

MONTHLY MONITORING REPORT

AT

THE HALL SCHOOL CAMDEN

AQ1034

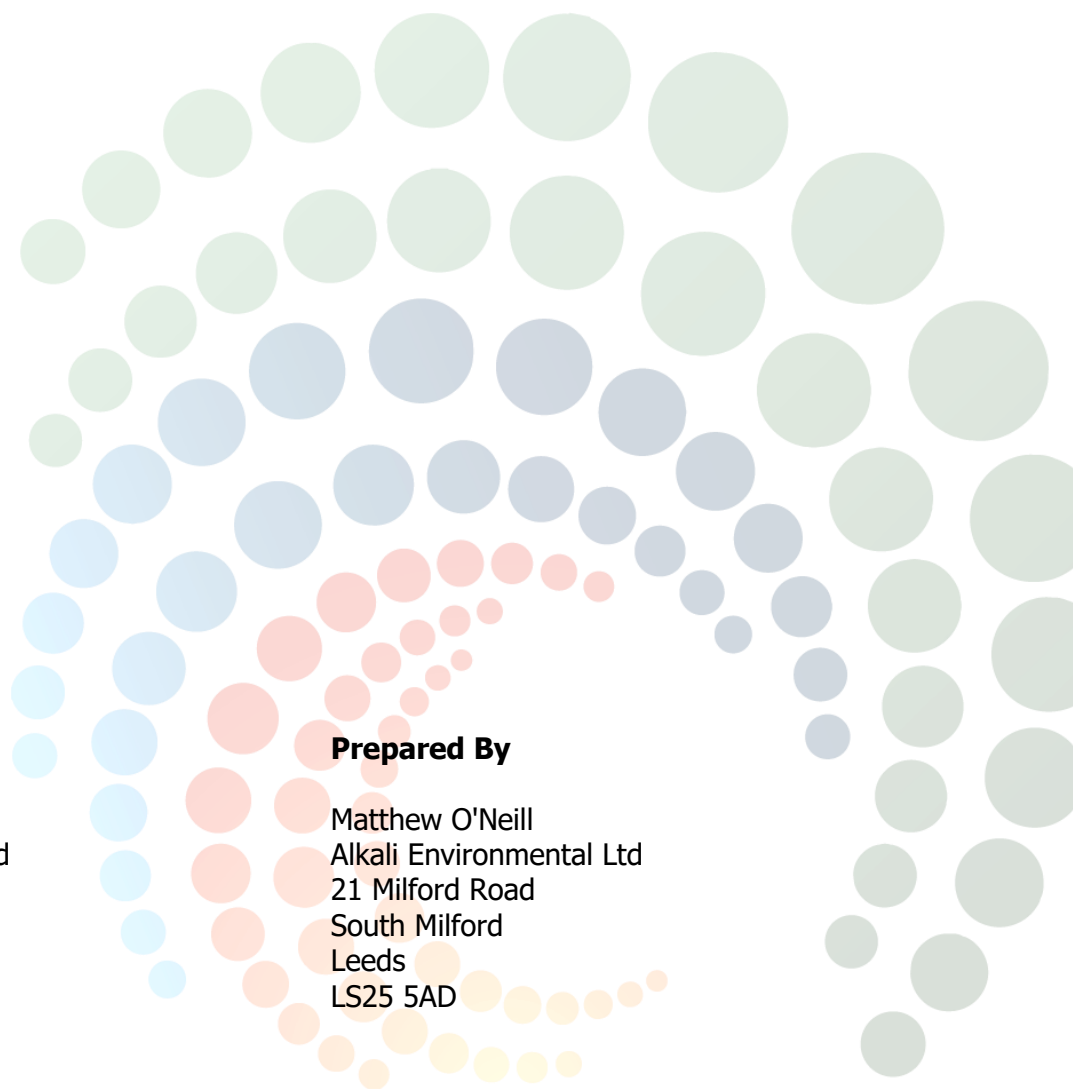
09 AUGUST 2023

Prepared For

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Monthly Dust Monitoring Report: The Hall Senior School, Camden

May 2023 (Wednesday 17/05/2023 to Sunday 02/06/2023)

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Development website (public access to monitoring reports): <https://hallschool.co.uk/school-development/>

1.0 Introduction

1.1 London Borough of Camden requirements

Camden's requirements for real-time dust monitoring are consistent with Camden and GLA policy and industry best practice guidance. These requirements are triggered when an Air Quality Assessment (AQA) for a proposed development finds that there is a medium or high risk of dust impacts (without considering mitigation measures) during demolition or construction.

Real-time dust monitoring can be used to enable effective on-site management of the air quality impacts of demolition and construction activities through comprehensive preventative dust mitigation and, in the case of triggering a dust alert from the monitoring equipment, through the application of additional reactive dust mitigation measures.

Ultimately, the purpose of real-time dust monitoring is to ensure that the air quality impacts of demolition and construction activities are minimised as far as possible for the protection of amenity and health, both for local residents, the general public, and operatives on-site.

1.2 Development information

Alkali Environmental Consultants has been commissioned by LIFE Build Solutions Limited to undertake dust monitoring during the demolition and construction of a school redevelopment at The Hall School, 23 Crossfield Road, London NW3 4NU. The site location is shown in Appendix A.

Planning permission for the site was granted by Camden Council in January 2020 (planning reference 2022/4408/P) subject to a number of planning conditions. Of relevance to this report are one of the planning

conditions; to air quality (planning condition 11). These conditions require dust monitoring throughout the demolition and construction period.

The working hours for demolition and construction activities, as detailed in the planning permission, are presented below:

- Monday to Friday: 8am – 9pm
- Saturday: 8am – 4pm
- Sunday and Public Holidays: 8am – 4pm

As per the planning conditions, dust monitoring is being undertaken in order to protect nearby sensitive receptors from the effects of noise and dust exposure as a consequence of the ongoing construction works. This report presents the monthly results of the dust monitoring during May 2023 and highlights any exceedance of the trigger/action levels.

2.0 Site updates and works taken place during this monitoring period

As previously agreed with the 'Air Quality' and 'Planning' departments of Camden Council, the dust monitors were located at 2 points on the boundary.

No demolition or construction work took place during this period, and the data informs the baseline conditions.

3.0 Monitoring summary for May 2023

- There were 0 exceedances of the 15-min site action trigger level, and 0 exceedances of the one-hour site action trigger level.
 - Data coverage was 100% at location 1 and 100% at location 2.
-

4.0 Methodology

4.1 Monitoring equipment

For dust (PM₁₀) monitoring at The Hall School in Camden, we have been using Earthsense Zephyr Air Quality monitors at two locations (ref Z544 and Z621). These monitors are certified to the MCERTS Indicate standard as required by Camden Council. Both monitors were calibrated on purchase in October 2022, and again at the beginning of June 2023.

4.2 Monitoring locations

The monitoring locations are presented in the Construction Management Plan (CMP) submitted to Camden Council and has been agreed with the relevant Environmental Health Officer.

Location photos and a map showing the measurement positions is presented in Appendix A and further details are provided below:

- Measurement Location 1:

The Z544 PM₁₀ monitor is positioned to the south of the site, and on the South West of the Hall secured to the top of the roof. The air intake is located approximately 10 metres above ground level.

- Measurement Location 2:

The Z621 PM₁₀ monitor is position to the North East of the site at the far end of the playground and is attached to fencing at approximately 3 metres above ground level

4.3 Trigger and action levels

In accordance with the requirements of the planning condition, early warning 'alert' and 'action' levels have been set and are presented in Table 1 below. The incident response procedure, should a trigger or action level be exceeded, is presented in the CMP.

| Table 1 - Trigger and Action Level for PM₁₀ Trigger / Action Level | Trigger / Action Dust Level (µg/m³) |
|--|---|
| Alert level (as a 15 minute average) | 150 µg/m ³ |
| Action Level (as a 15 minute average) | 195 µg/m ³ |

5.0 Dust monitoring results

5.1 A summary of 15-minute average PM₁₀ levels are presented in Table 2 & 3 below for Measurement Locations 1 and 2.

Predictions of background pollutant concentrations on a 1km-by-1km grid basis have been produced by DEFRA for the entire of the UK to assist LAs in their Review and Assessment of air quality. The proposed development site is located in grid square NGR:

526500, 184500

Data for this location was downloaded from the DEFRA website for the purpose of this assessment. The background concentrations for PM10 in the location are 18.05 µg/m³

TABLE 2: SUMMARY OF DUST MONITORING RESULTS (MEASUREMENT LOCATION 1)

| Week Commencing | Max (µg/m3) | Min (µg/m3) | Average (µg/m3) | Number of Exceedance ≥ 150µg/m3 Trigger Level | Number of Exceedance ≥ 195µg/m3 Action Level | Data Capture (%) |
|-------------------------|-------------|-------------|-----------------|---|--|------------------|
| 17/05/2023 - 21/05/2023 | 22.82 | 6.08 | 11.51 | 0 | 0 | 100 |
| 22/05/2023 - 28/05/2023 | 23.82 | 5.35 | 10.94 | 0 | 0 | 100 |
| 29/05/2023 - 02/05/2023 | 17.00 | 2.53 | 8.46 | 0 | 0 | 100 |

TABLE 3: SUMMARY OF DUST MONITORING RESULTS (MEASUREMENT LOCATION 2)

| Week Commencing | Max (µg/m3) | Min (µg/m3) | Average (µg/m3) | Number of Exceedance ≥ 150µg/m3 Trigger Level | Number of Exceedance ≥ 195µg/m3 Action Level | Data Capture (%) |
|-------------------------|-------------|-------------|-----------------|---|--|------------------|
| 17/05/2023 - 21/05/2023 | 20.39 | 5.1 | 10.22 | 0 | 0 | 100 |
| 22/05/2023 - 28/05/2023 | 19.83 | 4.96 | 9.87 | 0 | 0 | 100 |
| 29/05/2023 - 02/05/2023 | 16.87 | 2.67 | 7.90 | 0 | 0 | 100 |

6.0 Dust monitoring conclusions

6.1 15-minute averaging period

The results presented in Table 2 indicate that during the monitoring period (between 17 May 2023 and 2 June 2023) there was no exceedance of the 15-minute alert level ($150\mu\text{g}/\text{m}^3$) or action level ($195\mu\text{g}/\text{m}^3$) at Measurement Location 1. The highest concentration recorded was $23.82\mu\text{g}/\text{m}^3$ occurring at 05:15 hours on Friday 19th May 2023.

The results presented in Table 3 indicate that during the monitoring period (between 17 May 2023 and 2 June 2023) there was no exceedance of the 15-minute alert level ($150\mu\text{g}/\text{m}^3$) or action level ($195\mu\text{g}/\text{m}^3$) at Measurement Location 2. The highest concentration recorded was $20.39\mu\text{g}/\text{m}^3$ occurring at 05:00 hours on Sunday 28th May 2023.

Appendix A: Site plan and location of measurement positions



MEASUREMENT LOCATION 1



MEASUREMENT LOCATION 2



Appendix B: Glossary

Table 9: Air quality terminology Terminology
PM₁₀

Exceedance

µg/m³

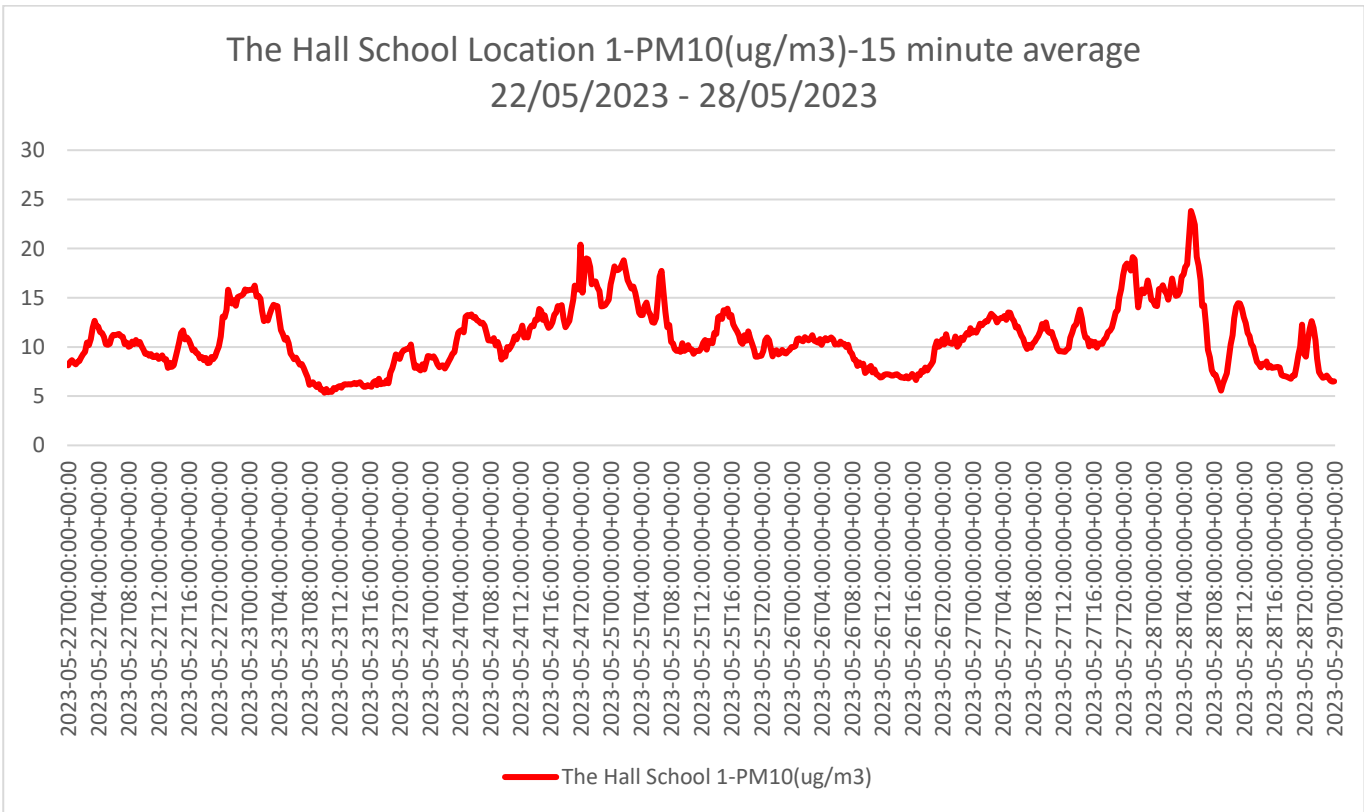
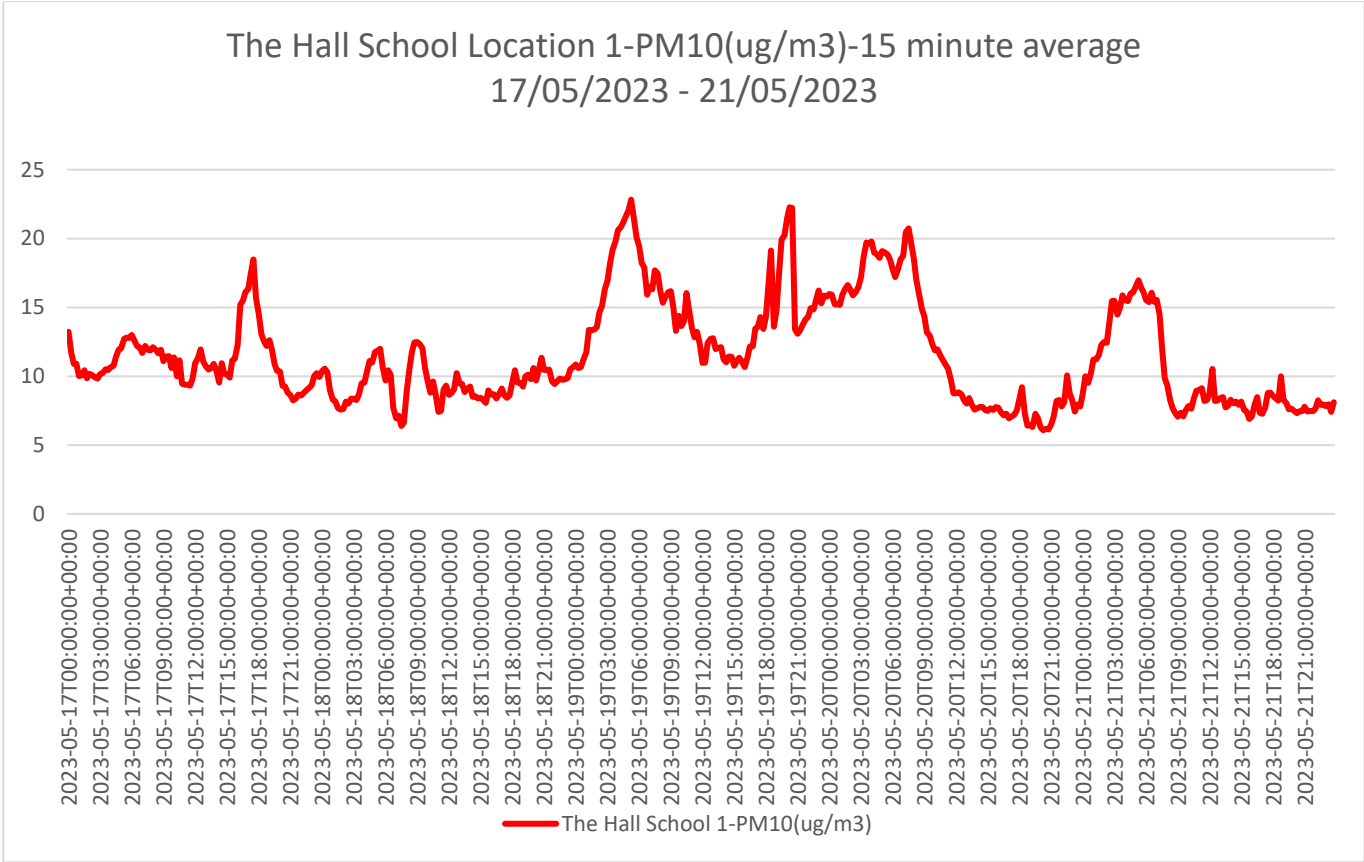
Description

Particulate matter with an aerodynamic diameter of less than 10 micrometres

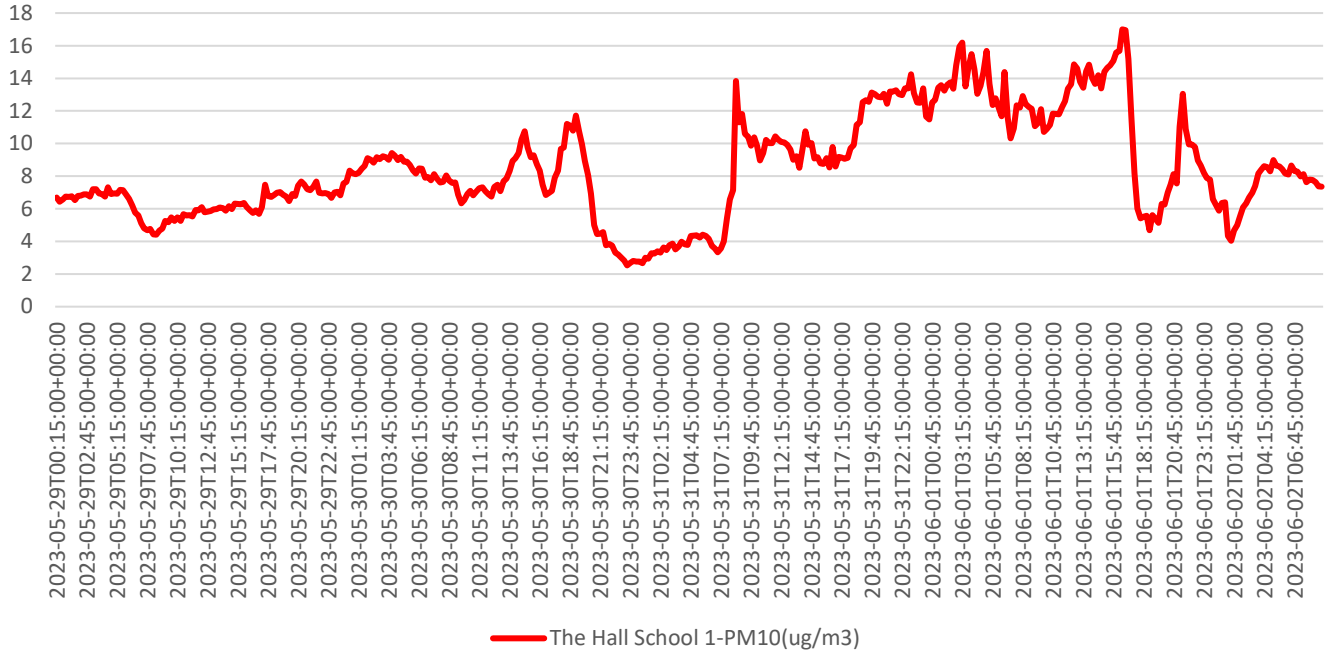
A period of time where the concentration of a pollutant is greater than, or equal to, the appropriate quality standard.

1 µg/m³ means that one cubic meter of air contains one microgram (millionth of a gram) of pollutant

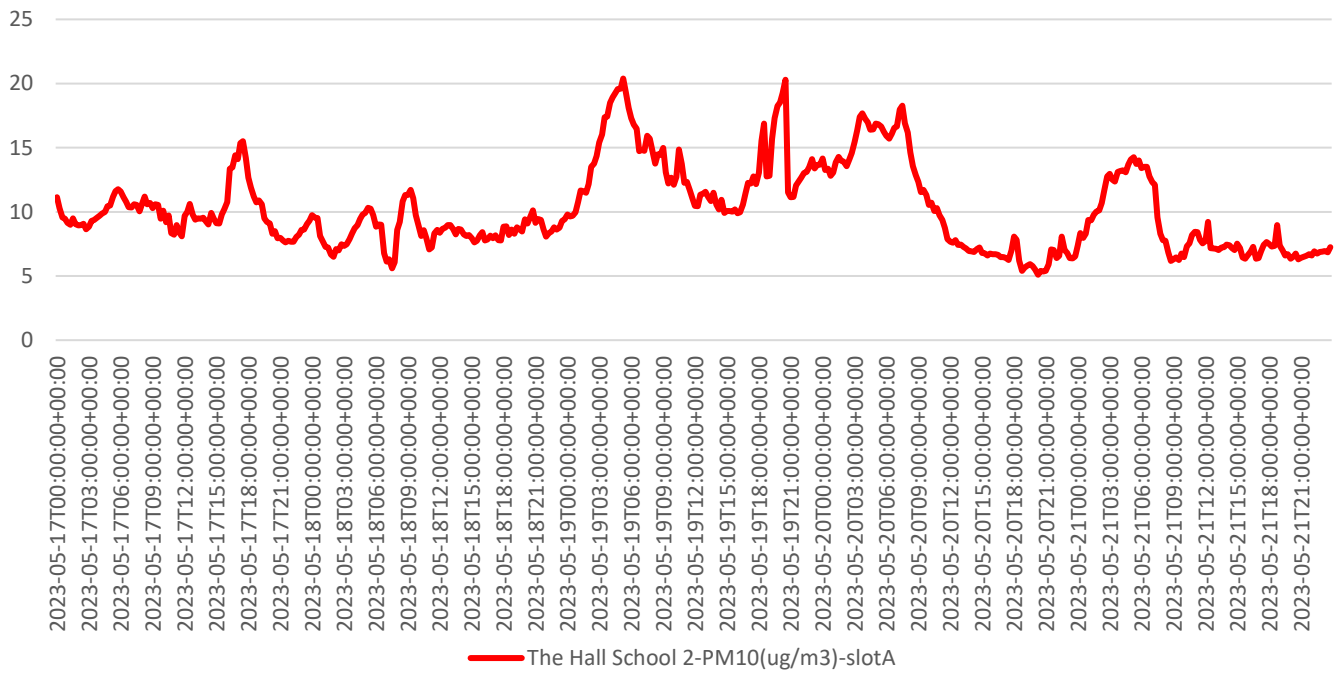
APPENDIX C: DUST MONITORING RESULTS



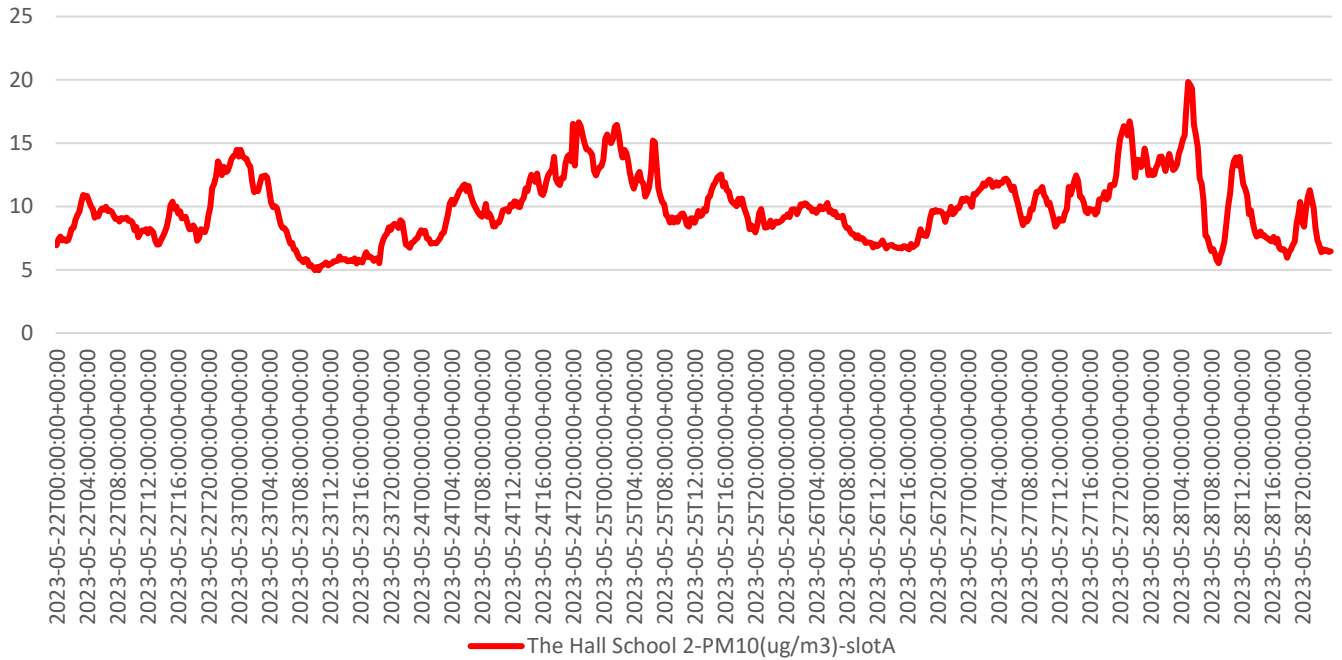
The Hall School Location 1-PM10(ug/m3)-15 minute average
29/05/2023 - 02/06/2023



The Hall School Location 2-PM10(ug/m3)
17/05/2023 - 21/05/2023



The Hall School Location 2-PM10(ug/m3)
22/05/2023 - 28/05/2023



The Hall School Location 2-PM10(ug/m3)
29/05/2023 - 02/06/2023

