



PM₁₀ Monitoring Report

June 2021

Highgate Newtown Community Centre

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PM₁₀ Monitoring Report (June 2021)

Highgate Newtown Community Centre

London Borough of Camden

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1. Monitoring Programme

Introduction

- 1.1 Phlorum Limited has been commissioned by the London Borough of Camden (LBC) to undertake PM₁₀ dust monitoring at Highgate Newtown Community Centre, 25 Bertram St, Highgate, London N19 5DQ.
- 1.2 Dust monitoring is required for the demolition of existing buildings on site and a mixed-use re-development of the site incorporating new blocks for residential and community use (planning ref **2018/5774/P**).
- 1.3 PM₁₀ dust monitoring is required throughout the circa 98-week build programme, including a period of baseline monitoring. Monthly reports are required throughout this phase to be supplied to the LBC air quality team.
- 1.4 This report provides details of the monitoring programme and associated results and covers the monitoring period:
 - Ist June 2021 to the 30th June 2021, inclusive.

Guidance and consultation

- 1.5 The dust monitoring programme follows guidance set out in the Greater London Authority (GLA) Control of Dust and Emissions During Construction and Demolition Supplementary Planning Guidance (SPG)¹, as well as the Institute of Air Quality Management (IAQM) Guidance on Monitoring in the Vicinity of the Demolition and Construction Sites².
- 1.6 The approach to the monitoring programme, as outlined below, was agreed with the air quality officer at LBC in advance of the installation.

Dust monitoring units

1.7 As requested during consultation with LBC, two 'MCERTS' indicative real-time PM₁₀ monitors were installed on site on Friday 28th February 2020 and were connected to power and began transmitting data on 2nd March 2020.

¹ GLA Control of Dust and Emissions During Construction and Demolition Supplementary Planning Guidance, 2014: <u>Https://www.london.gov.uk/sites/default/files/gla_migrate_files_destination/Dust%20and%20Emissions%20SPG%208%20</u> <u>July%202014.pdf</u>

² IAQM Guidance on Monitoring in the Vicinity of the Demolition and Construction Sites, 2018: https://iaqm.co.uk/text/guidance/guidance_monitoring_dust_2018.pdf



1.8 Full details of the dust monitoring units, including service history, calibration, and installation dates, are provided below in Table 1.1.

140.00	Monitor 1 – SW Residential	Monitor 2 – NE Courtyard	
ltem	ID: s/n 1595 #177 MP2	ID: s/n 1597 #178 MP1	
Dust Monitor	Aeroqual Dust Sentry (MCERTS certified)	Aeroqual Dust Sentry (MCERTS certified)	
Serial Number	DS 03052021-1595	DS 03052021-1597	
Location (lat, long)	51.5626°N, -0.1439°E	51.5629°N, -0.1429°E	
Inlet Height	c. 1.5m	c. 3m	
Last Calibrated	June 4 th 2021	June 4 th 2021	
Calibration Due	June 4 th 2023	June 4 th 2023	
Installation	28 th February 2020 / 2 nd March 2020	28 th February 2020 / 2 nd March 2020	

Table 1.1: Dust monitor details

1.9 An updated map of the dust monitoring locations is provided in Figure 1, with new photographs of the units installed on site provided in Figures 2 and 3.

Trigger Levels

- 1.10 The following trigger levels were set at the request of LBC's air quality officer:
 - 'Warning' level: 150µg.m⁻³ (15-minute average);
 - 'Action' level: 250µg.m⁻³ (15-minute average);
 - ♥ 'Action' level: 190µg.m⁻³ (1-hour average).



2. Monitoring Results

Monitoring period

2.1 The results presented in this section of the dust monitoring report relate to the monitoring period 1st June to 30th June 2021, inclusive.

Details of works during monitoring period

- 2.2 Works on site commenced at the beginning of May 2021 and continued through June 2021. The construction activities which occurred during the June monitoring period include the following:
 - Excavation and subsequent pouring of concrete foundations;
 - Stoning up of work zones;
 - Tying of rebar.

Summary data during monitoring period

2.3 The data in Table 2.1, below, provides a summary of exceedances of the trigger levels, as well as average concentrations and valid data capture.

ltem	Monitor 1 – SW Residential	Monitor 2 – NE Courtyard	Explanation	
	ID: s/n 1597 #178 MP1	ID: s/n 1597 #178 MP1		
Data Capture	98.1%	99.3%	There were no major connectivity issues during this monitoring period.	
Average Daily Mean PM ₁₀ Concentration (µg.m ³)	5.9	6.4	-	
15-Minute mean Trigger Level Exceedances	0	0	There were no exceedances of the 15- minute mean trigger level during June 2021.	
1-Hour mean Trigger Level Exceedances	0	0	There were no exceedances of the 1-Hour mean trigger during June 2021	



- 2.4 Graph 1 provides the 15-minute average PM₁₀ time-series for the monitoring period. It shows that there were no exceedances of the 15-minute 'Warning' level at either monitor during June 2021.
- 2.5 There were no exceedances of the 15-minute 'Action' trigger level at either monitor during this period. Overall, there is good agreement in the trend lines for both monitors which suggests that there are few significant localised dust sources in close proximity to either monitor.
- 2.6 Graph 2 provides the 1-hour average PM₁₀ time-series for the monitoring period. It shows that there are no exceedances of the 'Action' trigger level. Again, there is good agreement in the trend lines for both monitors, suggesting that there are few significant localised dust sources in close proximity to either monitor.

Summary of results

- 2.7 There were no exceedances of either the 15-minute 'Warning' level or the 'Action' trigger levels at either Monitor 1 or Monitor 2 throughout this monitoring period.
- 2.8 There were no exceedances of the 1-hour mean 'Action' trigger level during the monitoring period.
- 2.9 Overall, there is good agreement in the trend line for both monitors, however, it is worth noting that there were some brief, localised spikes in PM₁₀ concentrations observed at both monitors.
- 2.10 The construction works which commenced on site at the beginning of May 2021continued throughout June 2021. Therefore, the results presented within this report for June 2021 relate to the second period of construction phase monitoring.



Figure 1: Map of monitoring locations







Figure 2: Monitor 1 – SW Residential







Figure 3: Monitor 2 – NE Courtyard





Note: This monitor was moved on 25th August 2020.



Graph 1: 15-minute mean time-series







Graph 2: 1-hour mean time-series







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