

## Air Quality and Dust Monitoring Monthly Report – July 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.

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

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# 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 dust monitoring undertaken within Birmingham City Council (BCC) during July 2022.
- 1.1.2 Figures 1-3 in Appendix A indicates the BCC worksite together with dust monitoring locations for July 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](http://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:
- Curzon Street Station**
- The ground remediation and utility diversion works.
- Washwood Heath**
- Setup of the compound area and haulage routes; and
  - Demolition and crushing of existing concrete foundations.
- Bromford East Tunnel Portal (BETP)**
- On-site slurry treatment.
- 1.1.5 Seven (7) dust monitors are installed around the worksites, where works are underway. These sites returned a medium to high dust risk rating.
- 1.1.6 Dust monitoring locations and results for July 2022 are presented in Appendix B, Table 2 together with line charts for each dust monitor 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 mitigation.
- 1.1.7 The trigger level for PM<sub>10</sub> concentrations of 190 µg/m<sup>3</sup>, over a 1-hour period, in accordance with the updated guidance document '*Guidance on Monitoring in the Vicinity of Demolition and Construction Sites – (November 2018)*' has been applied.

- 1.1.8 Details of trigger alert investigations and remediations are presented in Appendix B, Table 3.
- 1.1.9 Data capture was below 90% for multiple monitors due to power disconnection on site.
- 1.1.10 Table 1 provides a summary of the complaint information related to dust or air quality received during the reporting period, together with the findings of any related investigations.

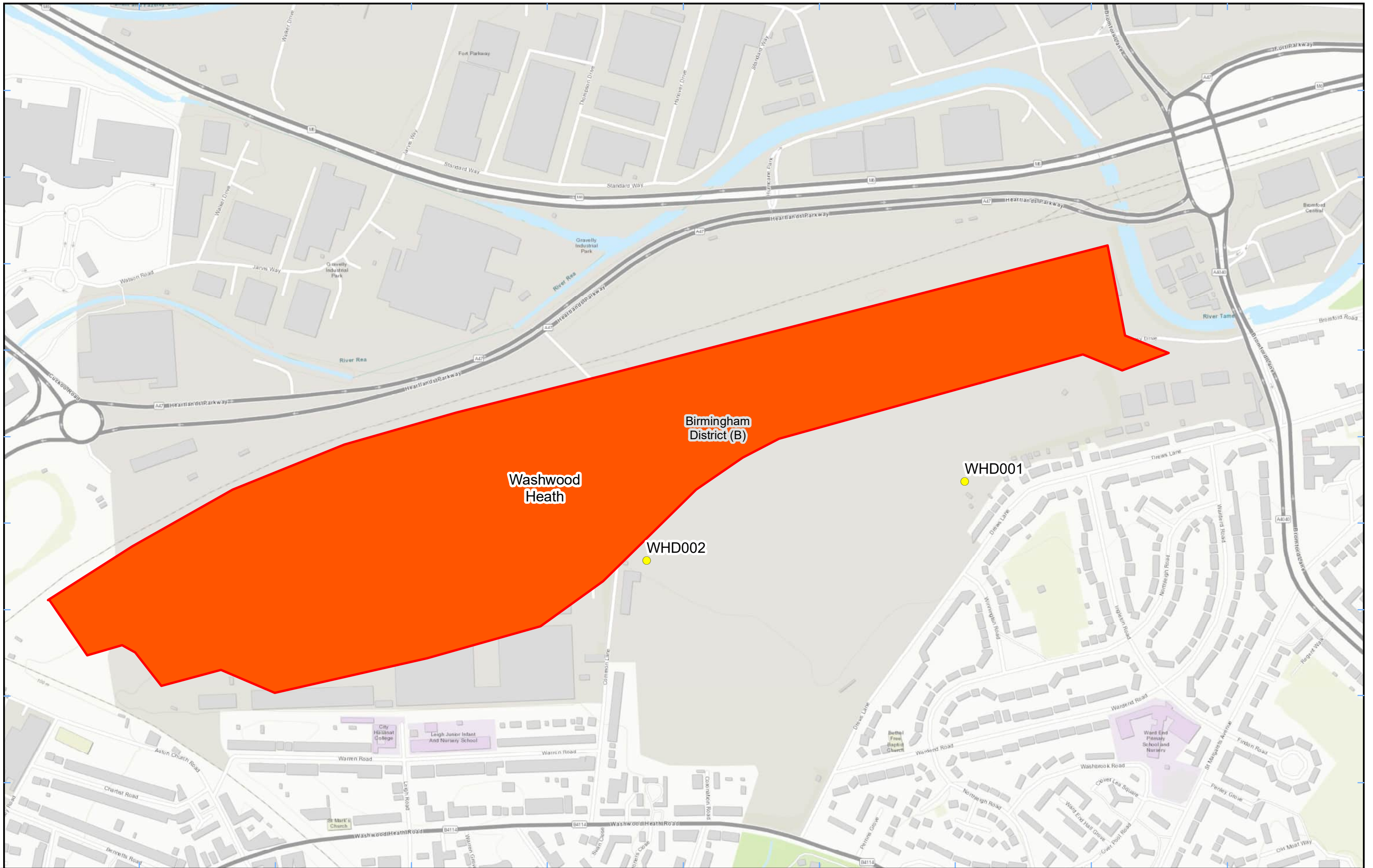
Table 1: Summary of complaints received during July 2022 in BCC

<b>Complaint Reference No.</b>	<b>Worksite Reference</b>	<b>Description of complaint</b>	<b>Results of investigation</b>
HS2-22-80796-E-C	N/A	Levels of dust from cement production.	The response detailed the mitigations in place on site for both noise and dust and confirmed that no monitored levels had been exceeded. Acoustic fencing has also been installed onsite to further assist with reducing noise levels.

# Appendix A –Worksite and Dust Monitoring Locations

Figure 1-3: Worksites and monitoring locations within the BCC





**Legend**

- Dust Monitor
- District Borough Unitary Boundaries
- Worksite

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Map Number

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

Birmingham City Council

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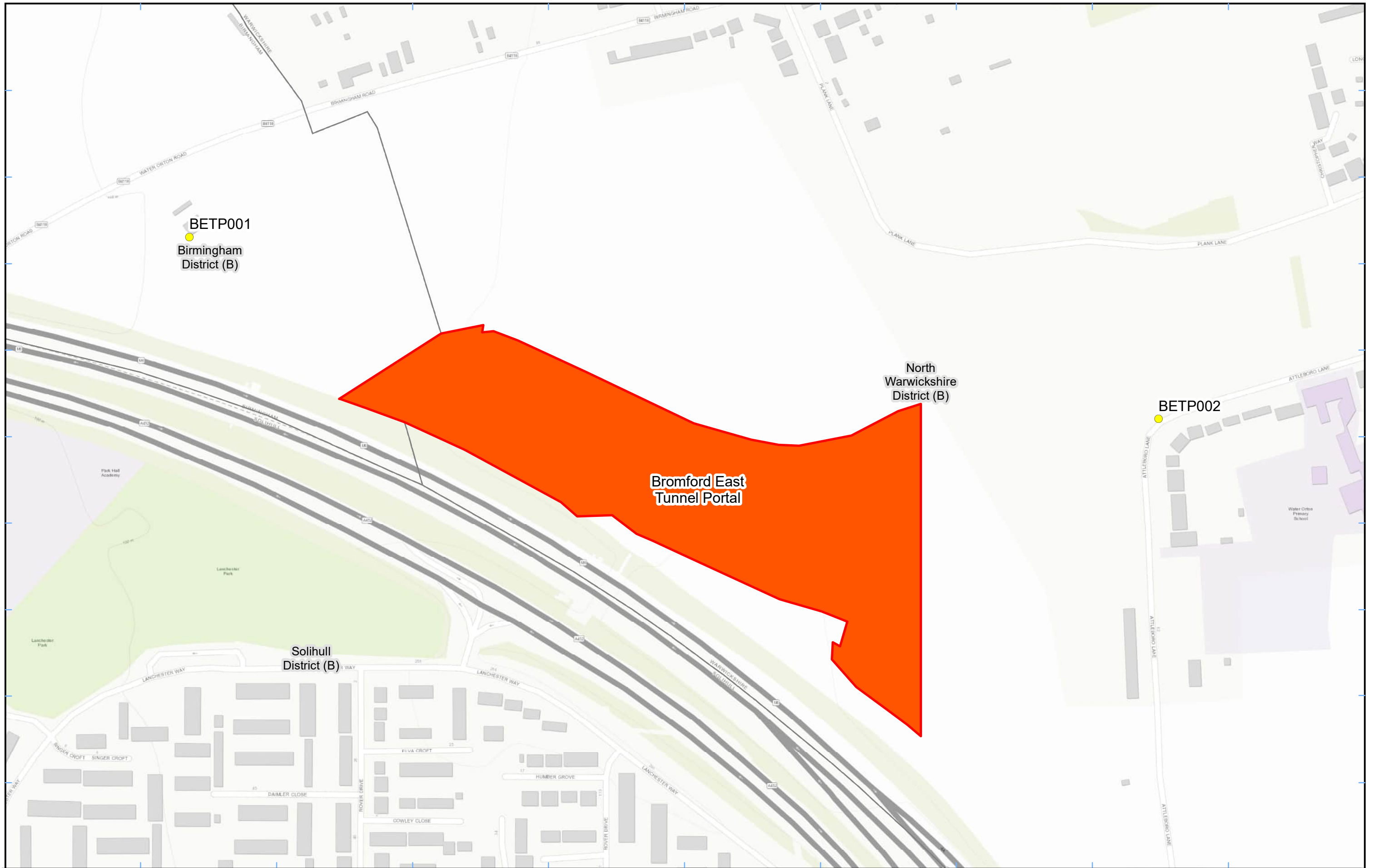
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**Legend**

- Dust Monitor
- Worksite
- District Borough Unitary Boundaries

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Map Number

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

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**Legend**  
 ● Dust Monitor  
 □ District Borough Unitary Boundaries

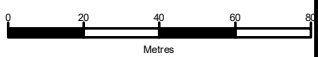
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Map Number  
 Map Name  
**Monitoring Locations  
 In BCC (Sheet 3)**  
 Birmingham City County


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## Appendix B – Dust Monitoring Results

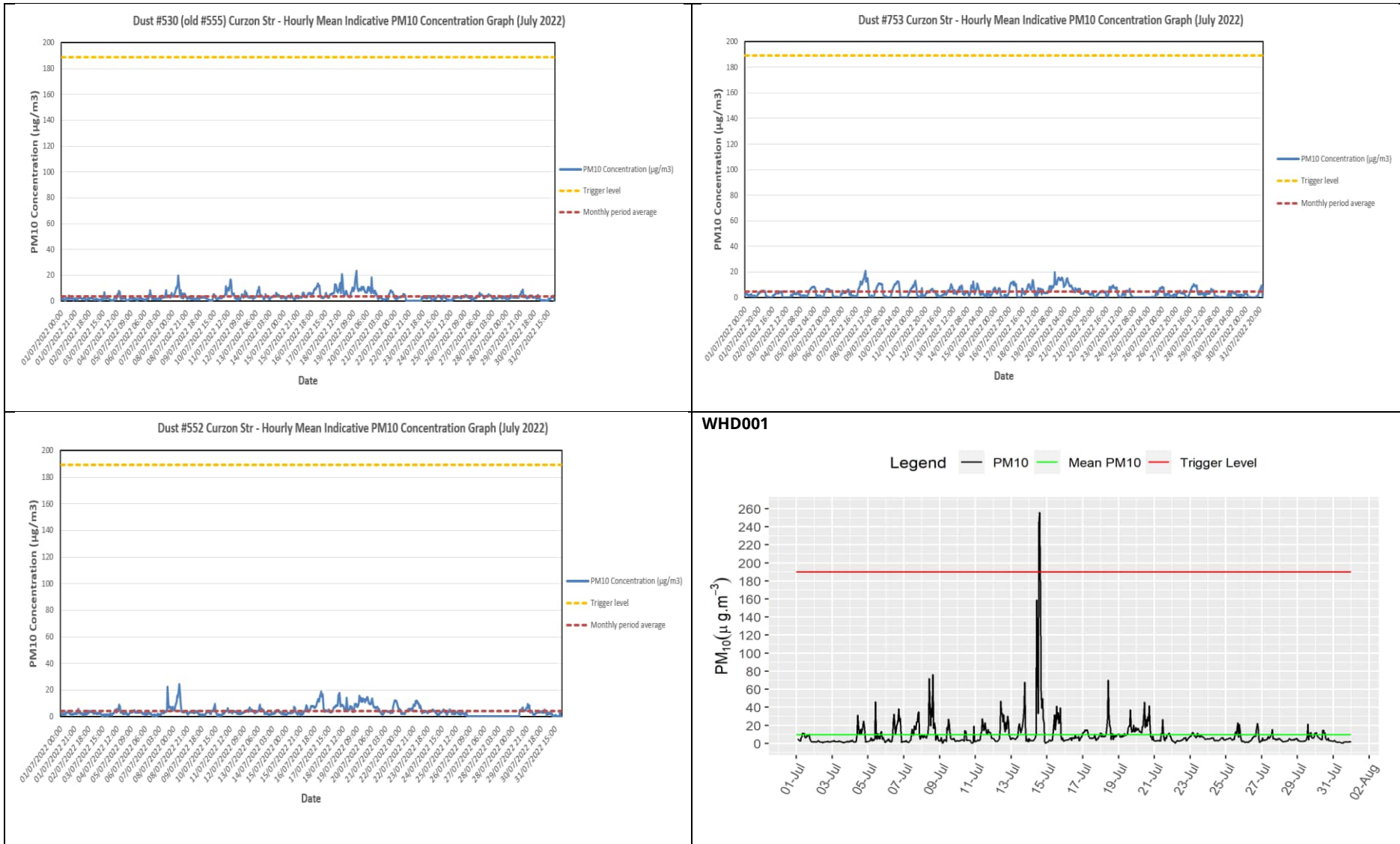
Table 2: Dust monitoring locations and July 2022 results

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 <sub>10</sub> concentration (µg/m <sup>3</sup> )	Minimum 1-hour PM <sub>10</sub> concentration (µg/m <sup>3</sup> )	Maximum 1-hour PM <sub>10</sub> concentration (µg/m <sup>3</sup> )	Number of 1-hour periods exceeding trigger level of 190 µg/m <sup>3</sup>	Data capture rate (%)
Dust #530 (old #555)	407702, 287079	Curzon Street Station HS2 Site	H	N/A	N/A	3.7	0.1	23.1	0	96.1
Dust #753	407619, 287006	Curzon Street Station HS2 Site	H	N/A	N/A	4.3	0.1	20.5	0	84.9
Dust #552	407765, 287073	Curzon Street Station HS2 Site	H	N/A	N/A	4.4	0.1	24.2	0	89.1
WHD001	411221, 289245	Washwood Heath Depot, near receptors on Drews Lane	M	Yes	No	9.7	0.2	255.9	2	100.0
WHD002	410758, 289130	Washwood Heath Depot, near receptors on Common Lane	M	Yes	No	1.4	0.1	19.4	0	98.4
BETP001	416620, 290808	Bromford East Tunnel Portal, Twisted Oak Stables	M	Yes	No	6.9	0.1	44.7	0	99.6
BETP002	417467, 290649	Bromford East Tunnel Portal, Attleboro Lane	M	Yes	No	6.1	0.8	90.5	0	100.0

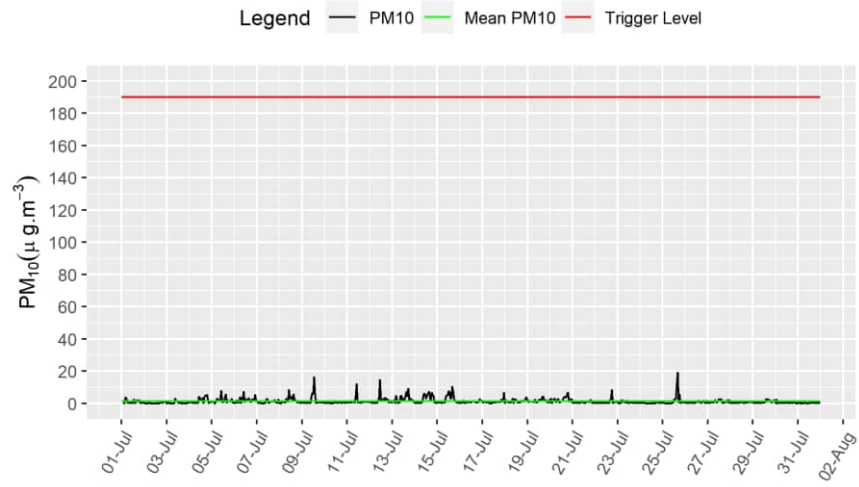
Table 3: Summary of exceedances during period (July 2022)

Monitoring Site ID	Period of trigger alert & Concentration recorded	Investigation	Outcomes / Resolution / Remedial measures implemented
WHD001	14/07/22 12:00 - 12:59; 245.6 µg/m <sup>3</sup> 13:00 - 13:59; 255.9 µg/m <sup>3</sup>	Earthworks undertaken close to the monitor.	The site was inspected to ensure mitigation measures were appropriate and in use and that no receptors were affected by these earthworks.

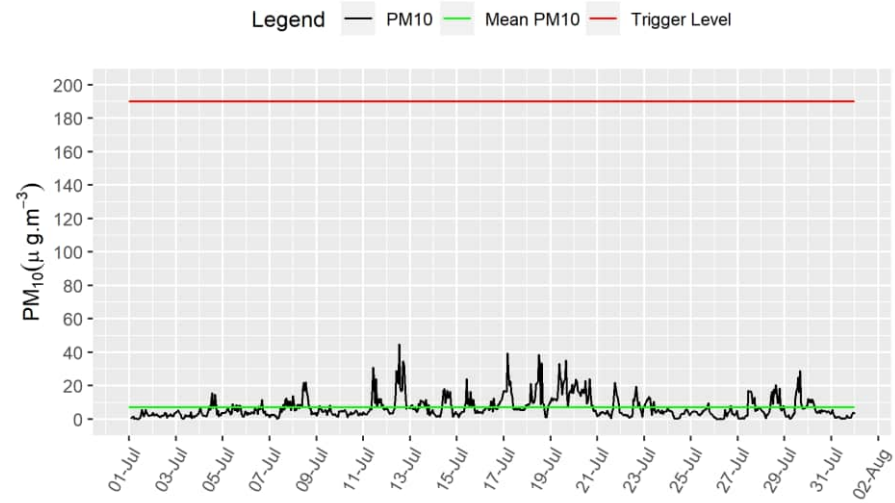
Figure 4: Construction dust hourly mean indicative PM<sub>10</sub> concentration for all monitors



**WHD002**



**BETP001**



**BETP002**

