

## Jondaryan Rail Loading Facility Air Quality Monitoring Results

Issue Month: June 2022

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 May 2022**

Site	Dust Deposition (mg/m <sup>2</sup> /day)	EA Criteria (mg/m <sup>2</sup> /day)	Compositional Analysis <sup>1</sup>			Comments
			Major (>20%)	Minor (5% - 20%)	Trace (<5%)	
JD1	10	120	Mineral Material (70%)	Insects (20%) Vegetation (10%)	Coal (<5%)	JRLF to 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 & southeast. Gravel road to east & south-east.
JD2*	150	120	Insects (40%) Vegetation (30%) Polysaccharide Slime (25%)	Mineral Material (5%)	Coal (<5%)	JRLF to east-south-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 southeast, south & south-west.
JD3	13	120	Insects (70%) Mineral Material (30%)	-	Coal (<5%) Vegetation (<5%)	JRLF to east-south-east. Grass & 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. Gravel edge road to south-east, south & south-west.
JD4	23	120	Insects (80%)	Mineral Material (20%)	Coal (<5%) Vegetation (<5%)	JRLF to south-east. Grass immediately surrounding. Cropped paddock to north. Local roads in all directions. Highway & rail to south-east, south & south-west.
JD5	50	120	Polysaccharide Slime (60%)	Insects (20%) Mineral Material (10%) Coal (5%) Vegetation (5%)	-	JRLF to east-south-east. Grass immediately surrounding. Highway & rail to north-west, north, north-east, east & south-east. Road to north-west, north, north-east, east & south-east. Bare ground to the north.

<sup>1</sup> 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/m<sup>2</sup>/day as stated in JRLF's Environmental Authority (EA)). The predominant wind directions for May 2022 were South East (31.7%), East (30.5%) and South West (9.1%). The predominant wind speeds were light air to gentle breeze<sup>2</sup>. \*An elevated result was recorded at JD2 of 150 mg/m<sup>2</sup>/day. Compositional results show that coal made up less than 5% of the sample and the major components were insects (40%), vegetation (30%) and polysaccharide slime (25%). Polysaccharide slime is decaying organics, mainly vegetation or insects, that is indistinguishable. Vegetation is any plant matter that is windblown and deposited in the gauge. Localised dust sources, wind direction and additional dust deposition gauge results indicate on investigation that the JRLF was not the major contributor to the elevated results.

<sup>2</sup>Wind speed classification uses the Beaufort scale

### TSP 24 Hour Average May 2022

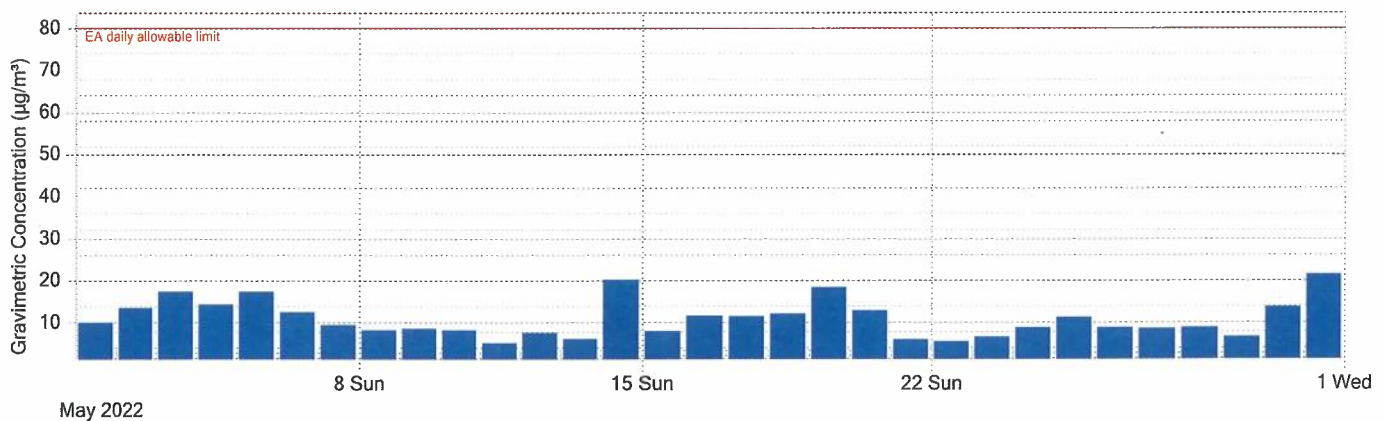


Figure 1: Jondaryan Township TSP continuous monitoring 24 Hr average results for January 2022

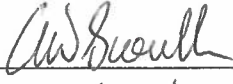
**Comments:** Ecotech Pty Ltd has been contracted by NAC for the maintenance and data collection at a TEOM site located in the Jondaryan Township which continuously measures Total Suspended Particulate (TSP) matter. When measured at a sensitive place, the maximum level of the release of TSP from the JRLF (24 hour rolling average) is 80 micrograms per cubic metre (80 µg/m<sup>3</sup>) 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 May 2022 were South East (31.7%), East (30.5%) and South West (9.1%). The predominant wind speeds were light air to gentle breeze. Unit availability for TSP determination was 100% 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 (07) 4694 8834.

Issued by:

Andrew Scouller

CHPP Manager

New Acland Coal Pty Ltd

  
Date: 30/06/22