

Air Quality and Dust Monitoring Monthly Report – August 2021 London Borough of Camden



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 Camden (LBC) during July and August 2021 respectively.
- 1.1.2 Figure 1 to Figure 4 in Appendix A indicate 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 phase of works commenced within the LBC during December 2017 and is expected to be completed by December 2021. The next concurrent phase of construction works commenced in November 2019 and is expected to be completed by 2025. The current and planned worksites, include:

Skanska Costain Strabag Joint Venture (SCSjv)

- Adelaide Road Vent Shaft –Concreting and utilities works, vegetation clearance and groundworks;
- Site office and welfare ground works, concrete slab construction and services by Granby Terrace Bridge;
- Euston Scissor Cut – groundworks, piling operations and materials management;
- Euston Throat Retained Cut groundworks, piling operations, utilities diversion works and materials management; and
- Hampstead Road Bridge – mobilisation, site setup and utilities work.

Costain Skanska Joint Venture (CSjv)

- Compound and Power Signal Box, demolition works completed with ground slab and foundation removal continuing. Crushing of demolition arisings.
- Utilities reinstatement works (pavers) at Gower Place;
- Utility reinstatement works at Stephenson Way and Regnart Buildings;
- Ground excavation works on Varndell Street; and
- Harrington Street and Cartmel drainage works.

Mace Dragados Joint Venture (MDjv)

ITR:

- Site maintenance.

TSS:

- Completion of the shaft ready for tunnelling to start; and
- Foundations for future walls.

Main Site (NTH)/ Maria Fidelis:

- Retaining wall completion;
- Installation of sheet piles; and
- Started removal of Gabon baskets.

Utilities:

- Trial Hole Throughout the Euston Area.

Two Towers:

- Breaking ground floor slab and hoarding replacement.

- 1.1.5 Twenty-one (21) dust monitors are installed around worksites, where demolition, groundworks and materials management are underway. These sites returned a medium or 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 5. 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 There was one (1) dust trigger alert recorded during the monitoring period (August 2021). Triggers are presented in Appendix B, Table 3. All other results were in line with the expected ranges.
- 1.1.9 Data capture for the monitors AQ004, AQ008 and AQ011 was below 90% for the month of August 2021. For monitor AQ011 this was due to a fault with the monitor, and for AQ004 and AQ008 this was due to blockages within the heated inlets. These have been resolved.

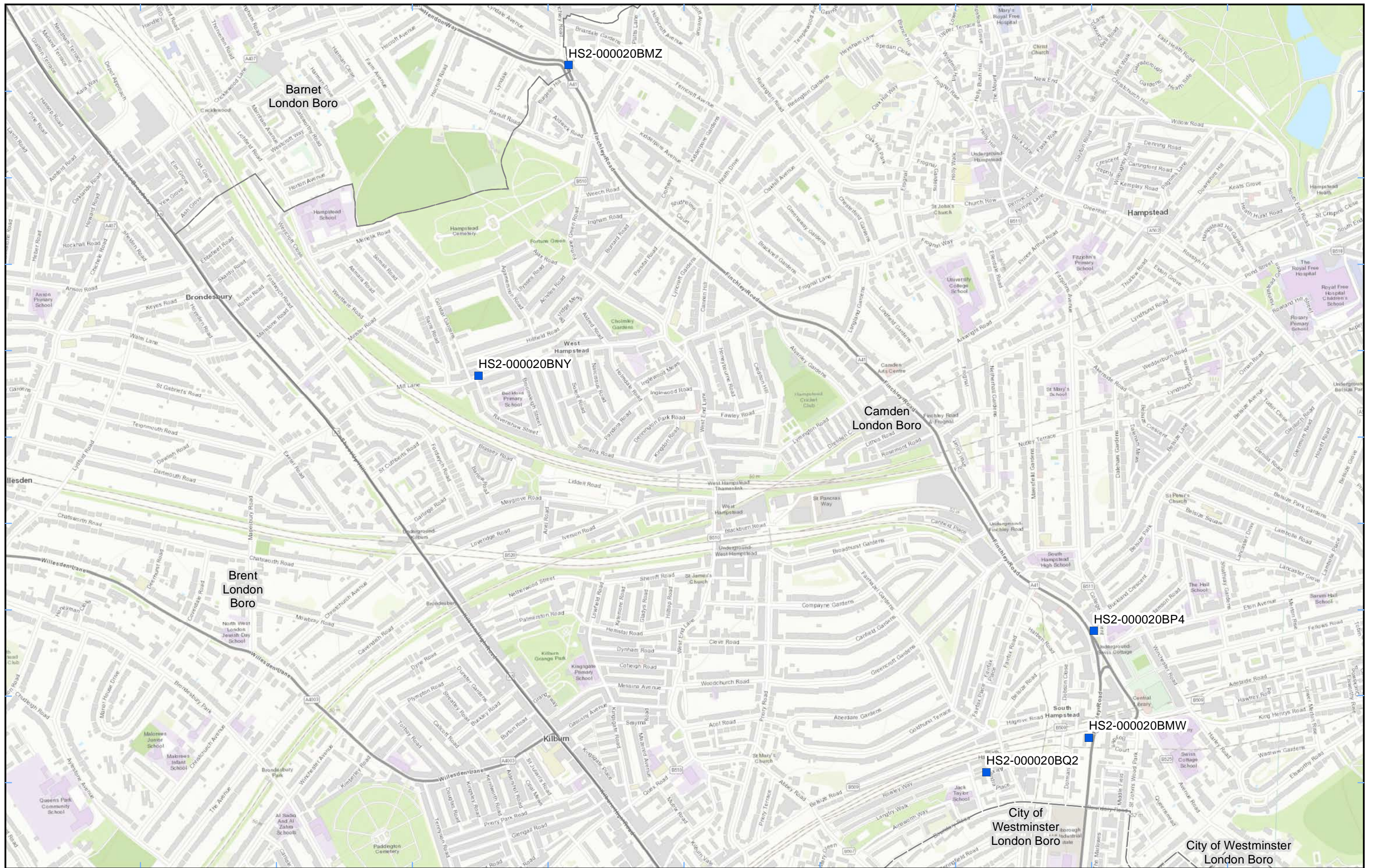
- 1.1.10 Diffusion tube monitoring of Nitrogen Dioxide (NO₂) is undertaken at sixty-four (64) locations around highways within the LBC as part of the management of air quality where significant effects may occur as a result of the scheme.
- 1.1.11 Diffusion tube monitoring results are provided from the 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 2021 running mean.
- 1.1.13 Table 1 provides a summary of the complaint information related 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 August 2021

Complaint Reference No.	Worksite Reference	Description of complaint	Results of investigation
HS2-21-42440-C	N/A	A complaint around dust levels was received during the reporting period.	A response was provided to the complainant around the mitigations deployed across sites, along with the ongoing monitoring information to ensure mitigations are effective in managing dust levels.

Appendix A – Worksites and Monitoring Locations

Figure 1 to Figure 4: Worksites and monitoring locations within the LBC



Legend
■ Diffusion Tube
 District Borough Unitary Boundaries

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Map Number
 Map Name
Monitoring Locations In LBC (Sheet 1)
London Borough of Camden

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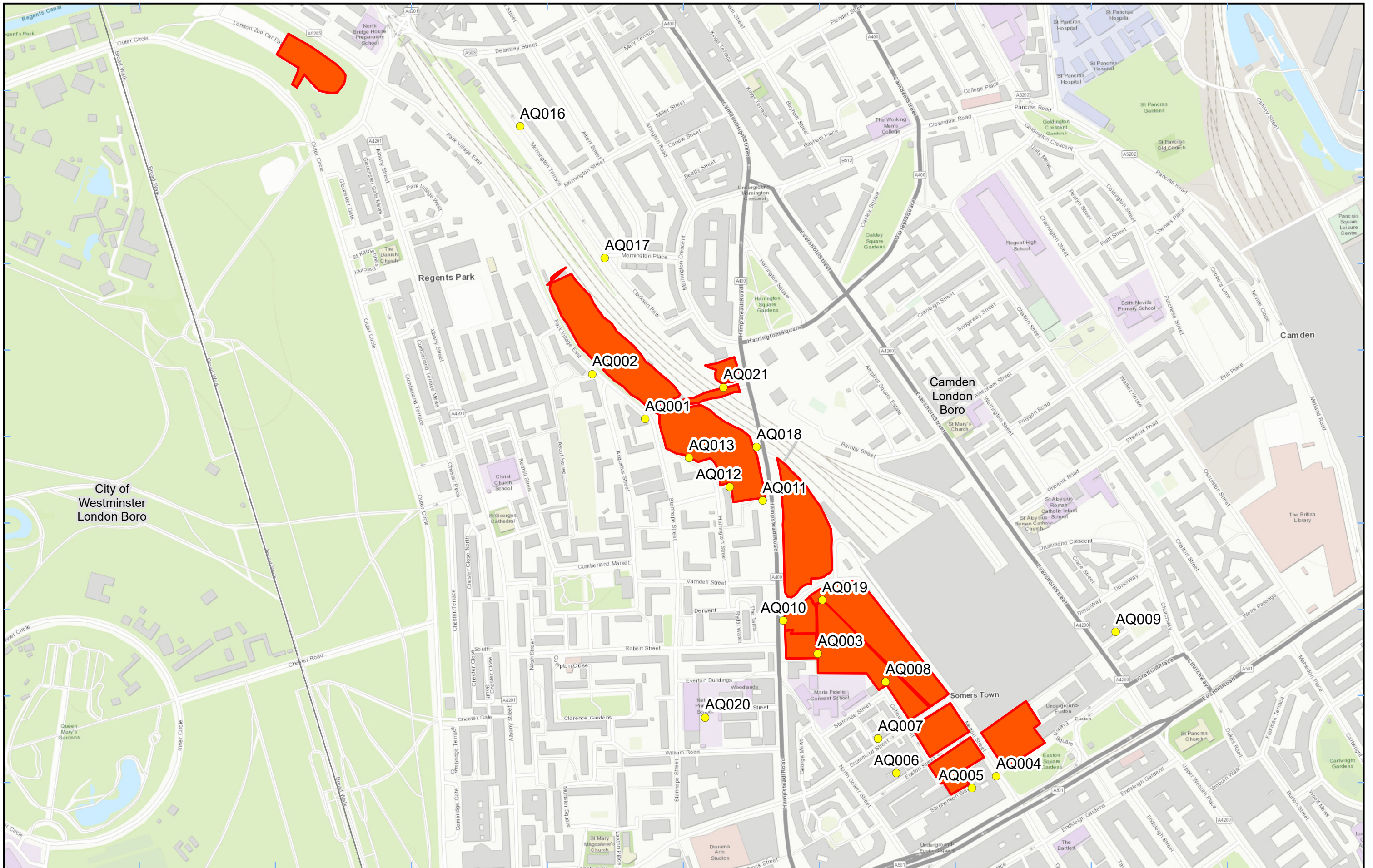
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Doc Number: **Date: 08/12/20**



Legend
 ● Dust Monitor □ District Borough Unitary Boundaries
 ■ Worksite

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Map Number
 Worksite and Monitoring Locations
 In LBC (Sheet 3)
 London Borough of Camden

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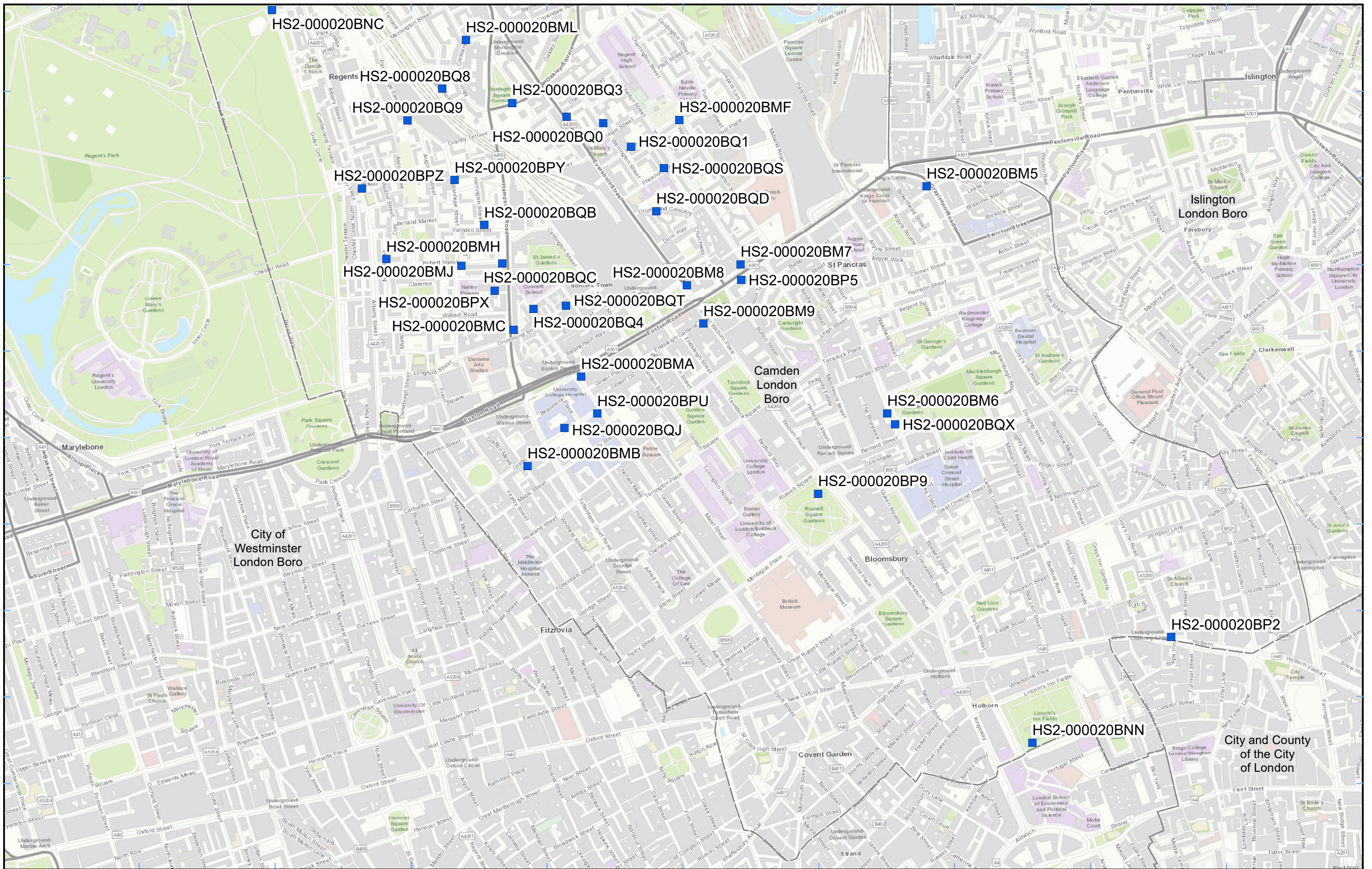
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Doc Number: Date: 27/08/21



Legend
■ Diffusion Tube
 - - - District Borough Unitary Boundaries

Map Number
 Map Name
**DT Monitoring Locations In LBC
 (Sheet 4)**
London Borough of Camden

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Appendix B – Dust Monitoring Results

Table 2: Dust monitoring locations and August 2021 Results

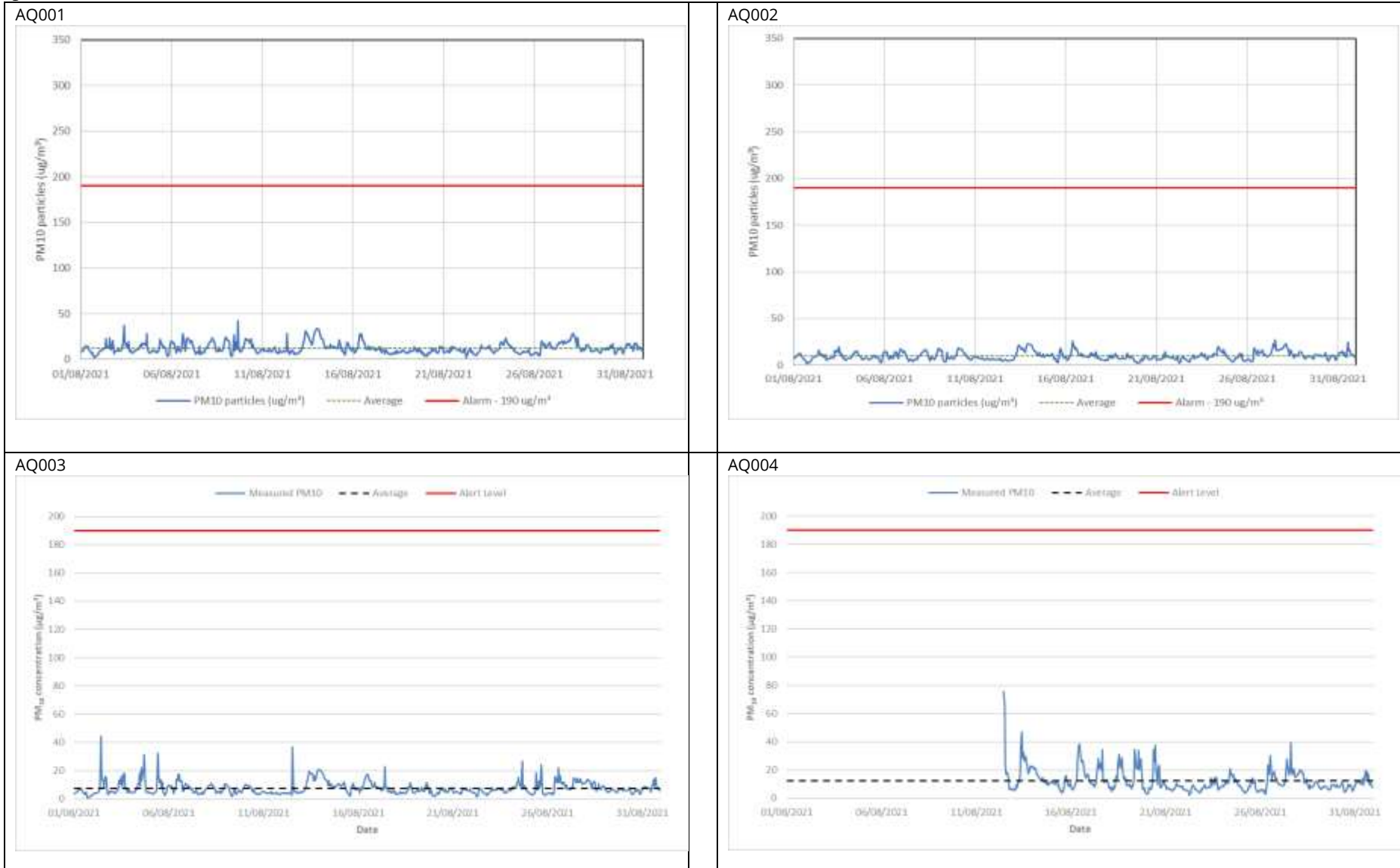
Monitoring site ID	Coordinates (X,Y)	Location description	Dust risk rating for site	Monitoring site active during period	Change to site since previous period report	Mean 1-hour PM ₁₀ concentration (µg/m ³)	Minimum 1-hour PM ₁₀ concentration (µg/m ³)	Maximum 1-hour PM ₁₀ concentration (µg/m ³)	Number of 1- hour periods exceeding trigger level of 190 µg/m ³	Data capture (%)
AQ001	529022, 183040	Junction of Park Village East, Stanhope Street and Granby Terrace	M	Yes	N	12.3	1.9	41.9	0	100.0
AQ002	528945, 183105	Park Village East	M	Yes	N	9.9	1.8	27.0	0	100.0
AQ003	529273, 182698	St James' Gardens	M	Yes	N/A	7.5	0.9	44.5	0	100.0
AQ004	529533, 182519	Melton Street	H	Yes	N/A	12.4	2.0	75.8	0	63.1
AQ005	529498, 182502	Stephenson Way	H	Yes	N/A	11.9	1.6	185.7	0	100.0
AQ006	529388, 182524	Euston Street	H	Yes	N/A	11.6	2.1	33.8	0	100.0
AQ007	529361, 182574	Drummond Street	H	Yes	N/A	8.3	1.3	21.8	0	100.0
AQ008	529372, 182657	Cobourg Street	H	Yes	N/A	13.0	2.0	125.9	0	62.7
AQ009	529707, 182730	Eversholt Street	H	Yes	N/A	10.0	2.0	29.3	0	100.0
AQ010	529223, 182746	Hampstead Road South	M	Yes	N/A	9.5	2.2	42.9	0	100.0
AQ011	529193, 182921	Hampstead Road	M	No	N	10.5	2.0	49.8	0	65.7

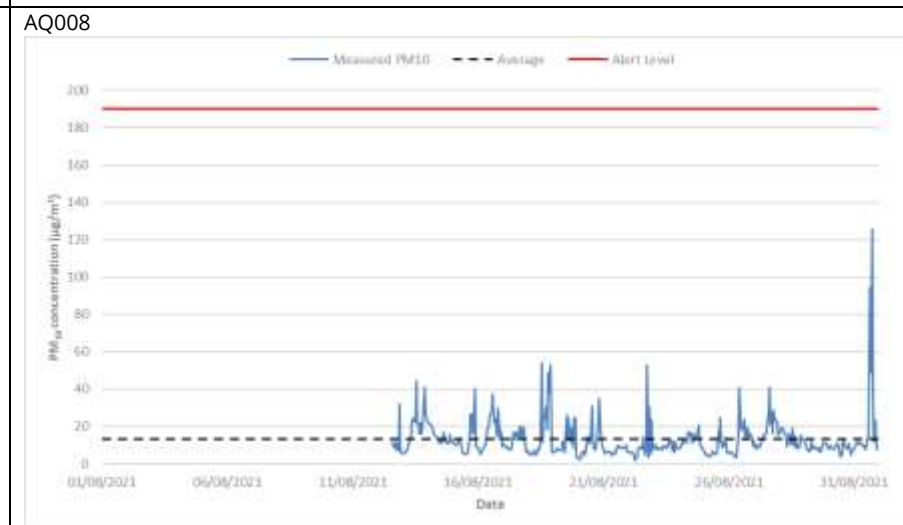
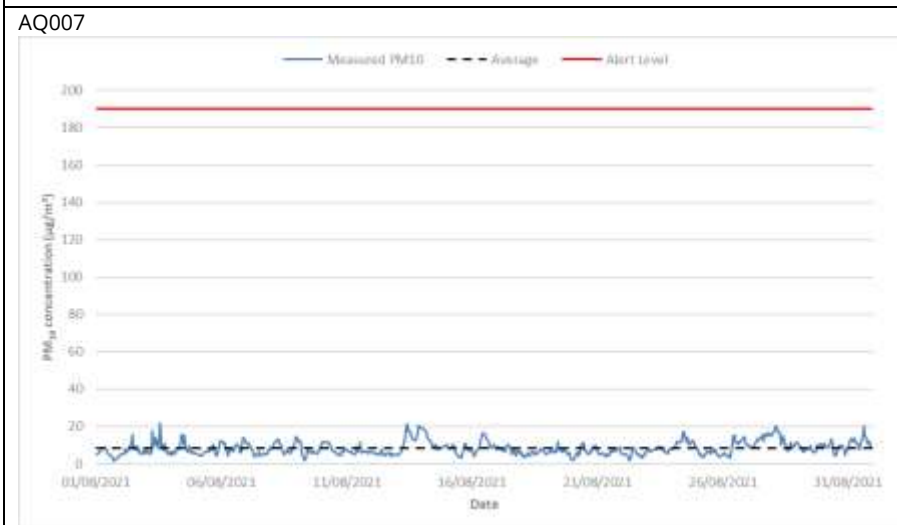
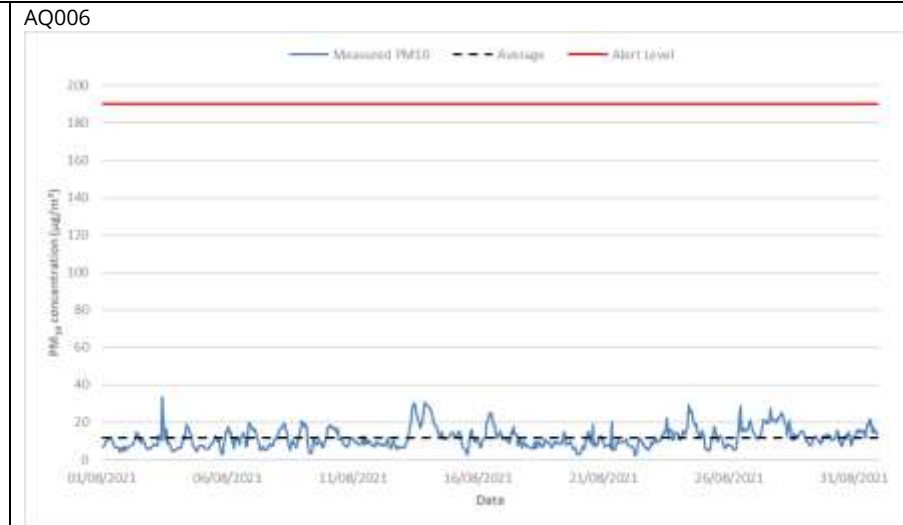
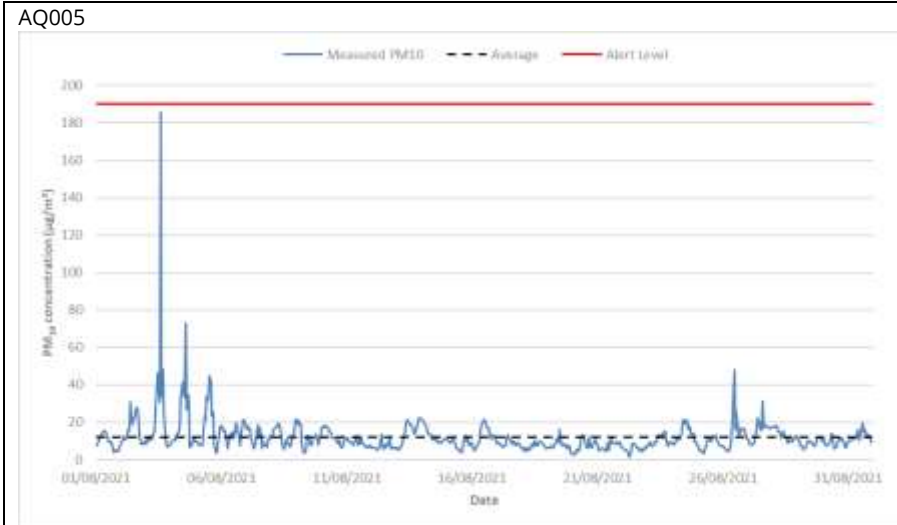
Monitoring site ID	Coordinates (X,Y)	Location description	Dust risk rating for site	Monitoring site active during period	Change to site since previous period report	Mean 1-hour PM ₁₀ concentration (µg/m ³)	Minimum 1-hour PM ₁₀ concentration (µg/m ³)	Maximum 1-hour PM ₁₀ concentration (µg/m ³)	Number of 1- hour periods exceeding trigger level of 190 µg/m ³	Data capture (%)
AQ012	529145, 182941	Rear of Coniston House	M	Yes	N	10.8	1.6	76.9	0	99.2
AQ013	529086, 182983	Regents Park Estate	M	Yes	N	14.3	1.5	103.6	0	99.7
AQ016	528840, 183466	Mornington Terrace North	M	Yes	N	13.3	2.1	151.4	0	100.0
AQ017	528963, 183274	Mornington Terrace South	M	Yes	N	7.4	1.6	19.0	0	100.0
AQ018	529184, 182999	Hampstead Road North	M	Yes	N	8.6	1.9	28.0	0	100.0
AQ019	529280, 182776	Park Village East (North)	M	Yes	N	8.0	1.9	28.8	0	100.0
AQ020	529109, 182605	Netley School	n/a	Yes	N/A	9.1	1.5	22.0	0	100.0
AQ021	529136, 183086	Site compound at the Junction of Hampstead Road & Granby Terrace Bridge.	M	Yes	N	9.2	2.0	69.4	0	100.0
AQ044	527725 , 184369	Adelaide Road Vent Shaft (west)	M	Yes	N	12.7	1.8	504.9	1	98.5
AQ045	527826 , 184375	Adelaide Road Vent Shaft (east)	M	Yes	N	7.7	1.7	87.5	0	97.3

Table 3: Summary of exceedances of trigger level in August 2021

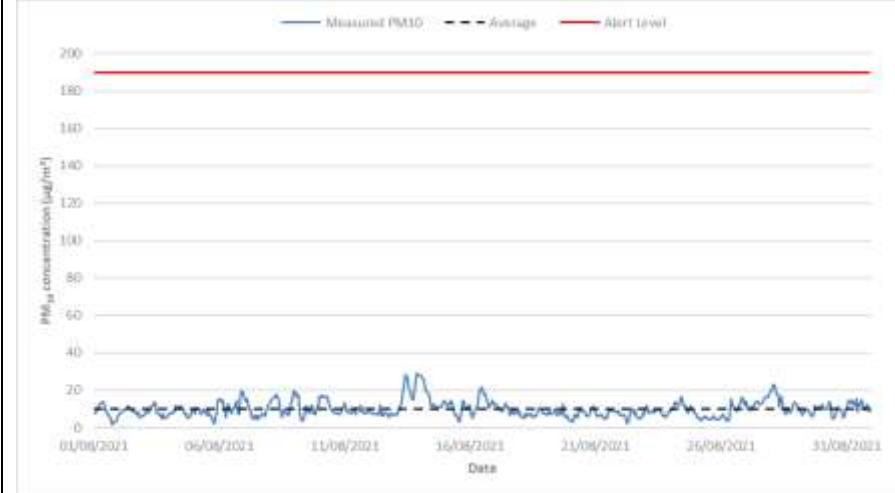
Monitoring site ID	Period exceeding trigger level	Investigation	Outcomes / Resolution / Remedial measures implemented
AQ044	28/08/2021 08:01- 09:00; 504.9 µg/m ³	At the time of the trigger alert on there were no dusty activities being carried on site. It is considered the trigger was associated with a short power outage to the monitor causing the internal pump/internal heater to run low.	n/a

Figure 5: Construction dust 1-hour mean indicative PM₁₀ concentration for dust monitors

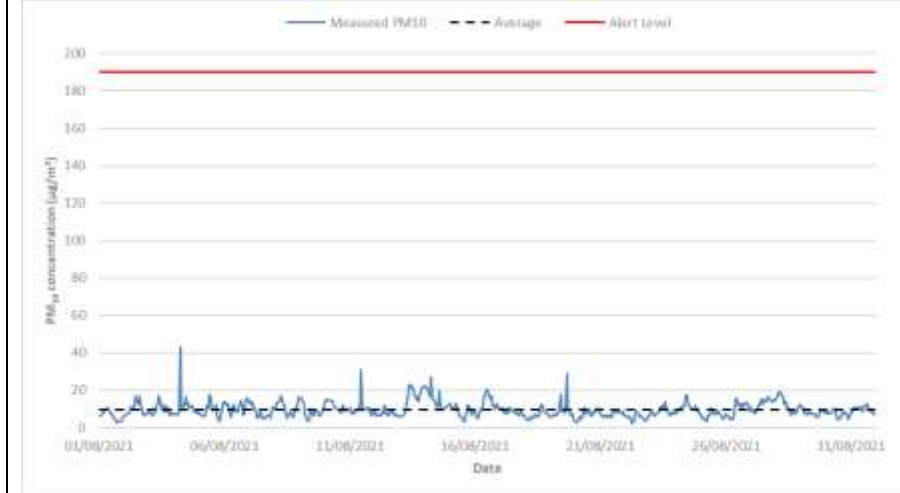




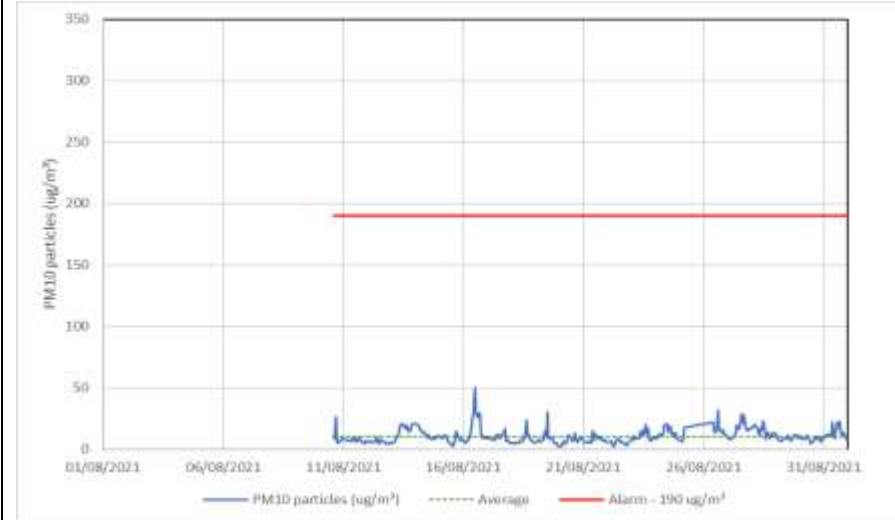
AQ009



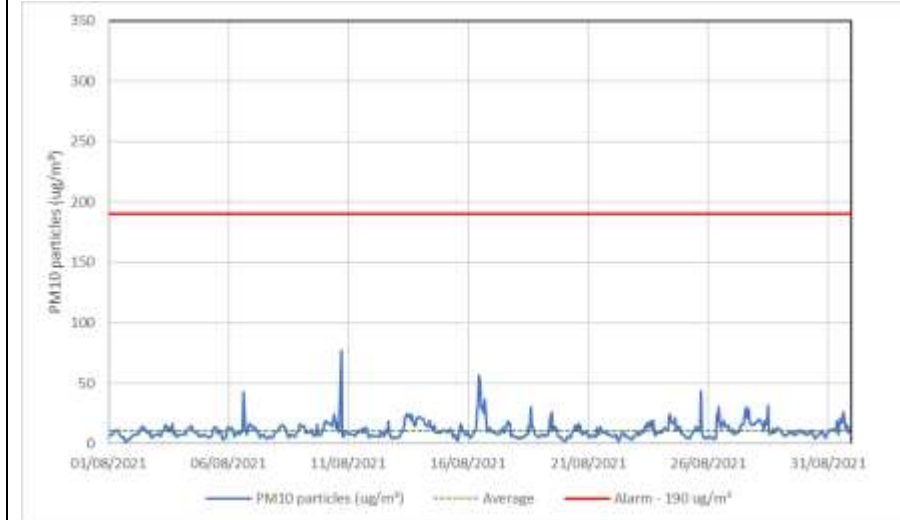
AQ010



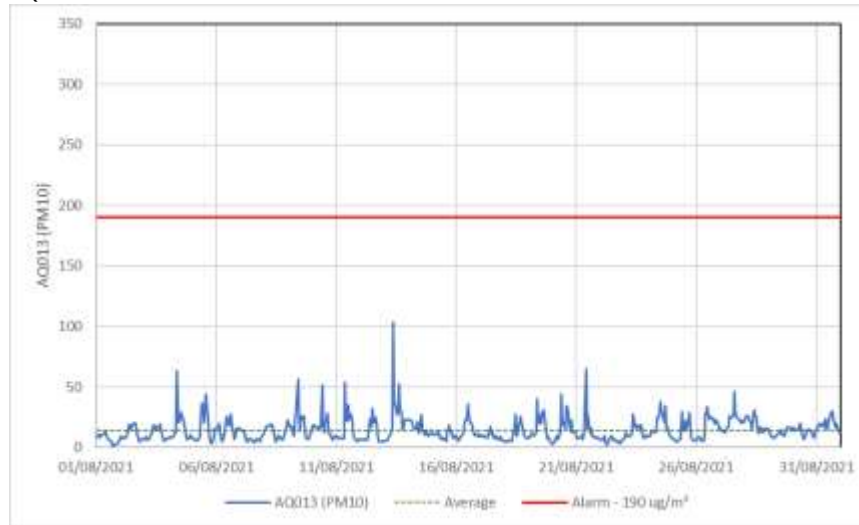
AQ011



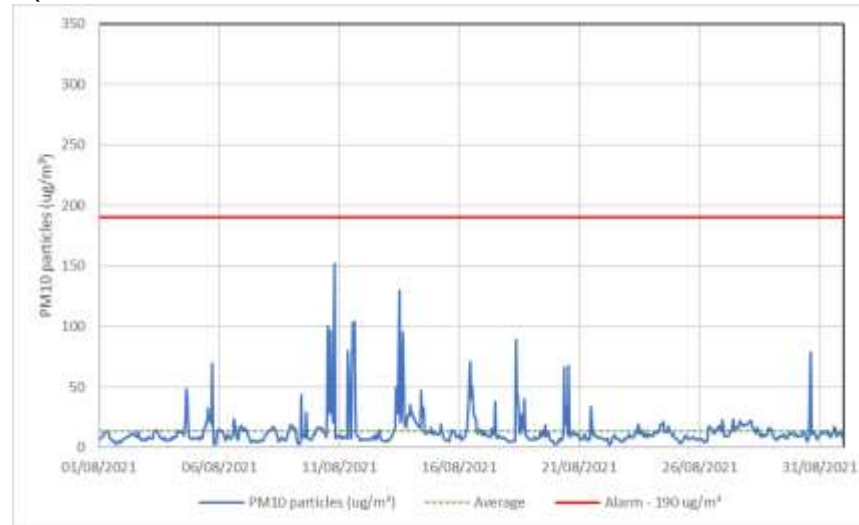
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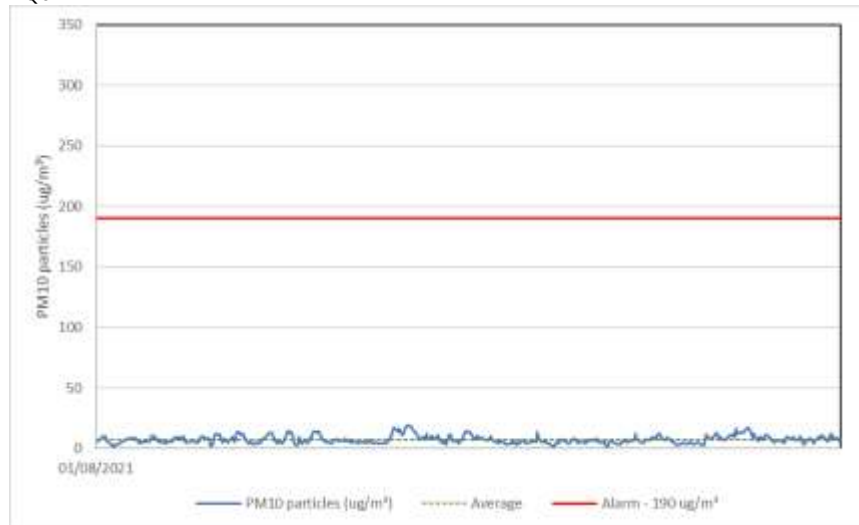
AQ013



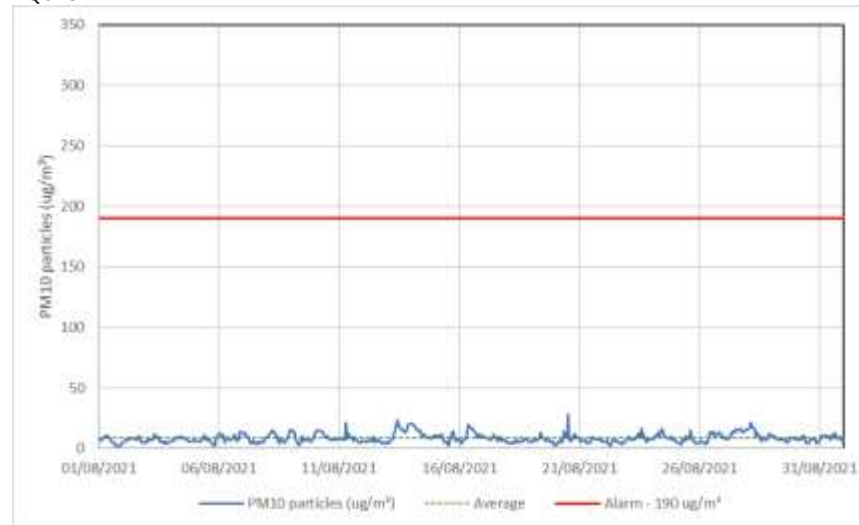
AQ016



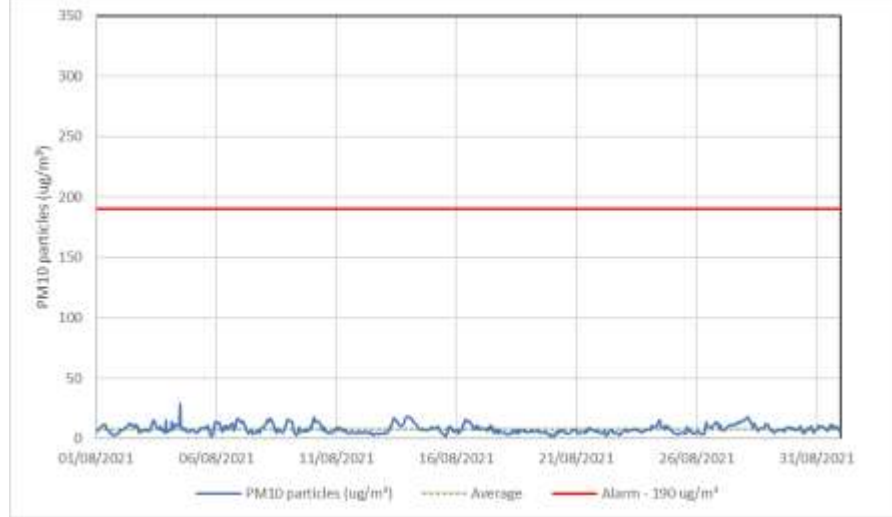
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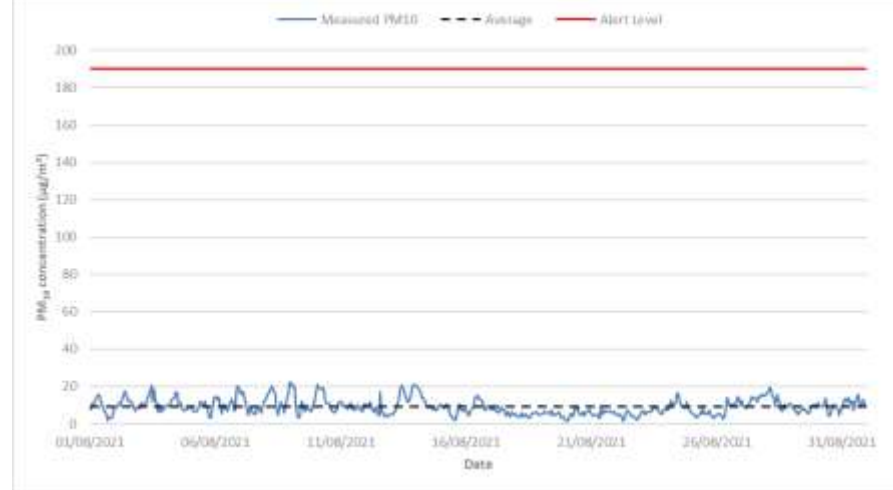
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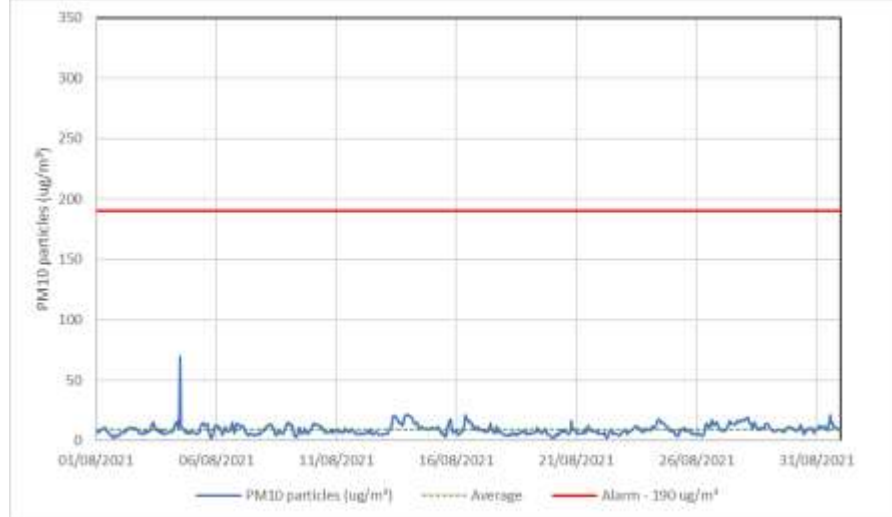
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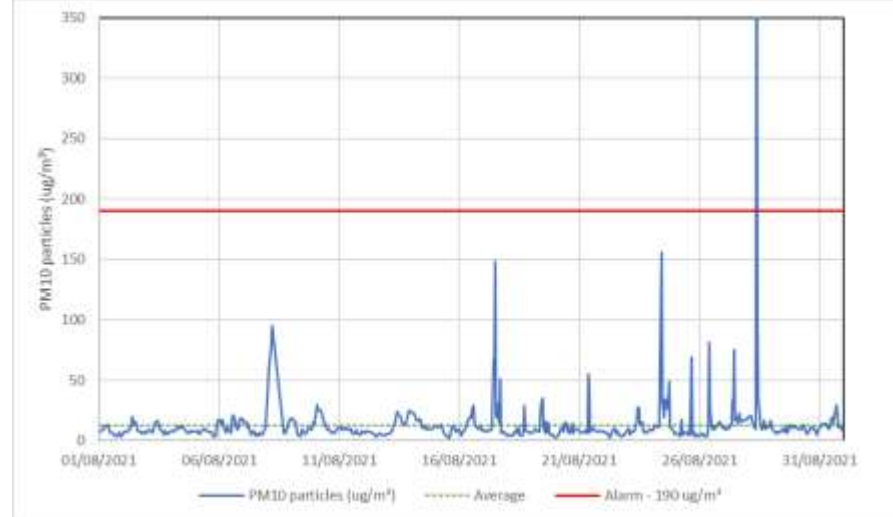
AQ020



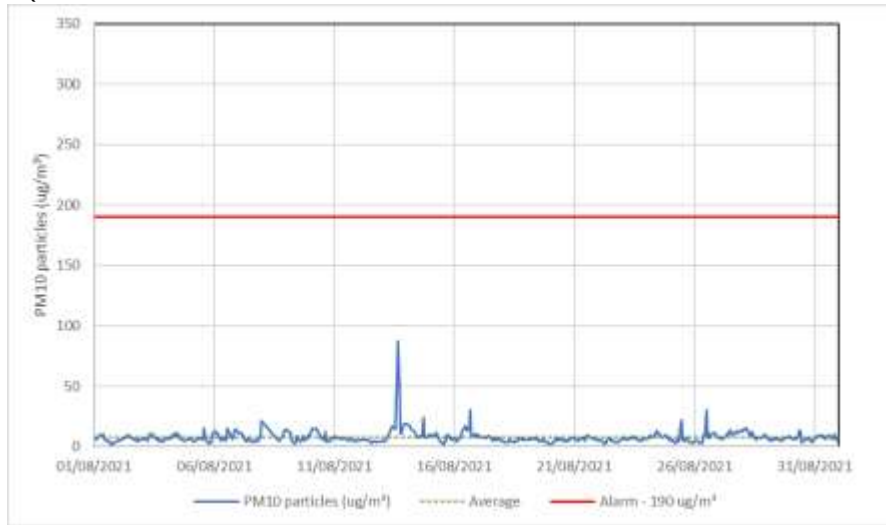
AQ021



AQ044



AQ045



Appendix C – Air Quality Monitoring Results

Table 4: NO₂ monitoring locations around highways, NO₂ concentrations and monthly monitoring results with running mean for 2021 (µg/m³)

Monitoring Site ID	Location description	Coordinate s (X, Y)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean 1
HS2-000020BM5	Junction of St Chad's Street and Grays Inn Road	530436, 182929	50	41	39	38	40	33	30						39
HS2-000020BM7	Chalton Street	529894, 182702	53	57	48	Tube Missing	Tube Missing	37	29						45
HS2-000020BM8	Junction of Euston Square and Grafton Place	529737, 182641	58	60	48	45	43	34	34						46
HS2-000020BM9	Junction of Endsleigh Gardens and Upper Woburn Place	529785, 182529	52	48	43	46	44	43	38						45
HS2-000020BMA	Junction of Euston Road and Gower Street	529429, 182375	53	47	44	42	39	36	36						42
HS2-000020BMB	Whitfield Street	529273, 182114	44	45	37	39	30	26	No Data						37
HS2-000020BMC	Hampstead Road	529232, 182511	68	73	65	67	66	64	61						66
HS2-000020BMF	Junction of Polygon Road and Ossulston Street	529715, 183123	38	37	28	34	25	21	12						28
HS2-000020BMH	Nash Street	528861, 182717	39	38	30	30	30	23	23						30
HS2-000020BMJ	Junction on Robert Street and Stanhope Street	529080, 182698	37	39	33	36	32	30	Tube Missing						35

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.

Monitoring Site ID	Location description	Coordinate s (X, Y)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean 1
HS2-000020BMK	Junction of Plender Street and Bayham Street	529196, 183546	50	51	44	47	43	37	No Data						46
HS2-000020BML	Junction of Arlington Road and Mornington Crescent	529093, 183356	42	38	31	32	26	20	21						30
HS2-000020BMM	Junction of Bayham Street and Pratt Street	529084, 183722	57	50	49	44	46	43	46						48
HS2-000020BMN	Junction of Delancey Street and Albert Street	528850, 183573	Tube Missing	38	38	34	32	26	21						32
HS2-000020BMQ	Junction of Parkway and Delancey Street	528662, 183604	46	47	41	47	42	35	41						42
HS2-000020BMR	Junction of Oval Road and Jamestown Road	528548, 183967	39	33	36	32	Tube Missing	24	No Data						33
HS2-000020BMS	Junction of Chalk Farm Road and Castlehaven Road	528685, 184188	50	43	40	42	42	40	No Data						43
HS2-000020BMT	Junction of Camden Road and Camden Street	529079, 184043	50	49	49	50	37	34	35						43
HS2-000020BMU	Junction of Southampton Road and Fleet Road	527783, 185407	40	38	36	37	36	36	32						36
HS2-000020BMV	Primrose Hill Road	527538, 184250	41	37	30	31	30	23	27						31
HS2-000020BMW	Junction of Finchley Road and Hilgrove Road	526619, 184081	50	51	45	53	53	47	43						49
HS2-000020BMZ	Junction of Finchley Road and Hendon Way	525102, 186042	Tube Missing	Tube Missing	50	64	62	63	57						59
HS2-000020BNA	Junction of Regent's Park Road and Rothwell Street	527884, 183980	40	33	26	27	26	22	21						28

Monitoring Site ID	Location description	Coordinate s (X, Y)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean 1
HS2-000020BNC	Junction of Outer Circle and Gloucester Gate	528528, 183443	32	32	26	29	20	21	22						26
HS2-000020BNH	Junction of Parkway and Albert Street	528763, 183720	42	36	Tube Missing	36	31	30	25						34
HS2-000020BNN	Lincoln's Inn Fields	530744, 181308	38	33	29	28	Tube Missing	22	25						29
HS2-000020BNQ	Camley Street	529735, 183737	Tube Missing	50	37	38	31	Tube Missing	25						36
HS2-000020BNY	Junction of Mill Lane and Hillfield Road	524839, 185136	48	43	39	44	34	30	20						37
HS2-000020BNZ	Mansfield Road	528050, 185508	38	37	29	29	29	23	26						30
HS2-000020BP0	Junction of Camden Road and Torriano Avenue	529708, 184871	52	56	50	45	Tube Missing	48	46						49
HS2-000020BP2	Junction of Grays Inn Road and Holborn	531149, 181616	39	32	32	35	33	24	25						31
HS2-000020BPB	Camden High Street	528966, 183735	69	Tube Missing	56	55	51	56	50						56
HS2-000020BPC	Castlehaven Road	528788, 184591	43	37	29	27	27	24	No Data						31
HS2-000020BPD	Prince of Wales Road	528571, 184683	39	33	25	25	23	23	18						26
HS2-000020BPE	Haverstock Hill	527710, 184749	44	38	36	34	37	29	No Data						36
HS2-000020BPF	Junction of Primrose Gardens and England's Lane	527549, 184640	43	40	30	33	Tube Missing	31	20						33
HS2-000020BPU	Junction of Gower Street and Grafton Way	529476, 182267	Tube Missing	43	39	38	35	32	43						38
HS2-000020BPW	Junction of Delancey Street and Arlington Road	528939, 183637	39	40	39	43	36	27	30						36
HS2-000020BPX	Netley Street	529177, 182625	44	40	34	38	29	25	34						35

Monitoring Site ID	Location description	Coordinate s (X, Y)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean 1
HS2-000020BPY	Stanhope Street	529060, 182947	38	32	32	33	26	21	21						29
HS2-000020BPZ	Albany Street	528790, 182923	39	35	33	34	29	27	18						31
HS2-000020BQ0	Werrington Street	529493, 183113	38	34	28	25	25	19	17						26
HS2-000020BQ1	Polygon Road	529574, 183045	Tube Missing	Tube Missing	29	26	26	18	18						23
HS2-000020BQ2	Alexandra Place	526320, 183980	37	35	29	26	24	21	No Data						29
HS2-000020BQ3	Harrington Square	529228, 183172	53	51	44	46	45	36	39						45
HS2-000020BQ4	Junction of North Gower Street and Starcross Street	529290, 182572	45	41	30	36	30	25	22						33
HS2-000020BQ5	Adelaide Road	527713, 184392	44	40	32	31	31	25	No Data						34
HS2-000020BQ6	Mornington Terrace	528836, 183474	38	33	27	27	25	15	Tube Missing						28
HS2-000020BQ7	Arlington Road	529009, 183479	35	35	29	29	22	20	Tube Missing						28
HS2-000020BQ8	Clarkson Row	529024, 183213	37	39	31	31	Tube Missing	20	25						30
HS2-000020BQ9	Park Village East	528923, 183121	37	37	31	31	27	22	24						30
HS2-000020BQA	Eversholt Street	529386, 183132	55	47	42	36	35	Tube Missing	26						40
HS2-000020BQB	Junction of Harrington Street and Varndell Street	529147, 182816	32	40	31	31	25	24	23						30
HS2-000020BQC	Junction of Robert Street and Hampstead Road	529199, 182704	47	49	38	40	32	26	No Data						38
HS2-000020BQD	Drummond Crescent	529648, 182856	47	47	33	35	28	26	No Data						36
HS2-000020BQJ	Grafton Way	529380, 182225	47	46	41	38	40	36	43						41

Monitoring Site ID	Location description	Coordinate s (X, Y)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean 1
HS2-000020BQL	Delancey Street	528768, 183581	46	46	42	48	42	28	34						41
HS2-000020BQR	Lamp post on Park Village East	528682, 183505	37	35	29	30	27	23	Tube Missing						30
HS2-000020BQS	Opposite Maria fidelis school on Phoenix Road	529670, 182982	42	42	30	28	26	22	18						30
HS2-000020BQT	Drummond Street	529385, 182581	40	44	37	38	33	26	26						35
HS2-000020BQX	Lamp post on Brunswick Square	530344, 182236	45	40	36	25	28	23	24						32
HS2-000020BP4	Triplicate site on Finchley Road next to Swiss Cottage kerbside automatic monitoring station	526633, 184392	Tube Missing	52	Tube Missing	Tube Missing	58	52	40						50
HS2-000020BP5	Triplicate site next to the Euston Road roadside automatic monitoring stations	529895, 182657	55	62	57	61	60	53	No Data						58
HS2-000020BP9	Triplicate site in Russell Square next to Bloomsbury urban background automatic monitoring station	530120, 182034	38	36	36	32	30	22	20						30