Jondaryan Rail Loading Facility Air Quality Monitoring Results
Issue Month: March 2021

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 2021

Site	Dust Deposition (mg/m²/day)	EA Criteria (mg/m²/day)	Compositional Analysis[1]			Comments
			Major (>20%)	Minor (5% - 20%)	Trace (<5%)	
JD1	13	120	Mineral Material (75%)	Insects (20%) Coal (5%)	Vegetation (<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	37	120	Polysaccharide Slime (50%) Mineral Material (35%)	Insects (10%) Coal (5%)	Vegetation (<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	23	120	Mineral Material (75%)	Coal (15%) Insects (10%)	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	146*	120	Polysaccharide Slime (55%)	Insects (20%) Mineral Material (10%) Vegetation (10%) Coal (5%)	-	JRLF to south-east. Grass immediately surrounding. Cropped paddock to north. Local roads in all directions. Highway & rail to south-east, south & southwest.
JD5	37	120	Mineral Material (85%)	Insects (10%) Vegetation (5%)	Coal (<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.

[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. The predominant wind directions for January 2021 were East (54.6%), North East (22.7%) and South East (9.3%). The predominant wind speeds were light air to gentle breeze[2]. *An elevated result was recorded at JD4 of 146 mg/m²/day. Compositional results show that coal made up 5% of the sample and the major components were polysaccharide slime (55%), insects (20%), mineral material (10%) and vegetation (10%). 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. Wind from the south-east was evident for a small portion of the sample period at 9.3%. The wind direction combined with the additional dust deposition gauge results indicates that the JRLF was not the major contributor to the elevated result.

[2]Wind speed classification uses the Beaufort scale

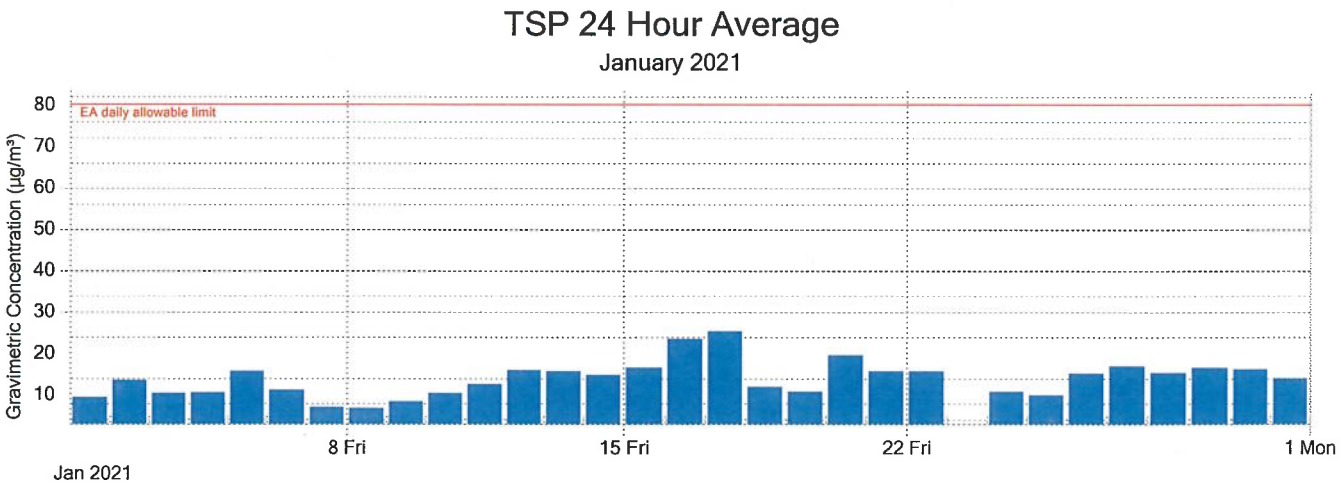

Figure 1: Jondaryan Township TSP continuous monitoring 24 Hr average results for January 2021

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 JLRF'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 2021 were East (54.6%), North East (22.7%) and South East (9.3%). The predominant wind speeds were light air to gentle breeze[2]. Unit availability for TSP determination was 99.2% 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 46948888.

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