Baseline Dust Monitoring Report

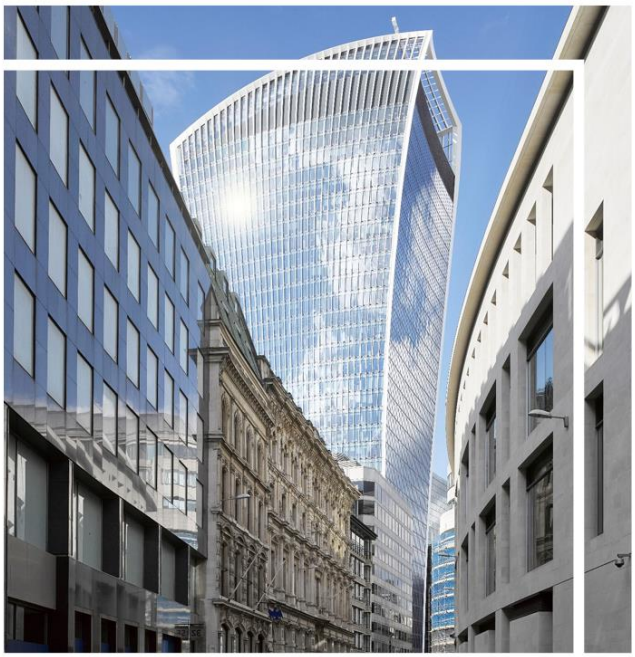
Godwin and Crowndale Estate

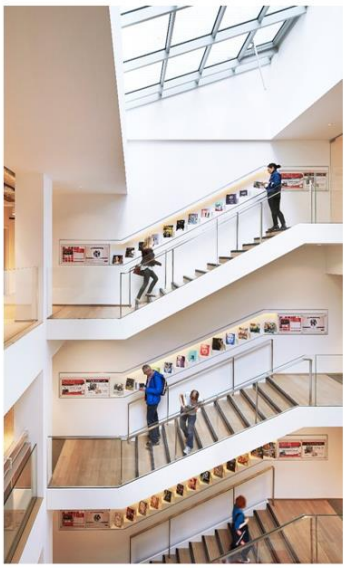
Camden Council

14 May 2024

35403-HML-XX-XX-RP-U-820001

Issue P02





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Contents

1. Introduction

1.1. London Borough of Camden Requirements

London Borough of Camden's (LBC) 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

Hilson Moran has been commissioned by Camden Council to undertake dust monitoring during the construction of 10, 3 storey houses at Godwin and Crowndale Estate in the London Borough of Camden hereafter referred to as the 'Site'. The Site location is shown in **Appendix A**.

Planning permission for the Site was granted by LBC in May 2021 (planning reference 2020/3801/P) subject to a number of planning conditions. Of relevance to this report is Planning Condition 18.

This report presents the findings of the three-month baseline monitoring period results of the air quality monitoring carried out between 9th February 2024 and 15th May 2024 (with an interim period of no power between 15th March and 25th April) and highlights any exceedance of the proposed trigger/action levels.

A glossary of terms is presented in **Appendix B**

2. Methodology

2.1. Monitoring Equipment

For dust (PM_{10}) monitoring at the site, the Aeroqual Dust Sentry monitors have been utilised at two locations. These monitors are MCERTS certified as required by LBC.

2.2. Monitoring Locations

The monitoring locations are presented in the Dust Management Plan (DMP) submitted to LBC which has been agreed with the Environmental Health Officer (EHO).

Location photographs and a map showing the monitoring locations is presented in **Appendix A** and further details are provided below:

- Baseline Monitoring Location 1:

  s/n 1563 | AER-DS #172 is located on the northern side of the site, mounted to a lamppost adjacent to the playing courts

- Baseline Monitoring Location 2

  s/n 1874 | AER-DS #233 is located to the southern edge of the site, mounted to a lamppost on Charlton Street

2.3. Trigger and Action Levels

In accordance with the requirements of the planning condition and as detailed in the DMP, early warning 'alert' and 'action' levels have been set and are presented in **Table 2.1** below. The incident response procedure, should a trigger or action level be exceeded, is presented in the DMP.

Table 2.1 Trigger and Action Levels for PM_{10}

Trigger/Action Level	Trigger/Action Dust Level (µg/m³)
Alert Level (as a 15-minute average)	150µg/m³
Action Level (as a 15-minute average)	250µg/m³
Alert Level (as a 1-hour average)	190µg/m³

3. Dust Monitoring Results

3.1. 15-Minute Averaging Period

A summary of 15-minute average PM_{10} levels for Baseline Monitoring Locations 1, 2, 3 and 4 are presented in **Tables 4.1, 4.2 4.3 & 4.4** below.

Table 3.1 Summary of Dust Monitoring Results (Monitoring Location 1)

Month Commencing	Max (µg/m³)	Min (µg/m³)	Average (µg/m³)	Number of Exceedances ≥ 150 µg/m³ Trigger Level	Number of Exceedances ≥ 150 µg/m³ Trigger Level	Data Capture
01/02/2024	27.8	0.5	4.9	0	0	100
01/03/2024	69.6	0.6	14.5	0	0	100*
01/04/2024	11.6	0.3	3.8	0	0	100*
01/05/2024	55.8	0.9	12.0	0	0	100
*Monitors were switched off between 15th March and 25th April, and the data loss from this period has not been included in the Data Capture						

Table 3.2 Summary of Dust Monitoring Results – Measurement Location 2

Month Commencing	Max (µg/m³)	Min (µg/m³)	Average (µg/m³)	Number of Exceedances ≥ 150 µg/m³ Trigger Level	Number of Exceedances ≥ 150 µg/m³ Trigger Level	Data Capture
01/02/2024	68.8	0.01	4.6	0	0	100
01/03/2024	65.9	0.4	13.4	0	0	100*
01/04/2024	13.2	0.02	3.2	0	0	100*
01/05/2024	48.5	0.4	11.0	0	0	100
*Monitors were switched off between 15th March and 25th April, and the data loss from this period has not been included in the Data Capture						

3.2. 1-hour averaging period

A summary of 1-hour average PM_{10} levels for Baseline Monitoring Locations 1, 2, 3 and 4 are presented in **Tables 4.1, 4.2 4.3 & 4.4** below.

Table 3.3 Summary of Dust Monitoring Results (Monitoring Location 1)

Month Commencing	Max (µg/m³)	Min (µg/m³)	Average (µg/m³)	Number of Exceedances ≥ 190 µg/m³ Trigger Level	Data Capture
01/02/2024	23.3	0.6	4.9	0	100
01/03/2024	67.7	0.9	14.4	0	100*
01/04/2024	11.0	0.4	3.8	0	100*
01/05/2024	47.9	1.0	11.9	0	100
*Monitors were switched off between 15th March and 25th April, and the data loss from this period has not been included in the Data Capture					

Table 3.4 Summary of Dust Monitoring Results – Measurement Location 2

Month Commencing	Max (µg/m³)	Min (µg/m³)	Average (µg/m³)	Number of Exceedances ≥ 150 µg/m³ Trigger Level	Number of Exceedances ≥ 150 µg/m³ Trigger Level	Data Capture
01/02/2024	37.2	0.01	4.6	0	0	100
01/03/2024	63.9	0.6	13.5	0	0	100*
01/04/2024	13.2	0.2	3.2	0	0	100*
01/05/2024	41.9	0.6	10.9	0	0	100
*Monitors were switched off between 15th March and 25th April, and the data loss from this period has not been included in the Data Capture						

4. Dust Monitoring Conclusions

4.1. 15-Minute Averaging Period

The results presented in Tables 4.1 and 4.2 indicate that during the monitoring period there were no exceedances of the 15-minute alert level (150 µg/m³) or the action level (250 µg/m³).

The highest concentration recorded at Monitoring Location 1 was 69.61 µg/m³ occurring at 10:45 on Thursday 7th March 2024.

At Monitoring Location 2 the highest recorded concentration at was 68.77 µg/m³ occurring at 12:30 on Friday 9th February 2024.

4.2. 1-Hour Monitoring Period

The results presented in Table 4.3 and 4.4 indicate that during the monitoring period there was no exceedance of the 1-hour limit value for PM_{10} (190 µg/m³) at Monitoring Locations 1 and 2.

The highest concentration recorded at Monitoring Location 1 over a 1-hour period was 67.67 µg/m³ occurring at 11.00 on 7th March 2024

At Monitoring Location 2 the highest recorded concentration was 63.87 µg/m³ on Thursday 7th March 2024.

5. Monitoring Summary for the Baseline Period

- There were no exceedances of the 15-min alert or action trigger levels at Monitoring Location 1 and 2 during the baseline period.

- There were no exceedances of the 1-hour limit at Monitor Locations 1 and 2 during the baseline period; and,

- Data coverage was 100% at both monitoring locations between 9th February - 15th March and 25th April – 14th May, omitting the interim period of no power.

- Power to the monitors was disabled between 15th March to 25th April due to the power source no longer being viable, as a result, the monitoring period was extended. The data missing during this timeframe has been excluded from the report's data capture to maintain the integrity of the results and prevent any distortion.

5.1. Trigger and Action Levels

The baseline data collected is well below the trigger/alert thresholds indicating that there is sufficient headroom between the captured baseline and the proposed thresholds. Therefore, the proposed thresholds as set out in the DMP which are in accordance with GLA Guidance are considered to be suitable.

6. Summary

The baseline data collected at 2 locations around the site between 9th February 2024 and 14th May 2024 indicates that there were no exceedances of the Alert (>150 µg/m³) and Action (>250 µg/m³) trigger levels for PM_{10} for the 15-minute averaging period.

There were no exceedances of the 1 hr mean alert level (>190 µg/m³) for PM_{10}.

Appendix A - Site Plan and Location of Baseline Monitors

The baseline monitoring locations are shown in Figure 1(BML 1 & BML2).

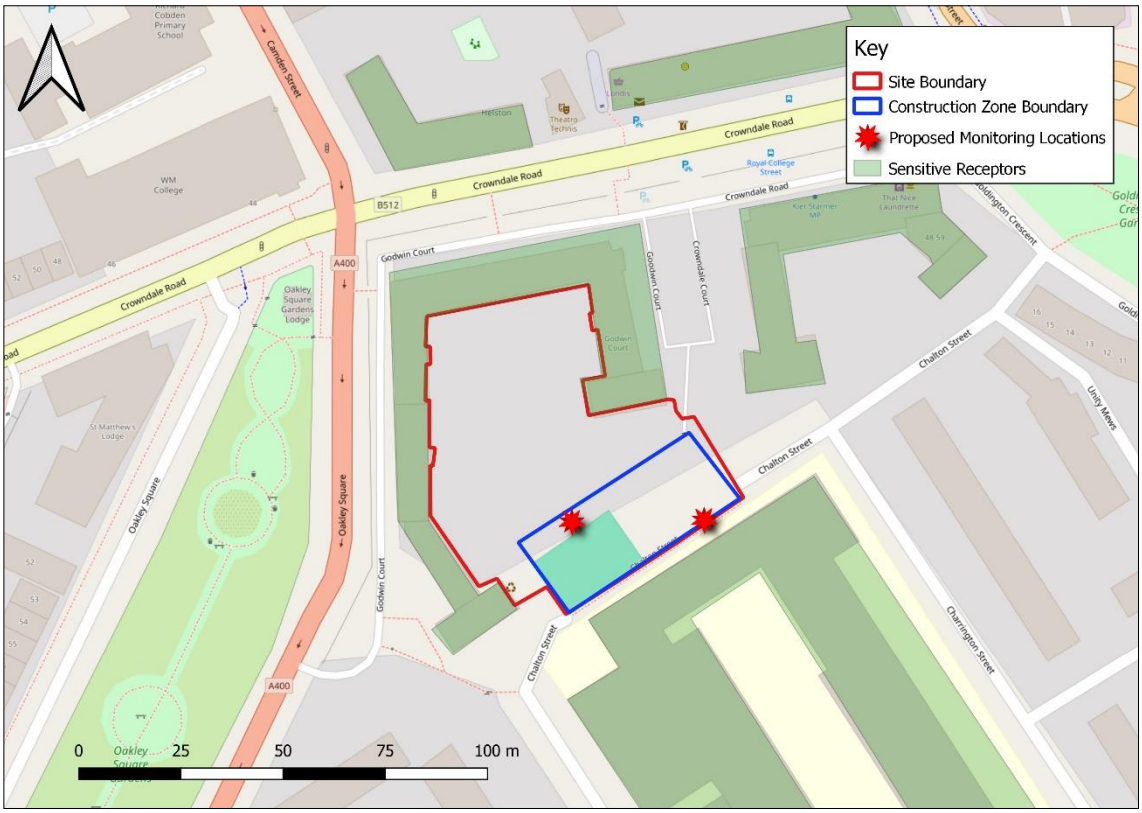

Figure 1 – Monitoring Locations

Figure 2 Baseline Monitoring Location 1

Figure 3 Baseline Monitoring Location 3

Appendix B Glossary

Terminology	Description
PM_{10}	Particulate matter with an aerodynamic diameter of less than 10 micrometres
Exceedance	A period of time where the concentration of a pollutant is greater than, or equal to, the appropriate quality standard
µg/m³	1 µg/m³ means that one cubic meter of air contains one microgram (millionth of a gram) of pollutant

Appendix C Dust Monitoring Results

15-Minute PM_{10}

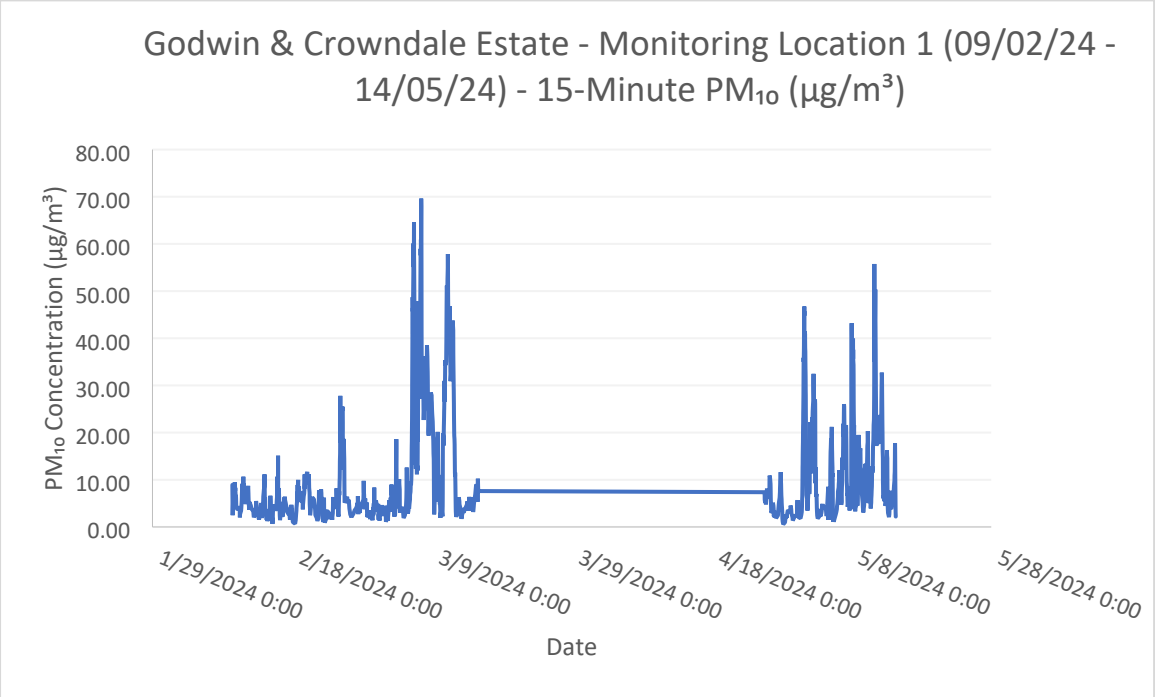

Figure 1 - Monitoring Location 1 – 15-Minute PM_{10} (µg/m³)

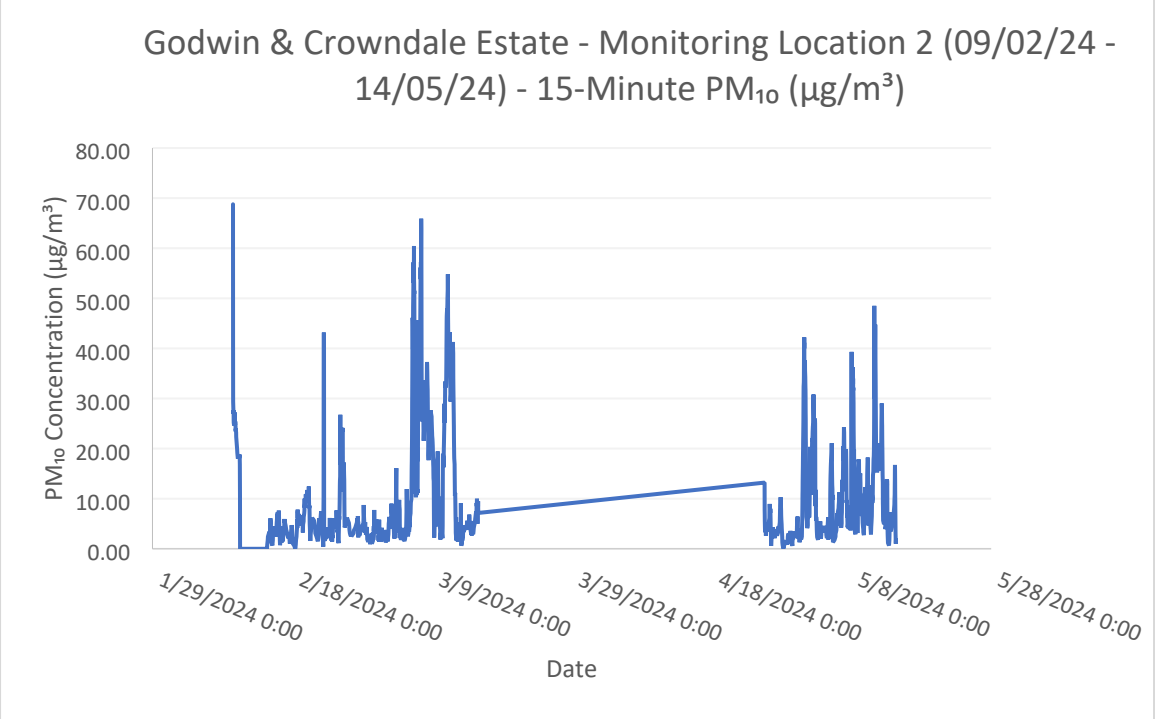

Figure 2 - Monitoring Location 2 – 15-Minute PM_{10} (µg/m³)

1-Hour PM_{10} (µg/m³)

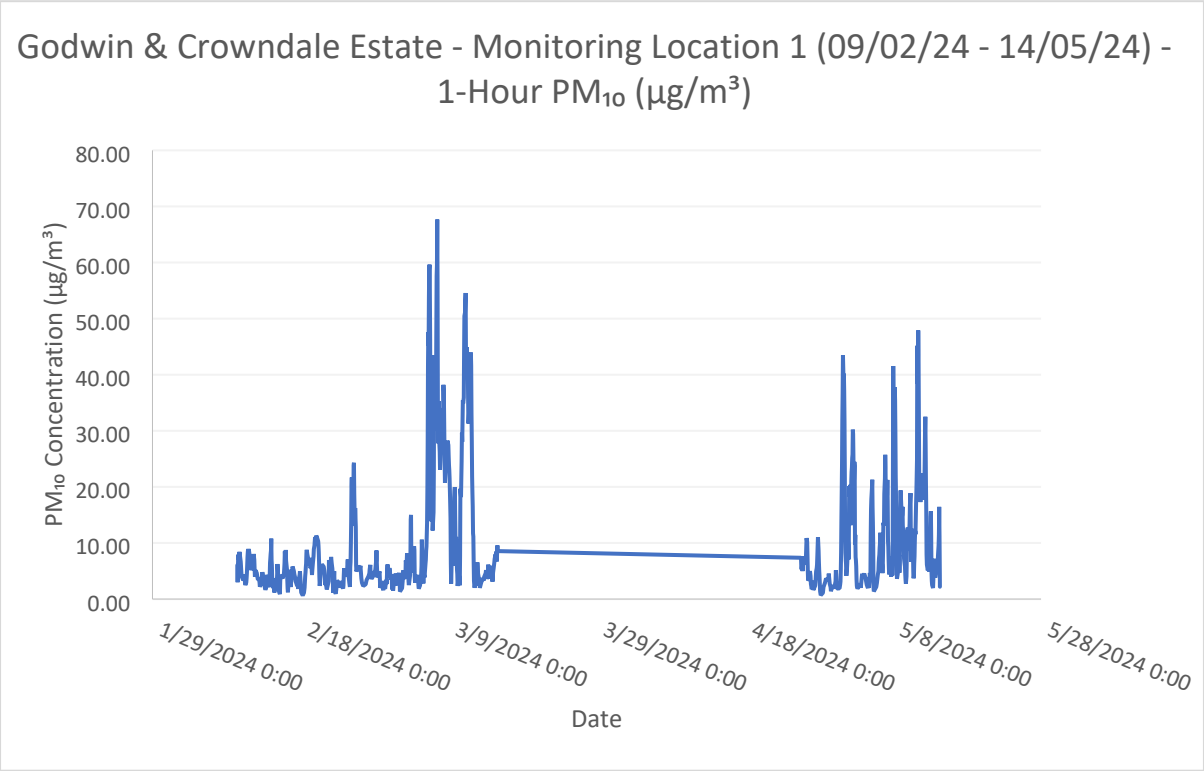

Figure 3 - Monitoring Location 1 – 1-Hour PM_{10} (µg/m³)

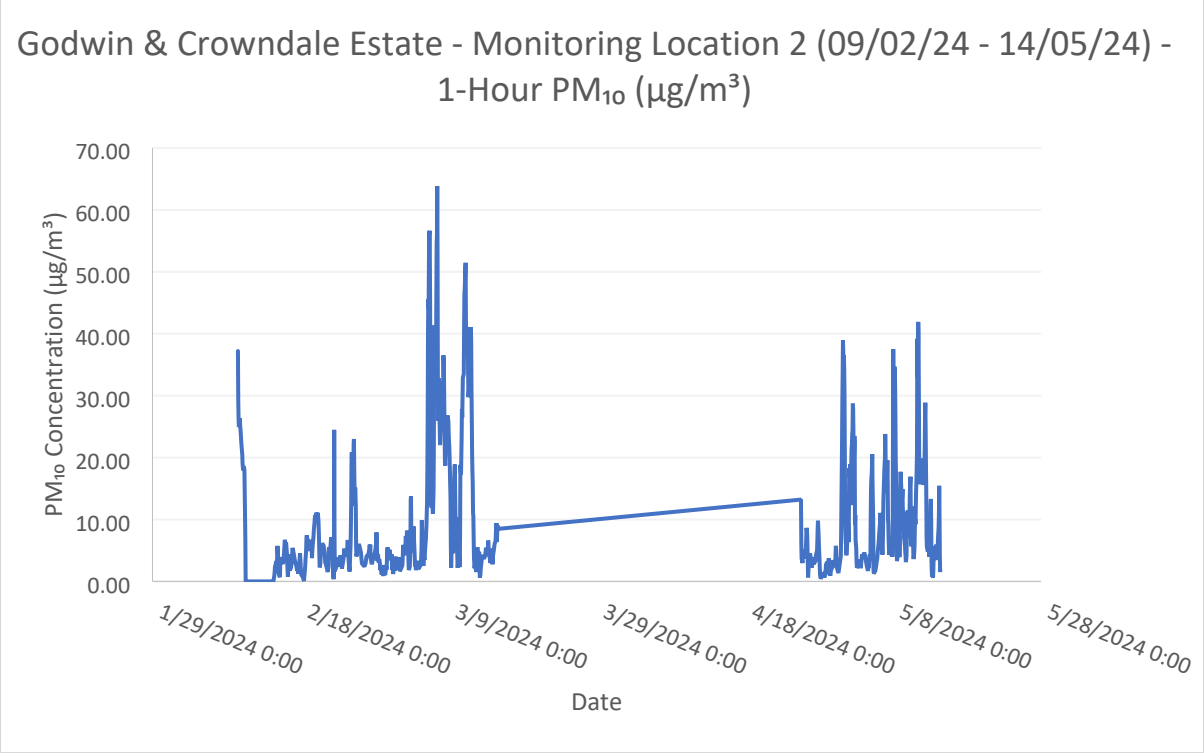

Figure 4 - Monitoring Location 2 – 1-Hour PM_{10} (µg/m³)

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