominant wind speeds were light air to gentle breeze². The TEOM unit availability for TSP determination was 98.9% of the sample period.

If there are any queries regarding the air quality monitoring undertaken for the Jondaryan Rail Loading Facility please contact Andrew Scouller at the New Acland Coal Mine during business hours on 4694 8888.

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