

PM₁₀ Monitoring Report
(September 2020)

Highgate Newtown Community Centre

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Highgate Newtown Community Centre

London Borough of Camden

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1. Monitoring Programme

Introduction

- 1.1 Phlorum Ltd 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:

 1st September 2020 to the 30th September 2020, 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.
- 1.8 Full details of the dust monitoring units, including service history, calibration and installation dates, are provided below in Table 1.1.

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

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

Table 1.1: Dust monitor details




Item	Monitor 1 – SW Residential	Monitor 2 – NE Courtyard
	ID: s/n 447 #08 MP2	ID: s/n 203 #03 MP1
Dust Monitor	Aeroqual Dust Sentry (MCERTS certified)	Aeroqual Dust Sentry (MCERTS certified)
Serial Number	DS 25102016-447	DS 26062015-203
Location (lat, long)	51.5626°N, -0.1439°E	51.5629°N, -0.1429°E *
Inlet Height	c. 1.5m	c. 3m *
Last Calibrated	July 1 st 2019	January 30 th 2019
Calibration Due	June 30 th 2021	January 29 th 2021
Installation	28 th February 2020 / 2 nd March 2020	28 th February 2020 / 2 nd March 2020

* On the 25th August, Monitor 2 was relocated and allocated a different power source, as the wall the unit fixed to was to be demolished.

- 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 September to 30th September 2020, inclusive.

Details of works during monitoring period

- 2.2 Demolition works commenced at the site during this monitoring period. Details of the demolition works that took place during this monitoring period are listed below:

-  The main hall was levelled to the base floor;
-  Caretakers cottage was demolished;
-  The community centre main building was demolished;
-  Crushing of foundations; and
-  Removal of demolished materials

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.

Table 2.1: Summary table of exceedances of trigger levels

Item	Monitor 1 – SW Residential	Monitor 2 – NE Courtyard	Explanation
	ID: s/n 447 #08 MP2	ID: s/n 203 #03 MP1	
Data Capture	91.7%	98.6%	A connectivity issue occurred at Monitor 1 between 26 th September at 06:42 and 28 th September at 13:15.
Average Daily Mean PM ₁₀ Concentration (µg.m ³)	5.99	5.93	-
15-Minute mean Trigger Level Exceedances	0	0	There were no exceedances of the 15-Minute mean trigger level at either monitor during September 2020.

1-Hour mean Trigger Level Exceedances	0	0	There were no exceedances of the 1-Hour mean trigger level at either monitor during September 2020.
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- 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 or the 15-minute 'Action' trigger level at either Monitor 1 or Monitor 2. Overall, there is good agreement in the trend lines for both monitors which suggest that there are few significant localised dust sources in close proximity to either monitor.
- 2.5 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 and there is good agreement in the trend line for both monitors. A brief localised dust source was present at Monitor 1 between 16:16 and 17:16 on September 3rd.

Summary of results

- 2.6 There were no exceedances of the 15-minute 'Warning' level at Monitor 1 and also no exceedances of the 15-minute PM₁₀ 'Action' trigger levels at either monitor during the monitoring period.
- 2.7 Overall, there is good agreement in the trend line for both monitors and there were no exceedances of the 1-hour mean 'Action' trigger level during the monitoring period.
- 2.8 During this monitoring period, demolition works commenced on site. As such, the results presented for September 2020 relate to the first construction phase monitoring period.

Figure 1: Map of monitoring locations



Figures

Figure 2: Monitor 1 – SW Residential



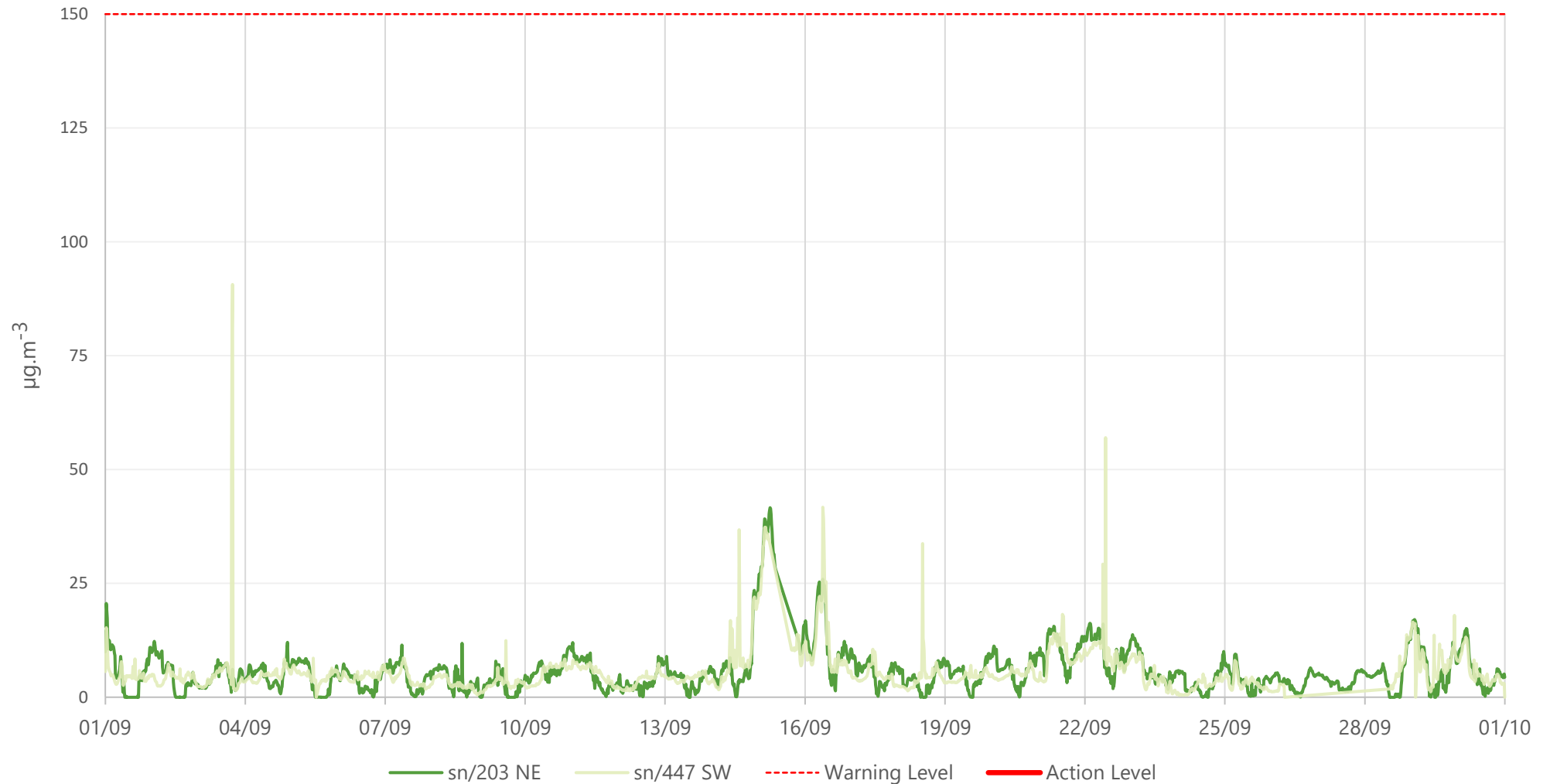
Figure 3: Monitor 2 – NE Courtyard



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

Graph 1: 15-minute mean time-series

Dust Monitoring at Highgate Newtown Community Centre (15 Minute Averages for PM₁₀)



Graph 2: 1-hour mean time-series

Dust Monitoring at Highgate Newtown Community Centre (Hourly Averages for PM₁₀)





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