



Adelaide Brighton Cement Ltd

ABN 96 007 870 199

ANNUAL GROUND LEVEL PARTICULATE MONITORING REPORT FOR BIRKENHEAD WORKS

COMPLIANCE DATE: 31/10/23 – 2023 Annual report

**EPA Licence 1126: Ground Level Particulate Monitoring and
Reporting plan (U - 1555)**

**Licensed site: Adelaide Brighton Cement, Birkenhead Works
62 Elder Road, Birkenhead, SA 5015**

Date of Submission: 31 October 2023

Version Number: 1



Report Submitted by: Adviser Environment C&L (SA/NSW/NT)

Glossary

| Term | Definition |
|--------------------------|----------------------------|
| $\mu\text{g}/\text{m}^3$ | micrograms per cubic metre |
| μm | micrometre |
| $^{\circ}\text{C}$ | degrees Celsius |
| m | metre |
| m^3 | cubic metre |
| m^3/s | cubic metres per second |

| Nomenclature | Definition |
|---------------------|-------------------|
|---------------------|-------------------|

| | |
|-------------------|--|
| PM_{10} | Particulate matter with a diameter less than 10 micrometres |
| $\text{PM}_{2.5}$ | Particulate matter with a diameter less than 2.5 micrometres |
| 24-hour average | Calendar day (midnight to midnight) |

| Abbreviations | Definition |
|----------------------|-------------------|
|----------------------|-------------------|

| | |
|---------|---|
| ABC | Adelaide Brighton Cement |
| Air EPP | South Australian Environment Protection (Air Quality) Policy 2016 |
| GLPMRP | ABC's Ground Level Particulate Monitoring and Reporting Plan |
| EPA | Environment Protection Authority |

Sampling Locations

- Map showing sampling locations, major infrastructure, sensitive environmental receptors, and north arrow



Sampling locations are indicated by colour-coded dots on the above map.

NB: Four sampling points are located on the Birkenhead Works site; the other sampling points are in the community (corner of Gunn/ Well streets and Community Park).

Monitoring Objective

Annual report to include the following:

Monitoring data for each monitor (on site and off site) including EPA monitor (Le Fevre 1) for comparison as follows

- Yearly time series graph of 24-hour average PM₁₀ concentrations reported against the Air EPP for PM₁₀ of 50 micrograms per cubic metre (24-hour average).
- Yearly time series graph of 24-hour average PM_{2.5} concentrations reported against the Air EPP for PM_{2.5} of 25 micrograms per cubic metre (24-hour average).

Monitoring Plan

This monitoring report has been prepared in compliance with the Ground Level Particulate Monitoring and Reporting Plan, approved 16 October 2023 by the South Australian EPA.

The Plan is available on the ABC Birkenhead Community Website:
<http://www.birkenheadcommunity.com.au/>

Monitoring Data

This report contains monitoring data only. For analysis of the monitoring data, refer to the following;

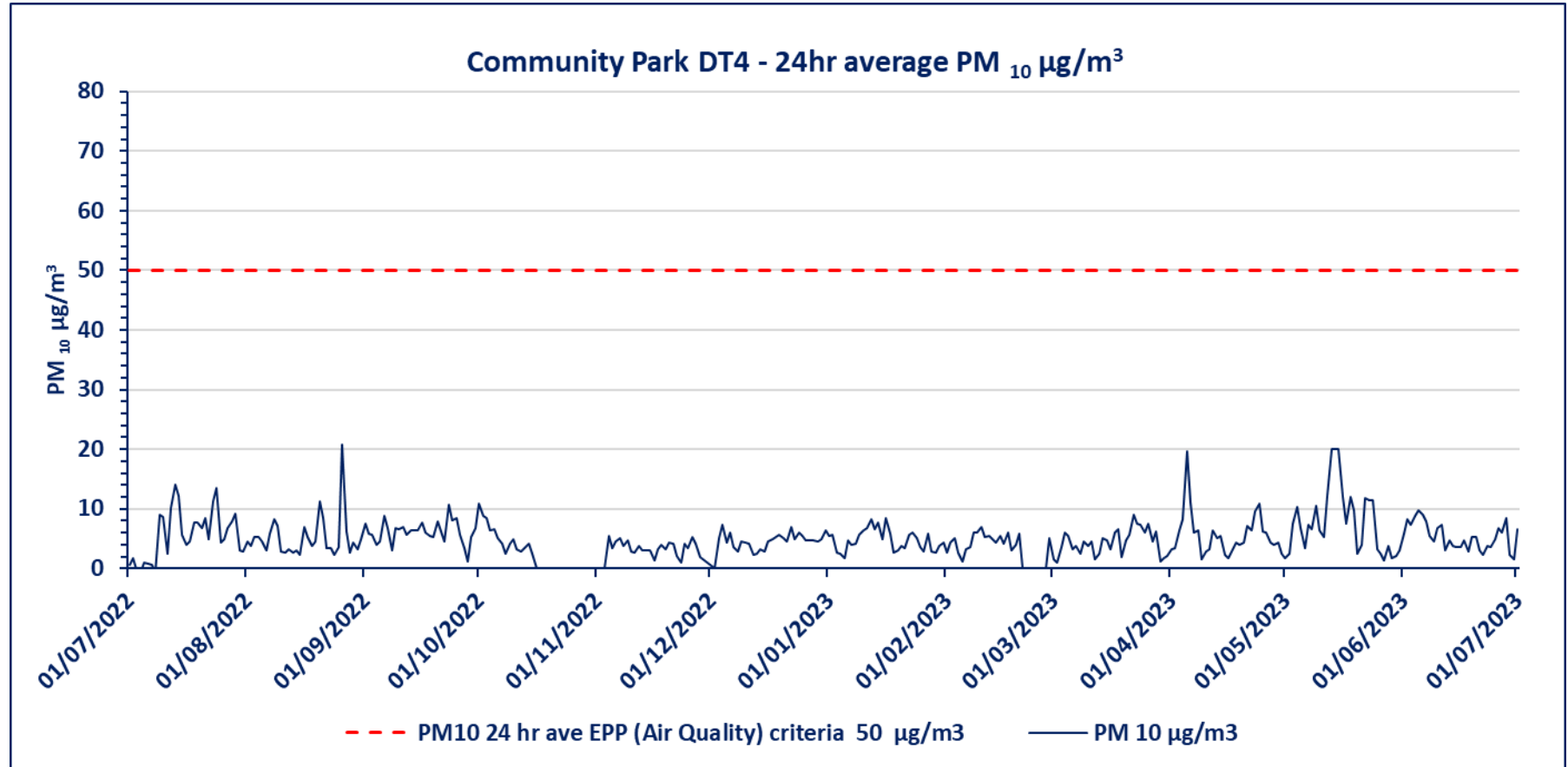
- 2022 Quarterly Ground Level Particulate Monitoring Reports
- 2022 Quarterly Dust Management Reports.

There has been an intermittent problem with data transfer from the monitors to the Katestone FTP server. The equipment supplier Kenelec and Katestone have been involved in an ongoing investigation to identify the cause. ABC engaged the services of IndustrialNow, a company that provides specialist engineering capabilities with integrating and supporting both legacy and the latest automation technologies to resolve the issue of intermittent data transfer from ambient dust monitors. ABC understands the intermittent data transfer issue was resolved in December 2022, by reconfiguring the telstra Access Point Name (APN) settings.

There were no 24-hour exceedances of PM₁₀ and PM_{2.5} Air (EPP) criteria on ABC ambient particulate monitors in the community, indicating good ambient air quality.

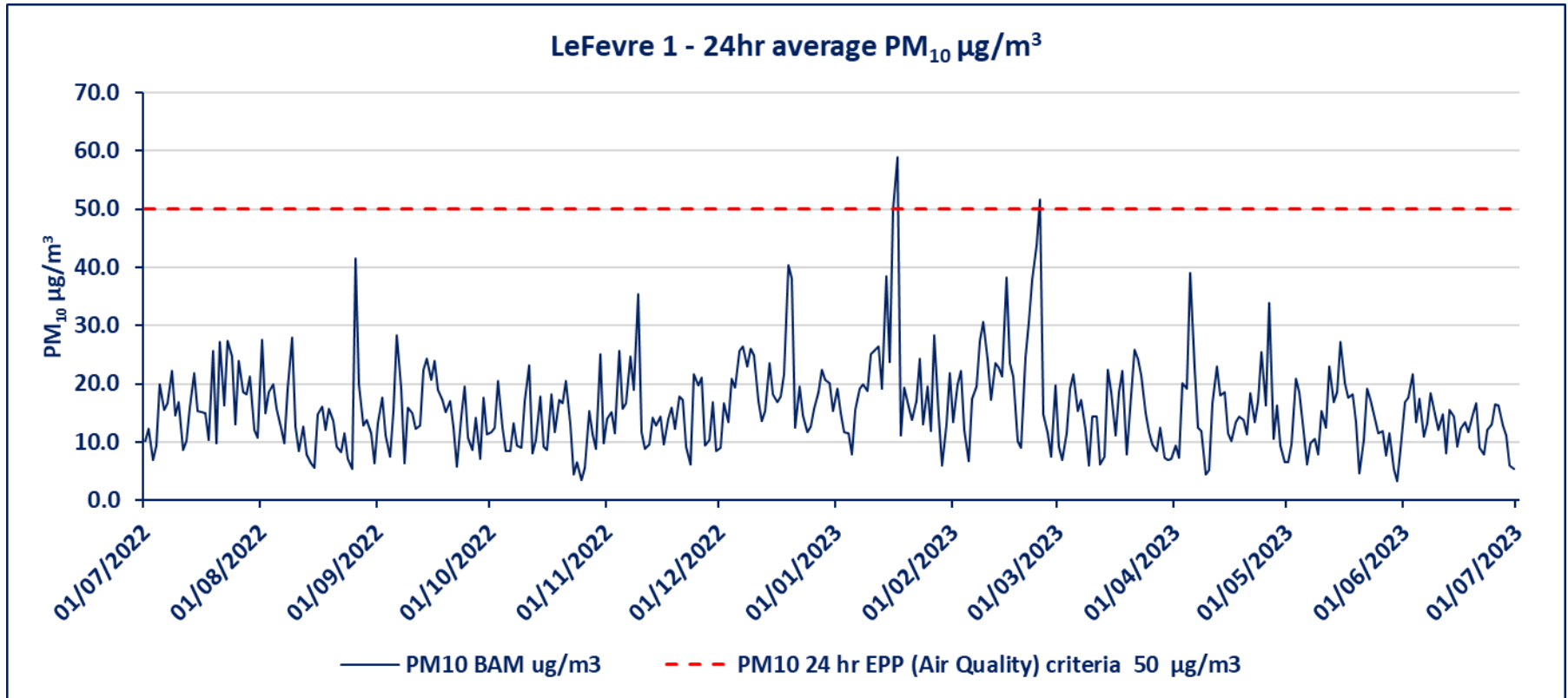
PM₁₀
trends
(24-hour
Averages)

ABC Community Monitors

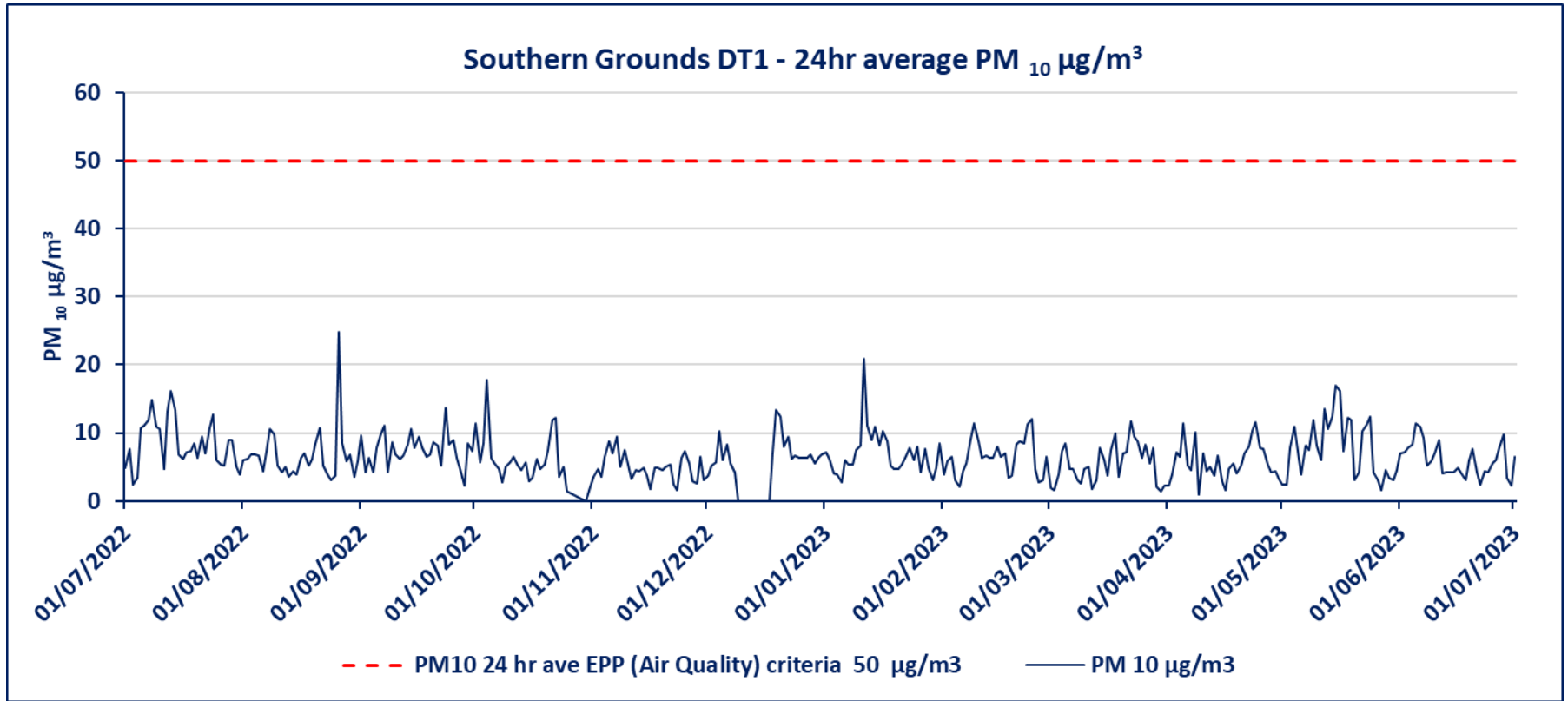


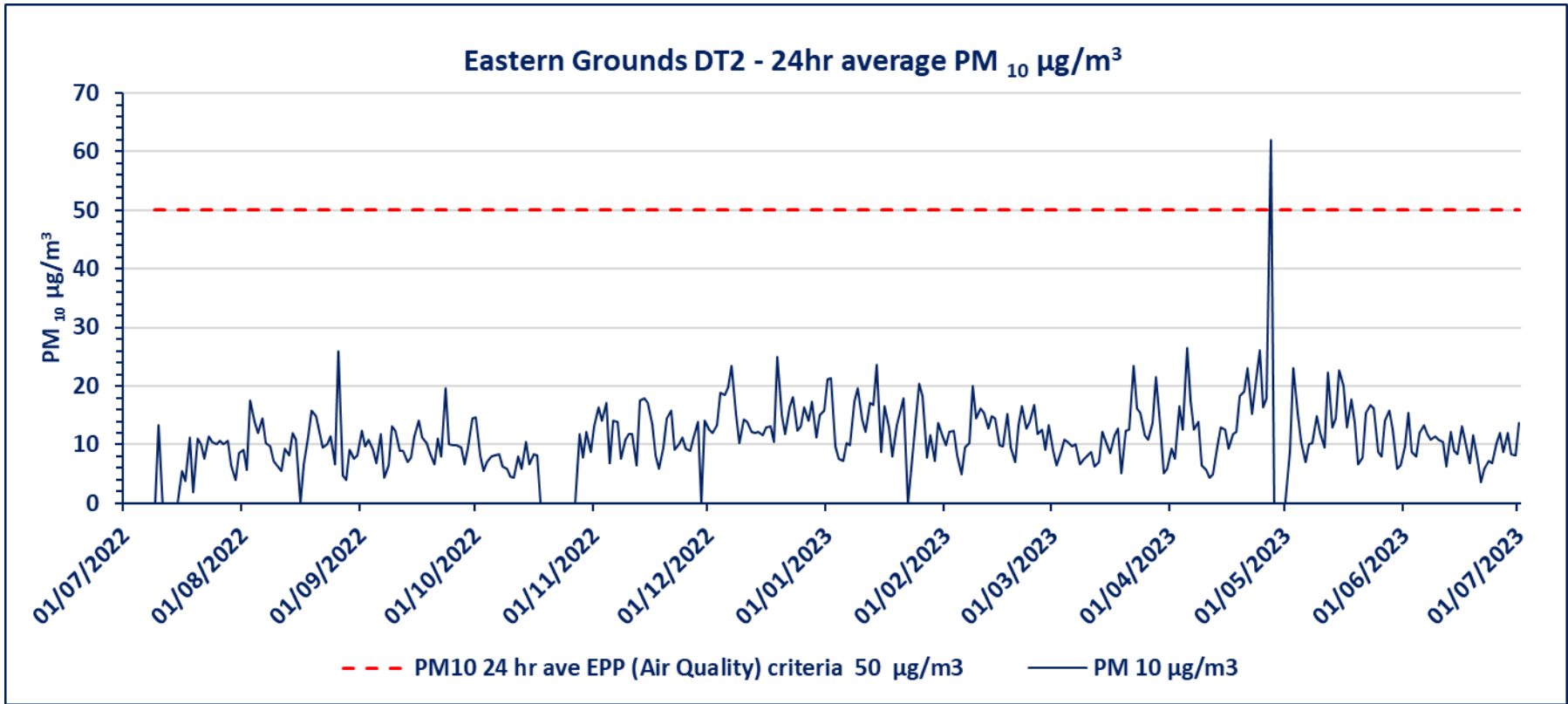
The property (not owned by ABC), on which the Gunn Street Monitor was located, was sold for redevelopment and was no longer available for use from the 30/6/2022. As a consequence the monitor was removed on 28 June 2022. A new monitoring location is currently being determined.

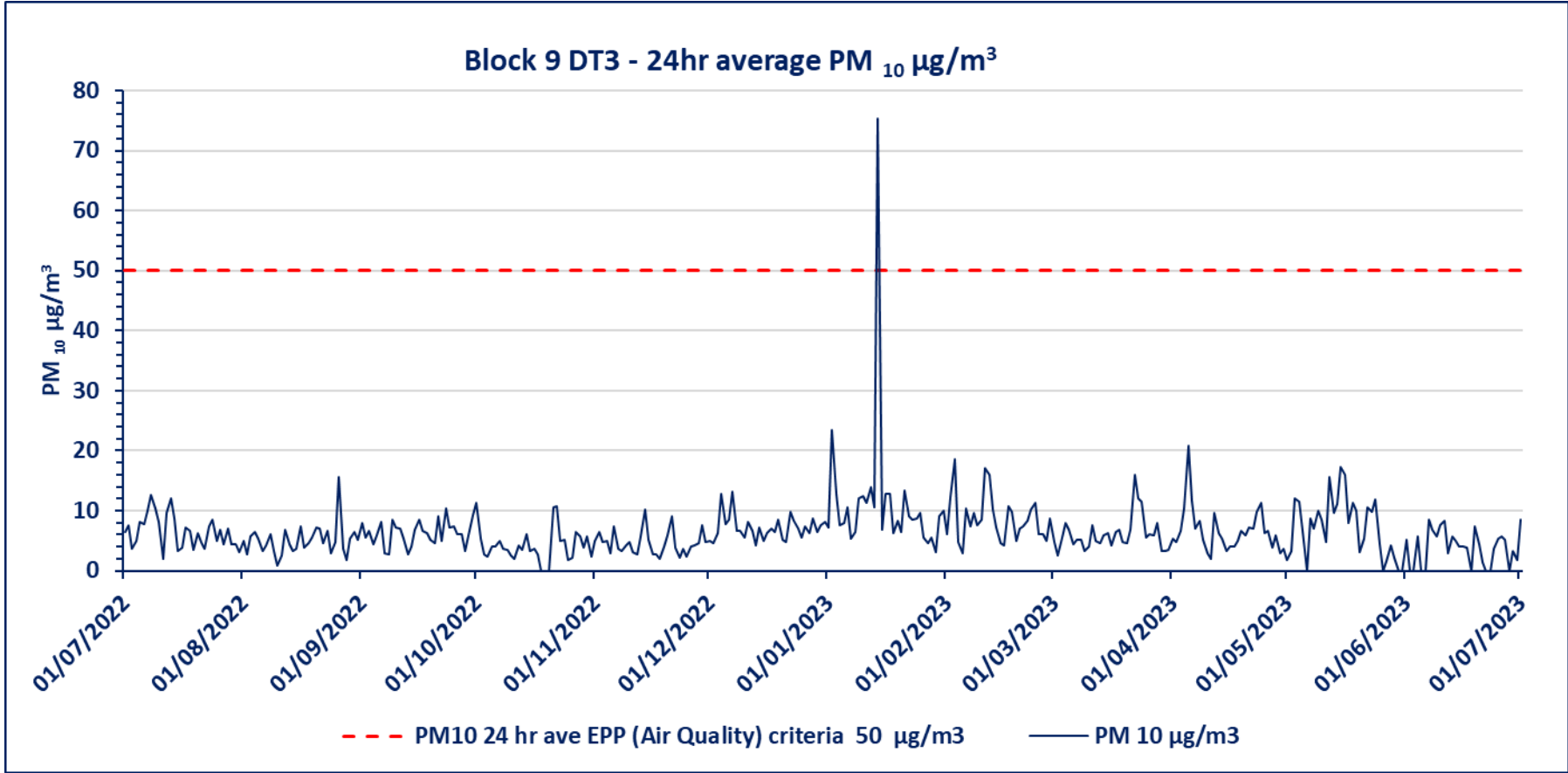
EPA LeFevre 1 Monitor

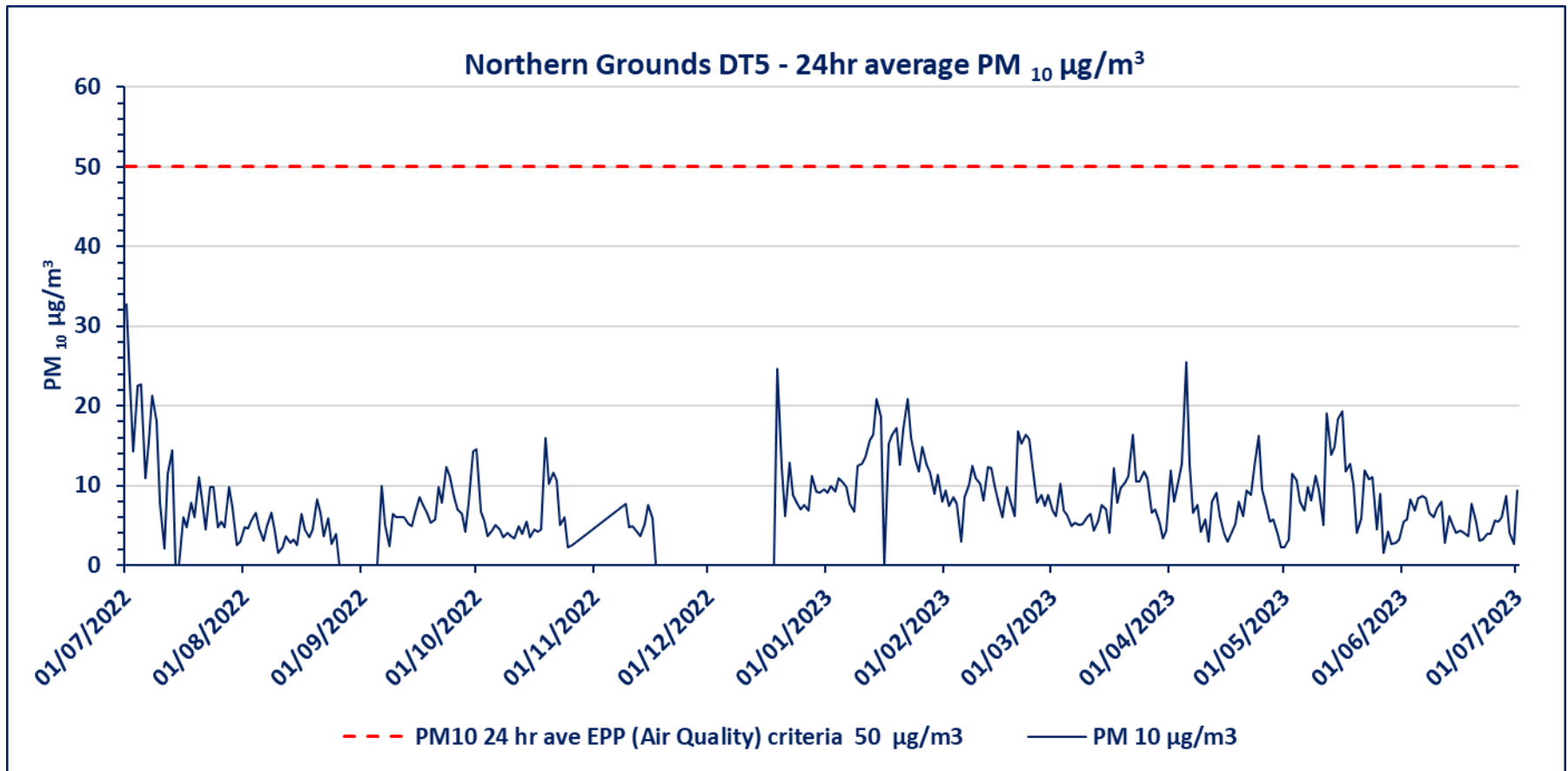


ABC Onsite Monitors



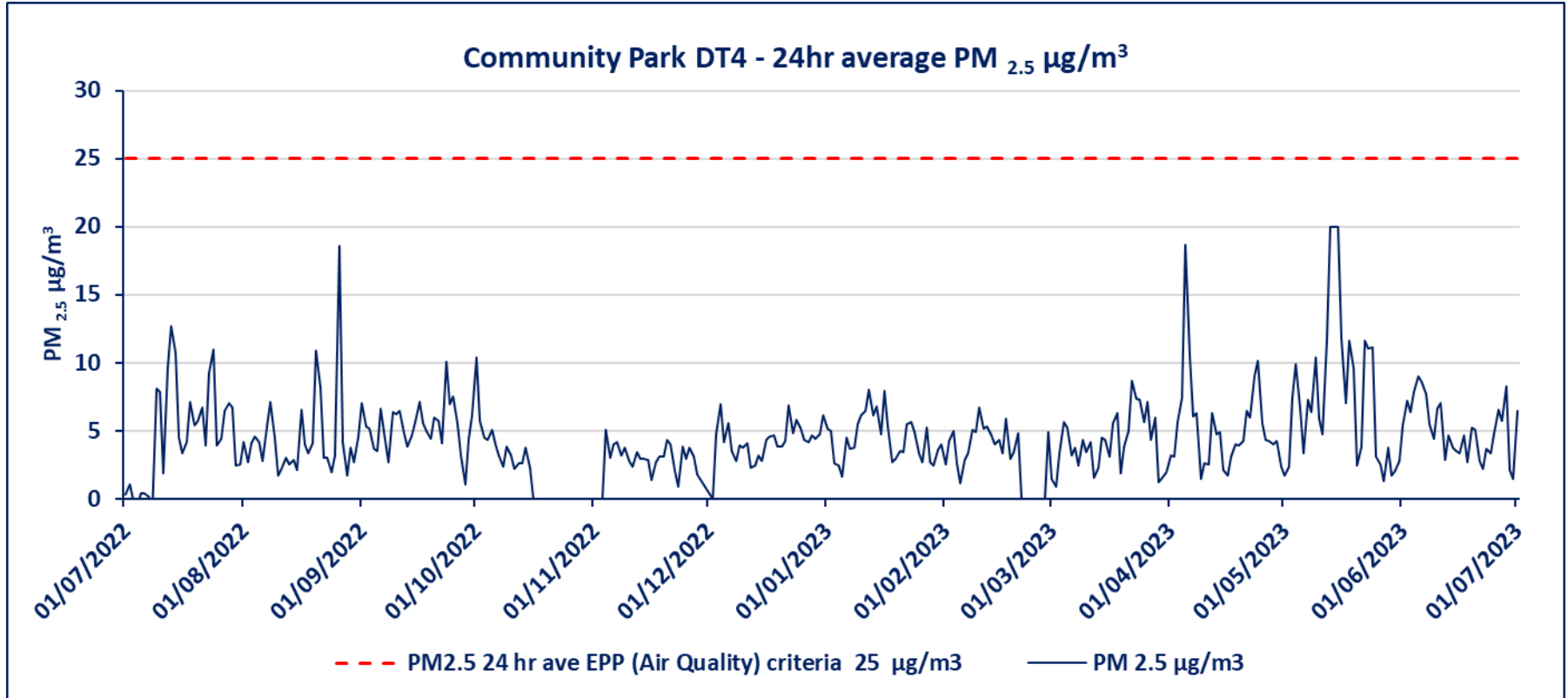






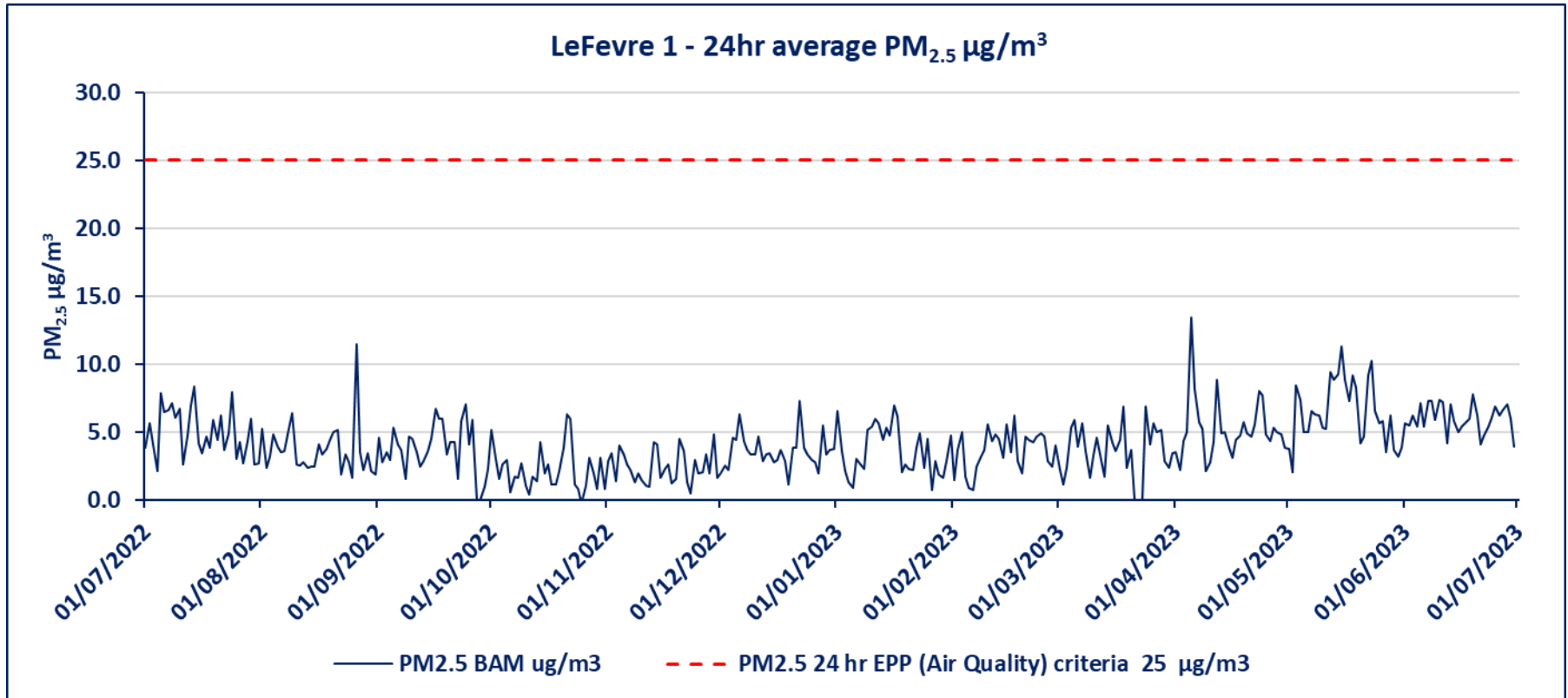
**PM_{2.5}
trends
(24-hour
Averages)**

ABC Community Monitors



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EPA LeFevre 1 Monitor



ABC Onsite Monitors

