

# Ground Level Particulate Notification Report - 07 January, 2020

Adelaide Brighton Cement, Birkenhead Works  
62 Elder Road, Birkenhead, SA 501  
EPA Licence No: 1126

## Summary

The 24-hour average particulate matter monitoring data collected at the Community Park and Gunn Street monitoring sites during 07 January, 2020 is shown in [Table 1](#) below. The data indicates that:

- The 24-hour average PM<sub>10</sub> concentration measured at Community Park of 50.2 µg/m<sup>3</sup> exceeded the EPP Air criterion of 50 µg/m<sup>3</sup>
- The 24-hour average PM<sub>2.5</sub> concentration measured at Community Park of 48.9 µg/m<sup>3</sup> exceeded the EPP Air criterion of 25 µg/m<sup>3</sup>
- The 24-hour average PM<sub>2.5</sub> concentration measured at Gunn Street of 45.1 µg/m<sup>3</sup> exceeded the EPP Air criterion of 25 µg/m<sup>3</sup>

**Table 1: Monitoring Summary**

Monitoring Location	Pollutant	24-hour average (µg/m <sup>3</sup> )	EPP Air Criterion (µg/m <sup>3</sup> )
Community Park	PM <sub>10</sub>	50.2	50
	PM <sub>2.5</sub>	48.9	25
Gunn Street	PM <sub>10</sub>	45.7	50
	PM <sub>2.5</sub>	45.1	25

The 24-h PM<sub>10</sub> exceedance on Community Park monitor and 24-h PM<sub>2.5</sub> exceedances on Gunn Street and Community Park monitors were due to a regional increase in smoke and particulate from bush fires on Kangaroo Island brought to the metropolitan areas of Adelaide by South Westerly winds.

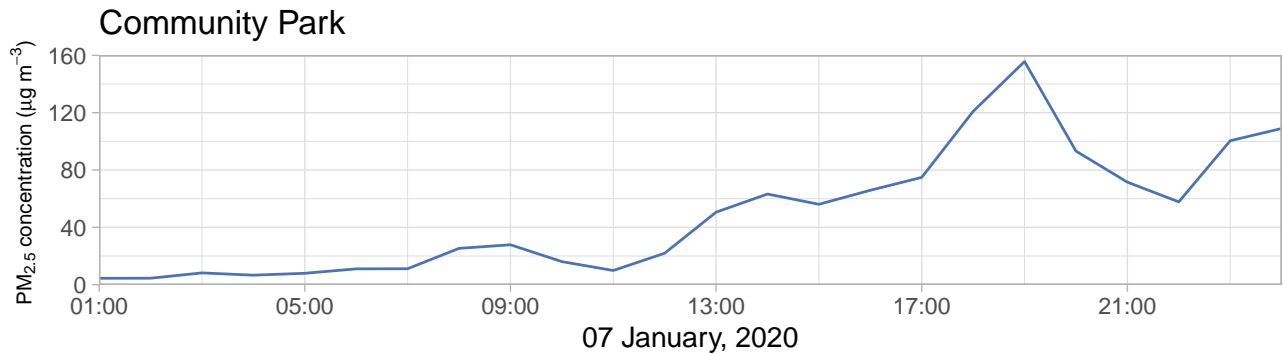
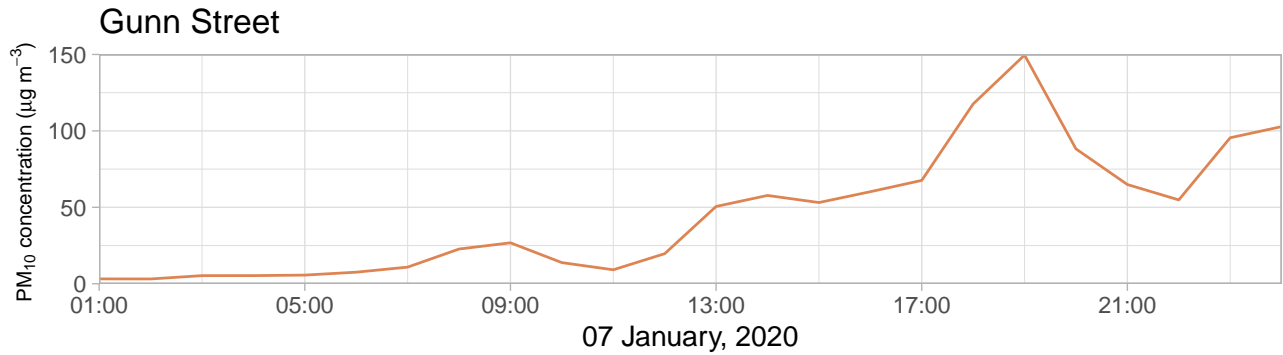
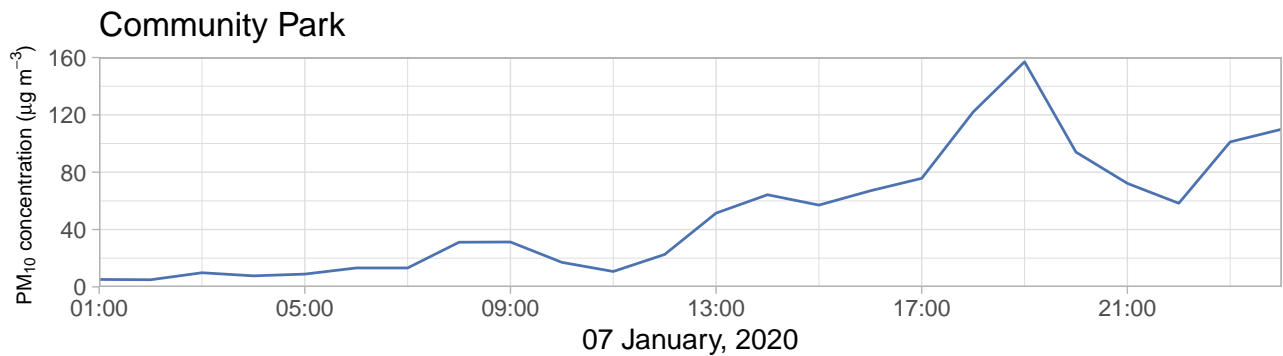
## Community Monitoring

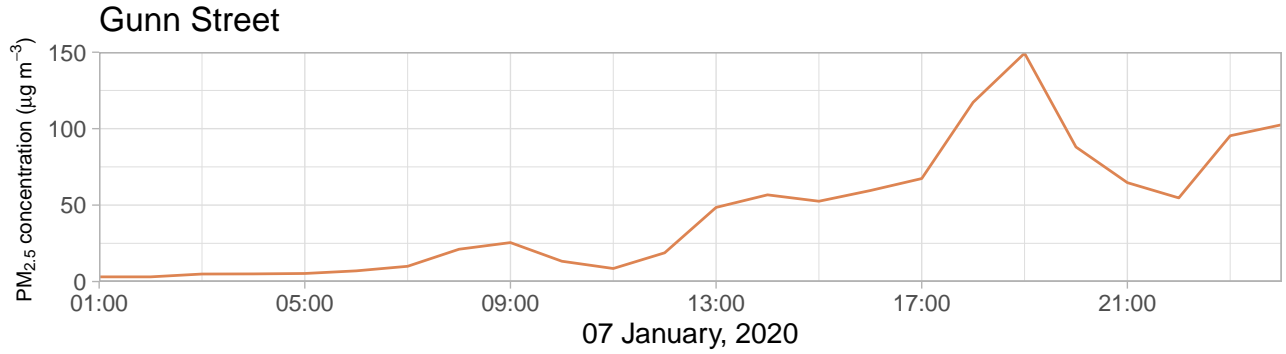
Monitoring data collected at the community monitoring sites is presented in this section.

The table below shows the proportion of PM<sub>10</sub> and PM<sub>2.5</sub> measured at each monitor, according to the average wind direction at the time of monitoring.

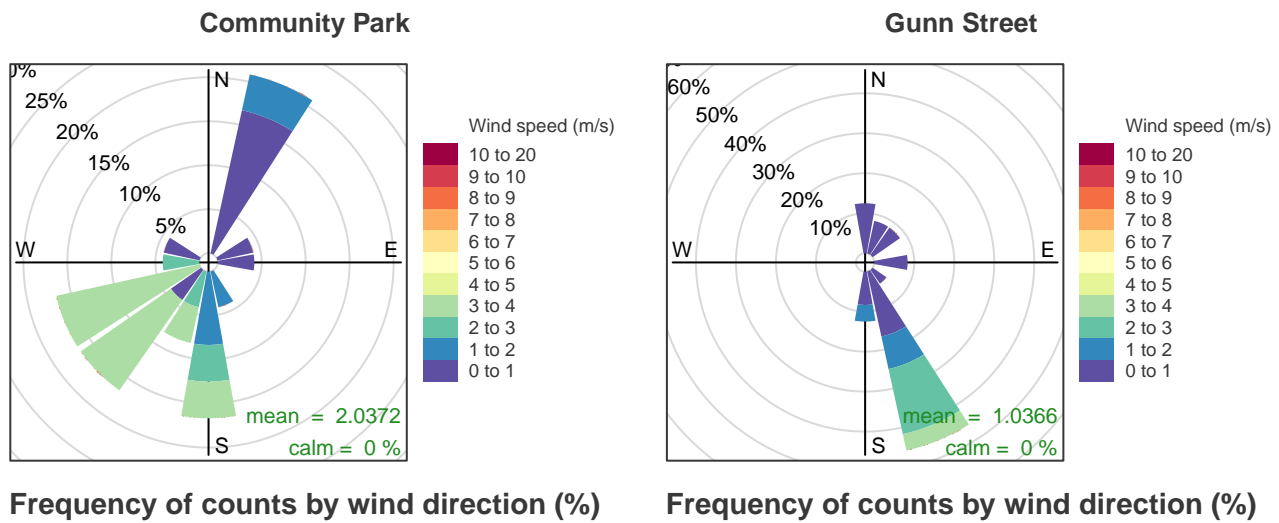
Monitoring Location	Direction	PM <sub>10</sub> proportion (%)	PM <sub>2.5</sub> proportion (%)
Community Park	From direction of ABC (WD < 180)	30	29
Community Park	From other direction (WD > 180)	70	71
Gunn Street	From direction of ABC (WD < 180)	99	99
Gunn Street	From other direction (WD > 180)	1	1

The figures below show the time series of 1-hour average measurements throughout 07 January, 2020

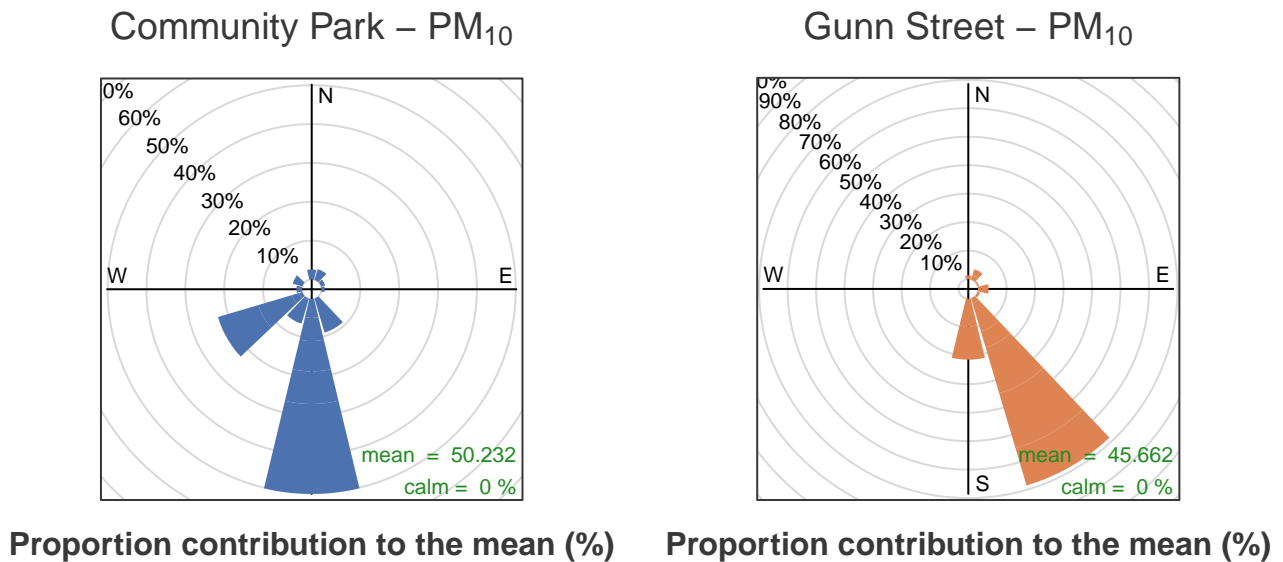




The figures below show wind roses summarising the period 07 January, 2020.



The figures below show dust roses summarising the period 07 January, 2020



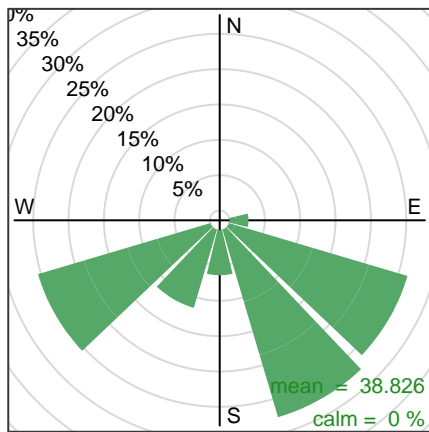
### EPA Monitoring

The 24-hour average PM<sub>10</sub> and PM<sub>2.5</sub> concentrations measured at the EPA monitoring sites are shown in the table below. Note that the data has not been validated.

Site	Region	PM <sub>10</sub> (µg/m <sup>3</sup> )	PM <sub>2.5</sub> (µg/m <sup>3</sup> )
CBD	Adelaide CBD	35	19
Christies	Southern Adelaide	41	-
Elizabeth	Northern Adelaide	42	22
Kensington	Eastern Adelaide	33	-
Le Fevre 1	Northwestern Adelaide	38	19
Le Fevre 2	Northwestern Adelaide	39	19
Netley	Western Adelaide	48	20
Port Augusta	Mobile Station	22	10
Port Pirie Oliver St	Spencer Gulf	35	-
Whyalla Schulz Res	Spencer Gulf	24	-
Whyalla Walls St	Spencer Gulf	27	-

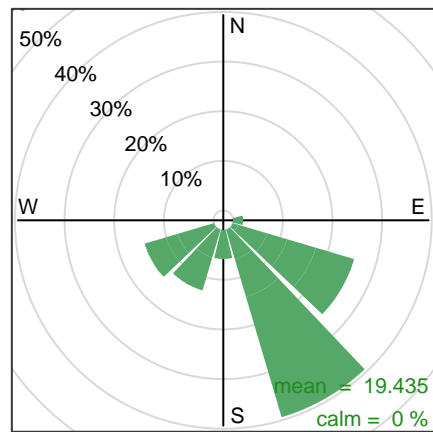
The dust roses below show the distribution of PM<sub>10</sub> and PM<sub>2.5</sub> measured at Le Fevre 1 for the period 07 January, 2020 .

Le Fevre 1 – PM<sub>10</sub>



Proportion contribution to the mean (%)

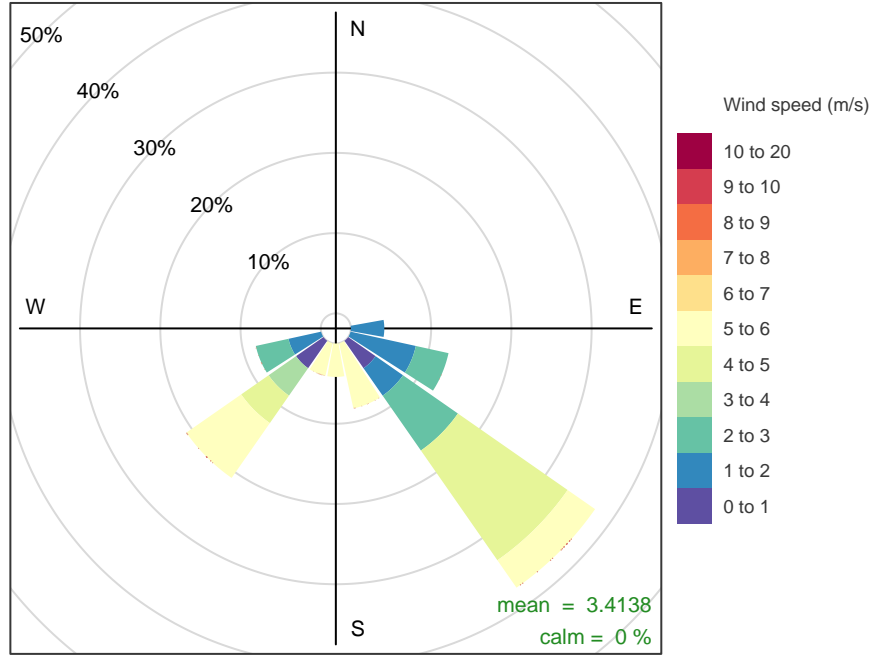
Le Fevre 1 – PM<sub>2.5</sub>



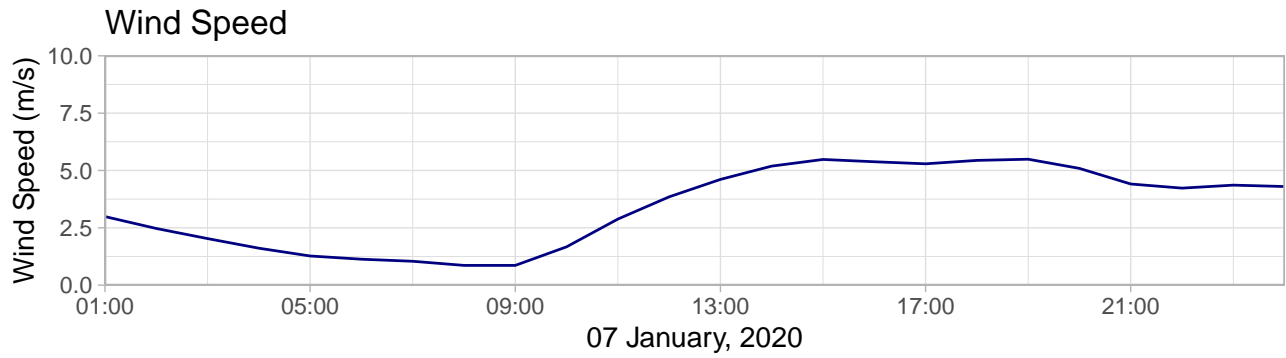
Proportion contribution to the mean (%)

### Meteorological Monitoring

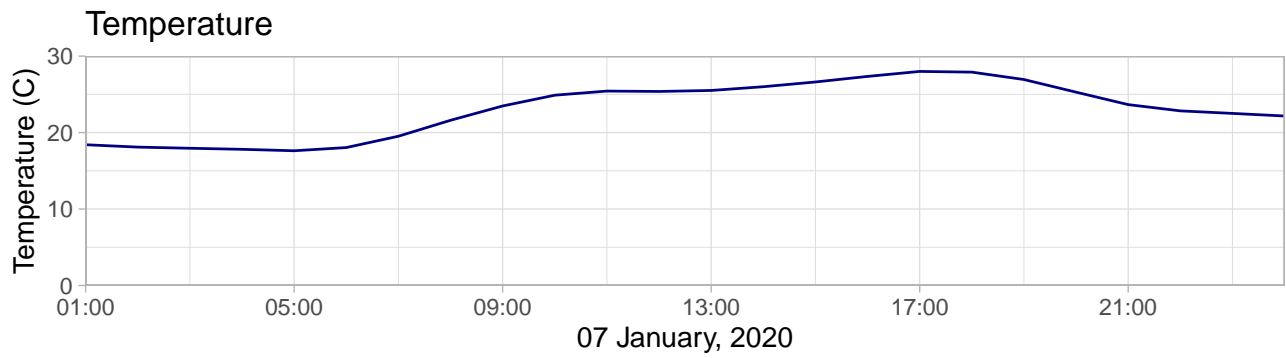
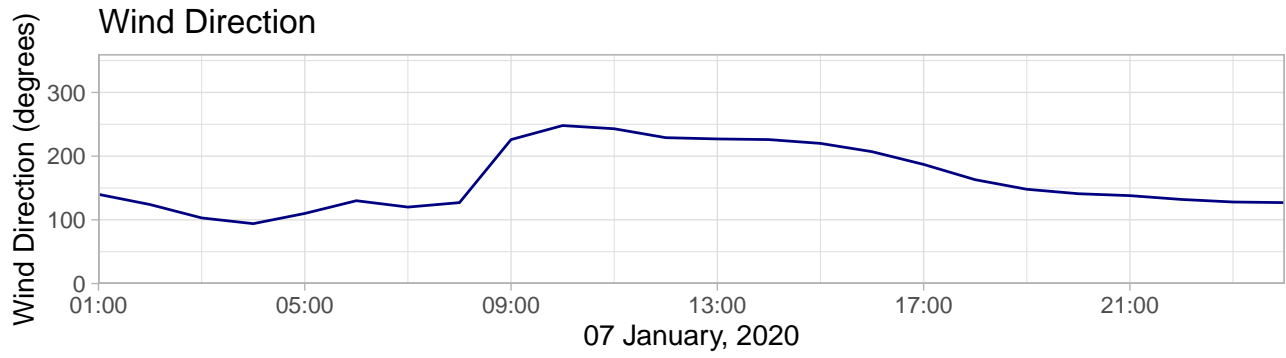
The following figures show meteorological parameters measured<sup>1</sup> throughout the day.



Frequency of counts by wind direction (%)



<sup>1</sup>Powered by [Dark Sky](#)



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*Recent air quality data measured by ABC or EPA is indicative only and may be affected by instruments not working correctly, power failures and the like. Data is published directly from the monitors and will be validated at a later date.*