

Air Quality and Dust Monitoring Monthly Report – September 2025

London Borough of Ealing



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 in the London Borough of Ealing (LBE) during August 2025 and September 2025 respectively.
- 1.1.2 Figure 1 to Figure 3 in Appendix A present the current worksites together with air quality and dust monitoring locations.
- 1.1.3 This summary should be read in conjunction with the overview monitoring report 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:

Old Oak Common Depot (located in the London Borough of Hammersmith and Fulham)

- General Site: Materials management and haulage.
- Station Box: Steel fixing, formwork, falsework, concreting.
- GWML & SAB: Excavating, backfilling, fitting trench boxes, laying pipe.
- Site haul roads and public roads adjacent to site: Cleaning with road sweeper.
- OOCL: Excavating, level surfacing and clearing, backfilling, installing precast concrete chambers.
- MEPH: Deliveries, warehouse set up.
- Blockwork: Block laying, housekeeping, concrete mixing.
- Attenuation Tank: Piling and store set ups, striking shutters.

Victoria Road Crossover Box and Flat Iron Site

- Crossover Box construction.
- Tunnel Boring Machine preparation.
- Materials management conveyor demobilisation.

Willesden Euro Terminal

- Limited excavated material spoil management and onward removal by rail.

Atlas Road

- Conveyor demobilisation.

Green Park Way Vent Shaft

- Vent shaft construction.
- Tunnel Boring Machine removal.
- Materials management.

Mandeville Road Vent Shaft

- Vent shaft construction.
- Materials management.

Westgate Vent Shaft

- Vent shaft and headhouse construction.
- Materials management.

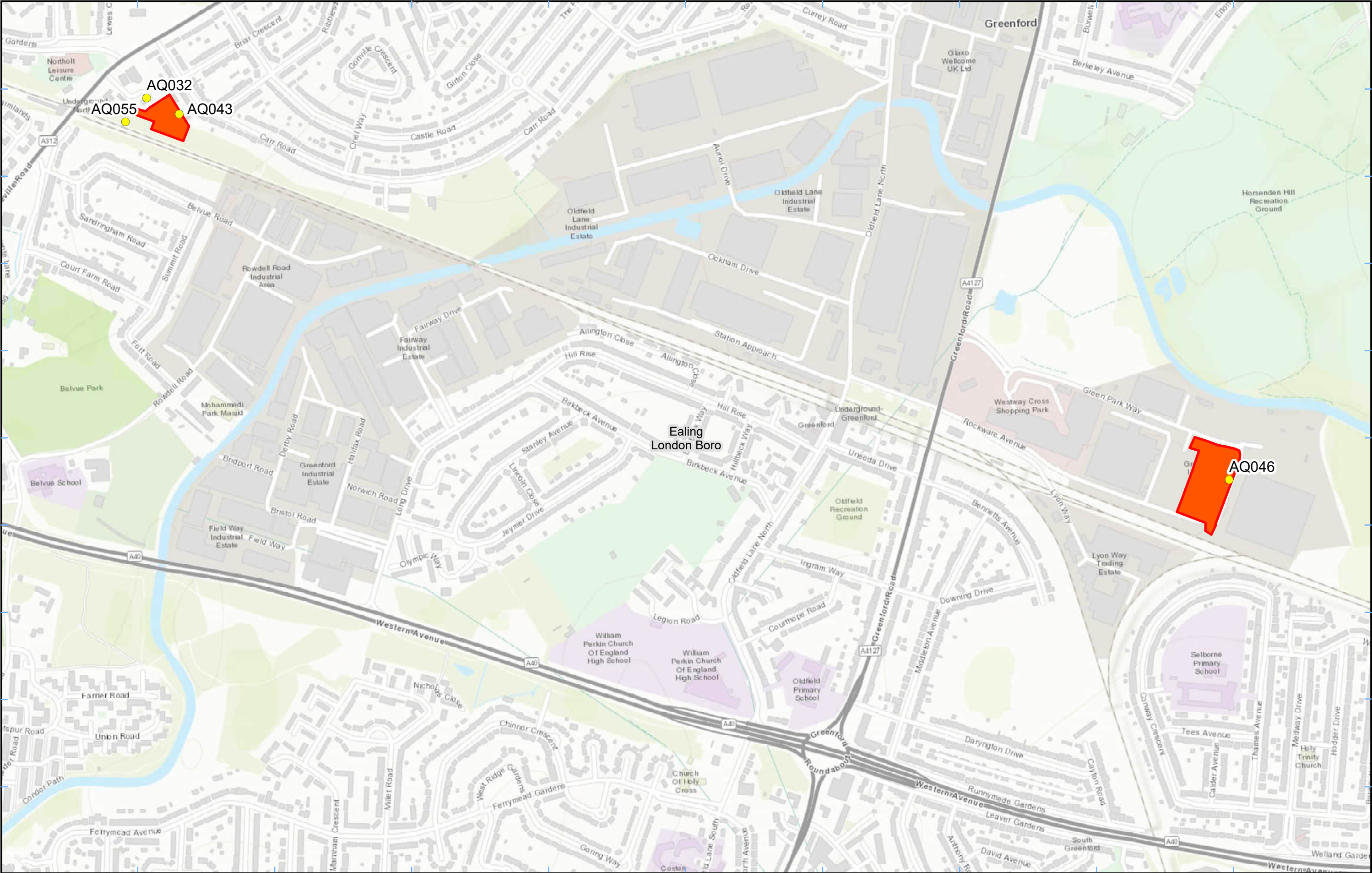
- 1.1.5 Nineteen (19) dust monitors are installed around these worksites, where works are underway. These sites returned a medium dust risk rating.
- 1.1.6 Dust monitoring locations and results are presented in Appendix B, Table 1, together with line charts of monthly data from each dust monitor presented 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 2.
- 1.1.9 Two (2) dust trigger alerts were recorded during the monitoring period (September 2025).
- 1.1.10 Data capture was below 90% for monitors:
- AQ024: Due to a fault with the monitor, to be replaced in October 2025.
 - AQ036: Data capture was below 90% due to a technical fault which developed on 30th July 2025. This issue was resolved on 3rd September 2025.
- 1.1.11 Diffusion tube monitoring of Nitrogen Dioxide (NO₂) is undertaken at six (6) locations around highways within the LBE as part of the management of air quality where significant effects occur as a result of the scheme.
- 1.1.12 Diffusion tube monitoring results are as provided from the laboratory analysis, and therefore still require various analysis and adjustments to be undertaken. Final corrected

results will be presented and described in the annual report. However, based on the results to date, no unexpected values were recorded during the monitoring period.

- 1.1.13 NO₂ monitoring locations and results are presented in Appendix C, Table 3, together with the 2025 running mean.
- 1.1.14 There were no (0) complaints received during the reporting period (September 2025).

Appendix A – Worksites and Monitoring Locations

Figures 1 to 3: Worksites and Monitoring Locations within the LBE



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 & Monitoring Locations
In LBE (Sheet 1)**

London Borough of Ealing



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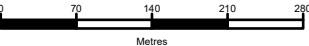
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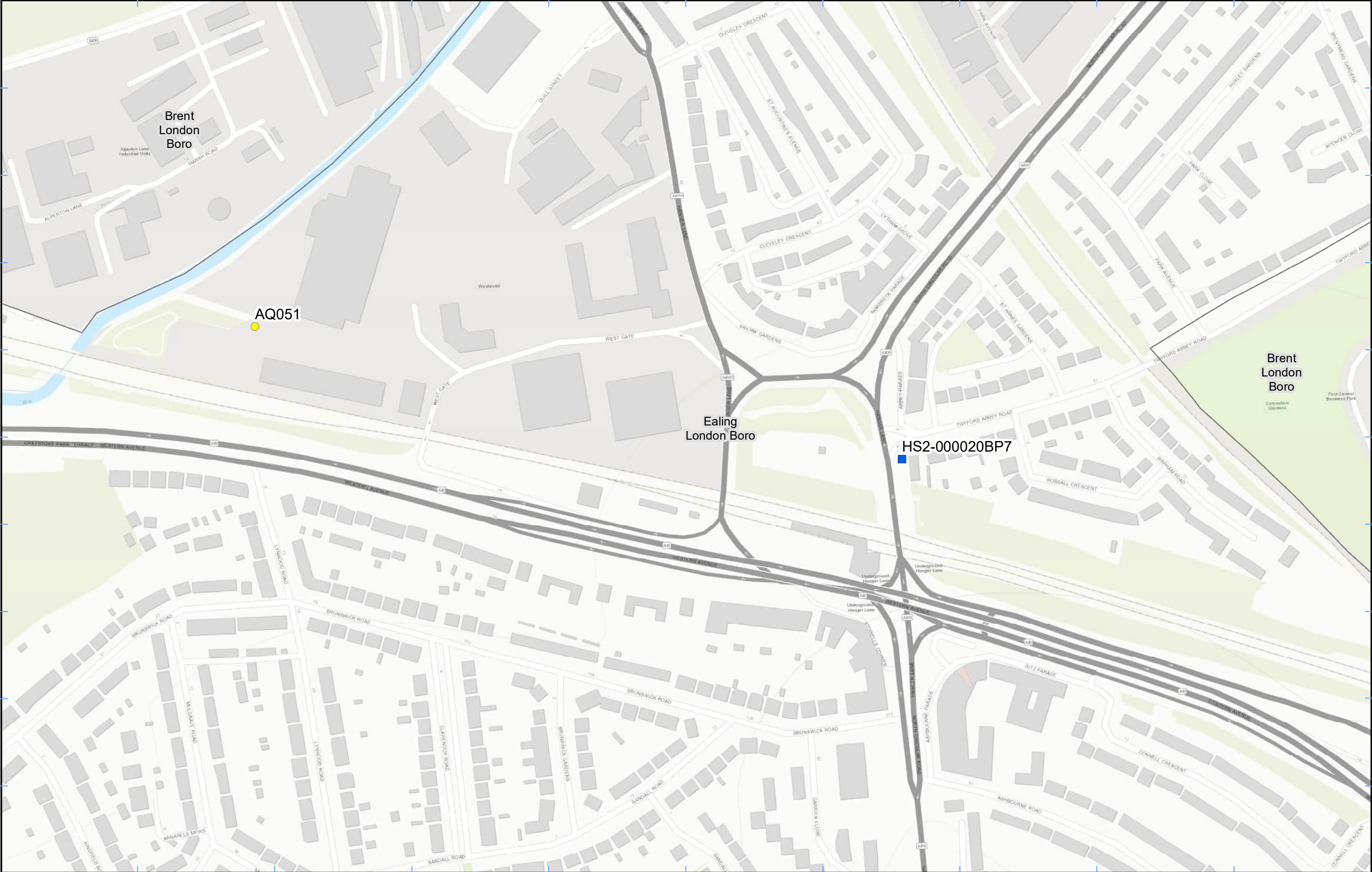
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Date: 18/05/23



- Legend**
- Diffusion Tube
 - Dust Monitor
 - District Borough Unitary Boundaries

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Map Number

Map Name

Monitoring Locations
In LBE (Sheet 2)

London Borough of Ealing



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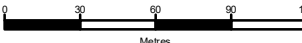


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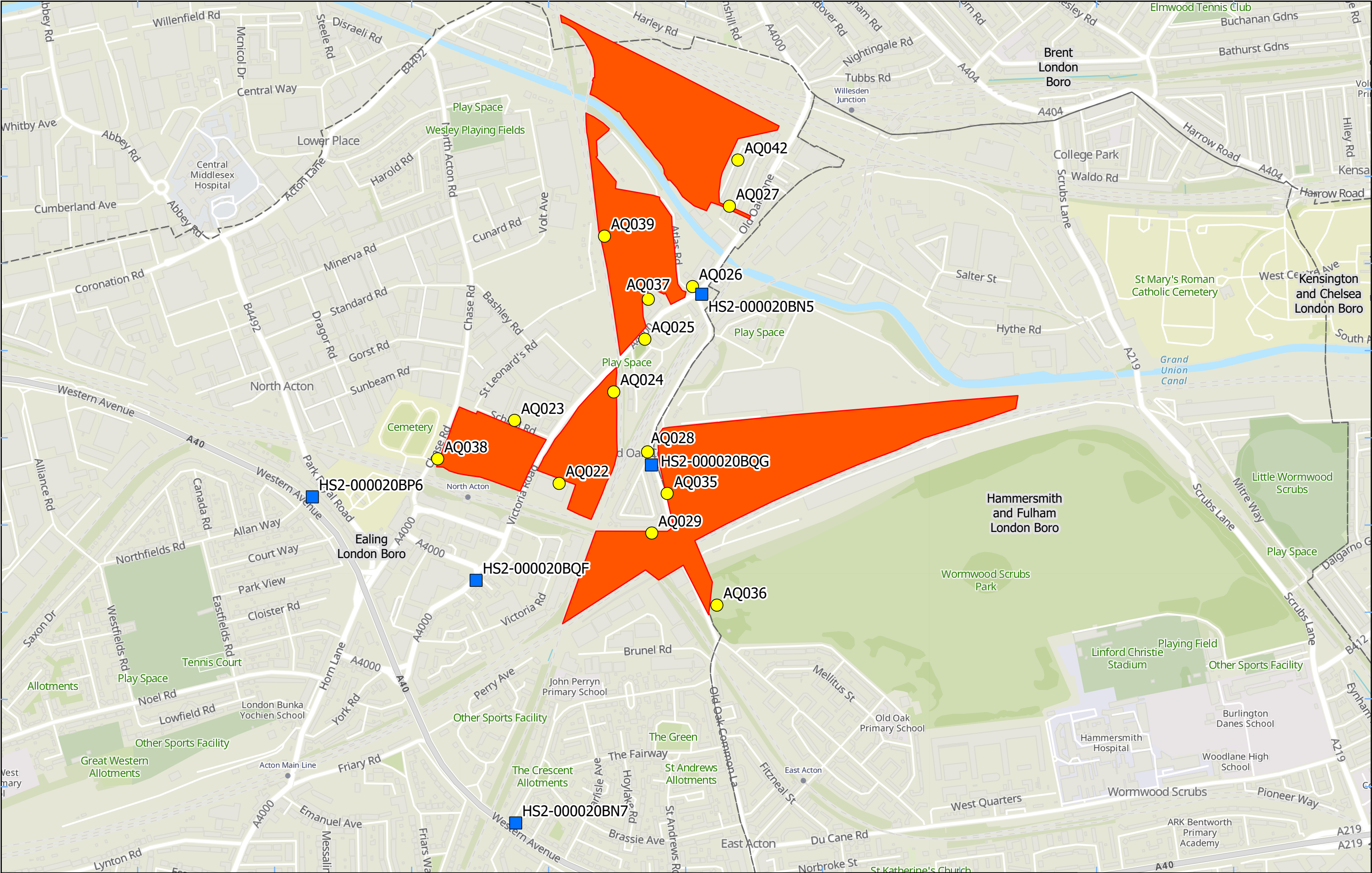
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Legend

- Dust Monitor
- Worksite
- Diffusion Tube
- District Borough Unitary Boundaries

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Map Number

Map Name
**Worksite and Monitoring Locations
In LBE (Sheet 3)**

London Borough of Ealing



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Metres

Date: 06/02/25

Appendix B – Dust Monitoring Results

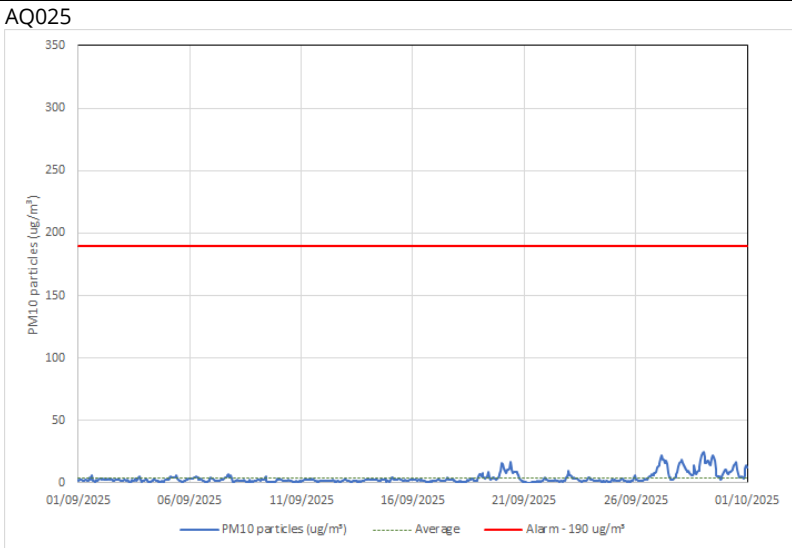
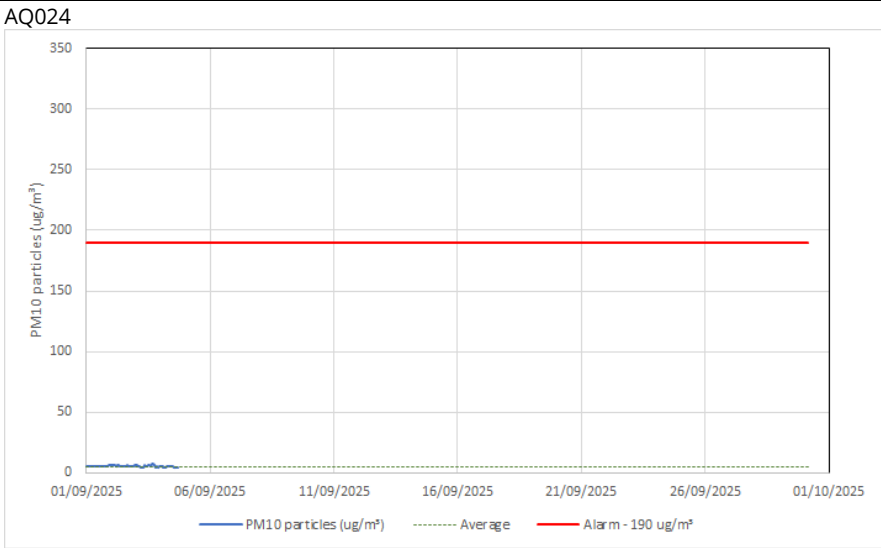
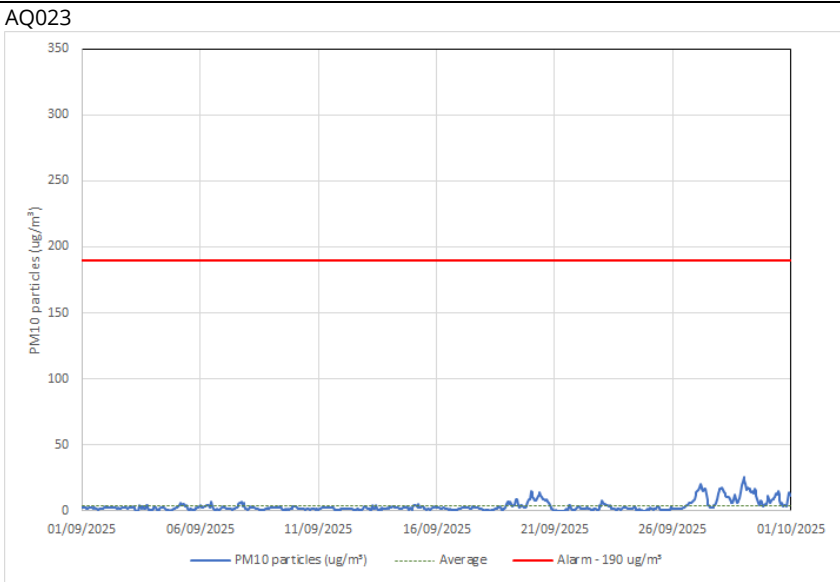
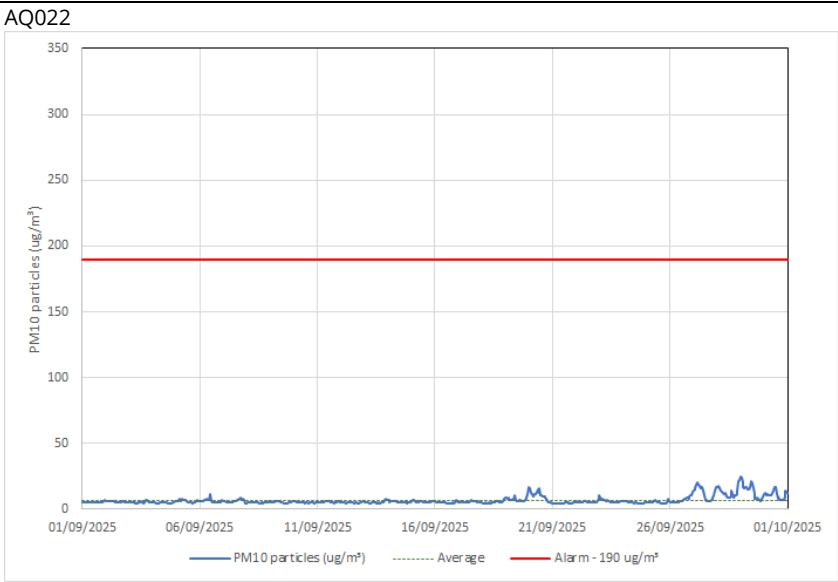
Table 1: Dust Monitoring Locations and Results

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 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 (%)
AQ022	521072, 181985	Boden House	M	Yes	N	6.8	4.0	24.6	0	96.9
AQ023	520956, 182149	School Road	M	Yes	N	3.8	0.1	25.4	0	95.8
AQ024	521214, 182223	Braitrim House	M	Yes	N	5.4	4.0	7.2	0	12.1
AQ025	521295, 182360	Victoria Road	M	Yes	N	3.9	0.1	25.2	0	96.5
AQ026	521419, 182497	Old Oak Lane	M	Yes	N	3.6	0.1	27.3	0	93.1
AQ027	521515, 182706	Channel Gate Road	M	Yes	N	3.9	0.1	30.7	0	96.4
AQ032	513402, 184536	Badminton Close	M	Yes	N	3.9	1.0	23.6	0	96.9
AQ037	521304, 182464	Atlas Road	M	Yes	N	3.6	0.1	26.0	0	96.4
AQ038	520756, 182049	Chase Road	M	Yes	N	6.9	4.0	22.6	0	96.9
AQ039	521190, 182628	Atlas Road 2	M	Yes	N	3.7	0.3	24.0	0	96.9
AQ042	521537, 182826	Stephenson Road	M	Yes	N	5.6	0.1	45.1	0	94.5
AQ043	513468, 184504	Mandeville Road	M	Yes	N	3.7	0.1	23.8	0	95.2

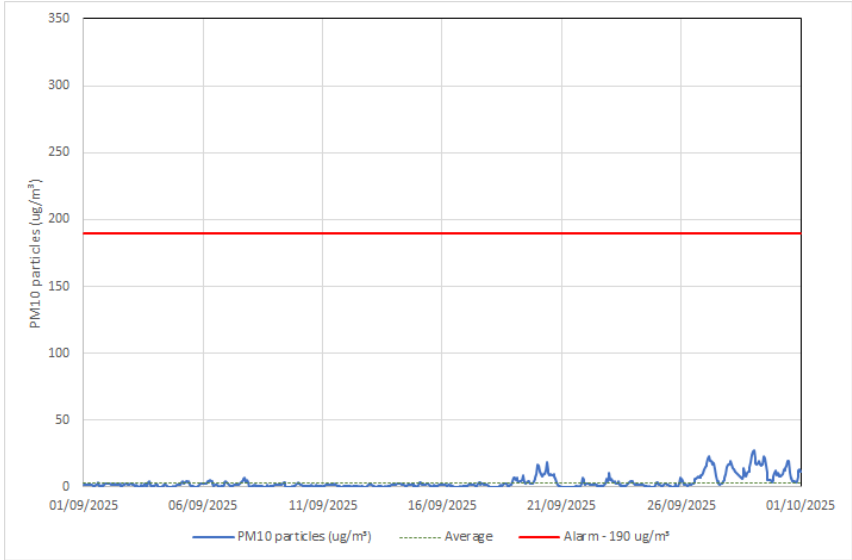
Monitoring site ID	Coordinates (X,Y)	Location description	Dust risk rating for site	Monitoring site active during period	Change to site since previous period report	Mean 1-hour PM ₁₀ concentration (µg/m ³)	Minimum 1-hour PM ₁₀ concentration (µg/m ³)	Maximum 1-hour PM ₁₀ concentration (µg/m ³)	Number of 1-hour periods exceeding trigger level of 190 µg/m ³	Data capture (%)
AQ046	515593, 183764	Green Park Way	M	Yes	N	6.7	4.0	20.7	0	96.9
AQ051	517976, 182823	Westgate	M	Yes	N	6.5	4.0	88.1	0	96.9
AQ055	513359, 184488	Mandeville Road 2	M	Yes	N	3.7	0.1	21.7	0	96.0
AQ028	521314, 182084	Wells House Road	M	Yes	No	12.6	1.0	96.7	0	96.8
AQ029	521317, 181856	Site Boundary south of houses on Wells House Road	H	Yes	No	14.4	1.6	66.7	0	96.8
AQ035	521354, 181956	Old Oak Common	H	Yes	No	16.6	1.3	81.1	0	96.6
AQ036	521482, 181668	Old Oak Common Lane	M	Yes	No	20.8	2.0	402.8	2	87.9

Table 2: Summary of exceedances during period (September 2025)

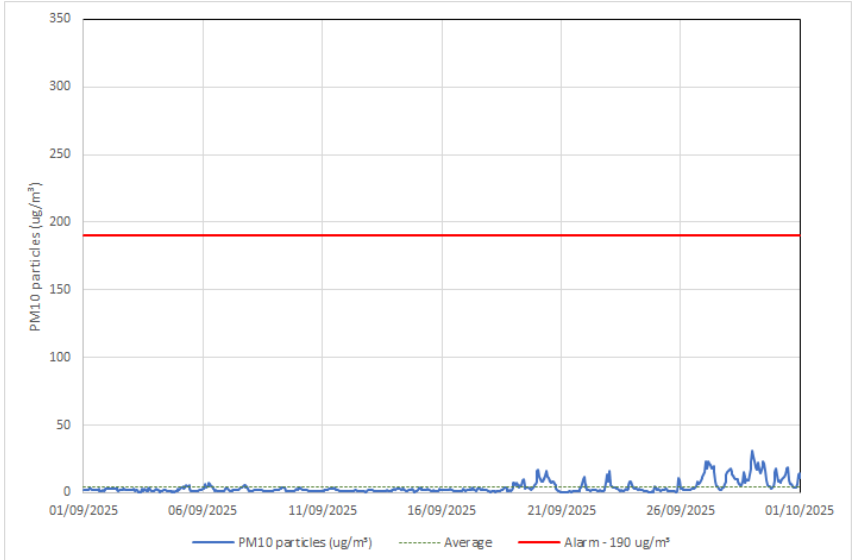
Monitoring site ID	Period exceeding trigger level	Investigation	Outcomes / Resolution / Remedial measures implemented
AQ036	23/09/2025 15:00 recorded an hourly mean concentration of 220.3 µg/m ³	An investigation was undertaken and determined that the exceedance was caused by excavation works and manhole installation on-site.	J Coffey is increasing the frequency of dust suppression across all areas of the sites given the drier weather we have recently been experiencing. All operatives were re-briefed of dust suppression procedures. No complaints were received.
	27/09/2025 08:00 recorded an hourly mean concentration of 402.8 µg/m ³	An investigation was undertaken and determined that no works were being undertaken during the time of the exceedance. The exceedance occurred at the start of shift at 8am with no works being undertaken, only material deliveries. Dry weather conditions while taking deliveries of Hiab and cement in Wormwood Scrubs. The deliveries were taking place in very close proximity to the monitor with the wind blowing towards the monitor throughout the day.	Increased frequency of wetting down of site areas undertaken following the exceedance alert.



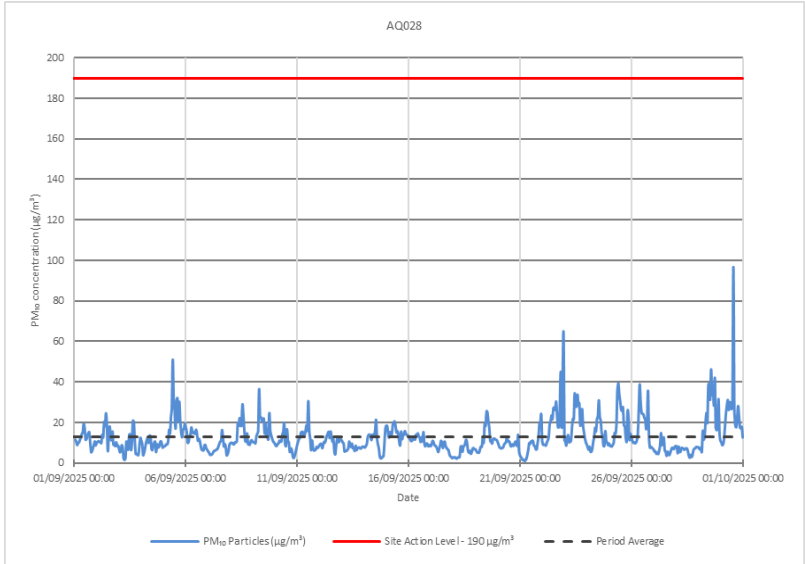
AQ026



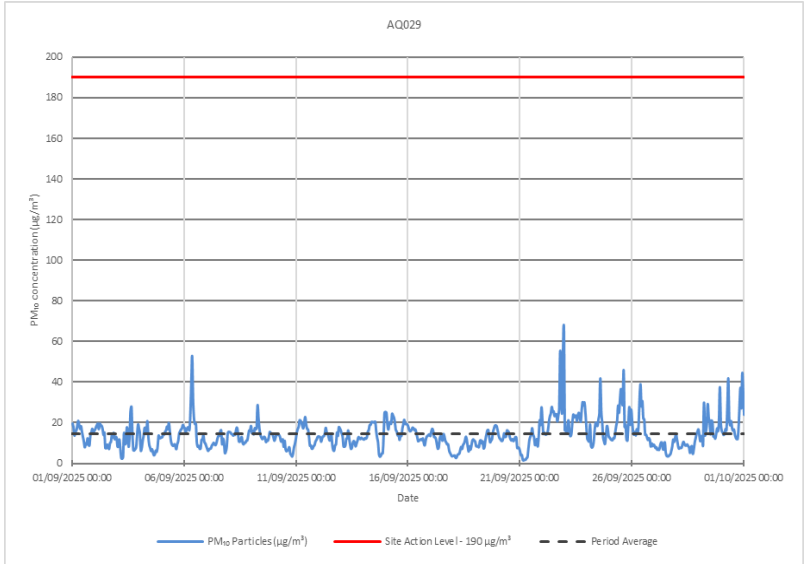
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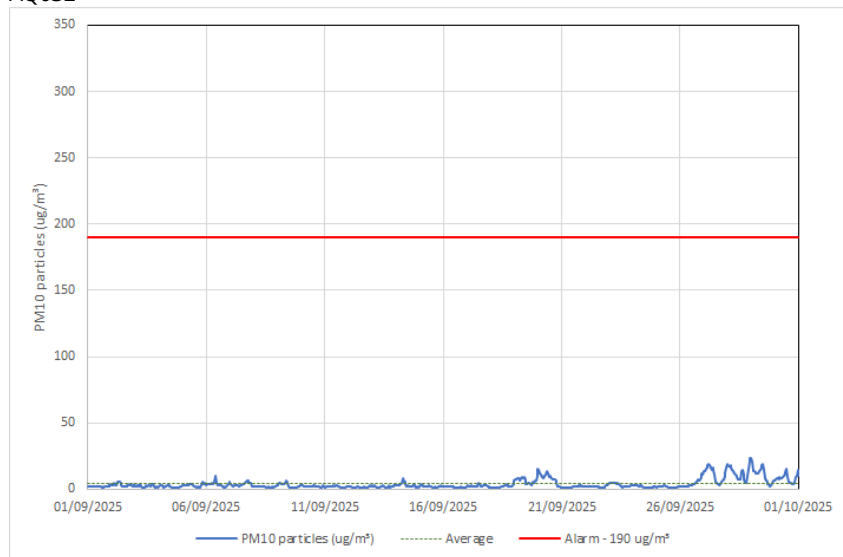
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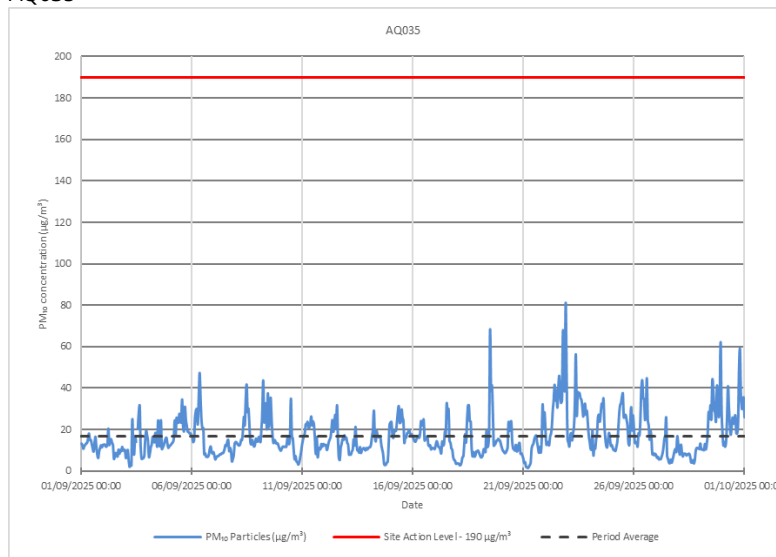
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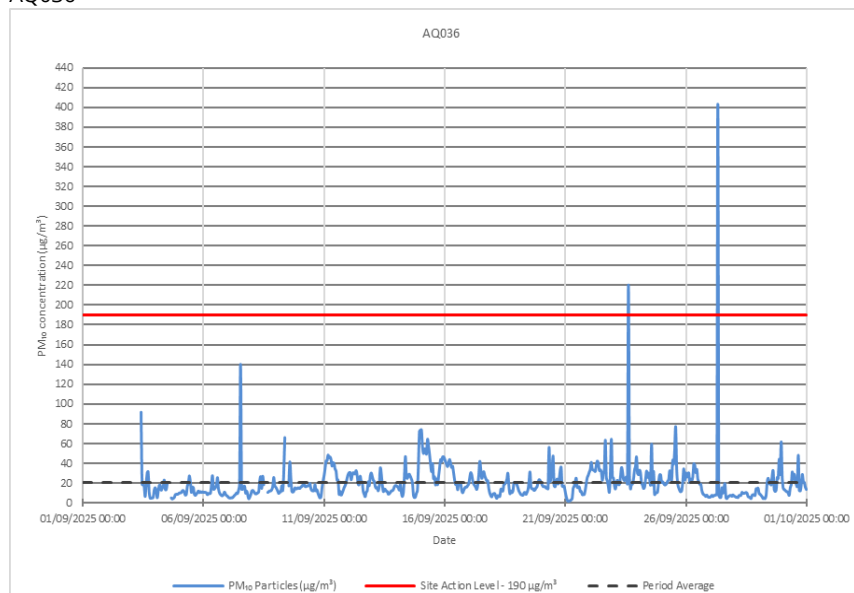
AQ032



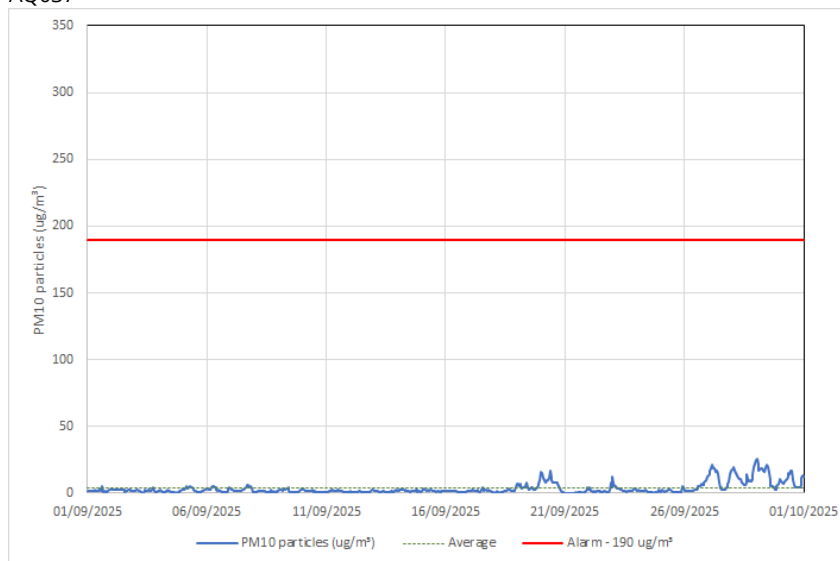
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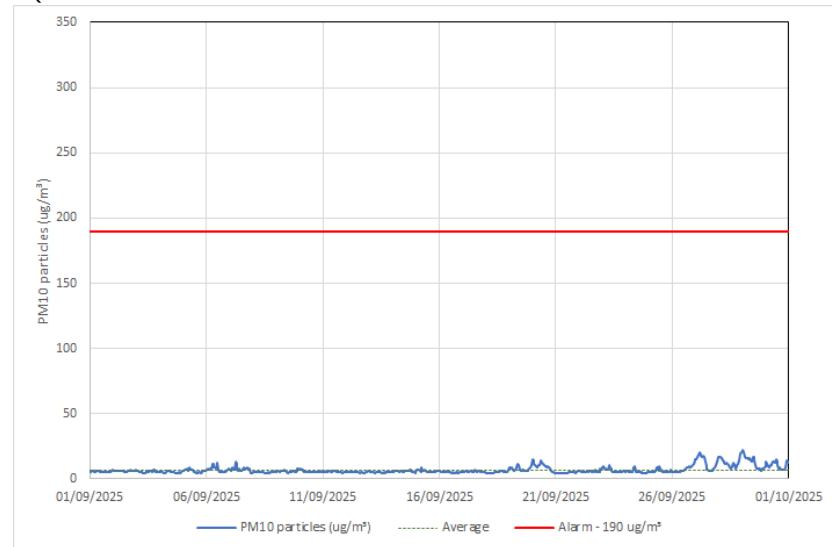
AQ036



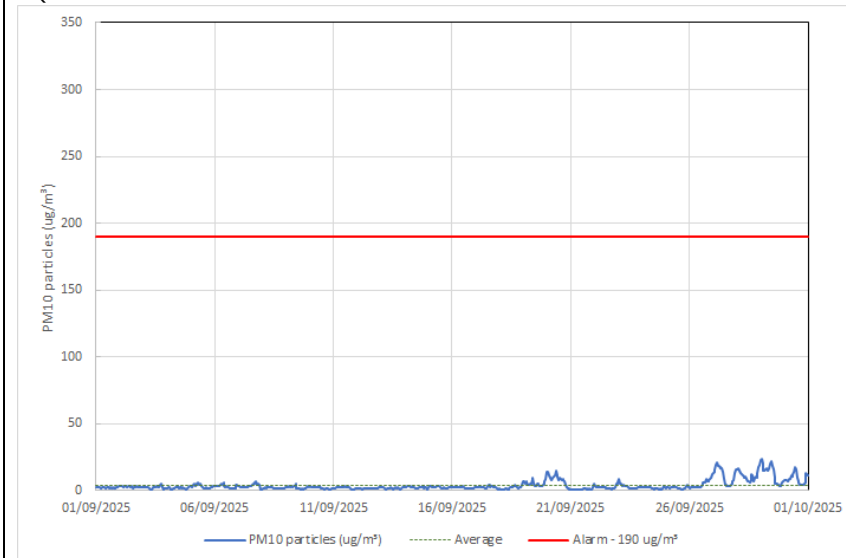
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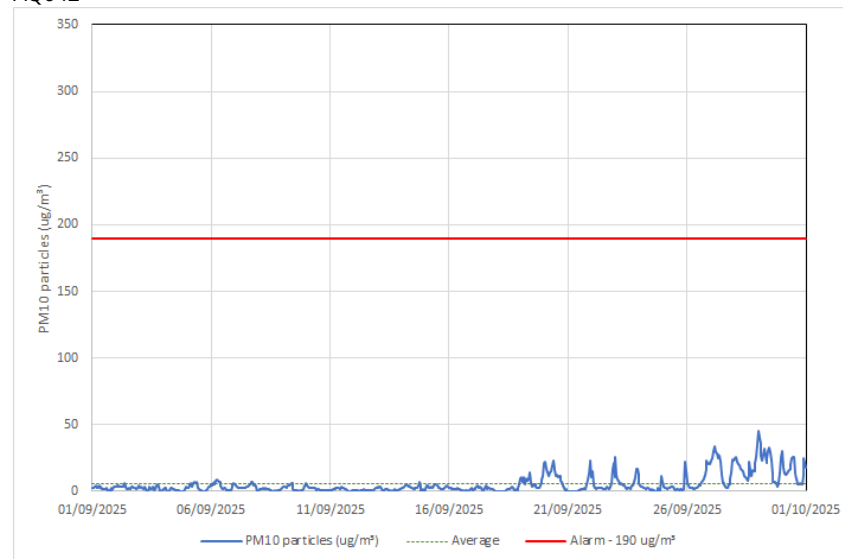
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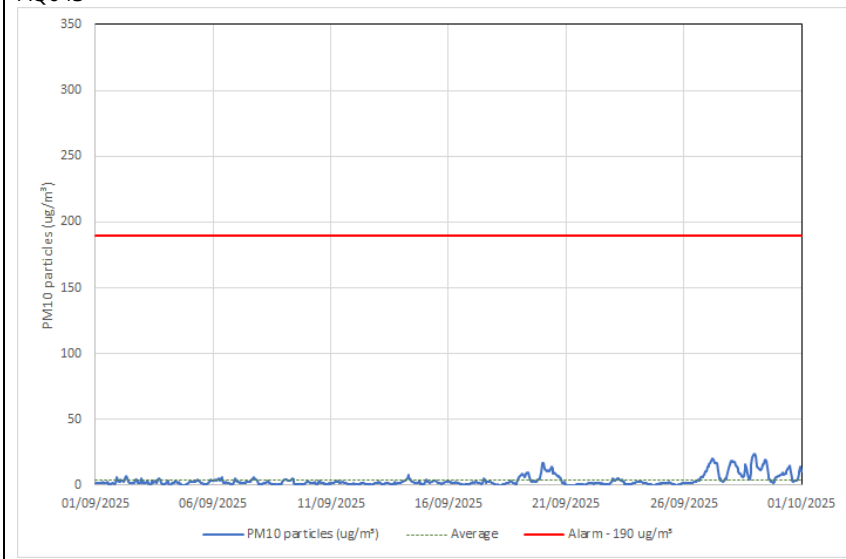
AQ039



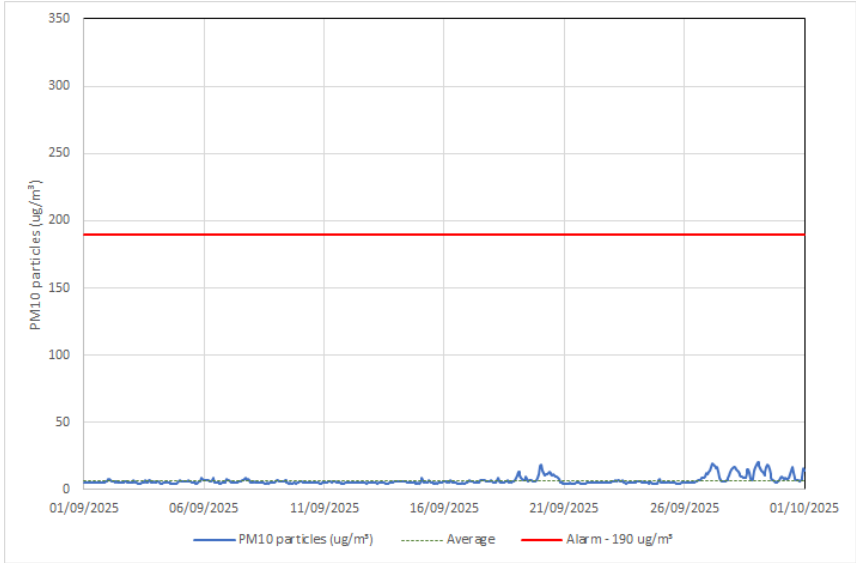
AQ042



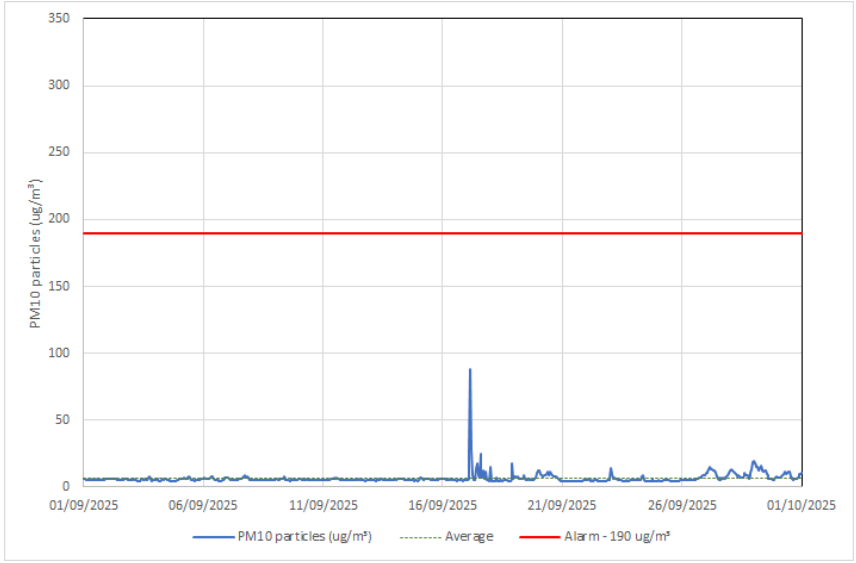
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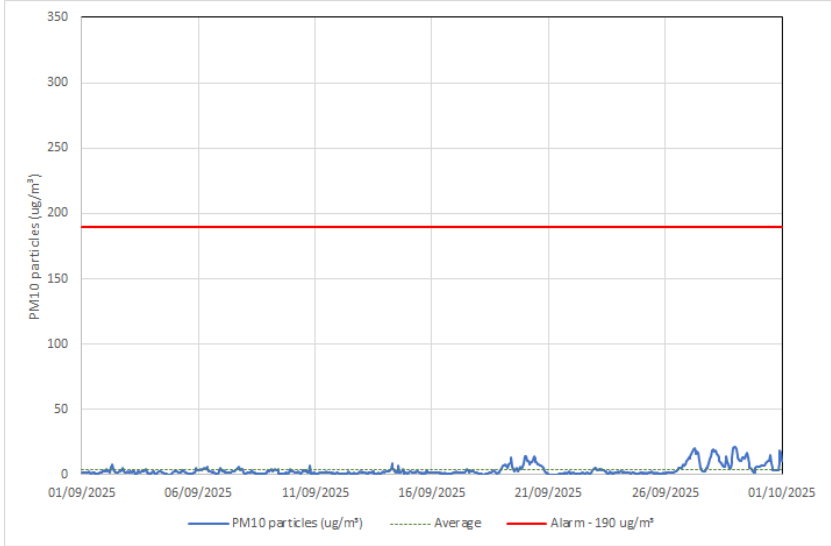
AQ046



AQ051



AQ055



Appendix C – Air Quality Monitoring Results

Table 3: NO₂ monitoring locations around highways, NO₂ concentrations and monthly monitoring results with running mean for 2025 (µg/m³)

Monitoring Site ID	Location description	Coordinates (X, Y)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean ¹²
HS2-000020BN5	Sign post on Victoria Road	521443, 182477	58	46	30	41	27	29	30	26					36
HS2-000020BN7	The Approach Street sign	520959, 181102	48	34	39	30	22	31	30	26					32
HS2-000020BQF	Conway Drive signpost	520856, 181733	46	44	46	Tube Missing	34	33	34	30					38
HS2-000020BQG	Lamp post outside No 1. Wells House Road on Old Oak Common Lane	521312, 182033	51	44	43	41	26	33	30	28					37
HS2-000020BP6	Triplicate site next to the Ealing, Western Avenue Acton roadside automatic monitoring station	520430, 181950	47	38	48	34	26	27	27	27					34

¹ Note: to aid interpretation and conform with best practice, the monthly measurements in this table are reported rounded to the nearest whole number. The annual mean presented here is calculated based on laboratory data to 4 significant figures, rounded to a whole number, and therefore may differ slightly to a mean derived from averaging the rounded monthly measurements in the table.

² The annual mean for diffusion tubes presented in the table above still require various analysis and adjustments to be undertaken before comparison to the Air Quality Objectives. The final corrected annual mean will be presented in the HS2 Annual Air Quality Report.

Monitoring Site ID	Location description	Coordinates (X, Y)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean ¹²
HS2-000020BP7	Triplicate site next to the Ealing, Hangar Lane Gyratory roadside automatic monitoring station	518537, 182708	60	50	32	48	26	41	46	46					44