

Air Quality and Dust Monitoring Monthly Report – August 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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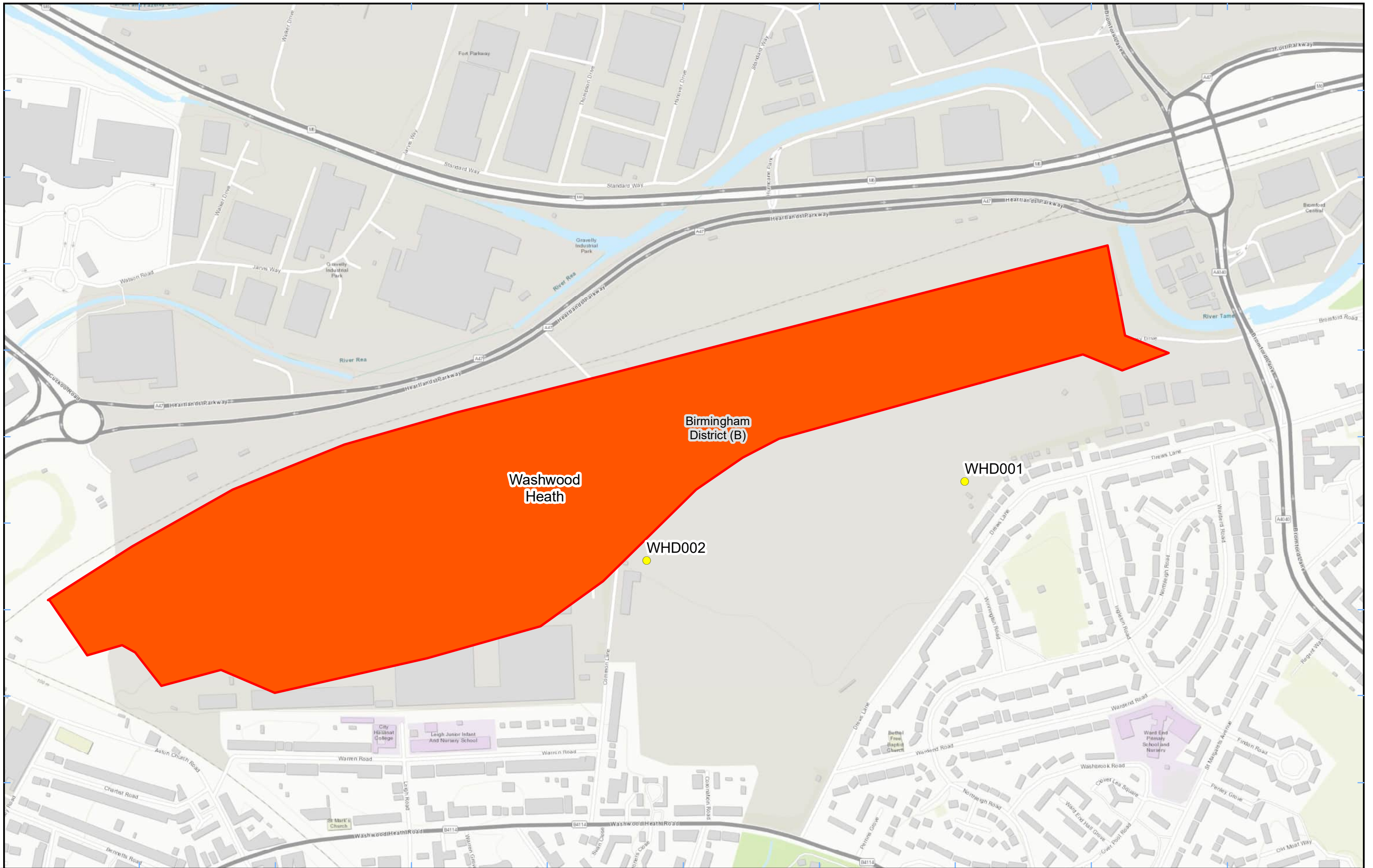
Monthly Summary

- 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 air quality and dust monitoring undertaken within Birmingham City Council (BCC) during August 2022.
- 1.1.2 Figures 1-3 in Appendix A indicates the current worksites together with the dust monitoring locations for August 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:
- Curzon Street Station**
- Ground remediation and
 - Utility diversion works
- Washwood Heath (Sublot 4)**
- 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.
- 1.1.5 The dust monitoring locations and results are presented in Appendix B, Table 1, together with line charts of monthly data from the 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 mitigations.
- 1.1.6 Seven (7) dust monitors are installed around the worksites, where works are underway. These sites returned a medium to high dust risk rating
- 1.1.7 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 (August 2022).
- 1.1.9 Data capture was below 90% for multiple monitors due to power disconnection on site.
- 1.1.10 No (0) complaints were received during the monitoring period (August 2022).

Appendix A – Worksites and Monitoring Locations

Figure 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

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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 1: Dust monitoring locations and August 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	8.2	0.2	124.0	0	100.0
WHD002	410758, 289130	Washwood Heath Depot, near receptors on Common Lane	M	Yes	No	2.6	0.01	66.0	0	97.7
BETP001	416620, 290808	Bromford East Tunnel Portal, Twisted Oak Stables	M	Yes	No	7.5	0.1	37.4	0	100.0
BETP002	417467, 290649	Bromford East Tunnel Portal, Attleboro Lane	M	Yes	No	6.0	0.3	77.5	0	99.9
Dust #530 (old #555)	407702, 287079	Curzon Street Station HS ₂ Site	H	N/A	N/A	3.2	0.1	14.2	0	86.6
Dust #753	407619, 287006	Curzon Street Station HS ₂ Site	H	N/A	N/A	4.4	0.1	32.7	0	79.0
Dust #552	407765, 287073	Curzon Street Station HS ₂ Site	H	N/A	N/A	4.9	0.2	36.5	0	99.6

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



