

Ground Level Particulate Notification Report - 25 July, 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 25 July, 2020 is shown in [Table 1](#) below. The data indicates that:

- The 24-hour average PM_{2.5} concentration measured at Community Park of 45.4 µg/m³ exceeded the EPP Air criterion of 25 µg/m³
- The 24-hour average PM_{2.5} concentration measured at Gunn Street of 37.2 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	47.8	50
	PM _{2.5}	45.4	25
Gunn Street	PM ₁₀	37.7	50
	PM _{2.5}	37.2	25

All ABC monitors (on site and off site), showed similar particulate levels and trends. This indicates the particulate level was from a localised airshed condition, rather than related to any specific site activity. Calm to low wind speed conditions, and low temperatures resulted in reduced flushing of the local air shed and accumulation of particulates. Particulate levels started to rise from about 6 pm and continued to rise throughout the rest of the evening. The PM_{2.5} particulate levels are indicative of combustion sources most likely from the increased use of domestic wood heaters at this time of the year.

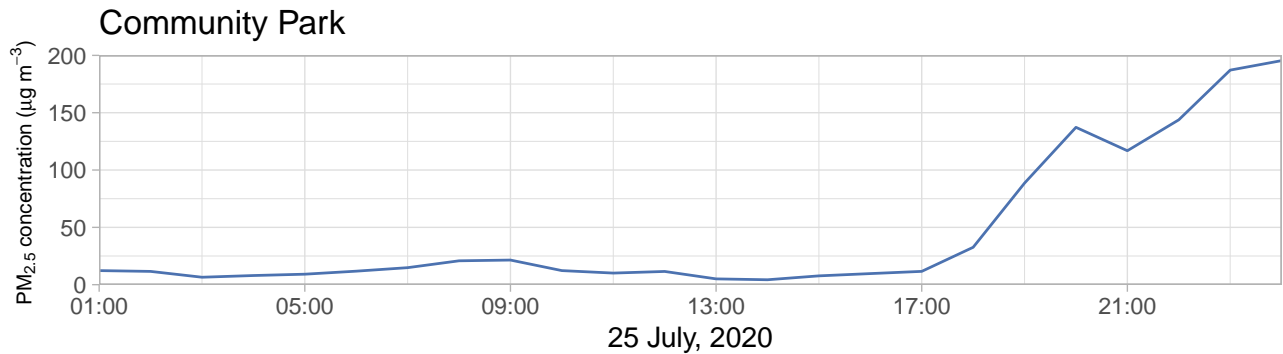
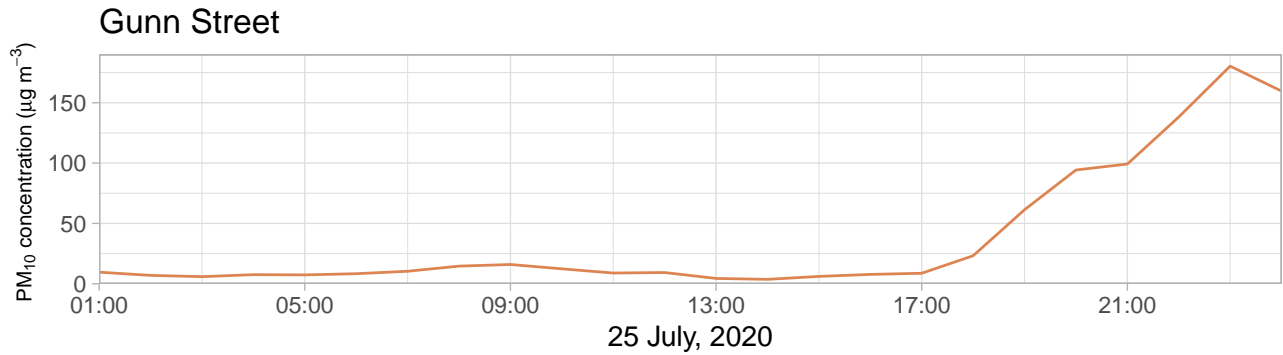
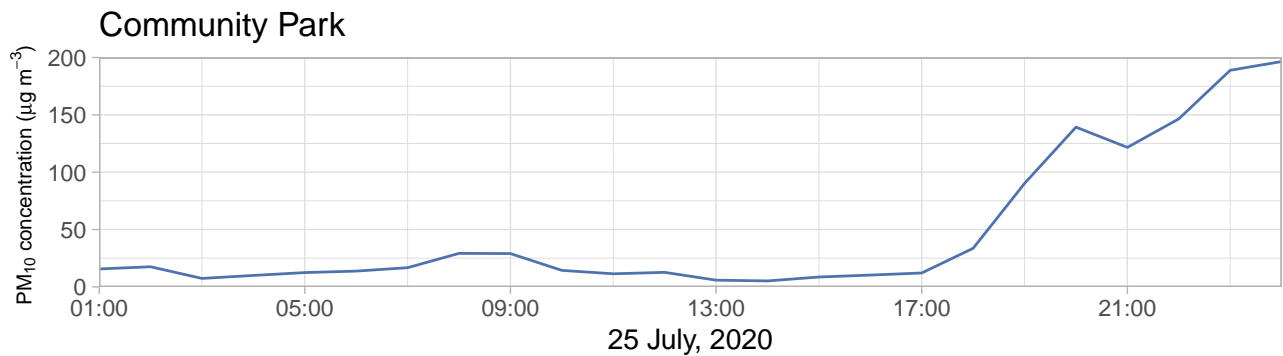
Community Monitoring

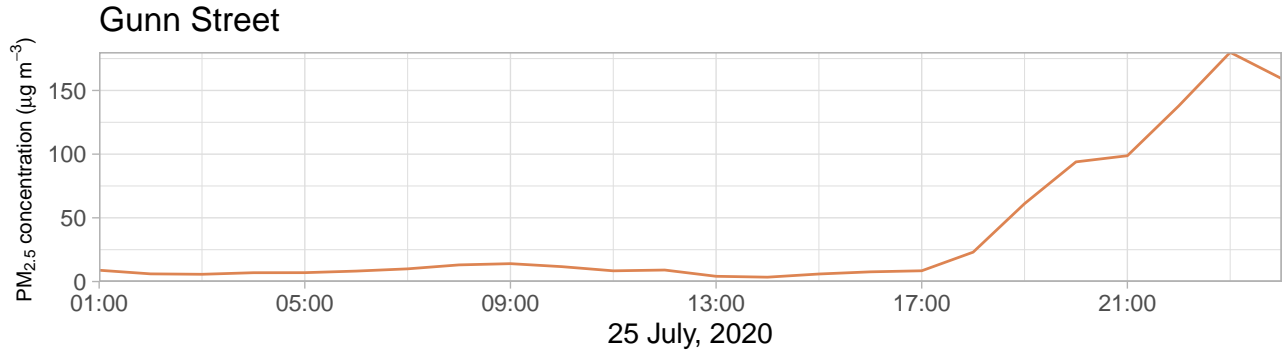
Monitoring data collected at the community monitoring sites is presented in this section.

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.

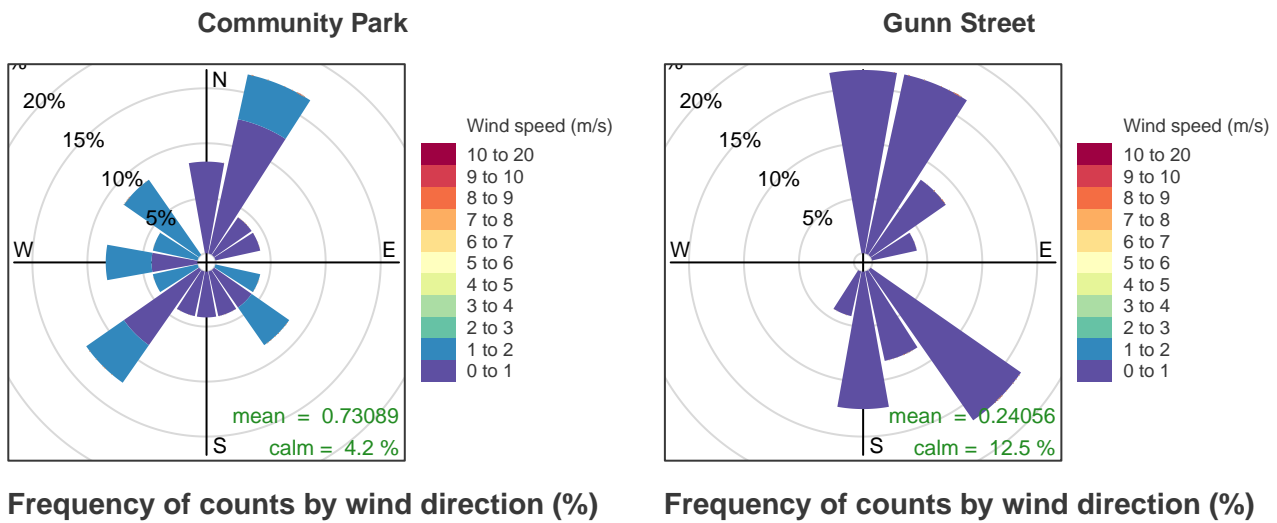
Monitoring Location	Direction	PM ₁₀ proportion (%)	PM _{2.5} proportion (%)
Community Park	From direction of ABC (WD < 180)	27	25
Community Park	From other direction (WD > 180)	73	75
Gunn Street	From direction of ABC (WD < 180)	58	57
Gunn Street	From other direction (WD > 180)	42	43

The figures below show the time series of 1-hour average measurements throughout 25 July, 2020

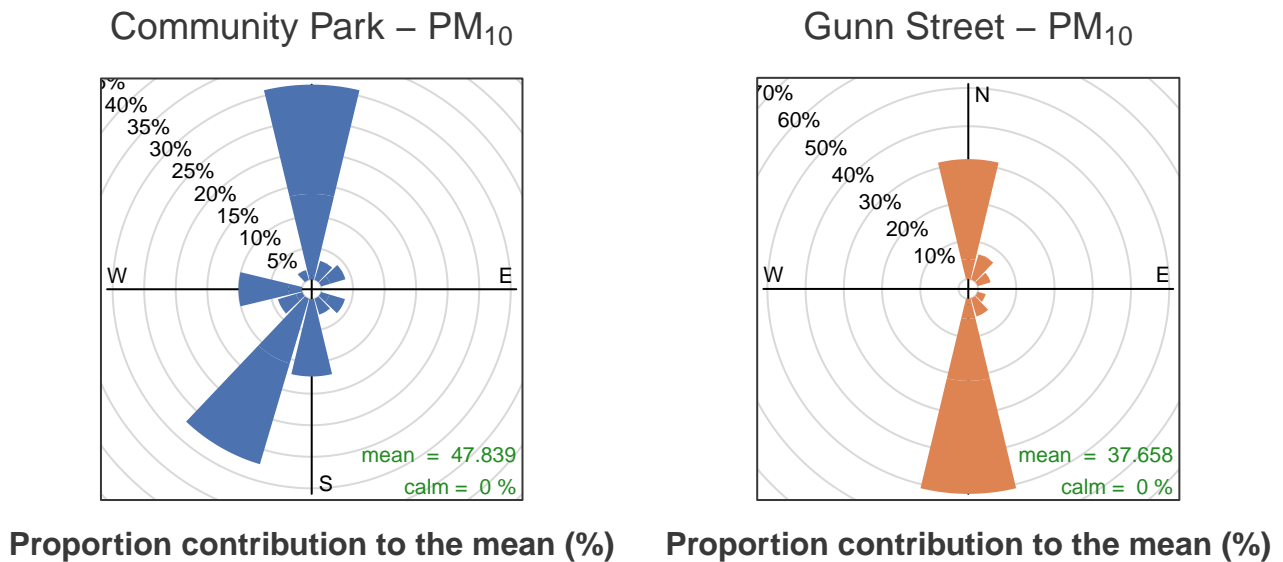




The figures below show wind roses summarising the period 25 July, 2020.



The figures below show dust roses summarising the period 25 July, 2020



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.