December 2024



Air Quality and Dust Monitoring Monthly Report – December 2024 London Borough of Brent

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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 November 2024 and December 2024 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:

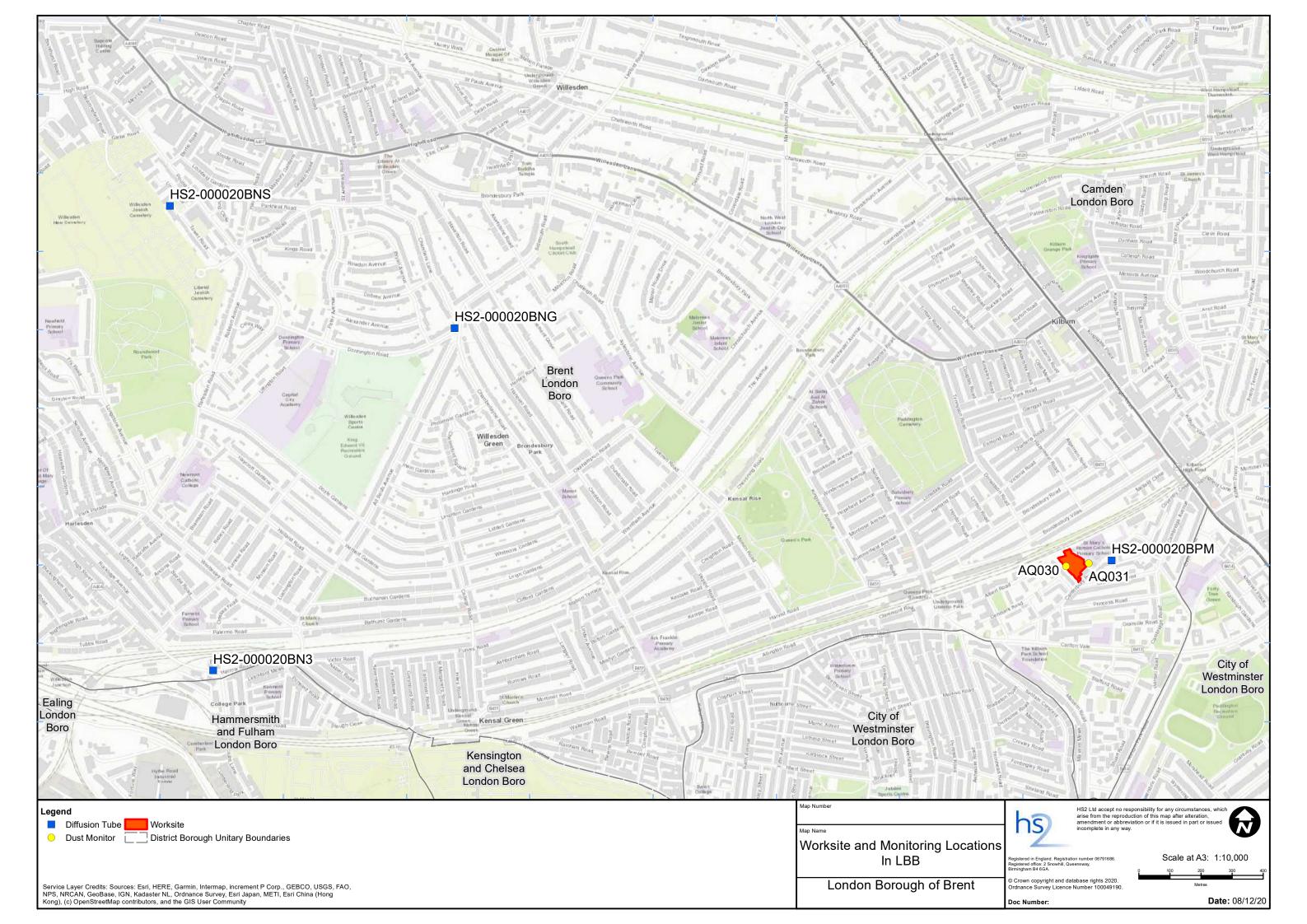
Canterbury Road Vent Shaft

- 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 μ g/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 No (0) dust trigger alerts were recorded during the monitoring period (December 2024).
- 1.1.9 Diffusion tube monitoring of Nitrogen Dioxide (NO₂) 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.

- 1.1.10 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.
- 1.1.11 NO₂ monitoring locations and results are presented in Appendix C, Table 2, together with the 2024 running mean.
- 1.1.12 There were no (0) complaints received during the reporting period (December 2024).

Appendix A - Worksites and Monitoring Locations

Figure 1: Worksites and Monitoring Locations within the LBB

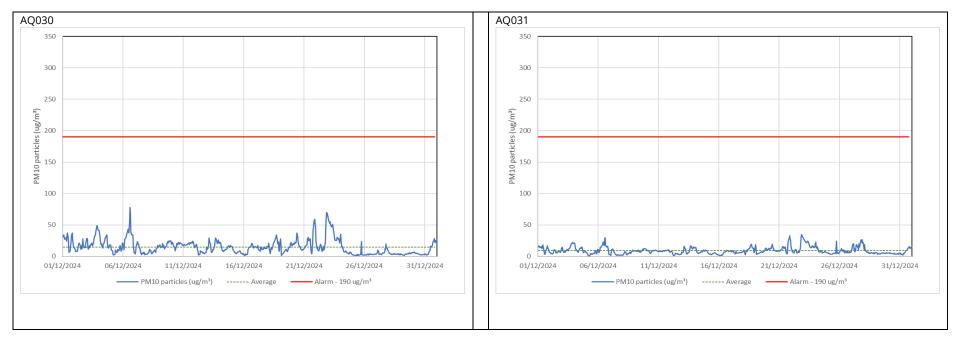


Appendix B - Dust Monitoring Results

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/m³)	Minimum 1- hour PM ₁₀ concentration (μg/m³)	Maximum 1- hour PM ₁₀ concentration (μg/m³)	Number of 1- hour periods exceeding trigger level of 190 µg/m ³	Data capture (%)	
AQ030	525093, 183264	Western Hoarding of Canterbury Road works site	М	Yes	N	15.0	1.2	78.0	0	100.0	
AQ031	525112, 183320	Eastern Hoarding of Canterbury Road works site	М	No	N	9.1	0.9	34.6	0	100.0	

Figure 2: Construction dust 1-hour mean indicative PM₁₀ concentration for all dust monitors



Appendix C - Air Quality Monitoring Results

Table 2: NO₂ monitoring locations around highways, NO₂ concentrations and monthly monitoring results with running mean for 2024 (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- 000020BN3	Sign post on High Street Harlesden	522335, 182955	47	43	35	36	41	40	29	Tube Missing	44	47	39		40
HS2- 000020BNG	Lamp post on Donnington Road	523110, 184055	36	29	24	22	30	24	18	22	25	33	31		27
HS2- 000020BNS	Lamp post on Tower Road by Willesden Jewish Cemetery	522196, 184448	24	22	18	16	17	14	12	15	18	25	18		18
HS2- 000020BPM	Lamp post along Gorefield Place near block of flats	525222, 183309	31	27	23	15	19	16	22	17	23	20	Tube Missing		21

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.