

Ground Level Particulate Notification Report - 09 January, 2020

Adelaide Brighton Cement, Birkenhead Works
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EPA Licence No: 1126

Summary

The 24-hour average particulate matter monitoring data collected at the Community Park and Gunn Street monitoring sites during 09 January, 2020 is shown in [Table 1](#) below. The data indicates that:

- The 24-hour average PM_{2.5} concentration measured at Community Park of 43.0 µg/m³ exceeded the EPP Air criterion of 25 µg/m³
- The 24-hour average PM_{2.5} concentration measured at Gunn Street of 36.2 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	48.2	50
	PM _{2.5}	43.0	25
Gunn Street	PM ₁₀	37.7	50
	PM _{2.5}	36.2	25

Smoke and dust from bush fires burning on Kangaroo Island and in other regional areas, have contributed to elevated levels of particulate in the Adelaide metropolitan area. The community monitors reflect these elevated particulate levels with the measured 24-hr averages for PM_{2.5} on the Community Park and Gunn street monitors exceeding the EPP Air criterion.

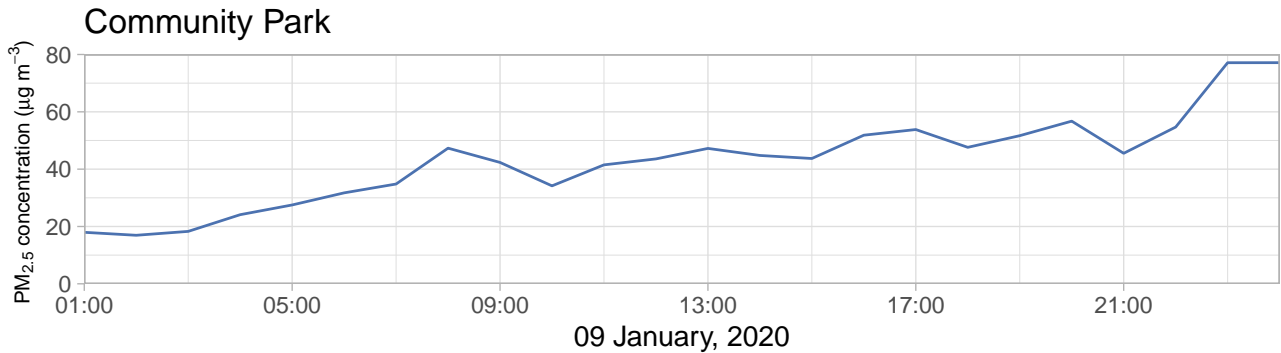
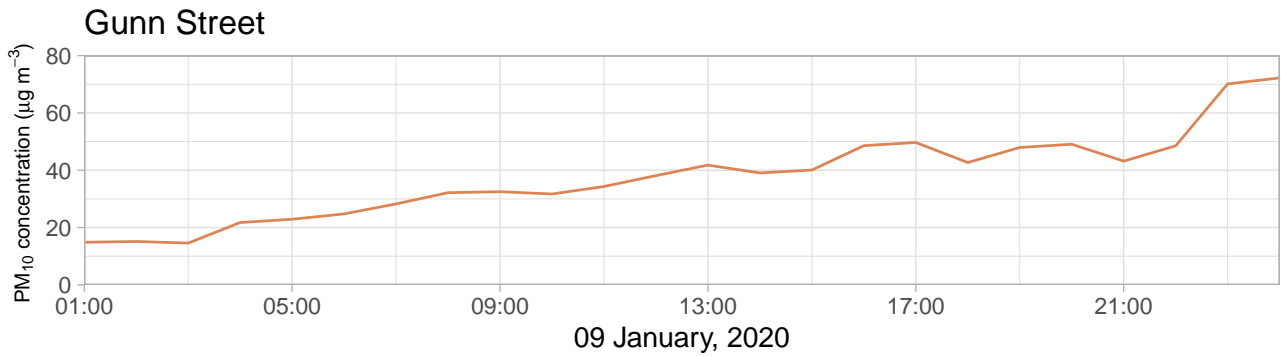
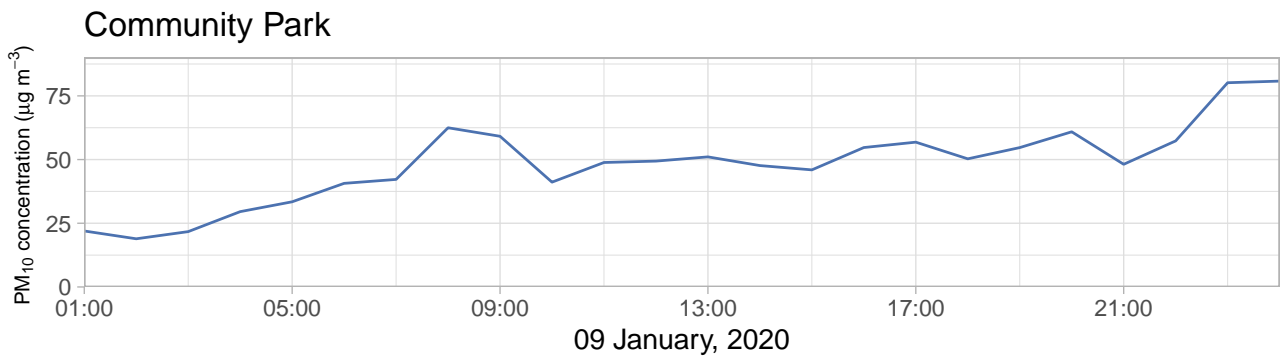
Community Monitoring

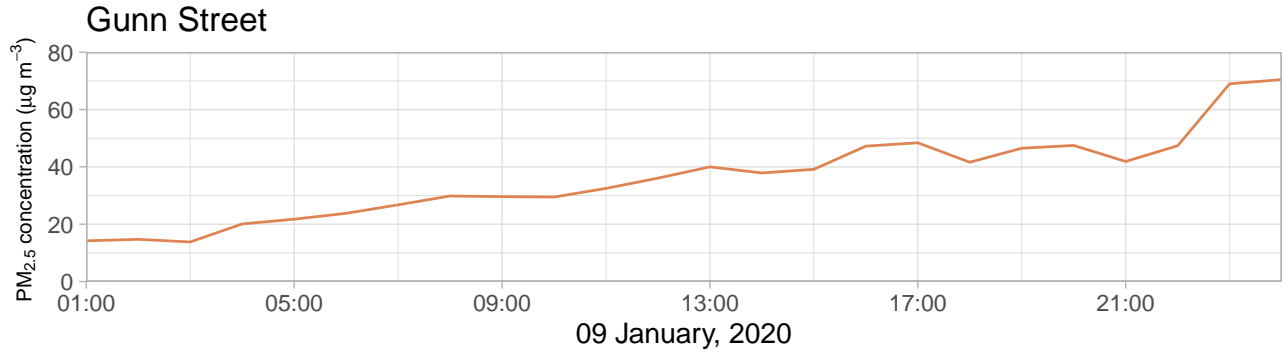
Monitoring data collected at the community monitoring sites is presented in this section.

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.

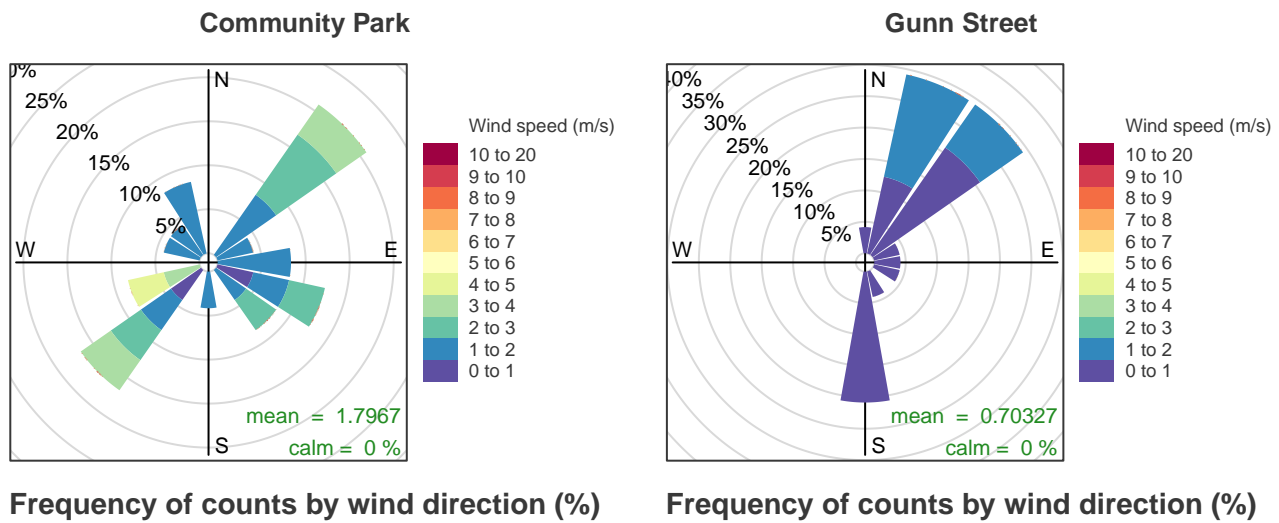
Monitoring Location	Direction	PM ₁₀ proportion (%)	PM _{2.5} proportion (%)
Community Park	From direction of ABC (WD < 180)	45	41
Community Park	From other direction (WD > 180)	55	59
Gunn Street	From direction of ABC (WD < 180)	100	100

The figures below show the time series of 1-hour average measurements throughout 09 January, 2020

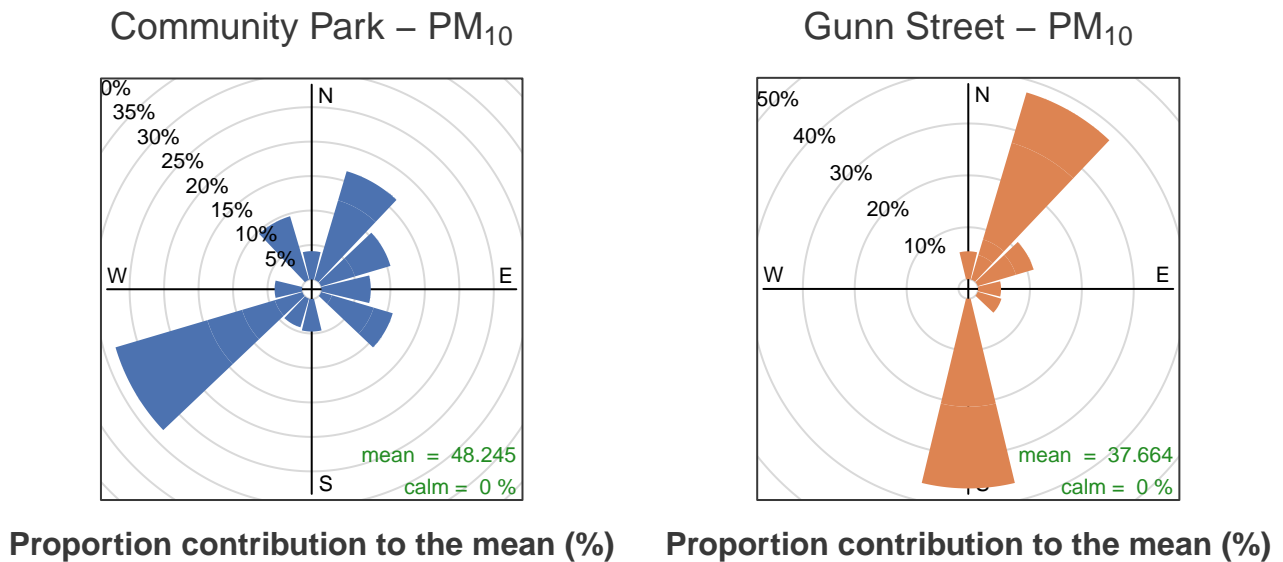




The figures below show wind roses summarising the period 09 January, 2020.



The figures below show dust roses summarising the period 09 January, 2020



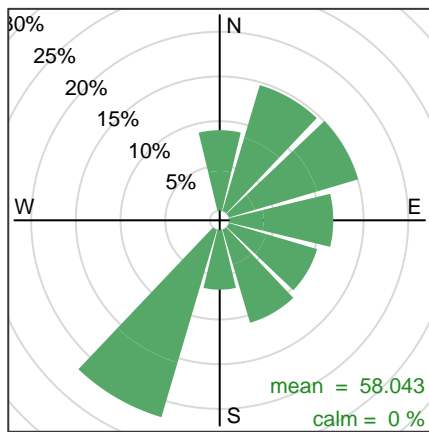
EPA Monitoring

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	38	16
Christies	Southern Adelaide	45	-
Elizabeth	Northern Adelaide	48	18
Kensington	Eastern Adelaide	38	-
Le Fevre 1	Northwestern Adelaide	57	16
Le Fevre 2	Northwestern Adelaide	52	16
Netley	Western Adelaide	-	17
Port Augusta	Mobile Station	77	32
Port Pirie Oliver St	Spencer Gulf	74	-
Whyalla Schulz Res	Spencer Gulf	83	-
Whyalla Walls St	Spencer Gulf	68	-

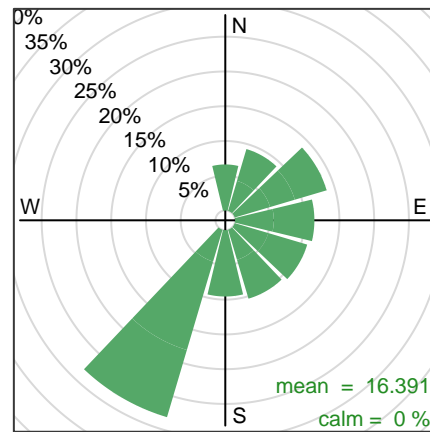
The dust roses below show the distribution of PM₁₀ and PM_{2.5} measured at Le Fevre 1 for the period 09 January, 2020 .

Le Fevre 1 – PM₁₀



Proportion contribution to the mean (%)

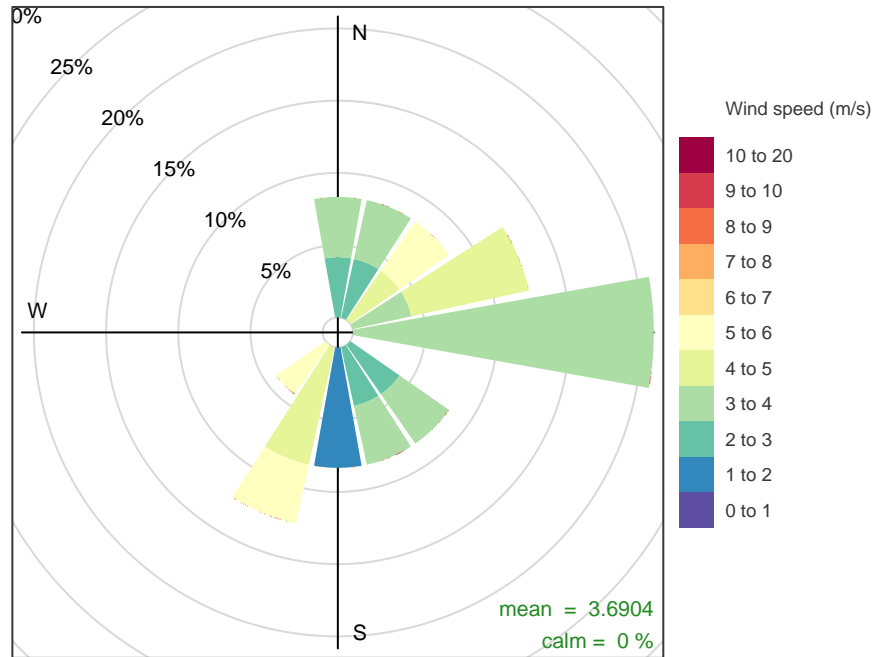
Le Fevre 1 – PM_{2.5}



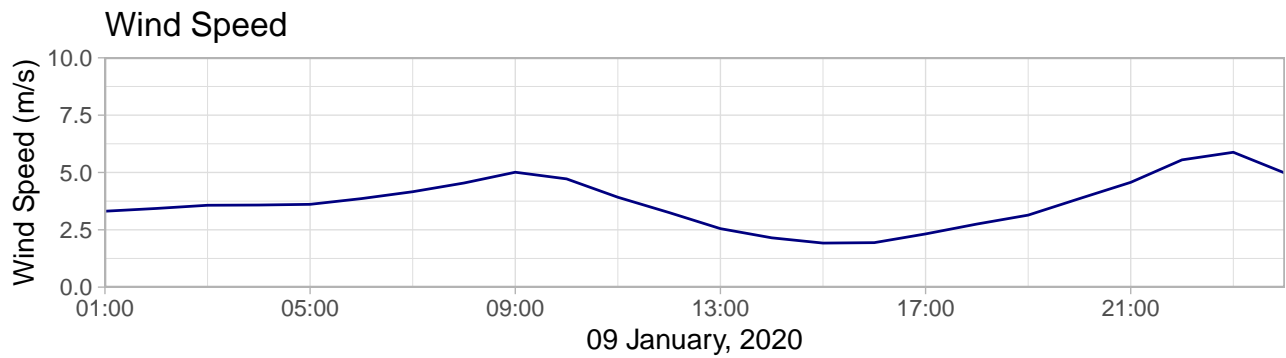
Proportion contribution to the mean (%)

Meteorological Monitoring

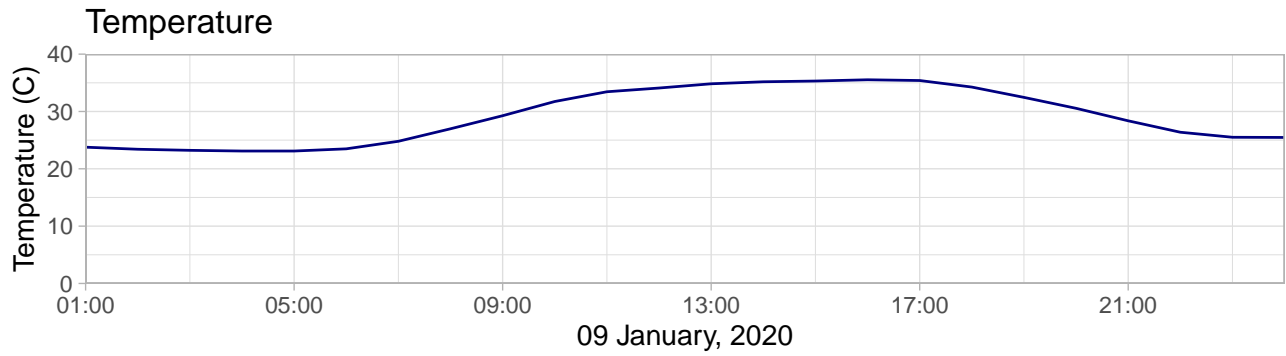
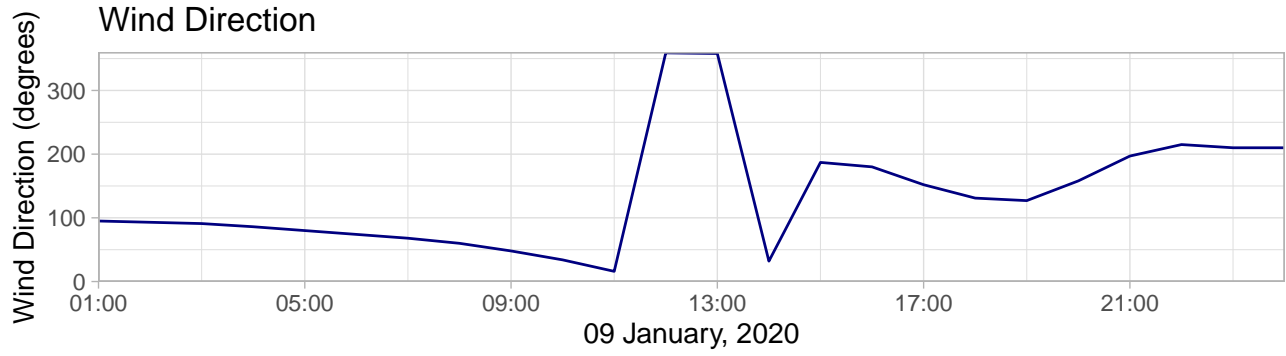
The following figures show meteorological parameters measured¹ throughout the day.



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.