HS2

March 2025

Air Quality and Dust Monitoring Monthly Report – March 2025

London Borough of Brent

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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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 Brent (LBB) during February 2025 and March 2025 respectively.

1.1.2 Figure 1 in Appendix A presents 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, include:

Canterbury Road Vent Shaft

- Works currently paused.

1.1.5 Two (2) dust monitors are installed around this worksite, 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 2. 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_{10} concentrations of 190 µg/m^3, 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 Data capture was below 90% for the AQ030 monitor due to the filter on the monitor becoming overloaded and the pump failing. It has not been possible to safely access and

service monitor AQ030 for several months due to siteworks currently being paused. The aim is to arrange specific works to enable safe access and replace the monitor during April.

1.1.10 Diffusion tube monitoring of Nitrogen Dioxide (NO_2) is undertaken at four (4) locations around highways within the LBB as part of the management of air quality where significant effects may occur as a result of the scheme.

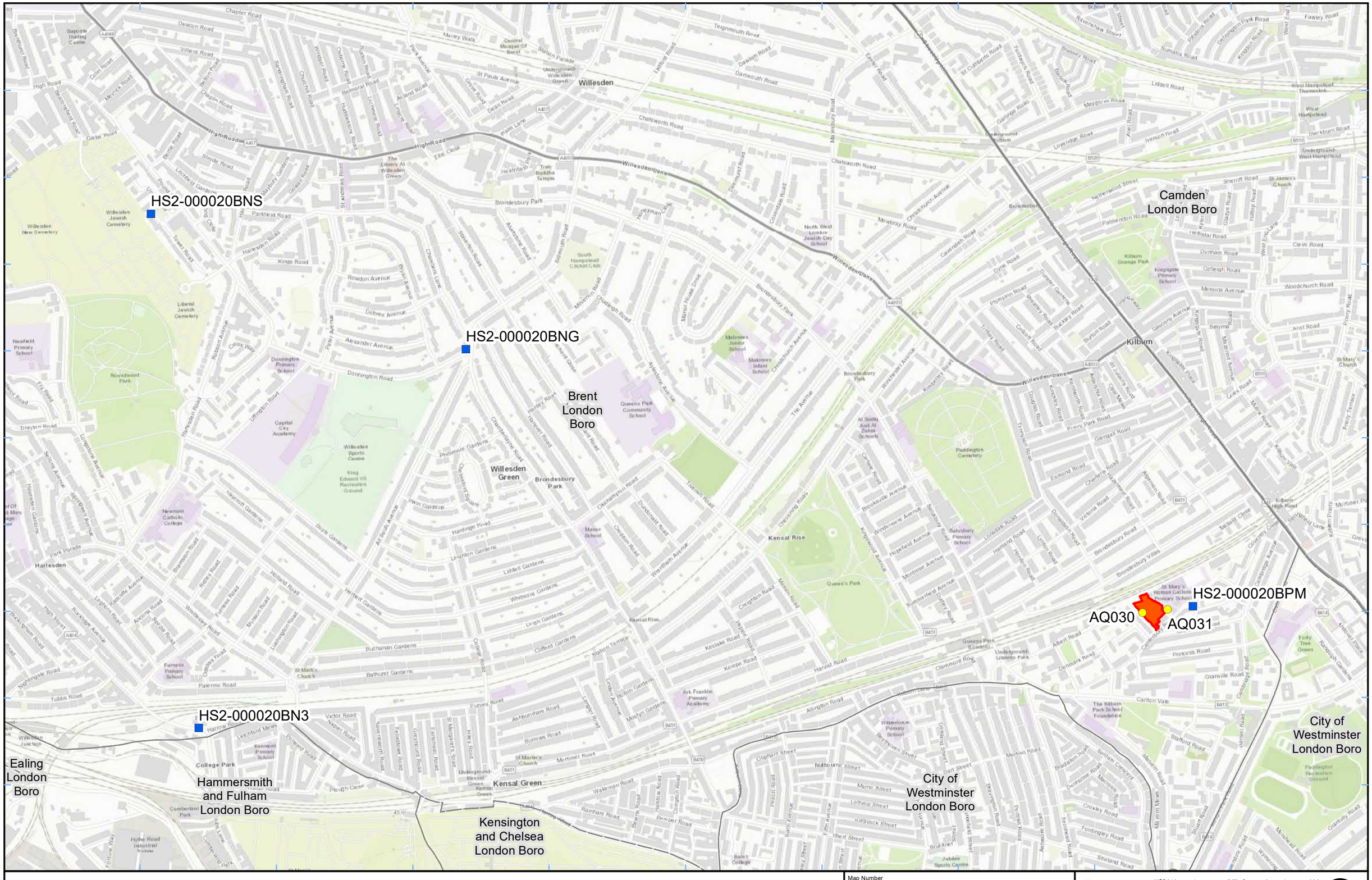
1.1.11 Diffusion tube monitoring results are as provided from the laboratory analysis, and therefore still require various analysis and adjustments to be undertaken. Final corrected results will be presented and described in the annual report. However, based on the results to date, no unexpected values were recorded during the monitoring period.

1.1.12 NO_2 monitoring locations and results are presented in Appendix C, Table 3, together with the 2025 running mean.

1.1.13 There were no (0) complaints received during the reporting period (March 2025).

Appendix A –Worksites and Monitoring Locations

Figure 1: Worksites and Monitoring Locations within the LBB


HS2-000020BNS
HS2-000020BNG
HS2-000020BN3
HS2-000020BPM
AQ030
AQ031
Brent London Boro
Camden London Boro
City of Westminster London Boro
Ealing London Boro
Hammersmith and Fulham London Boro
Kensington and Chelsea London Boro
Willesden
Willesden Green
Brondesbury Park
Kensal Rise
Kensal Green
College Park
Kilburn
Harlesden
High Road
Willesden Lane
Chatsworth Road
Brondesbury Park
Kilburn High Road
Willesden Jewish Cemetery
Willesden New Cemetery
Liberal Jewish Cemetery
Roundwood Park
Willesden Sports Centre
Capital City Academy
Newman Catholic College
Queens Park Community School
Paddington Cemetery
Queen's Park
Ark Franklin Primary Academy
Willesden Junction
Hythe Road Industrial Estate
Cumberland Park
Jubilee Sports Centre
Baker's College
Central Mosque Of Brent
The Library At Willesden Green
Trais Buddha Temple
South Hampstead Cricket Club
North West London Jewish Day School
Malorees Junior School
Malorees Infant School
Al Sadiq And Al Zahra Schools
Maple Walk School
Kingsgate Primary School
Kilburn Grange Park
The Kilburn Park School Foundation
St Mary's Roman Catholic Primary School
Underground: Willesden Green
Underground: Kilburn
Underground: West Hampstead
Underground: Queens Park
Overground: Kilburn
Overground: West Hampstead
Overground: Willesden Junction
Overground: Kensal Green
Overground: Queens Park (London)
Overground: Harlesden
Overground: Willesden Green
Overground: Brondesbury
Overground: Brondesbury Park
Overground: Kilburn High Road
Overground: Kensal Rise
Overground: Willesden Junction
Overground: Harlesden
Overground: Queens Park
Overground: Kilburn

Appendix B – Dust Monitoring Results

Table 1: Dust Monitoring Locations and Results

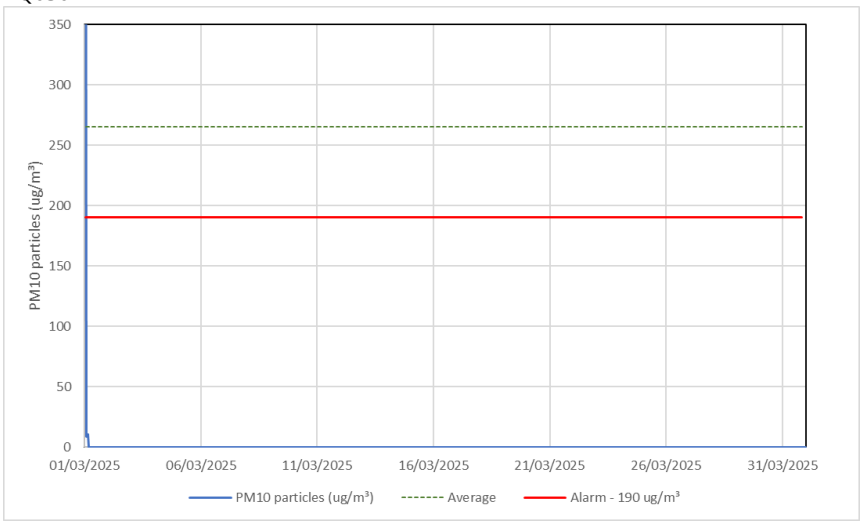
Monitoring site ID	Coordinates (X,Y)	Location description	Dust risk rating for site	Monitoring site active during period	Change to site since previous period report	Mean 1-hour PM_{10} concentration ($\mu g/m^3$)	Minimum 1-hour PM_{10} concentration ($\mu g/m^3$)	Maximum 1-hour PM_{10} concentration ($\mu g/m^3$)	Number of 1-hour periods exceeding trigger level of 190 $\mu g/m^3$	Data capture (%)
AQ030	525093, 183264	Western Hoarding of Canterbury Road works site	M	No	N	265.1	9.1	775.6	1	0.4
AQ031	525112, 183320	Eastern Hoarding of Canterbury Road works site	M	Yes	N	11.9	1.6	43.8	0	99.9

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

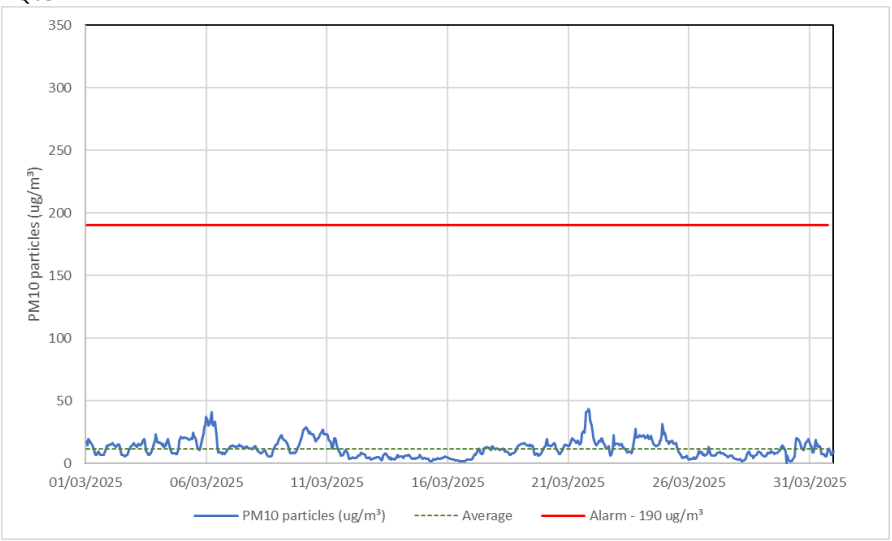
Monitoring site ID	Period exceeding trigger level	Investigation	Outcomes / Resolution / Remedial measures implemented
AQ030	01/03/2025 00:01 – 01:00; 775.6 $\mu g/m^3$	The trigger was caused by the monitor's filter becoming overloaded and the pump failing. It has not been possible to safely access and service the monitor for several months due the site works being paused.	The aim is to arrange specific works to enable safe access and replace the monitor during April.

Figure 2: Construction dust 1-hour mean indicative PM_{10} concentration for all dust monitors

AQ030



AQ031



Appendix C - Air Quality Monitoring Results

Table 3: NO_2 monitoring locations around highways, NO_2 concentrations and monthly monitoring results with running mean for 2025 (µg/m^3)

Monitoring Site ID	Location description	Coordinates (X, Y)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean[12]
HS2-000020BN3	Sign post on High Street Harlesden	522335, 182955	49	44											47
HS2-000020BNG	Lamp post on Donnington Road	523110, 184055	44	28											36
HS2-000020BNS	Lamp post on Tower Road by Willesden Jewish Cemetery	522196, 184448	32	23											28
HS2-000020BPM	Lamp post along Gorefield Place near block of flats	525222, 183309	32	26											29

[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.*