

Air Quality and Dust Monitoring Monthly Report – May 2025

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 May 2025.
- 1.1.2 Figure 1 to Figure 3 in Appendix A present the current worksites together with the dust monitoring locations.
- 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, Figure 1 to Figure 3, include:

Sublot 4

Washwood Heath

- Traffic on main site haul road, including haul road maintenance with excavator, Articulated Dump Trucks (ADTs), dozer and roller to compact.
- Vehicle delivery check area, including reversing vehicles and loading / unloading plant / material deliveries.
- Small tools works installing Vehicle Restraint System (VRS) fencing.
- Excavators and rollers working south of the brook backfilling behind Fibre-Reinforced Concrete (FRC) wall.

Curzon Street

- Pier and deck construction.
- Underground drainage works.
- Tripod dismantling and installations.
- Excavator, tower crane, mobile crane and roller working at site.
- Traffic on main site haul road, including haul road maintenance with excavator, roller to compact.
- Vehicle delivery check area, including reversing vehicles and loading / unloading plant / material deliveries.
- Excavators, cranes and concrete pumps working in permanent brook conducting Fibre-Reinforced Concrete (FRC) works.

Bromford East Tunnel Portal (Sublot 1B)

- Operation and maintenance of two Tunnel Boring Machines (TBMs).
- Operation and maintenance of two Slurry Treatment Plants (STPs).

- Deliveries of equipment and segments for tunnel construction.
- Operation of a sub-station which is owned by a different company.
- Construction of a Mechanical, Electrical and Plumbing (MEP) building for Bromford Tunnel Intermediate Shaft (BTIS) and Bromford Tunnel East Portal (BTEP).
- Operation and maintenance of two grout batching plants.
- Use of gantry crane, tower crane and several crawler cranes.
- The transport of muck from Muck Bin 1 / 2 to Sublot Delta via ADT.
- Construction of acoustic platform.

Curzon Street Station – Pre-main works

- Installation of bearing and secant piles
- Import of materials required for piling activities
- Export of excavated materials – including commencement of bulk dig
- Earthworks required for installation of site compound
- Excavation and construction of pile caps.

- 1.1.5 Eight (8) dust monitors are installed around these worksites, where works are underway. These sites returned a low to high dust risk rating.
- 1.1.6 Dust monitoring locations and results are presented in Appendix B, Table 2, together with line charts of monthly data from 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 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 Details of the 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:
- Monitor WHD003 – A field calibration was done on 2nd May 2025, and a lab calibration monitor swap out was done on 20th May 2025. A site visit is to be scheduled to resolve the monitor issues.
 - Monitor WHD001 – Error with data uploading following monitor move on 2nd May 2025 which has now been resolved.

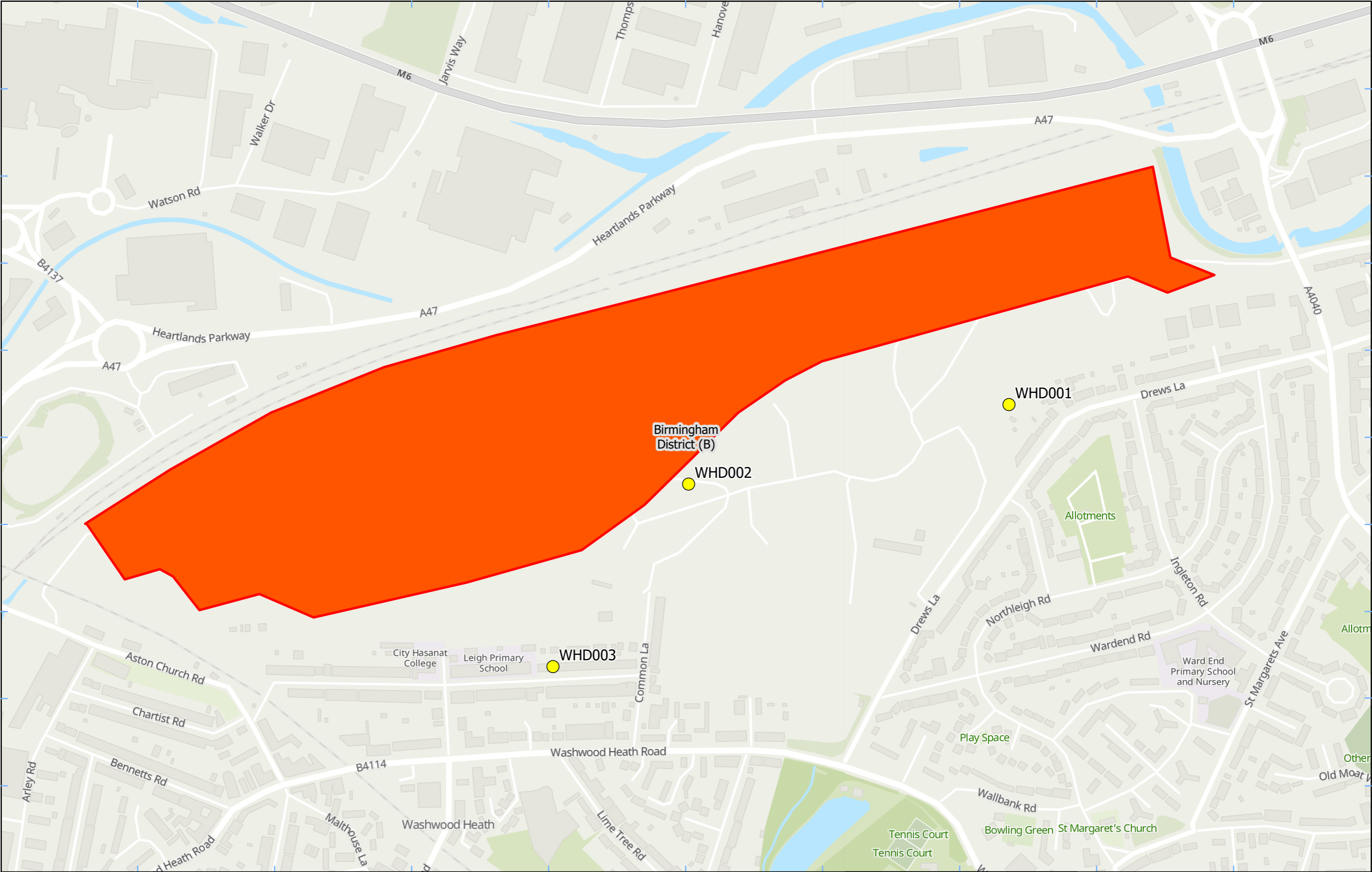
1.1.10 Table 1 provides a summary of the complaint information relating to dust or air quality received during the reporting period, together with the findings of any related investigations.

Table 1: Summary of complaints received during May 2025

Complaint Reference No.	Worksite Reference	Description of complaint	Results of investigation
HS2-25-46402-C	N/A	Increased amount of dust in the area.	Dust not related to HS2 works as location is a considerable distance from HS2 works. Resident has been informed.
HS2-25-46442-C	N/A	Increased amount of dust in the area.	Nearest site 600 metres away no earthworks or construction activities taking place. Resident has been updated and advised Saharan dust has been visible across the UK and may have contributed to the noticeable dust.
HS2-25-46443-C	N/A	Increased amount of dust in the area.	Nearest site 600 metres away no earthworks or construction activities taking place. Resident has been updated and advised Saharan dust has been visible across the UK and may have contributed to the noticeable dust.

Appendix A – Worksites and Monitoring Locations

Figures 1 - 3: Worksites and Monitoring Locations within BCC



Legend

District Borough Unitary Boundaries Worksite

Dust Monitor

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Map Number

Map Name

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

Birmingham City Council

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Legend

District Borough Unitary Boundaries Worksite

Dust Monitor

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Map Name

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

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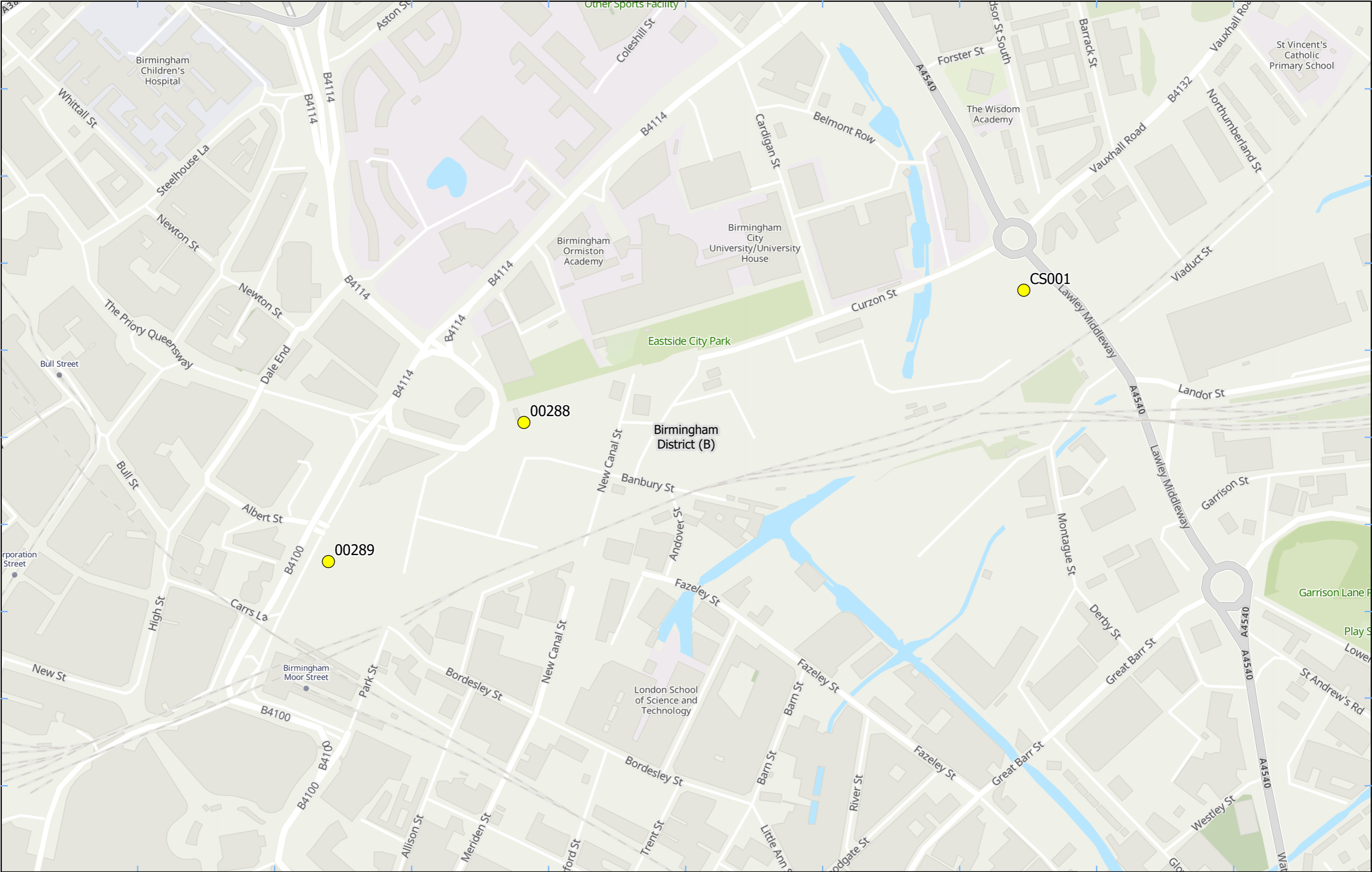
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Legend

 Dust Monitor

 District Borough Unitary Boundaries

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




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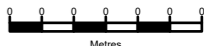
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Appendix B – Dust Monitoring Results

Table 2: Dust Monitoring Locations and 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 PM10 concentration (µg/m3)	Minimum 1-hour PM10 concentration (µg/m3)	Maximum 1-hour PM10 concentration (µg/m3)	Number of 1-hour periods exceeding trigger level of 190 µg/m3	Data capture (%)
WHD001	411221, 289245	Washwood Heath Depot, near receptors on Drews Lane	M	Yes	No	7.7	0.8	40.8	0	40.7
WHD002	410758, 289130	Washwood Heath Depot, near receptors on Common Lane	M	Yes	No	10.7	1.1	52.0	0	100.0
WHD003	410562, 288866	Washwood Heath Depot, near receptors on Warren Road	M	Yes	No	11.8	3.2	31.7	0	62.8
BETP001	416719, 290767	Bromford East Tunnel Portal, Twisted Oak Stables	L	Yes	No	11.2	0.7	102.2	0	100.0
BETP002	417406, 290605	Bromford East Tunnel Portal, Attleboro Lane	M	Yes	No	8.5	0.9	159.7	0	100.0
CS001	408254, 287210	University Locks, Curzon Street	M	Yes	No	10.9	0.2	48.4	0	100.0
00288	407676, 287057	Curzon St – East Side City Park	H	Yes	No	27.2	2.7	207.5	1	100.0
00289	407450, 286896	Curzon St – Moor St Queensway	H	Yes	No	17.3	1.3	105.8	0	100.0

Table 3: Summary of exceedances during period (May 2025)

Monitoring Site ID	Period of trigger alert & Concentration recorded	Investigation	Outcomes / Resolution / Remedial measures implemented
00288	03/05/2025: 14:01 – 15:00; 207.5 µg/m ³	Extended period of dry weather on site at the time of trigger, dust controls in place to manage dust as much as practicable.	Controls already in place to manage dust on site during warm / dry weather.

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

