April 2024



Air Quality and Dust Monitoring Monthly Report - April 2024

London Borough of Camden

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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 Camden (LBC) during March 2024 and April 2024 respectively.
- 1.1.2 Figure 1 to Figure 5 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 5, include:

Skanska Costain Strabag Joint Venture (SCSjv)

Adelaide Road Vent Shaft

Limited groundworks.

Euston Scissor Cut

- · Limited groundworks;
- Concrete works; and
- Materials management

Euston Throat Retained Cut

- Limited groundworks;
- Concrete works; and
- Materials management

Hampstead Road Bridge

Utilities diversion works.

Euston Cavern

- Limited concrete;
- Groundworks; and
- Materials management

Mace Dragados Joint Venture (MDjv)

TSS

- Installation of all access hatches
- Screeding of all access hatches lids
- Installation of flood control barriers
- Installation of fire doors (ongoing a few more doors still outstanding)
- Continued with floor painting (ongoing)
- Continued with fire stopping around doors and various services
- Installation of handrails and balustrades
- Asset protection
- Various scaffolding works.

NTH De-mob

- All remaining furniture removed
- Internal strip out continuing
- A/C decommissioning on going
- Cabling stripped and coiled ready for removal with building.

MF building

- MDJV staffing commenced move into Maria Fidelis.
- Furniture install to all floors of MF
- Works to MF completed other than roofing/L5 balcony.
- Desnagging on going.

MF Old School

- Completed steel plant deck on the roof and waterproofing
- Window install and fire protection to beams
- External scaffolding construction

Utilities

- TSS Chamber 1 and Chamber 2 RC works completed
- TSS duct trench excavation progressing to link into both chambers
- TSS Water Main DI1000 MH11 to MH10 all full pipes laid
- External Sites Excavation for EZ Valve and X connection at Hampstead Road; Ph1b (re)commissioning at Robert St & Cumberland Market
- NTH construction of permanent MH03 (MH04 due to commence 20th May). MH5 completed
- Thrust block in Melton St.

<u>ITR</u>

- Chamber concrete surrounds added as per NR request
- CCTV commissioning ongoing
- Clear site ready for Taxi rank going into service
- Install signpost for extra signage install SW corner

Air Quality and Dust Monitoring Summary Report, April 2024 London Borough of Camden

- Remove storage container down into Two Towers
- Install additional wayfinding signage
- Remove all site power from feeder pillar ready for handover to operation
- Install galvanised steel top edges as recommended by the RSA
- Public invited for site walk prior to entry into service
- Remove damaged bollards as buses run over them
- Electrical snagging & cable labelling on night shift
- Weld Heritage railings & paint on night shift
- Cabling for extra CCTV cameras as requested by NR.
- 1.1.5 Twenty-Two (22) dust monitors are installed around these worksites, where works are underway. These sites returned a medium 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 in Figure 6. 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 Details of the trigger alerts investigations and remediations are presented in Appendix B, Table 3.
- 1.1.9 Data capture was below 90% for AQ008 due to a tripped electrical switch, which resulted in a power failure for the unit on 25/04/2024. This issue was resolved on-site on 07/05/2024. Data capture for monitor AQ019 was below 90% due to a fault with the monitor, subsequently replaced (on the 3rd April).
- 1.1.10 Diffusion tube monitoring of Nitrogen Dioxide (NO₂) is undertaken at sixty-four (64) locations around highways within the LBC 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 NO₂ monitoring locations and results are presented in Appendix C, Table 4, together with the 2024 running mean.

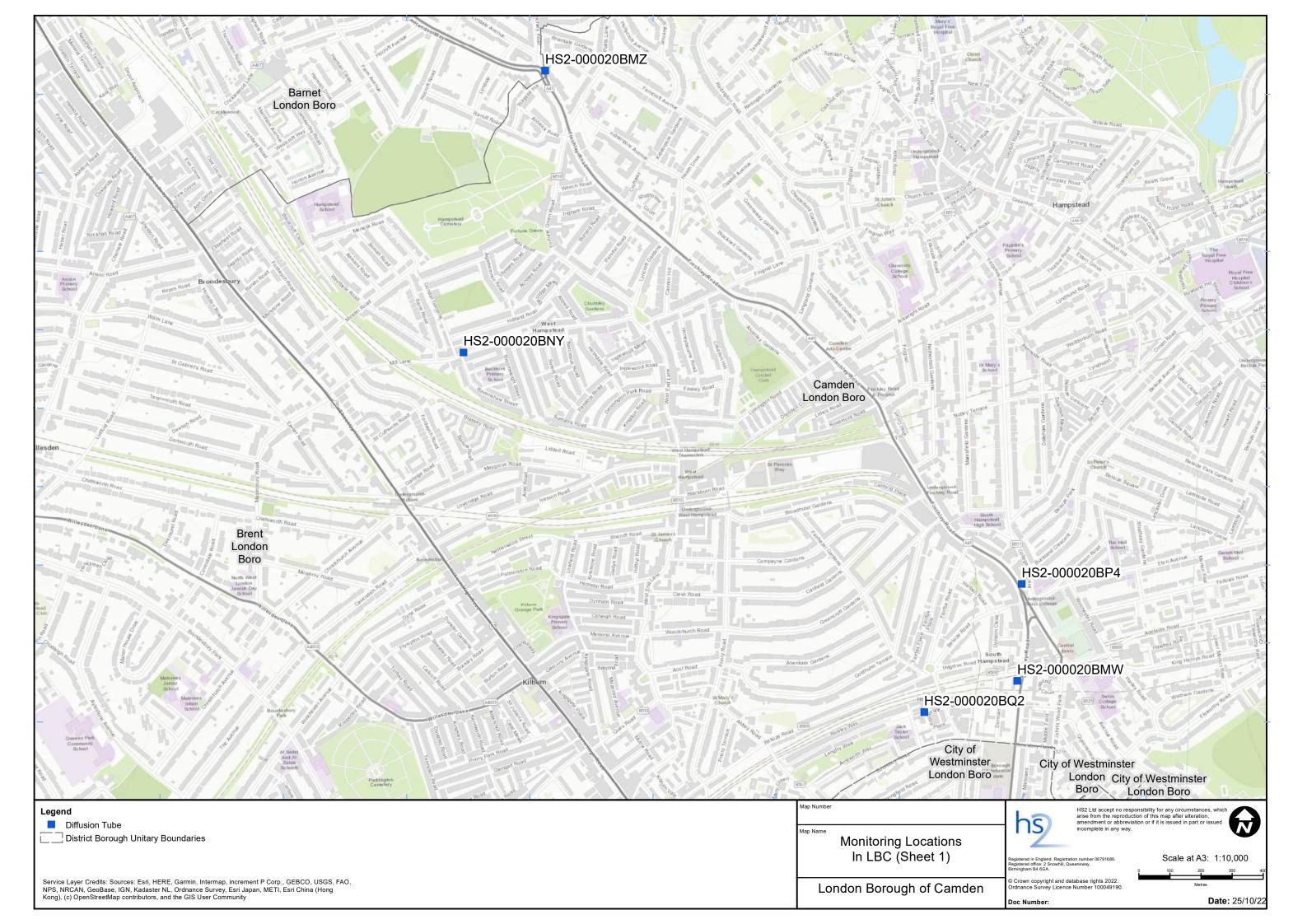
1.1.13 Table 1 provides a summary of the complaint information relating to dust or air quality received during the reporting period, together with the findings of any related investigations.

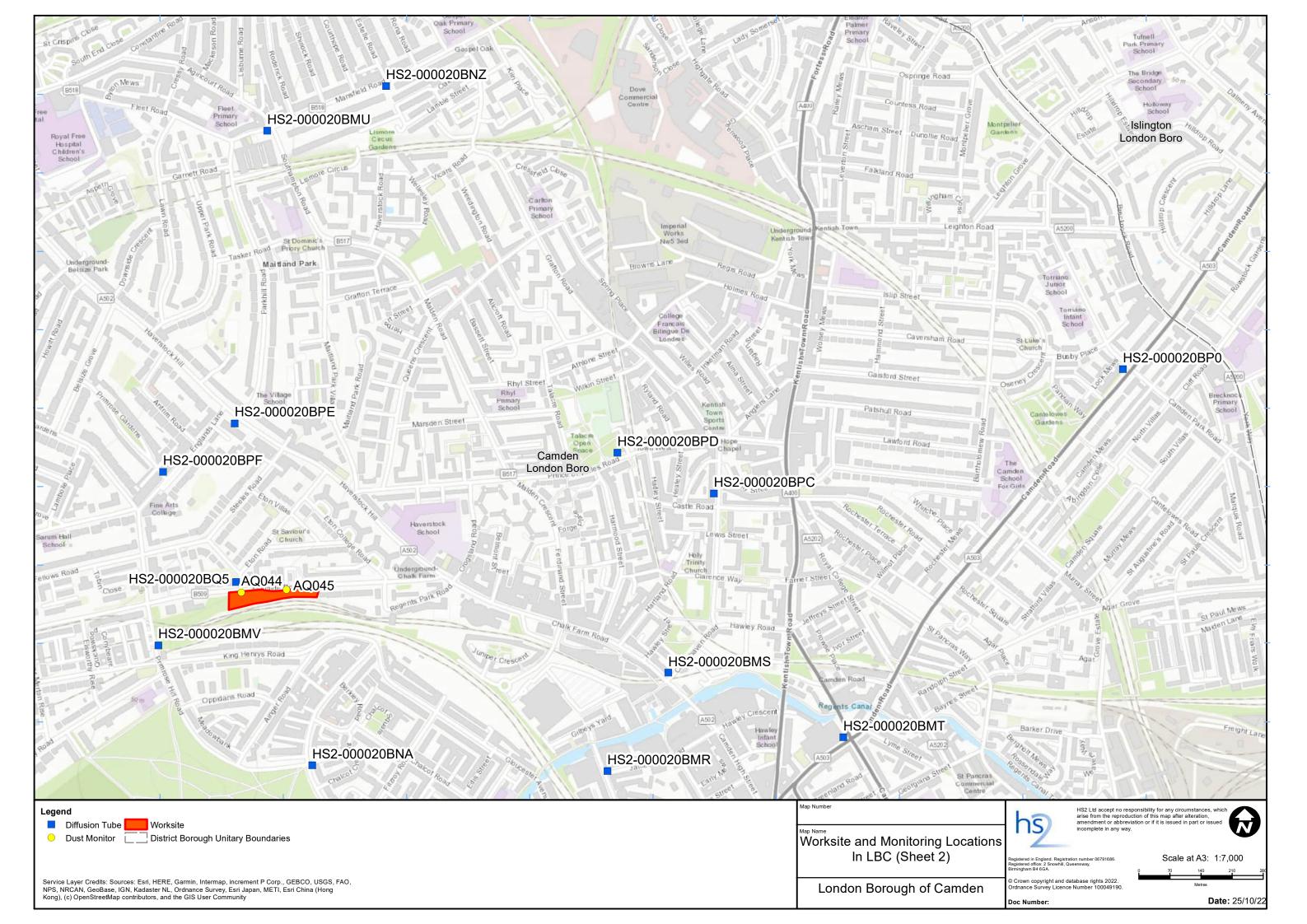
Table 1: Summary of complaints received during April 2024

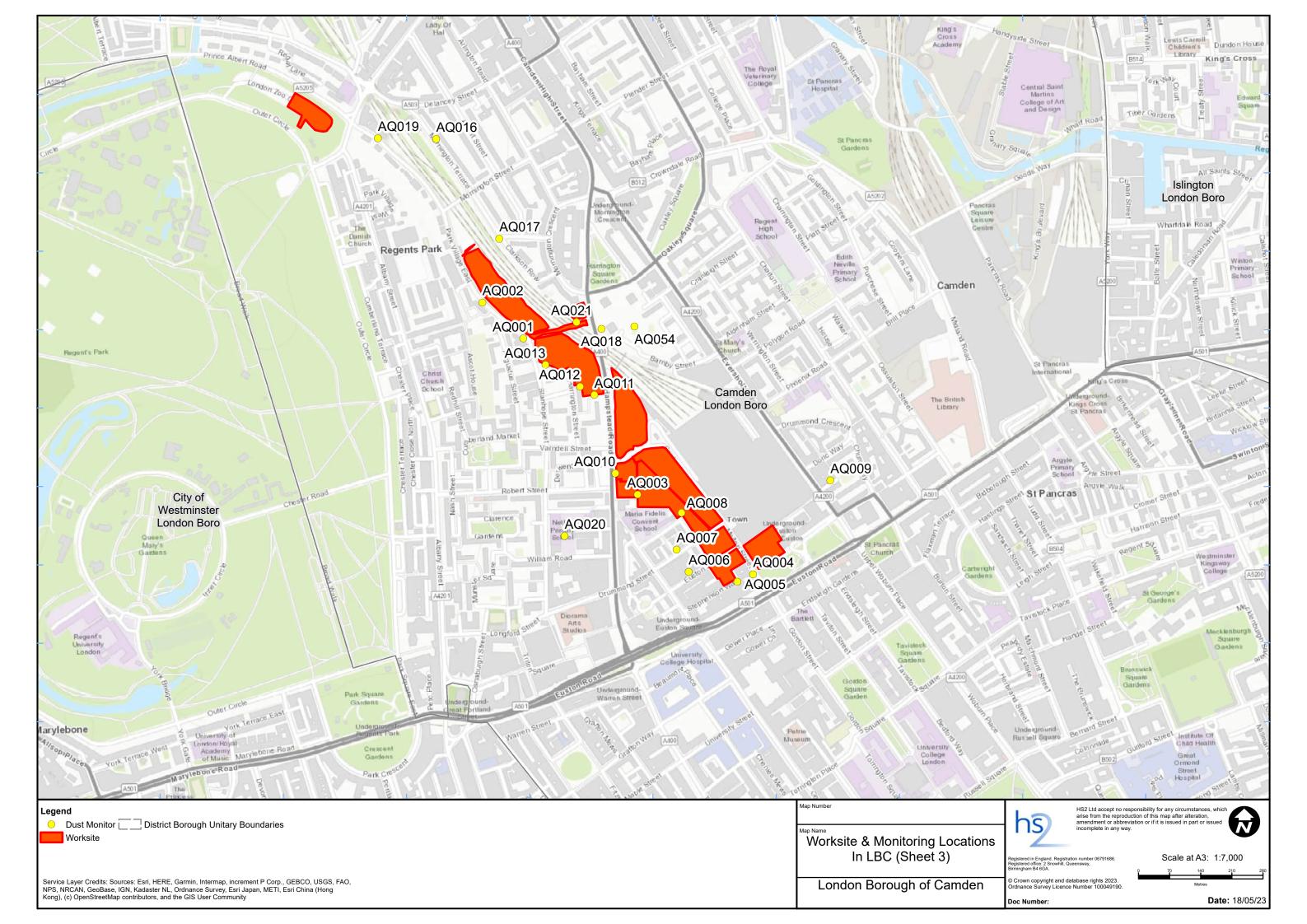
Complaint Reference No.	Worksite Reference	Description of complaint	Results of investigation
HS2-24-45308-C	N/A	Complaint concerning dust inside property.	Two dust monitors are in place, measuring levels 24/7. No elevated levels have been reported via these monitors for over 12 months. Dust suppression has been and continues to be used at the site. Works ended at the site in May this year and are not scheduled to recommence until spring 2025.
HS2-24-45331-C			Environment specialists investigated data from the air quality monitors in place. No
HS2-24-45332-C	N/A	Dust from site impacting on resident's health. Raised by LBC	high dust risk activities have been carried out in recent months. Dampening/dust suppression measures are in place on the
HS2-24-45333-C		. Kaisea sy Ese	site. Stakeholder has been given the details of the Special Cases process.

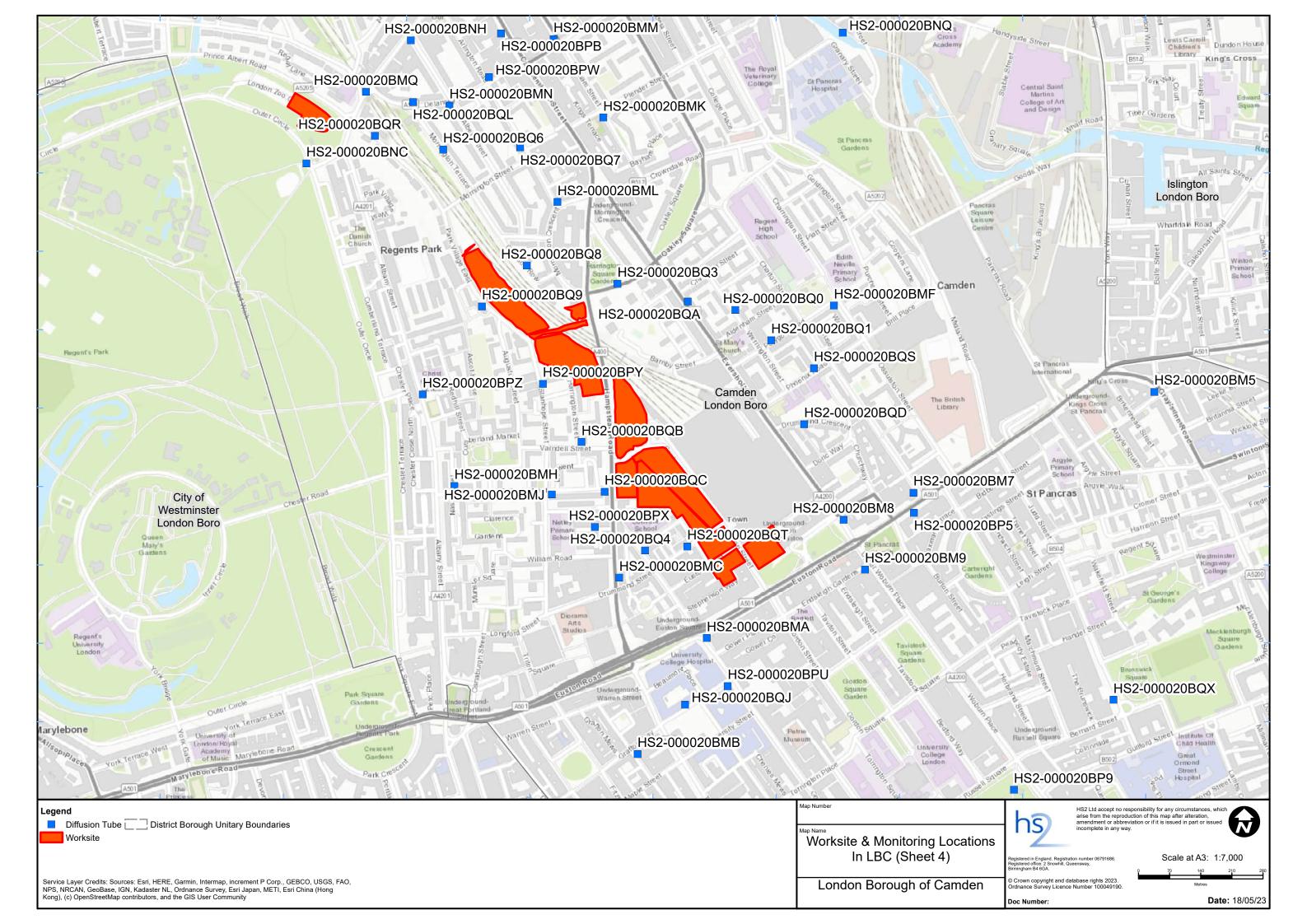
Appendix A - Worksites and Monitoring Locations

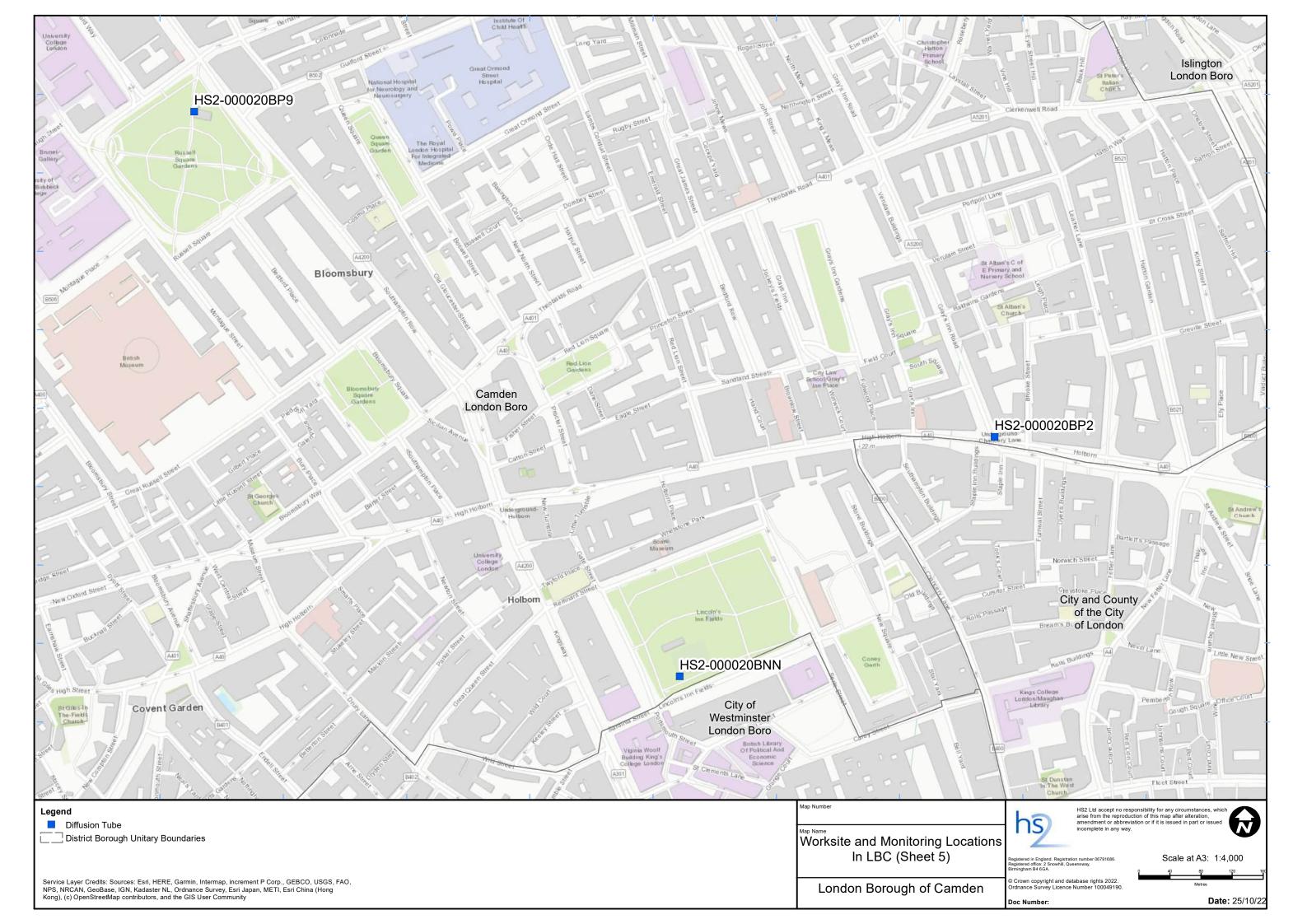
Figure 1 to Figure 5: Worksites and monitoring locations within the LBC











Appendix B - Dust Monitoring Results

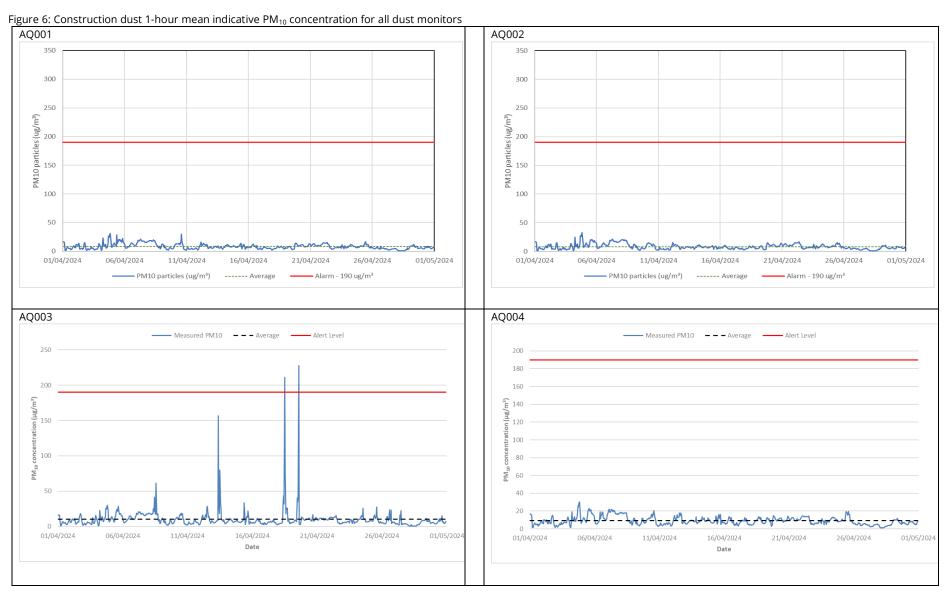
Table 2: Dust Monitoring Locations and Results

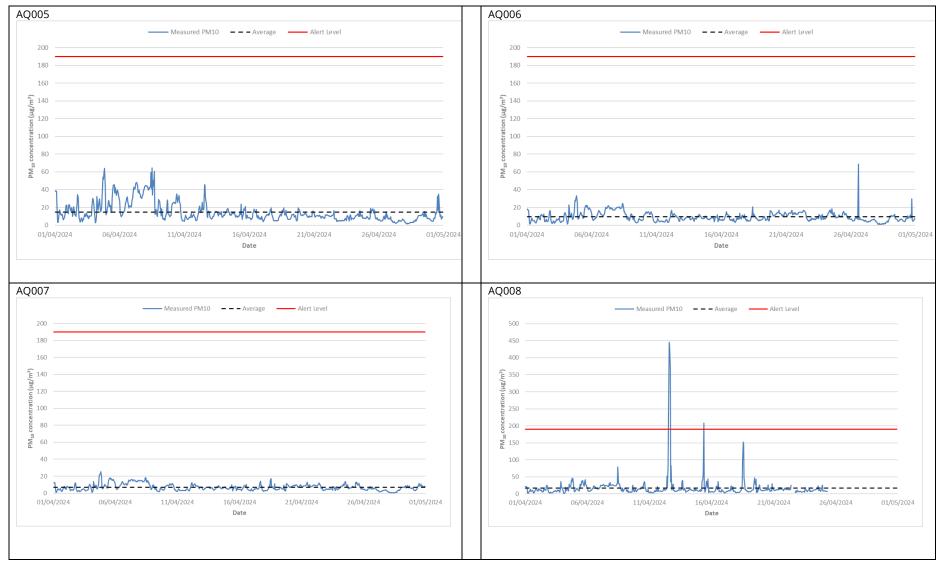
Monitoring site ID	Coordinates (X,Y)	Location description	Dust risk rating for site	Monitoring site active during period	Change to site since previous period report	Mean 1-hour PM ₁₀ concentration (μg/m³)	Minimum 1- hour PM ₁₀ concentration (μg/m³)	Maximum 1- hour PM ₁₀ concentration (µg/m³)	Number of 1- hour periods exceeding trigger level of 190 µg/m³	Data capture (%)
AQ001	529016, 183049	Junction of Park Village East, Stanhope Street and Granby Terrace	М	Yes	N	8.2	0.6	31.2	0	100.0
AQ002	528924, 183130	Park Village East	М	Yes	N	8.2	0.6	32.8	0	100.0
AQ003	529273, 182698	St James' Gardens	М	Yes	N/A	10.3	0.5	227.8	2	100.0
AQ004	529533, 182519	Melton Street	Н	Yes	N/A	9.1	1.0	30.3	0	100.0
AQ005	529498, 182502	Stephenson Way	Н	Yes	N/A	14.5	1.4	64.6	0	100.0
AQ006	529388, 182524	Euston Street	Н	Yes	N/A	9.4	0.9	68.6	0	100.0
AQ007	529361, 182574	Drummond Street	Н	Yes	N/A	7.0	0.3	25.4	0	100.0
AQ008	529372, 182657	Cobourg Street	Н	Yes	N/A	17.4	1.1	445.2	5	80.4
AQ009	529707, 182730	Eversholt Street	Н	Yes	N/A	27.3	1.6	147.8	0	100.0
AQ010	529223, 182746	Hampstead Road South	М	Yes	N/A	17.6	1.3	142.7	0	100.0
AQ011	529176, 182922	Hampstead Road	М	Yes	N	7.8	0.4	114.1	0	100.0

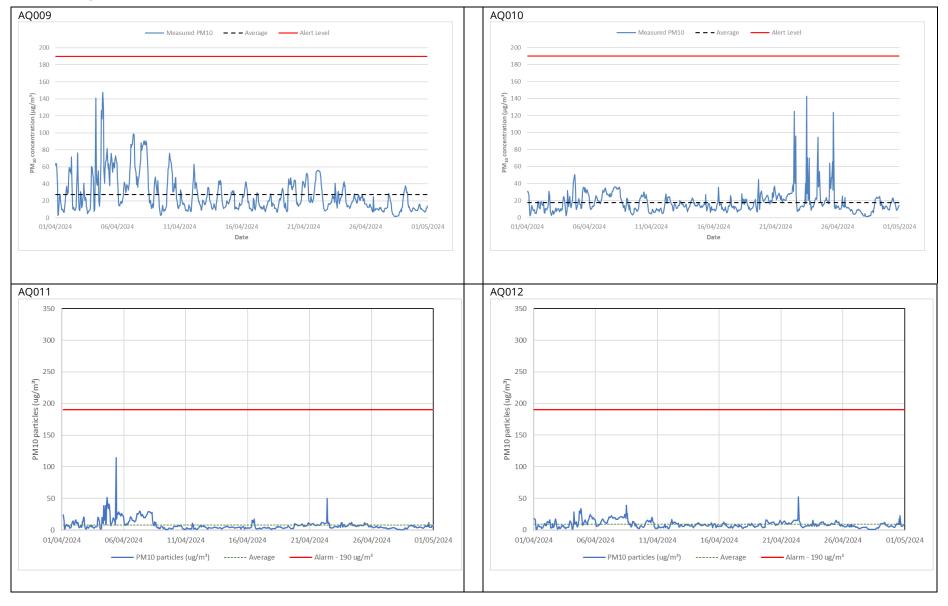
Monitoring site ID	Coordinates (X,Y)	Location description	Dust risk rating for site	Monitoring site active during period	Change to site since previous period report	Mean 1-hour PM ₁₀ concentration (μg/m³)	Minimum 1- hour PM ₁₀ concentration (μg/m³)	Maximum 1- hour PM ₁₀ concentration (μg/m³)	Number of 1- hour periods exceeding trigger level of 190 µg/m³	Data capture (%)
AQ012	529144, 182941	Rear of Coniston House	М	Yes	N	9.1	0.7	52.1	0	100.0
AQ013	529066, 182990	Regents Park Estate	М	Yes	N	7.4	0.6	27.9	0	100.0
AQ016	528820, 183498	Mornington Terrace North	М	Yes	N	8.1	0.6	92.9	0	100.0
AQ017	528962, 183274	Mornington Terrace South	М	Yes	N	9.6	0.6	100.5	0	100.0
AQ018	529192, 183071	Hampstead Road North	М	Yes	N	8.0	0.6	30.2	0	100.0
AQ019	528689, 183500	Park Village East (North)	М	Yes	N	8.1	0.5	36.5	0	88.8
AQ020	529109, 182605	Netley School	n/a	Yes	N/A	9.6	0.8	80.3	0	100.0
AQ021	529136, 183086	Site compound at the Junction of Hampstead Road & Granby Terrace Bridge	М	Yes	N	9.0	0.7	32.7	0	100.0
AQ044	527725, 184369	Adelaide Road 1	М	Yes	N	3.3	0.1	49.8	0	99.4
AQ045	527826, 184375	Adelaide Road 2	М	Yes	N	8.6	0.8	40.9	0	99.6
AQ054	529266, 183076	Ampthill Estate, Hampstead Road	М	Yes	N	8.1	0.5	32.9	0.0	100.0

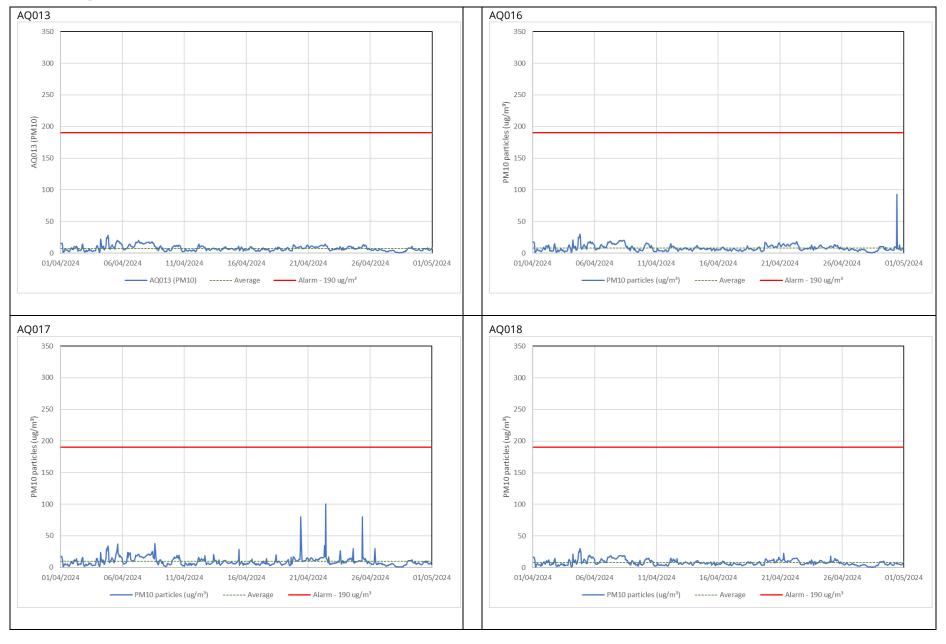
Table 3: Summary of exceedances during period (April 2024)

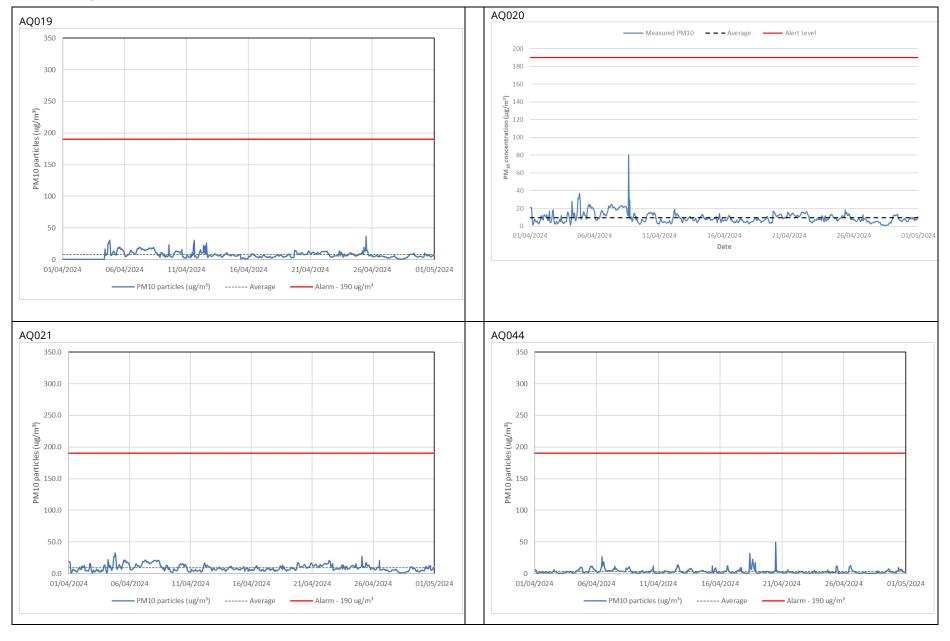
Monitoring site ID	Period exceeding trigger level	Investigation	Outcomes / Resolution / Remedial measures implemented
AQ003	18/04/2024 11:01 – 12:00; 211.4 μg/m³ 19/04/2024 13:01 – 14:00; 227.8 μg/m³	These exceedances occurred during the installation of mastic asphalt to the roof of the Maria Fidelis Substation.	In response to these exceedances, the asphalt machine was repositioned further from sensitive, offsite receptors. Vents and hatches were closed when possible, and fencing installed to divert the fumes from sensitive receptors.
AQ008	12/04/2024 12:01 – 13:00; 229.3 µg/m³ 13:01 – 14:00; 445.2 µg/m³ 14:01 – 15:00; 433.9 µg/m³ 15:01 – 16:00; 369.1 µg/m³ 15/04/2024 08:01 – 09:00; 208.5 µg/m³	These exceedances occurred during the backfilling of Manhole 05. This included concrete wagon delivery to NTH and concrete pouring approximately 20 metres from AQ008.	The construction manager was notified in response to these exceedances. Subsequently a review of the work methodology was undertaken. It was judged that no obviously dusty activities were being undertaken. The main site activity was a concrete pour which couldn't be stopped after it had commenced. Other potential causes could include changes on wind direction or the passage of vehicles. Best Practice Measures were implemented and damping down frequency increase. After the exceedance on 15/04/2024, works continued for the rest of the week with no additional exceedances.

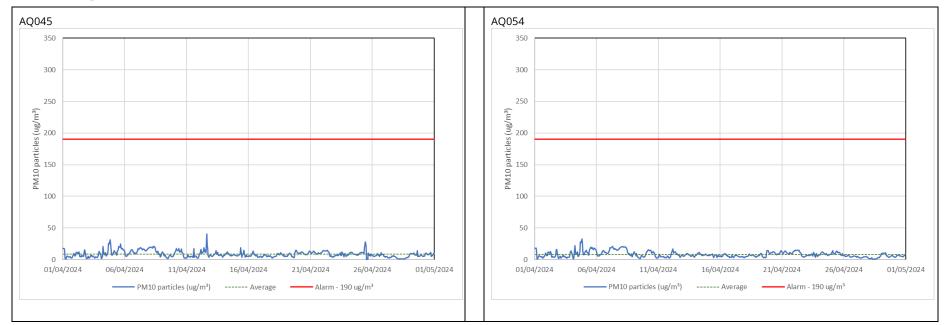












Appendix C - Air Quality Monitoring Results

Table 4: 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- 000020BM5	Junction of St Chad's Street and Grays Inn Road	530436, 182929	44	43	Tube Missing										44
HS2- 000020BM7	Chalton Street	529894, 182702	Tube Missing	45	42										44
HS2- 000020BM8	Junction of Euston Square and Grafton Place	529737, 182641	Tube Missing	39	35										37
HS2- 000020BM9	Junction of Endsleigh Gardens and Upper Woburn Place	529785, 182529	44	Tube Missing	Tube Missing										44
HS2- 000020BMA	Junction of Euston Road and Gower Street	529429, 182375	56	50	37										48
HS2- 000020BMB	Whitfield Street	529273, 182114	39	35	23										32
HS2- 000020BMC	Hampstead Road	529232, 182511	55	62	57										58
HS2- 000020BMF	Junction of Polygon Road and Ossulston Street	529715, 183123	32	27	29										29
HS2- 000020BMH	Nash Street	528861, 182717	34	27	18										26

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	Location	Coordinates	lon	Fab	Mari	A	Mari	Lun	test	0	Com	0-4	New	Des	Mean ¹²
Site ID	description	(X, Y)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean'
HS2- 000020BMJ	Junction on Robert Street and Stanhope Street	529080, 182698	31	31	27										29
HS2- 000020BMK	Junction of Plender Street and Bayham Street	529196, 183546	45	42	37										41
HS2- 000020BML	Junction of Arlington Road and Mornington Crescent	529093, 183356	36	30	25										30
HS2- 000020BMM	Junction of Bayham Street and Pratt Street	529084, 183722	39	Tube Missing	Tube Missing										39
HS2- 000020BMN	Junction of Delancey Street and Albert Street	528850, 183573	34	32	29										31
HS2- 000020BMQ	Junction of Parkway and Delancey Street	528662, 183604	38	36	39										38
HS2- 000020BMR	Junction of Oval Road and Jamestown Road	528548, 183967	30	28	21										27
HS2- 000020BMS	Junction of Chalk Farm Road and Castlehaven Road	528685, 184188	43	41	Tube Missing										42
HS2- 000020BMT	Junction of Camden Road and Camden Street	529079, 184043	46	41	37										41
HS2- 000020BMU	Junction of Southampton Road and Fleet Road	527783, 185407	40	30	34										35
HS2- 000020BMV	Primrose Hill Road	527538, 184250	Tube Missing	31	28										29

Monitoring	Location	Coordinates	lan	Fob	Ман	A 1014	May	lum	lud.	A.116	Con	Oct	Nev	Dos	Mean ¹²
Site ID	description	(X, Y)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	wean
HS2- 000020BMW	Junction of Finchley Road and Hilgrove Road	526619, 184081	43	45	39										42
HS2- 000020BMZ	Junction of Finchley Road and Hendon Way	525102, 186042	54	54	53										53
HS2- 000020BNA	Junction of Regent's Park Road and Rothwell Street	527884, 183980	29	29	22										27
HS2- 000020BNC	Junction of Outer Circle and Gloucester Gate	528528, 183443	29	22	19										23
HS2- 000020BNH	Junction of Parkway and Albert Street	528763, 183720	33	30	24										29
HS2- 000020BNN	Lincoln's Inn Fields	530744, 181308	23	33	30										29
HS2- 000020BNQ	Camley Street	529735, 183737	38	36	21										32
HS2- 000020BNY	Junction of Mill Lane and Hillfield Road	524839, 185136	42	39	29										37
HS2- 000020BNZ	Mansfield Road	528050, 185508	35	31	23										30
HS2- 000020BP0	Junction of Camden Road and Torriano Avenue	529708, 184871	45	51	40										45
HS2- 000020BP2	Junction of Grays Inn Road and Holborn	531149, 181616	36	35	32										34
HS2- 000020BPB	Camden High Street	528966, 183735	59	52	48										53
HS2- 000020BPC	Castlehaven Road	528788, 184591	29	27	23										26

Monitoring	Location	Coordinates		e.b		A			11	0	Com	0-4	New	D	B. 6 12
Site ID	description	(X, Y)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean ¹²
HS2- 000020BPD	Prince of Wales Road	528571, 184683	26	26	21										24
HS2- 000020BPE	Haverstock Hill	527710, 184749	40	39	29										36
HS2- 000020BPF	Junction of Primrose Gardens and England's Lane	527549, 184640	41	37	21										33
HS2- 000020BPU	Junction of Gower Street and Grafton Way	529476, 182267	43	42	38										41
HS2- 000020BPW	Junction of Delancey Street and Arlington Road	528939, 183637	27	28	30										28
HS2- 000020BPX	Netley Street	529177, 182625	36	30	31										32
HS2- 000020BPY	Stanhope Street	529060, 182947	Tube Missing	26	22										24
HS2- 000020BPZ	Albany Street	528790, 182923	34	25	26										28
HS2- 000020BQ0	Werrington Street	529493, 183113	35	26	27										29
HS2- 000020BQ1	Polygon Road	529574, 183045	27	33	Tube Missing										30
HS2- 000020BQ2	Alexandra Place	526320, 183980	29	29	Tube Missing										29
HS2- 000020BQ3	Harrington Square	529228, 183172	43	37	34										38
HS2- 000020BQ4	Junction of North Gower Street and Starcross Street	529290, 182572	33	33	28										32
HS2- 000020BQ5	Adelaide Road	527713, 184392	32	34	25										30
HS2- 000020BQ6	Mornington Terrace	528836, 183474	30	26	23										26

Monitoring	Location	Coordinates	1	E-L		A		Long	L. I	0	C	0-4	New	D	Mean ¹²
Site ID	description	(X, Y)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	wean
HS2- 000020BQ7	Arlington Road	529009, 183479	27	26	26										26
HS2- 000020BQ8	Clarkson Row	529024, 183213	32	26	28										29
HS2- 000020BQ9	Park Village East	528923, 183121	30	24	23										26
HS2- 000020BQA	Eversholt Street	529386, 183132	43	28	33										35
HS2- 000020BQB	Junction of Harrington Street and Varndell Street	529147, 182816	32	28	24										28
HS2- 000020BQC	Junction of Robert Street and Hampstead Road	529199, 182704	40	35	30										35
HS2- 000020BQD	Drummond Crescent	529648, 182856	39	36	38										38
HS2- 000020BQJ	Grafton Way	529380, 182225	40	47	32										40
HS2- 000020BQL	Delancey Street	528768, 183581	36	29	35										34
HS2- 000020BQR	Lamp post on Park Village East	528682, 183505	33	22	23										26
HS2- 000020BQS	Opposite Maria fidelis school on Phoenix Road	529670, 182982	34	32	26										30
HS2- 000020BQT	Drummond Street	529385, 182581	27	33	Tube Missing										30
HS2- 000020BQX	Lamp post on Brunswick Square	530344, 182236	36	39	31										35
HS2- 000020BP4	Triplicate site on Finchley Road next to Swiss Cottage kerbside automatic monitoring station	526633, 184392	49	40	41										43

Monitoring Site ID	Location description	Coordinates (X, Y)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean ¹²
HS2- 000020BP5	Triplicate site next to the Euston Road roadside automatic monitoring stations	529895, 182657	57	Tube Missing	Tube Missing										57
HS2- 000020BP9	Triplicate site in Russell Square next to Bloomsbury urban background automatic monitoring station	530120, 182034	34	30	Tube Missing										32