

Air Quality and Dust Monitoring Monthly Report – October 2022

Birmingham City Council



Department for Transport

High Speed Two (HS2) Limited has been tasked by the Department for Transport (DfT) with managing the delivery of a new national high speed rail network. It is a non-departmental public body wholly owned by the DfT.

High Speed Two (HS2) Limited,
Two Snowhill
Snow Hill Queensway
Birmingham B4 6GA

Telephone: 08081 434 434

General email enquiries: HS2enquiries@hs2.org.uk

Website: www.gov.uk/hs2

A report prepared by EWCs and MWCCs on behalf of HS2 Ltd.

High Speed Two (HS2) Limited has actively considered the needs of blind and partially sighted people in accessing this document. The text will be made available in full on the HS2 website. The text may be freely downloaded and translated by individuals or organisations for conversion into other accessible formats. If you have other needs in this regard please contact High Speed Two (HS2) Limited.

© High Speed Two (HS2) Limited, 2021, except where otherwise stated.

Copyright in the typographical arrangement rests with High Speed Two (HS2) Limited.

This information is licensed under the Open Government Licence v2.0. To view this licence, visit www.nationalarchives.gov.uk/doc/open-government-licence/version/2 **OGI** or write to the Information Policy Team, The National Archives, Kew, London TW9 4DU, or e-mail: psi@nationalarchives.gsi.gov.uk. Where we have identified any third-party copyright information you will need to obtain permission from the copyright holders concerned.



Printed in Great Britain on paper containing at least 75% recycled fibre.

Monthly Summary

1.1.1 This Summary Report is published in fulfilment of commitments detailed in the High Speed Rail (London-West Midlands) Environmental Minimum Requirements, Annex 1: Code of Construction Practice, for the nominated undertaker to present the results of air quality and dust monitoring undertaken within Birmingham City (BCC) during October 2022.

1.1.2 Figures 1 – 3 in Appendix A indicates the current worksites together with the dust monitoring locations for October 2022.

1.1.3 This summary should be read in conjunction with the overview monitoring report monthly available from www.gov.uk/government/collections/monitoring-the-environmental-effects-of-hs2, which highlights: the applicable standards and guidance, as well as the air quality and dust monitoring methodologies to be implemented by nominated undertakers throughout construction.

1.1.4 The current worksites as presented in Appendix A, Figures 1 – 3, include:

Washwood Heath (Sublot 4)

- On site piling;
- Setup of the compound area and haulage routes; and
- Demolition and crushing of existing concrete foundations on site.

Bromford East Tunnel Portal (BETP) (Sublot 1B)

- On-site slurry treatment.

Curzon Street Station

- Ground remediation; and
- Utility diversion works.

1.1.5 Seven (7) dust monitors are installed at worksites, where works are underway. These sites returned a medium to high dust risk rating.

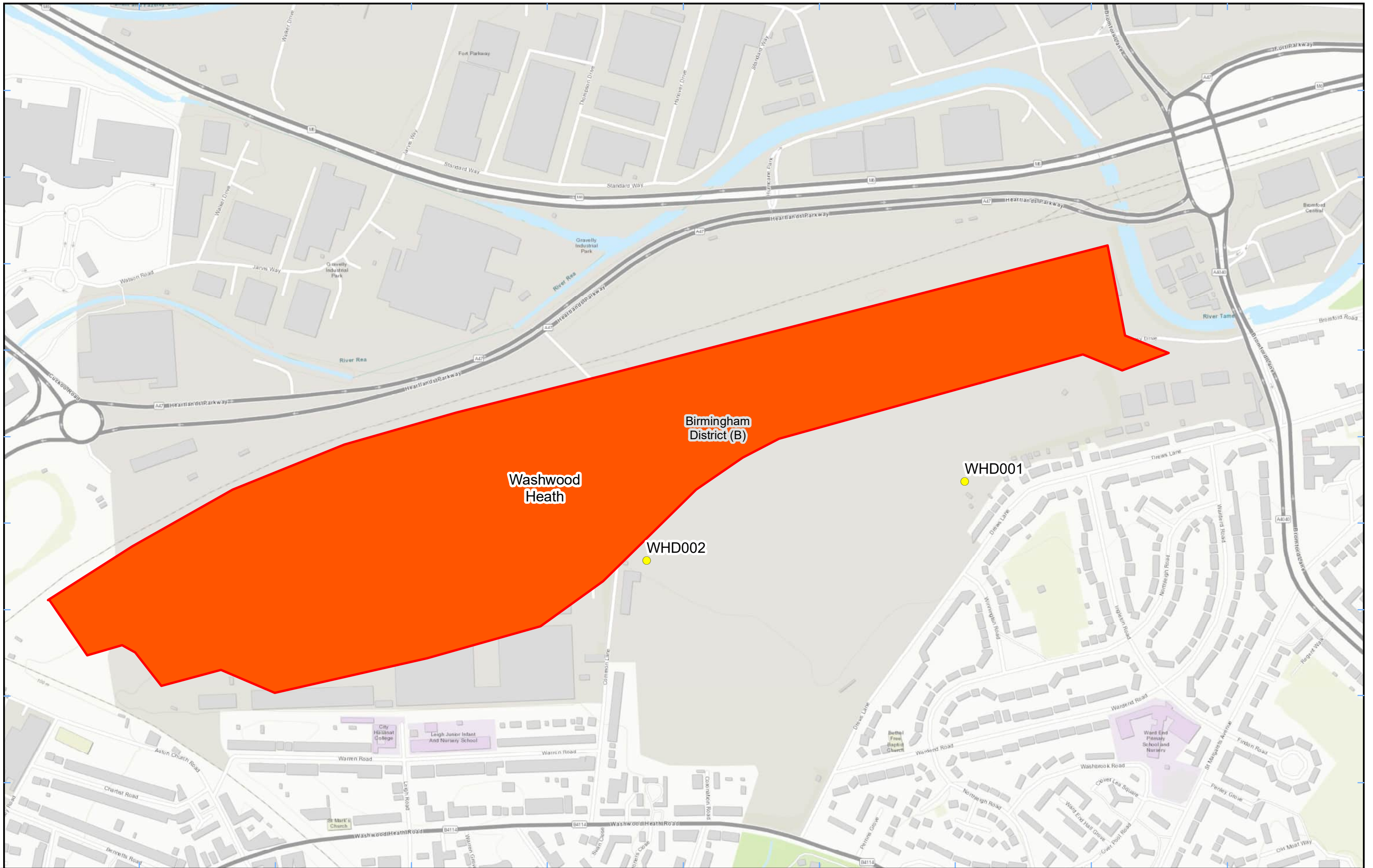
1.1.6 The dust monitoring locations and results are presented in Appendix B, Table 1, together with line charts of monthly data from the dust monitors presented in Figure 4. All continuous dust monitoring is undertaken using indicative monitors. Despite being Environment Agency (MCERTS) certified, indicative monitors carry a higher level of uncertainty than reference monitors, and therefore cannot be strictly compared with Air

Quality Standards for human health and the environment. The purpose of the monitoring undertaken is to ensure the effectiveness of the on-site mitigations.

- 1.1.7 The trigger level for PM₁₀ concentrations of 190 µg/m³, over a 1-hour period, in accordance with the updated guidance document '*Guidance on Monitoring in the Vicinity of Demolition and Construction Sites – (October 2018)*' has been applied.
- 1.1.8 There were no (0) dust trigger alerts recorded during the monitoring period (October 2022).
- 1.1.9 No (0) complaints were received during the reporting period.
- 1.1.10 Data capture was below 90% for multiple monitors due to a fault with the WHD002 dust monitor requiring repair and then, reinstallation. WHD002 was swapped out for laboratory calibration on 12th October. A fault was discovered so the monitor was removed again on 18th October, repaired, and reinstalled on 27th October. Also, #552 monitor had low data capture due to power disconnection on site.

Appendix A – Worksites and Monitoring Locations

Figures 1-3: Worksites and Monitoring Locations within the BCC



Legend

- Dust Monitor
- District Borough Unitary Boundaries
- Worksite

Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community


Map Number

Map Name
**Worksite and Monitoring Locations
 In BCC (Sheet 1)**

Birmingham City Council

Map Name
**Worksite and Monitoring Locations
 In BCC (Sheet 1)**


Birmingham City Council



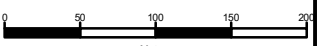
Registered in England. Registration number 06791686.
 Registered office: 2 Snowhill, Queensway,
 Birmingham B4 6GA.

© Crown copyright and database rights 2022.
 Ordnance Survey Licence Number 100049190.

Doc Number:



Scale at A3: 1:5,000



Metres

Date: 23/06/22



Legend

- Dust Monitor
- Worksite
- District Borough Unitary Boundaries

Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Map Number

Map Name
**Worksite and Monitoring Locations
 In BCC (Sheet 2)**

Birmingham City Council

HS2 Ltd accept no responsibility for any circumstances, which arise from the reproduction of this map after alteration, amendment or abbreviation or if it is issued in part or issued incomplete in any way.

Registered in England. Registration number 06791686.
 Registered office: 2 Snowhill, Queensway, Birmingham B4 6GA.

© Crown copyright and database rights 2022.
 Ordnance Survey Licence Number 100049190.

Scale at A3: 1:3,000

Doc Number:

Date: 23/06/22



Legend

- Dust Monitor
- District Borough Unitary Boundaries

Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Map Number

Map Name
**Monitoring Locations
In BCC (Sheet 3)**

Birmingham City County

hs2

HS2 Ltd accept no responsibility for any circumstances, which arise from the reproduction of this map after alteration, amendment or abbreviation or if it is issued in part or issued incomplete in any way.

Registered in England. Registration number 06791686.
Registered office: 2 Snowhill, Queensway,
Birmingham B4 6GA.

© Crown copyright and database rights 2022.
Ordnance Survey Licence Number 100049190.

Scale at A3: 1:2,000

Doc Number:

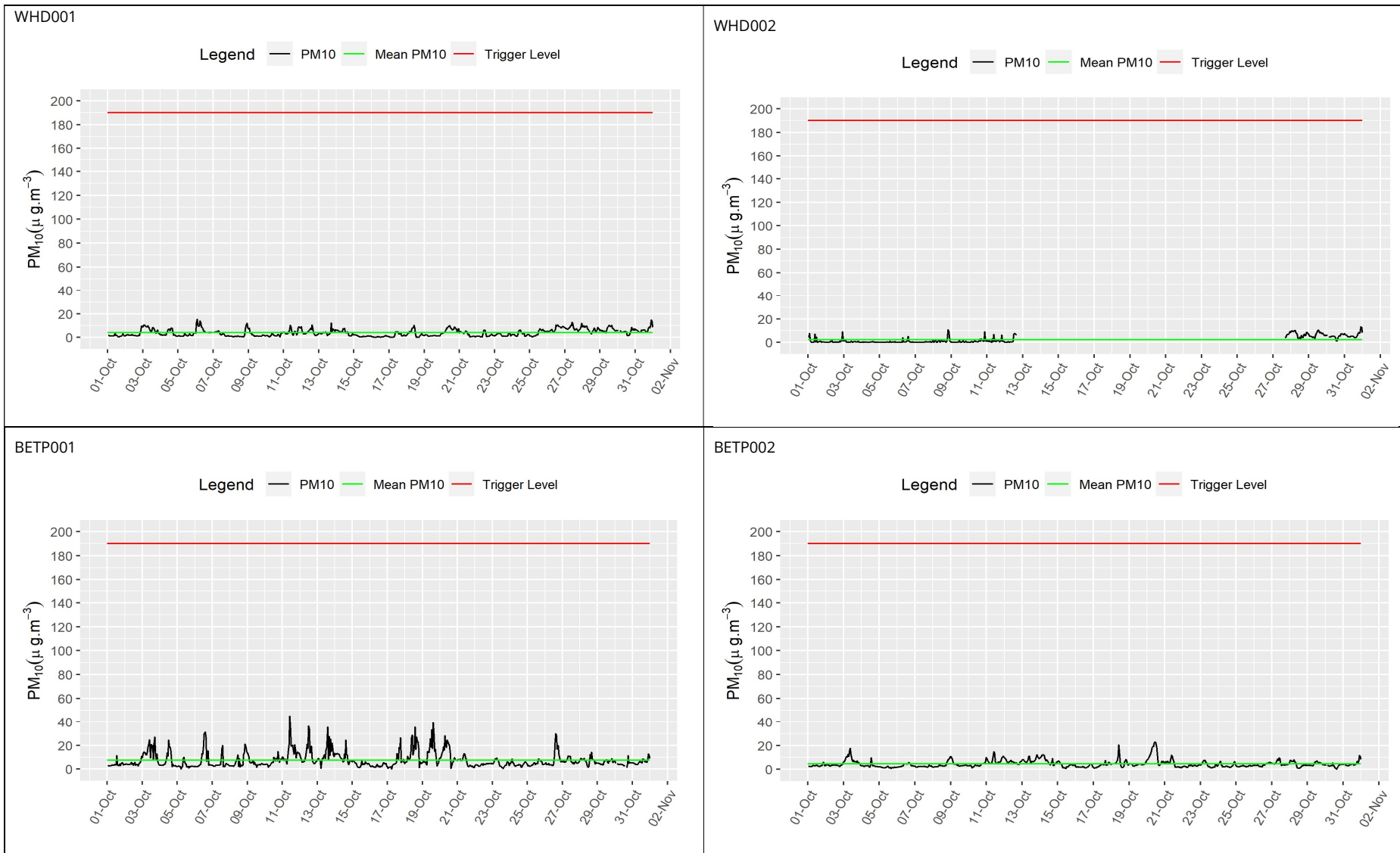
Date: 23/06/22

Appendix B – Dust Monitoring Results

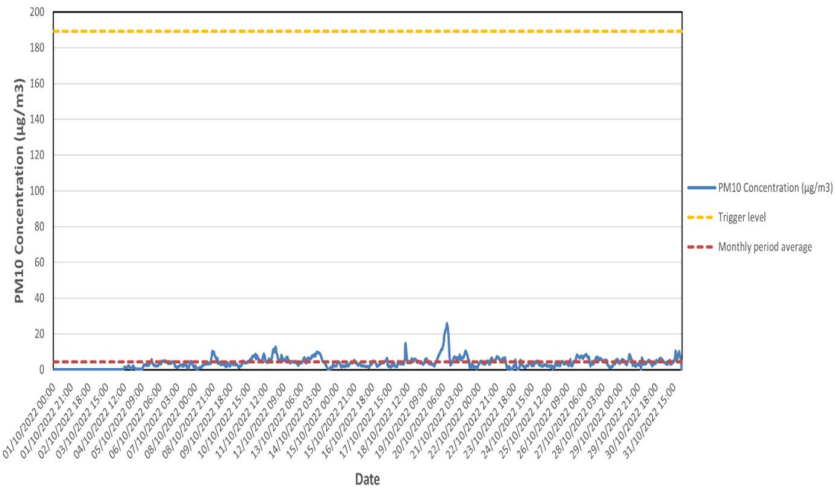
Table 1: Dust monitoring locations and October 2022 Results

Monitoring site ID	Coordinates (X,Y)	Location description	Dust risk rating for site	Monitoring site active during period	Change to site since previous period report	Mean 1-hour PM ₁₀ concentration (µg/m ³)	Minimum 1-hour PM ₁₀ concentration (µg/m ³)	Maximum 1-hour PM ₁₀ concentration (µg/m ³)	Number of 1-hour periods exceeding trigger level of 190 µg/m ³	Data capture (%)
WHD001	411221, 289245	Washwood Heath Depot, near receptors on Drews Lane	M	Yes	No	4.0	0.1	15.3	0	99.9
WHD002	410758, 289130	Washwood Heath Depot, near receptors on Common Lane	M	Yes	No	2.5	0.1	13.5	0	50.9
BETP001	416719, 290767	Bromford East Tunnel Portal, Twisted Oak Stables	M	Yes	No	7.6	0.1	45.2	0	99.7
BETP002	417406, 290605	Bromford East Tunnel Portal, Attleboro Lane	M	Yes	No	4.6	0.2	23.0	0	99.9
Dust #530 (old #555)	407702, 287079	Curzon Street Station HS ₂ Site	H	N/A	N/A	4.3	0.1	25.7	0	88.4
Dust #753	407619, 287006	Curzon Street Station HS ₂ Site	H	N/A	N/A	4.7	0.1	24.9	0	96.4
Dust #552	407765, 287073	Curzon Street Station HS ₂ Site	H	N/A	N/A	6.4	1.5	33.2	0	77.6

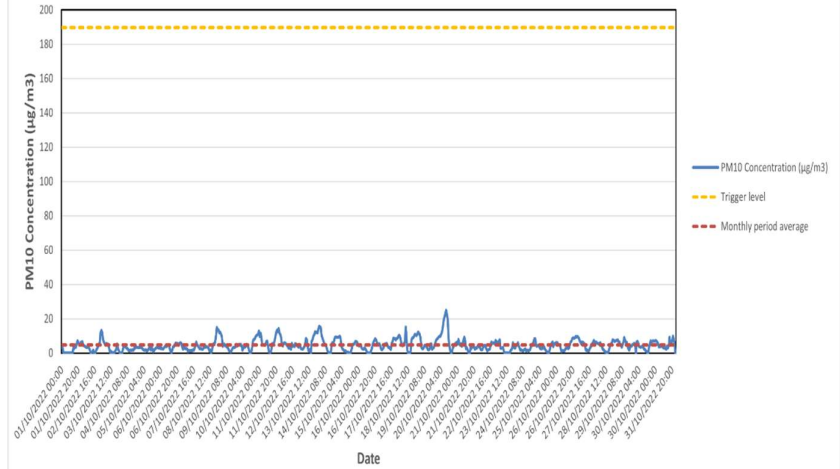
Figure 4: Construction dust 1-hour mean indicative PM₁₀ concentration for all dust monitors



Dust #530 (old #555) Curzon Str - Hourly Mean Indicative PM10 Concentration Graph (October 2022)



Dust #753 Curzon Str - Hourly Mean Indicative PM10 Concentration Graph (October 2022)



Dust #552 Curzon Str - Hourly Mean Indicative PM10 Concentration Graph (October 2022)

