

Ground Level Particulate Notification Report - 08 February, 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 08 February, 2020 is shown in [Table 1](#) below. The data indicates that:

- The 24-hour average PM₁₀ concentration measured at Community Park of 54.6 µg/m³ exceeded the EPP Air criterion of 50 µg/m³
- The 24-hour average PM_{2.5} concentration measured at Community Park of 52.1 µg/m³ exceeded the EPP Air criterion of 25 µg/m³
- The 24-hour average PM_{2.5} concentration measured at Gunn Street of 46.4 µg/m³ exceeded the EPP Air criterion of 25 µg/m³

Table 1: Monitoring Summary

Monitoring Location	Pollutant	24-hour average (µg/m ³)	EPP Air Criterion (µg/m ³)
Community Park	PM ₁₀	54.6	50
	PM _{2.5}	52.1	25
Gunn Street	PM ₁₀	47.0	50
	PM _{2.5}	46.4	25

Easterly winds brought smoke from Victorian bushfires into the Adelaide Metropolitan air shed contributing to elevated particulate levels.

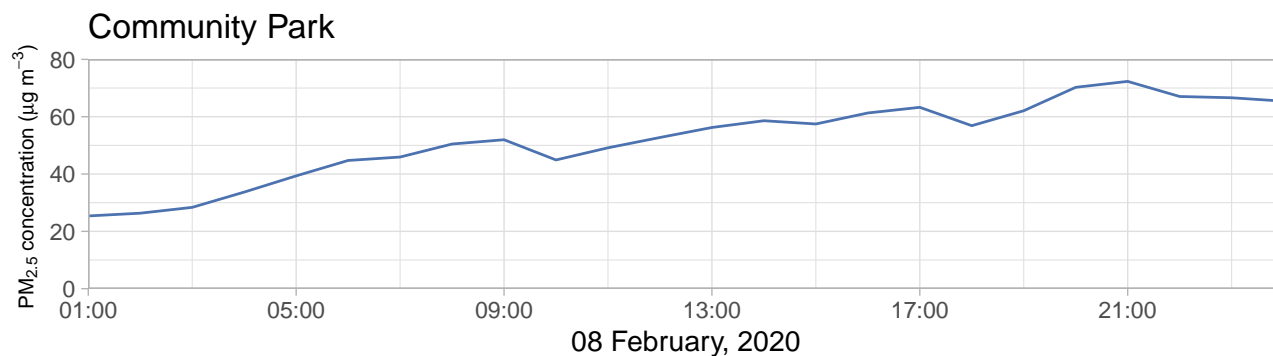
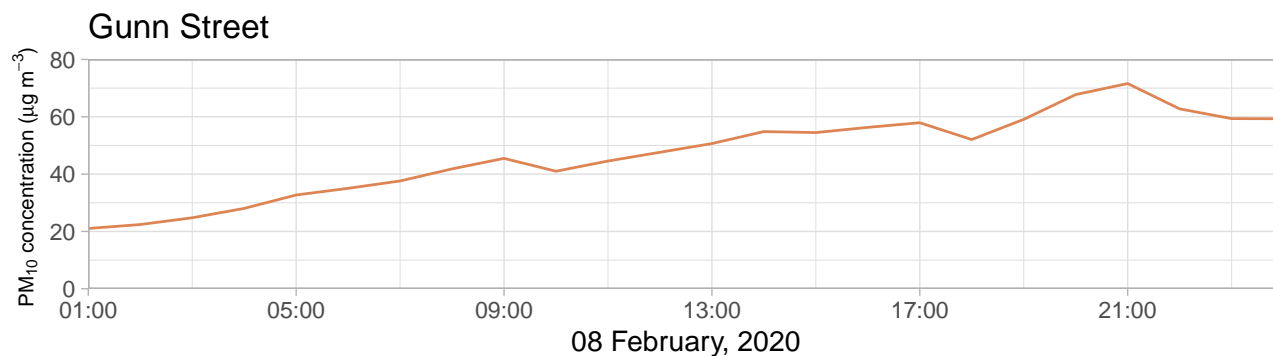
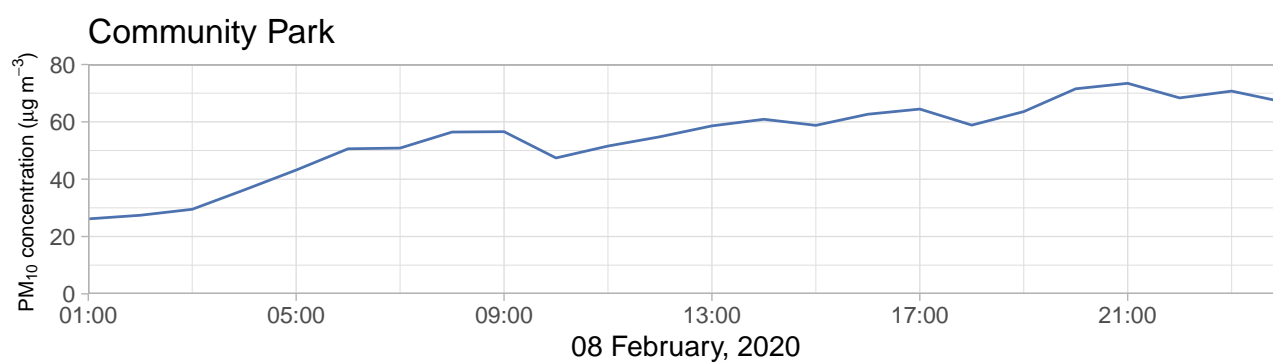
Community Monitoring

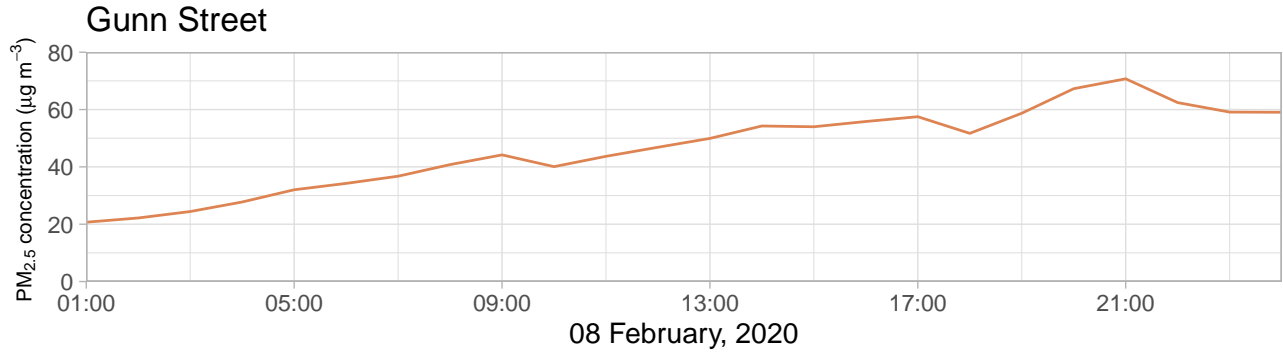
Monitoring data collected at the community monitoring sites is presented in this section.

The table below shows the proportion of PM₁₀ and PM_{2.5} measured at each monitor, according to the average wind direction at the time of monitoring.

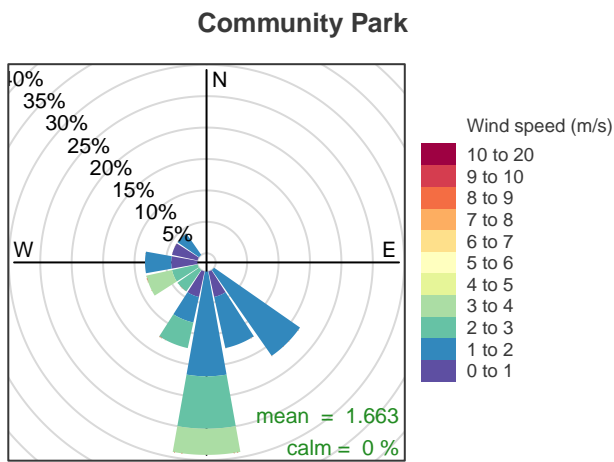
Monitoring Location	Direction	PM ₁₀ proportion (%)	PM _{2.5} proportion (%)
Community Park	From direction of ABC (WD < 180)	40	39
Community Park	From other direction (WD > 180)	60	61
Gunn Street	From direction of ABC (WD < 180)	95	95
Gunn Street	From other direction (WD > 180)	5	5

The figures below show the time series of 1-hour average measurements throughout 08 February, 2020

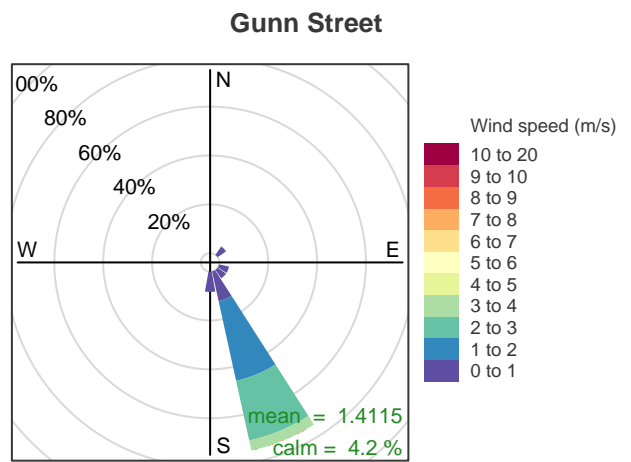




The figures below show wind roses summarising the period 08 February, 2020.



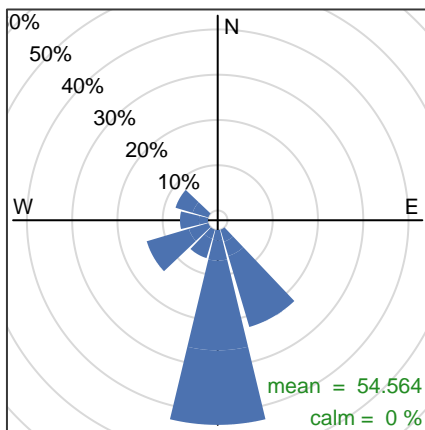
Frequency of counts by wind direction (%)



Frequency of counts by wind direction (%)

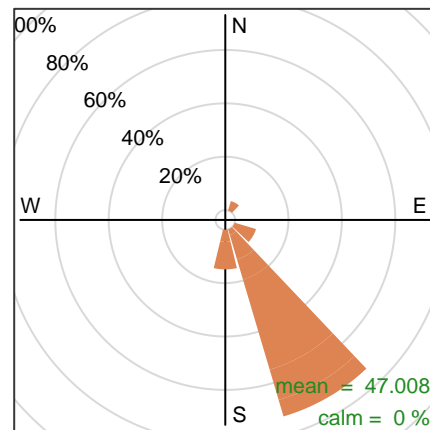
The figures below show dust roses summarising the period 08 February, 2020

Community Park – PM₁₀



Proportion contribution to the mean (%)

Gunn Street – PM₁₀



Proportion contribution to the mean (%)

EPA Monitoring

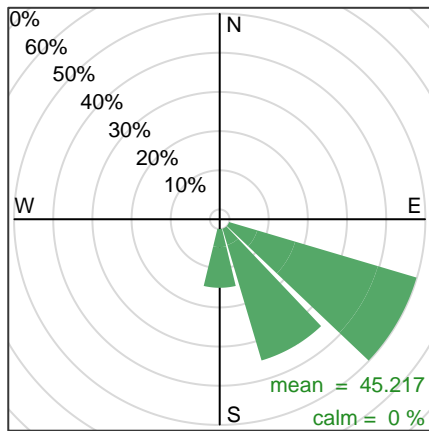
The 24-hour average PM₁₀ and PM_{2.5} concentrations measured at the EPA monitoring sites are shown in the table below. Note that the data has not been validated.

Site	Region	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)
CBD	Adelaide CBD	40	20
Christies	Southern Adelaide	45	-
Le Fevre 1	Northwestern Adelaide	45	20
Le Fevre 2	Northwestern Adelaide	40	22
Netley	Western Adelaide	52	21
Port Augusta	Mobile Station	47	26
Port Pirie Oliver St	Spencer Gulf	44	-
Whyalla Schulz Res	Spencer Gulf	43	-
Whyalla Walls St	Spencer Gulf	43	-

Easterly winds brought smoke from Victorian bushfires into the Adelaide Metropolitan air shed contributing to elevated particulate levels.

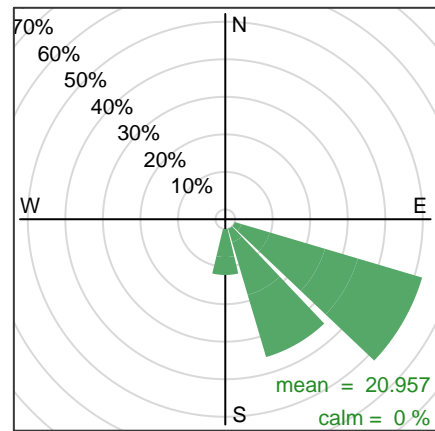
The dust roses below show the distribution of PM₁₀ and PM_{2.5} measured at Le Fevre 1 for the period 08 February, 2020 .

Le Fevre 1 – PM₁₀



Proportion contribution to the mean (%)

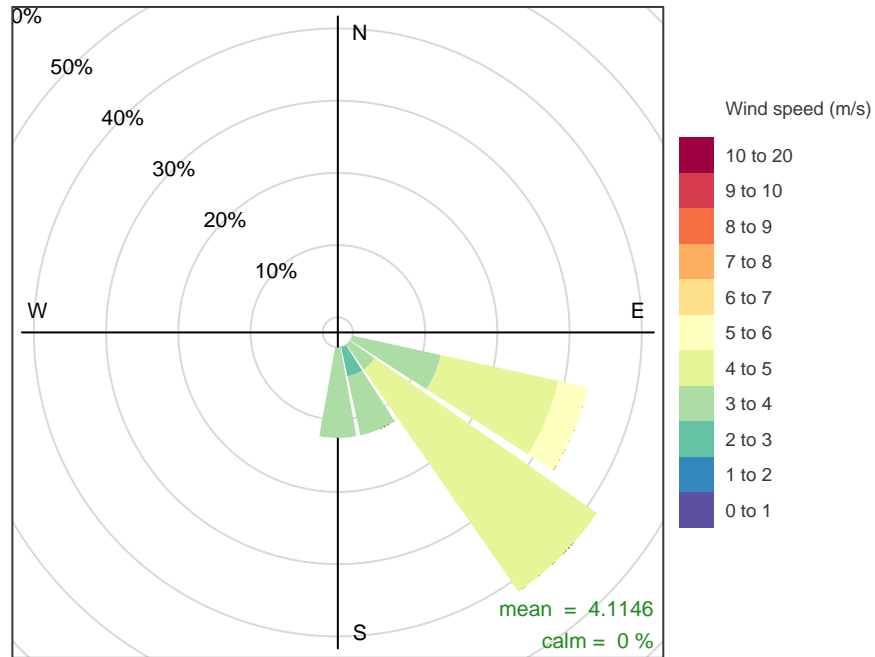
Le Fevre 1 – PM_{2.5}



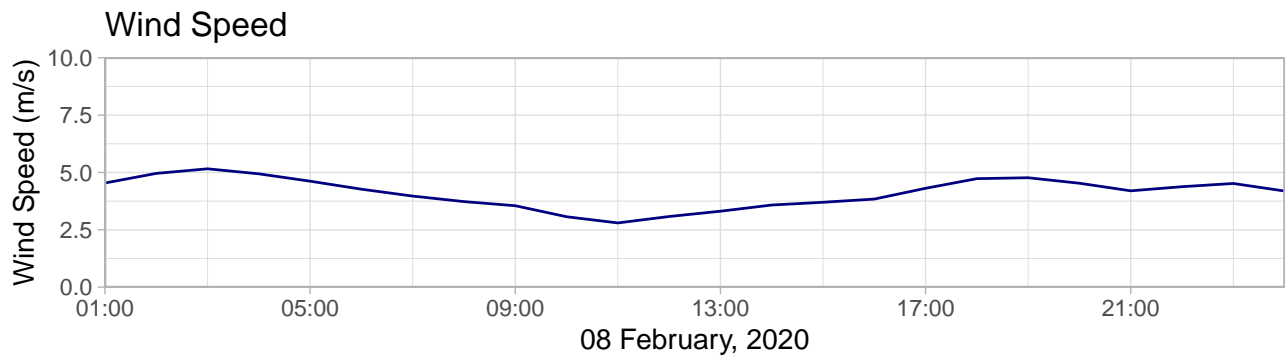
Proportion contribution to the mean (%)

Meteorological Monitoring

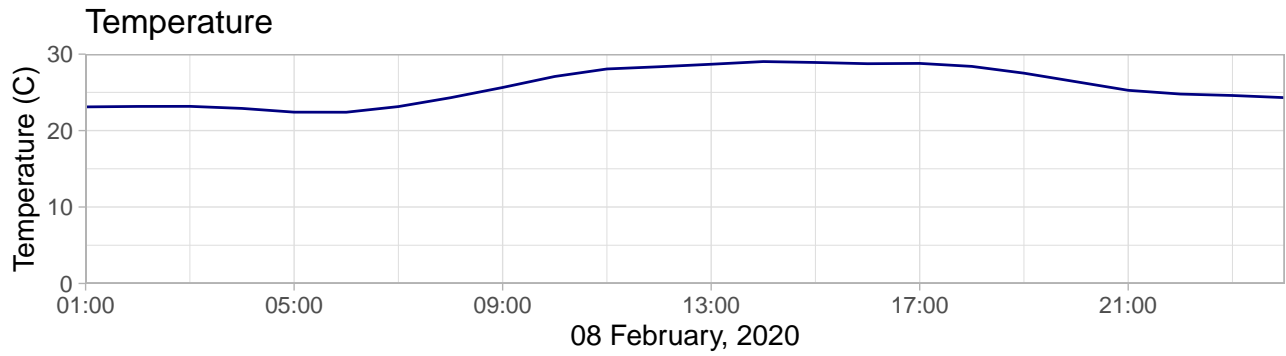
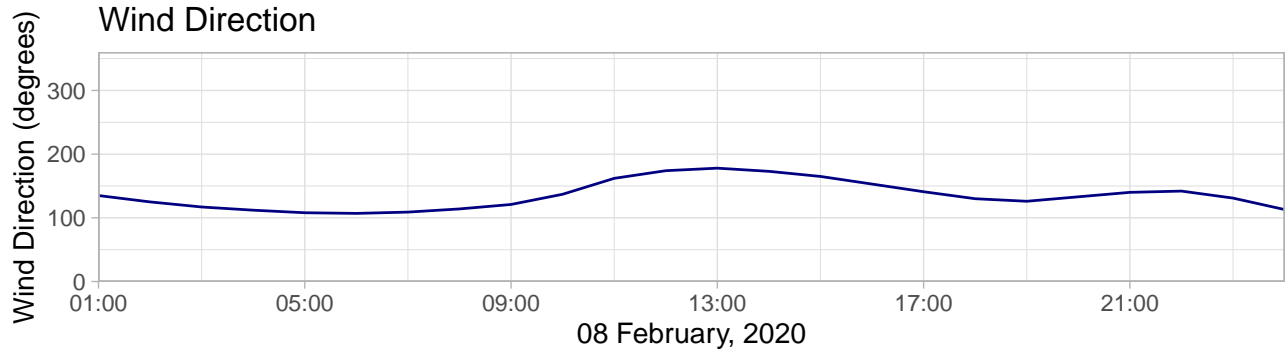
The following figures show meteorological parameters measured¹ throughout the day.



Frequency of counts by wind direction (%)



¹Powered by [Dark Sky](#)



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.