

**Iluka Resources Limited- Balranald Mineral Sands Mine
Monthly Particulate Monitoring (PM2.5 and PM10)**



The below air quality monitoring results have been obtained in accordance with the Balranald Mineral Sands Mine Air Quality Management Plan and assessed against the air quality criteria outlined in Table 4 of the NSW Development Consent SSD-5285.

Table 4- Short term impact assessment criterion for particulate matter		
Pollutant	Averaging period	Criterion
Particulate matter < 10µm (PM10)	24 Hour	50 µg/m ³
Particulate matter < 2.5µm (PM2.5)	24 Hour	25 µg/m ³

Due to prevailing hot and dry weather conditions with long frequent periods of high winds, there are a high number of exceedances (8) in particulate levels recorded on the monitoring station. However, no contribution from site activities was observed on either days where the criteria was exceeded.

Ongoing bushfire at Grampians (South-West to the site, that was fully contained on 03/01/2025) might have influenced elevation in PM10 at the monitoring station during high winds from the South-West direction on 01/01/2025.

Please see the comment section of the individual days for detailed information in the table below.

Continuous Particulate Monitor (CPM1) NSW Environment Protection Licence 20795 Point #13				
Date Time	PM2.5	PM10	Compliant (Yes/No)	Comments
	µg/m³	µg/m³		
24:00 01/01/2025	20.34	131.59	No	Period of exceedance - 00:25h to 02:00h 01/01/2025; 14:00h 01/12/2024 to 02:45h 02/01/2025. Average wind speed – 20.88 km/hr (up to 29.12 km/h) Wind direction - from SW/S No site activities were being undertaken that might have contributed to the event. Considering high winds from the SW direction, ongoing bushfire in Grampians might have impacted the PM10 dust levels at the monitor.
24:00 02/01/2025	7.48	28.73	Yes	
24:00 03/01/2025	6.23	21.22	Yes	
24:00 04/01/2025	6.91	21.02	Yes	
24:00 05/01/2025	4.7	26.88	Yes	
24:00 06/01/2025	7.65	33.56	Yes	
24:00 07/01/2025	3.17	12.79	Yes	
24:00 08/01/2025	4.88	13.77	Yes	
24:00 09/01/2025	17.05	100.82	No	Period of exceedance - 18:05h 09/01/2025 to 00:55h 10/01/2025. Average wind speed – 14.62 km/hr (up to 27.72 km/h)

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Continuous Particulate Monitor (CPM1) NSW Environment Protection Licence 20795 Point #13				
Date Time	PM2.5	PM10	Compliant (Yes/No)	Comments
				Wind direction - from SW/S/SE/E Considering wind predominantly blowing from the SW directions, towards the site, any impact on dust levels cannot be attributed to the site activities.
24:00 10/01/2025	5.33	21.97	Yes	
24:00 11/01/2025	5.31	19.83	Yes	
24:00 12/01/2025	5.82	19.63	Yes	
24:00 13/01/2025	6.17	13.94	Yes	
24:00 14/01/2025	6.34	21.68	Yes	
24:00 15/01/2025	65.45	477.23	No	Period of exceedance - 03:20h to 07:20h 15/01/2025; 11:45h 15/01/2025 to 05:50h 16/01/2025. Average wind speed – 24.80 km/hr (up to 37.40 km/h) Wind direction – predominantly from SW Considering wind blowing from the SW directions, towards the site, any impact on dust levels cannot be attributed to the site activities.
24:00 16/01/2025	50.9	378.97	No	Period of exceedance - 09:25h 16/01/2025 to 01:50h 17/01/2025. Average wind speed – 22.71 km/hr (up to 34.63 km/h) Wind direction – Fluctuated between from SW and S Considering wind blowing from the SW/S directions, towards the site, any impact on dust levels cannot be attributed to the site activities.
24:00 17/01/2025	5.36	30.7	Yes	
24:00 18/01/2025	4.8	23.85	Yes	
24:00 19/01/2025	3.23	12.72	Yes	
24:00 20/01/2025	3.92	15.72	Yes	
24:00 21/01/2025	7.42	37.83	Yes	
24:00 22/01/2025	16.89	113.34	No	Period of exceedance - 02:00h to 07:15h 22/01/2025; 08:20h to 23:25h 22/01/2025. Average wind speed – 20.98 km/hr (up to 29.62 km/h) Wind direction –from SW/S Considering wind blowing from the SW/S directions, towards the site, any

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Date Time	PM2.5	PM10	Compliant (Yes/No)	Comments
				impact on dust levels cannot be attributed to the site activities.
24:00 23/01/2025	17.96	112.09	No	<p>Period of exceedance - 15:45h to 23:15h 23/01/2025.</p> <p>Average wind speed – 19.29 km/hr (up to 30.42 km/h) Wind direction – predominantly from SW</p> <p>Considering wind blowing from the SW directions, towards the site, any impact on dust levels cannot be attributed to the site activities.</p>
24:00 24/01/2025	6.93	31.93	Yes	
24:00 25/01/2025	4.66	16.3	Yes	
24:00 26/01/2025	4.64	14.04	Yes	
24:00 27/01/2025	6.49	25.07	Yes	
24:00 28/01/2025	39.24	202.75	No	<p>Period of exceedance - 22:30h 27/01/2025 to 21:35h 28/01/2025.</p> <p>Average wind speed – 21.74 km/hr (up to 34.52 km/h) Wind direction – predominantly from SW</p> <p>Considering wind blowing from the SW directions, towards the site, any impact on dust levels cannot be attributed to the site activities.</p>
24:00 29/01/2025	9.89	45.22	Yes	
24:00 30/01/2025	10.19	68.47	No	<p>Period of exceedance - 13:35h to 20:50h 30/01/2025 (no data is available between 09:00h and 13:30h 30/01/2025 due to planned power outage).</p> <p>Average wind speed – 20.66 km/hr (up to 28.18 km/h) Wind direction – from SW/S</p> <p>Considering wind blowing from the SW/S directions, towards the site, any impact on dust levels cannot be attributed to the site activities.</p>
24:00 31/01/2025	6.38	21.11	Yes	