

Air Quality and Dust Monitoring Monthly Report – **July** 2020

London Borough of Camden



SKANSKA



Department for Transport

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High Speed Two (HS2) Limited,
Two Snowhill
Snow Hill Queensway
Birmingham B4 6GA

Telephone: 08081 434 434

General email enquiries: HS2enquiries@hs2.org.uk

Website: www.gov.uk/hs2

A report prepared by Costain Skanska 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 June and July 2020 respectively.
- 1.1.2 Figure 1 to Figure 3 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.

The current phase of enabling works commenced within the LBC during December 2017 and is expected to be completed by October 2020. 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:

- Site office and welfare on the adjacent former Addison Lee compound on Granby Terrace.
- Archaeological dig at St James' Gardens, groundworks and materials management.
- Demolition, materials management and groundworks at:
 - IBIS Hotel, 3 Cardington Street;
 - Thistle Hotel, Cardington Street;
 - Cobourg Street / Euston Street;
 - Regents Park Estate;
 - Walkden House, 67-75 & 77-79 Euston Street;
 - One Euston Square, 40 Melton Street and Grant Thornton House, 22 Melton Street; and
 - 132 – 140 Hampstead Road and Petrol Station.
- National Temperance Hospital, Site Office and Welfare 110-122 Hampstead Road.
- Thames Water Compound demobilised in July including power. The site will be merged with the neighbouring Vehicle Holding area in the coming months.
- Vehicle Holding Area, mobilisation, site set up and groundworks.
- Euston Scissor Cut (test piling and materials management).
- Adelaide Road Vent Shaft – mobilisation and roadworks outside of site.
- Ongoing Construction Partner site mobilisation works at Euston Station.

1.1.4 Twenty (20) dust monitors are installed around worksites, where demolition, groundworks and materials management are underway. These sites returned a medium or high dust risk rating.

1.1.5 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 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.

- 1.1.6 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.
- 1.1.7 There were three (3) dust trigger alerts recorded during the monitoring period (July 2020). Exceedances are presented in Appendix B, Table 3. All other results were in line with expected ranges.
- 1.1.8 Data capture for monitor AQ008 was below 90% for the month of July 2020 due to power issues. Data capture for AQ014 was 0% due to the site being demobilised including power supply to the dust monitor.
- 1.1.9 Diffusion tube monitoring of Nitrogen Dioxide (NO₂) is undertaken at sixty-five (65) 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.
- 1.1.10 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.
- 1.1.11 NO₂ monitoring locations and results are presented in Appendix C, Table 4, together with the 2020 running mean.
- 1.1.12 Table 1 provides a summary of the complaint information related to dust or air quality received during the reporting period (July 2020), together with the findings of any related investigations.

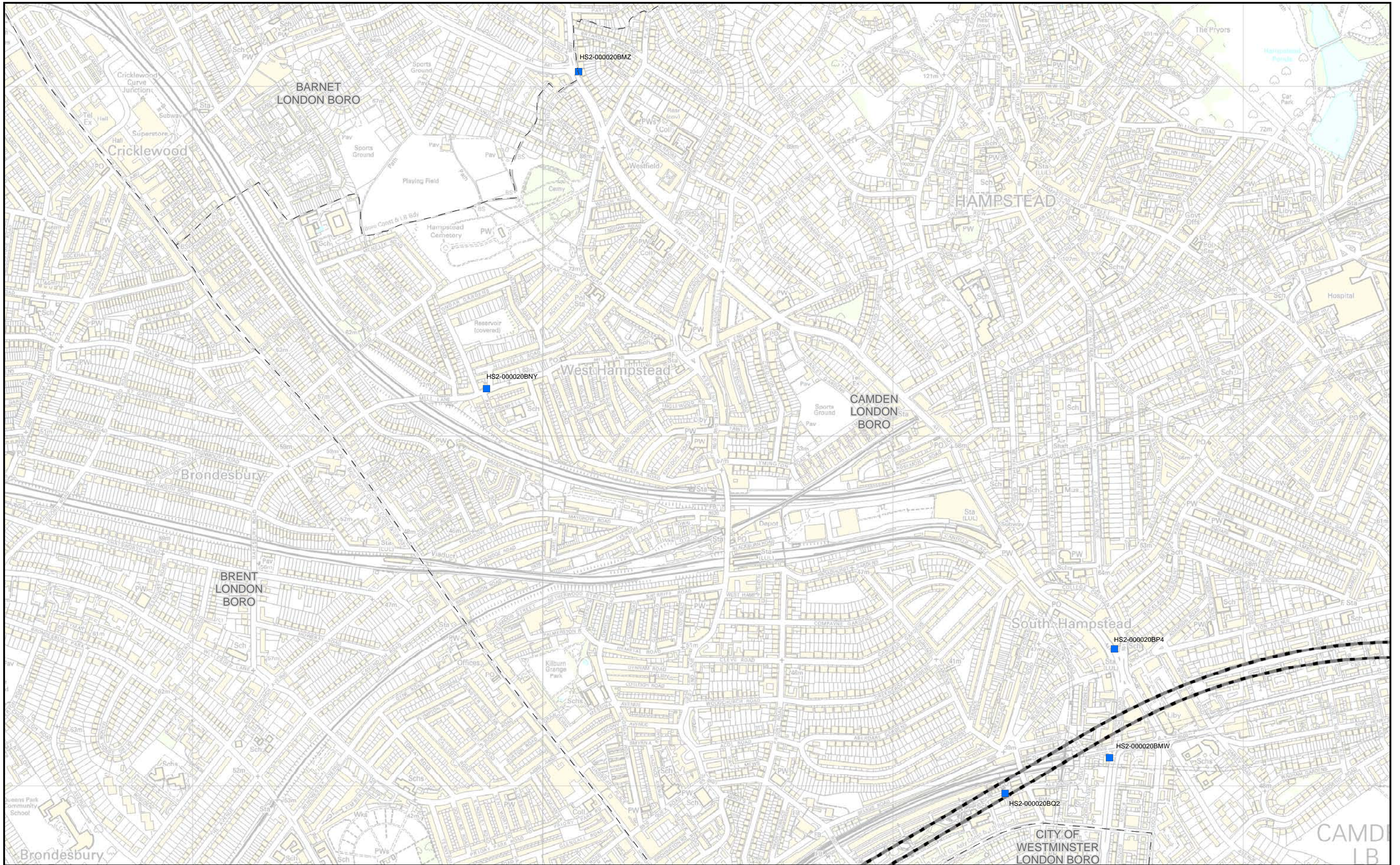
Table 1: Summary of complaints received during June 2020 in LBC

Complaint Reference No.	Worksite Reference	Description of complaint	Results of investigation
HS2-20-40229-C	Cubitt Court, Park Village East	On 5 th July 2020, complaint raised about dust levels.	The demolition work in Regent's Park Estate was identified as the likely origin/cause of the level of dust in the area. Information on how effects of construction are managed communicated to stakeholder. The HS2 Community Engagement team highlighted that the general principles of how HS2 manage the impacts of construction are available on the Camden Common Place website (https://hs2ineuston.commonplace.is/schemes/proposals/managing-the-impacts-of-construction/details).
HS2-20-40218-C	Cubitt Court, Park Village East	On 3 rd July 2020, complaint raised about dust levels.	

			Best Practice Mitigation measures are in place across all HS2 sites, as set out in the Code of Construction Practice, which for air quality include regular dampening down, strict emission standards for vehicles and plant as well as dust monitoring around medium and high risk sites, with alert levels set, allowing contractors to take rapid action if there is a rise in dust levels.
HS2-20-40231-C	Hampstead Road	On 9 th July 2020, complaint raised about ongoing dust levels in the Hampstead Road area.	<p>The HS2 Community Engagement team highlighted that the general principles of how HS2 manage the impacts of construction are available on the Camden Common Place website (https://hs2ineuston.commonplace.is/schemes/proposals/managing-the-impacts-of-construction/details).</p> <p>Best Practice Mitigation measures are in place across all HS2 sites, as set out in the Code of Construction Practice, which for air quality include regular dampening down, strict emission standards for vehicles and plant as well as dust monitoring around medium and high risk sites, with alert levels set, allowing contractors to take rapid action if there is a rise in dust levels.</p>
HS2-20-40248-C	Euston/Hampstead Road	On 14 th July 2020, complaint raised about accumulating dust.	<p>The HS2 Community Engagement team highlighted that the general principles of how HS2 manage the impacts of construction are available on the Camden Common Place website (https://hs2ineuston.commonplace.is/schemes/proposals/managing-the-impacts-of-construction/details).</p> <p>Best Practice Mitigation measures are in place across all HS2 sites, as set out in the Code of Construction Practice, which for air quality include regular dampening down, strict emission standards for vehicles and plant as well as dust monitoring around medium and high risk sites, with alert levels set, allowing contractors to take rapid action if there is a rise in dust levels.</p>

Appendix A – Worksites and Monitoring Locations

Figure 1 to Figure 3: Worksites and monitoring locations within the LBC



- Legend**
- Route in tunnel
 - Route on surface
 - Diffusion tube monitoring location

Figure Number

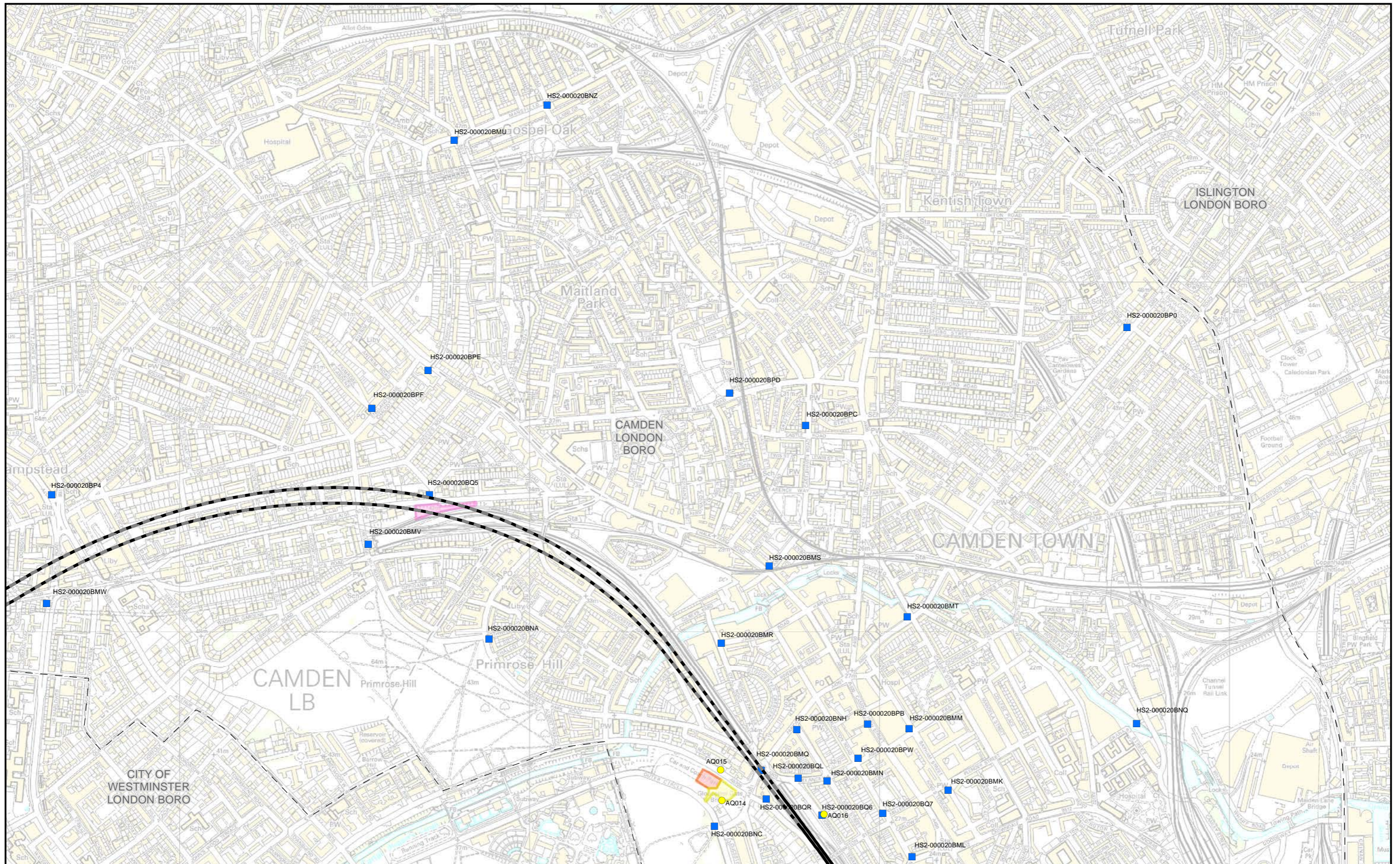
Figure Name
Worksites and Monitoring locations in LBC

London Borough of Camden

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 Map Number: 1EW02-CSJ-EV-REP-S000-000017_appAFig1.pdf **Date: 13/07/18**



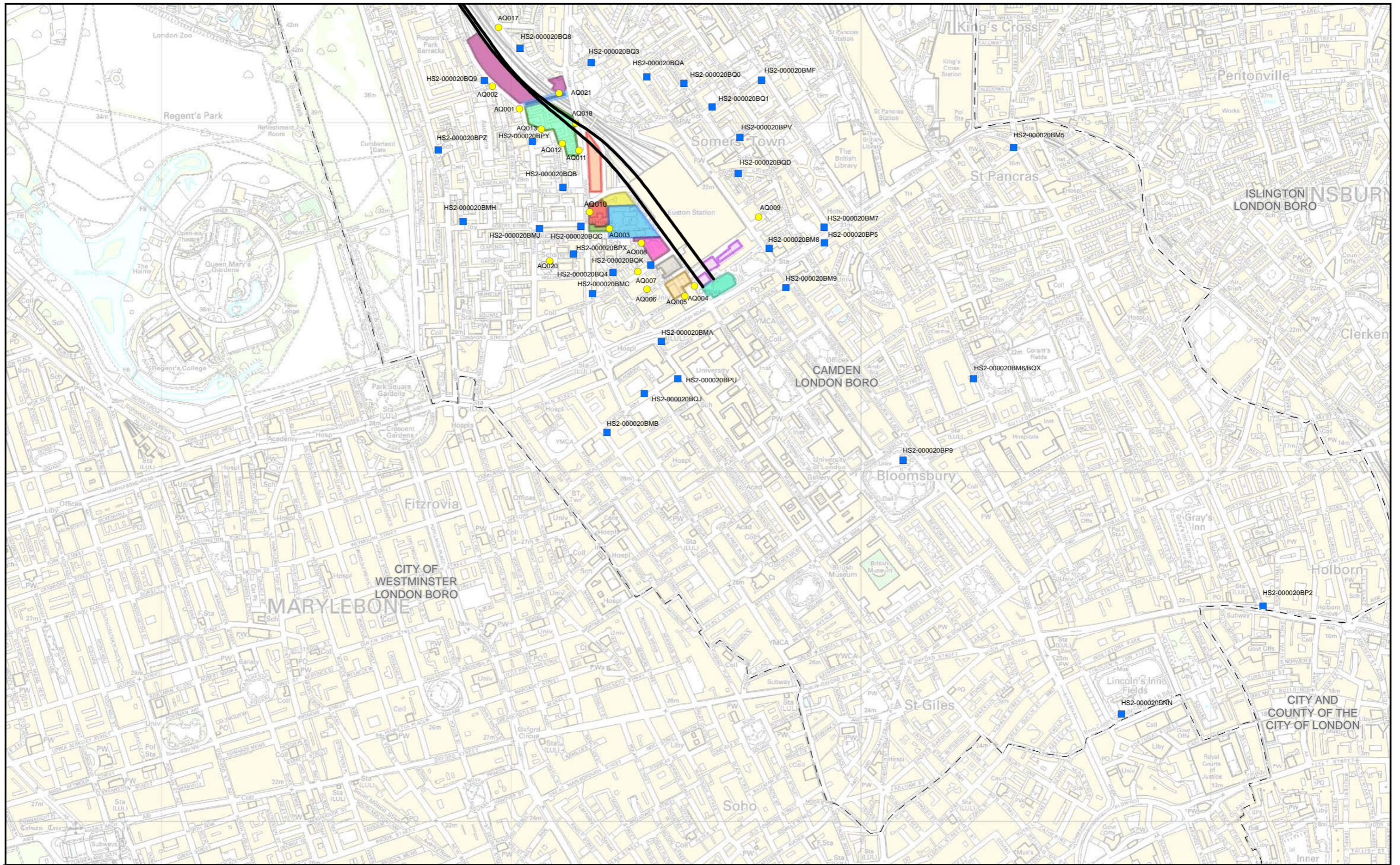
- Legend**
- Route in tunnel
 - Route on surface
 - Diffusion tube monitoring location
 - Dust monitoring location
 - Vehicle Holding area
 - Thames Water Compound
 - Adelaide Road Vent Shaft

Figure Number
 Figure Name
Worksites and Monitoring locations in LBC
 (sheet 2)

London Borough of Camden

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- Legend**
- Route in tunnel
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Figure Number

Figure Name
Worksites and Monitoring locations in LBC
 (sheet 3)

London Borough of Camden

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Appendix B – Dust Monitoring Results

Table 2: Dust monitoring locations and July 2020 Results

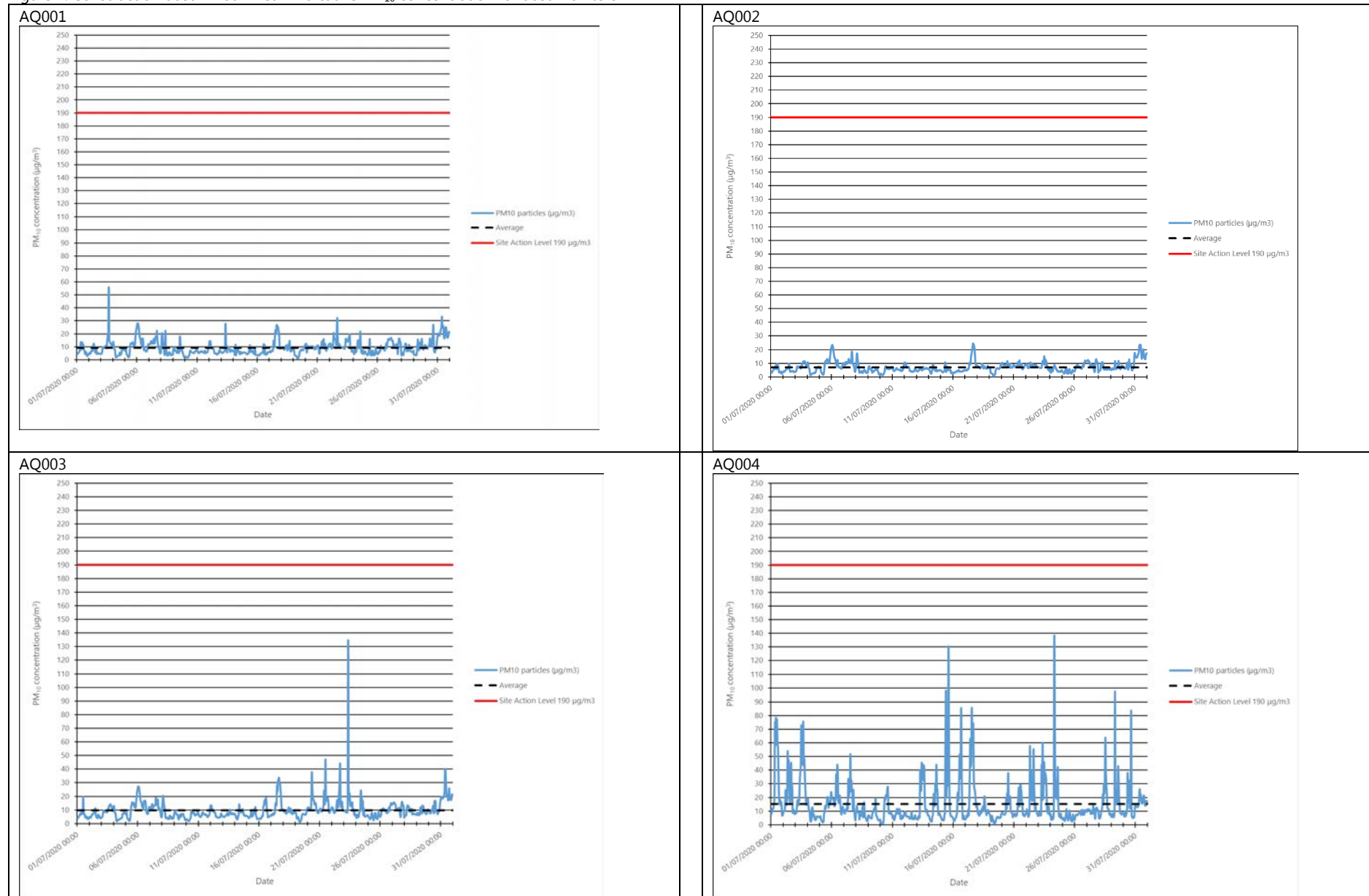
Monitoring site ID	Coordinates (X,Y)	Location description	Dust risk rating for site	Monitoring site active during period	Change to site since previous period report	Mean 1-hour PM ₁₀ concentration (µg/m ³)	Minimum 1-hour PM ₁₀ concentration (µg/m ³)	Maximum 1-hour PM ₁₀ concentration (µg/m ³)	Number 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	H	Yes	N	9.2	0.8	56.0	0	100.0
AQ002	528945, 183105	Park Village East	H	Yes	N	7.2	0.6	24.6	0	100.0
AQ003	529279, 182698	St James' Gardens	M	Yes	N	9.7	1.0	134.5	0	100.0
AQ004	529523, 182533	Melton Street	H	Yes	N	15.2	0.9	135.7	0	100.0
AQ005	529496, 182505	Stephenson Way	H	Yes	N	12.2	1.6	69.0	0	96.8
AQ006	529399, 182514	Euston Street	H	Yes	N	9.1	1.2	86.1	0	100.0
AQ007	529369, 182564	Drummond Street	H	Yes	N	7.5	0.8	29.0	0	100.0
AQ008	529372, 182657	Cobourg Street	H	Yes	N	22.1	1.7	242.5	3	64.5
AQ009	529707, 182730	Lancing Street	H	Yes	N	8.8	0.7	32.9	0	95.6
AQ010	529223, 182732	Hampstead Road South	H	Yes	N	15.2	1.4	67.1	0	100.0
AQ011	529193, 182921	Hampstead Road	H	Yes	N	10.6	1.6	53.4	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/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	H	Yes	N	9.9	1.0	78.4	0	100.0
AQ013	529086, 182983	Regents Park Estate	H	Yes	N	11.9	0.7	139.5	0	98.1
AQ014	528550, 183518	Thames Water Compound	L	No	N	No data				0.0
AQ015	528546, 183604	Prince Albert Road	L	Yes	N	10.4	1.2	49.5	0	100.0
AQ016	528840, 183466	Mornington Terrace North	H	Yes	N	5.7	0.7	22.7	0	100.0
AQ017	528963, 183274	Mornington Terrace South	H	Yes	N	7.9	0.9	27.9	0	100.0
AQ018	529184, 182999	Hampstead Road North	H	Yes	N	8.4	0.9	31.6	0	100.0
AQ020	529109, 182605	Netley School	n/a	Yes	N	2.2	0.2	13.6	0	100.0
AQ021	529136, 183086	Site compound at the Junction of Hampstead Road & Granby Terrace Bridge.	H	Yes	N	7.4	1.0	28.6	0	100.0

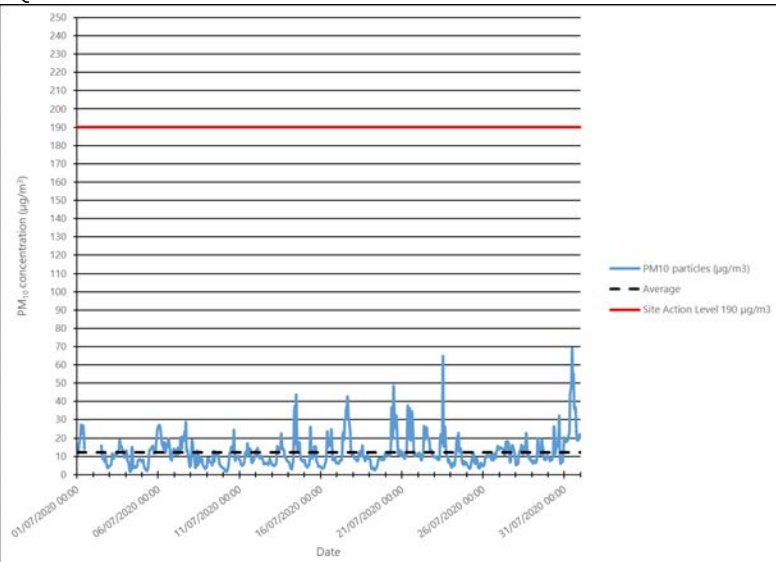
Table 3: Summary of exceedances of trigger level in July 2020

Period exceeding trigger level	Worksite	Monitoring site ID	Complaint reference number (if applicable)	Reason	Resolution
20/07/2020 14:01 – 15:00	Ibis Hotel, 3 Cardington Street & 1-3 Cobourg Street	AQ008	n/a	At the time of the trigger alert excavation works (1 excavator) were underway next to the Cobourg Street entrance adjacent to the Exmouth Arms. The dust monitor AQ008 is directly adjacent to the works which were not considered to be particularly a 'high-risk' dusty activity. Dust suppression was available and evidently being used. No clear reason for the trigger albeit works were in the immediate vicinity of the monitor.	Due to the loss of communication with the monitor (AQ008) over this period the trigger alerts were not received by the site team and hence not investigated at the time of the alert. From a subsequent study of CCTV footage of the site operations during this period it is considered that the earthworks and machine movements in the immediate vicinity of the monitor were the cause of the triggers. It was also evident from the footage that dust suppression and damping down was being employed in the locality and across the site.
22/07/2020 14:01 – 15:00	Ibis Hotel, 3 Cardington Street & 1-3 Cobourg Street	AQ008	n/a	At the time of the trigger no earthworks were underway but two excavators were operational in the immediate vicinity of the dust monitor AQ008. The area had evidently been damped down throughout the day. Again, no specific activity that could be seen for the trigger.	The other nearby site monitor on St James' Gardens showed no elevated levels during the month of July indicating the triggers were attributable to the localised activity by the Cobourg Street entrance and not the wider site. Given the recent and continued dry weather conditions the site teams were given further briefing/ toolbox talk specifically on-site dust management in addition to their daily site briefings.
23/07/2020 16:01 – 17:00	Ibis Hotel, 3 Cardington Street & 1-3 Cobourg Street	AQ008	n/a	Earth moving equipment (x2 excavators) operational in the locality at the time including a wagon being loaded with materials for a short period of time (less than 15 minutes) during the hour.	Dust suppression across the St James Garden site and wider area had been deployed each day. On St James Garden dust busters and site hoses were used to dampen down stockpiles, ballast, and general areas and a road sweeper was working continuously each day on the haul road in SJG and Euston area.

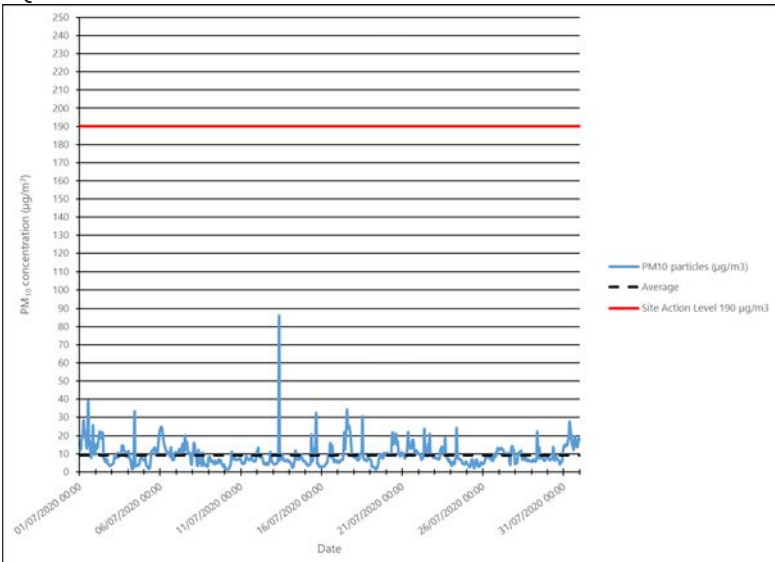
Figure 4: Construction dust 1-hour mean indicative PM₁₀ concentration for dust monitors



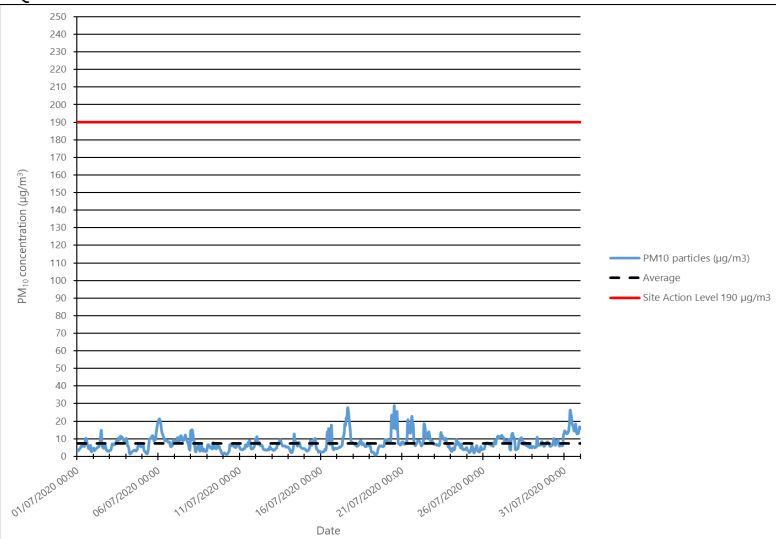
AQ005



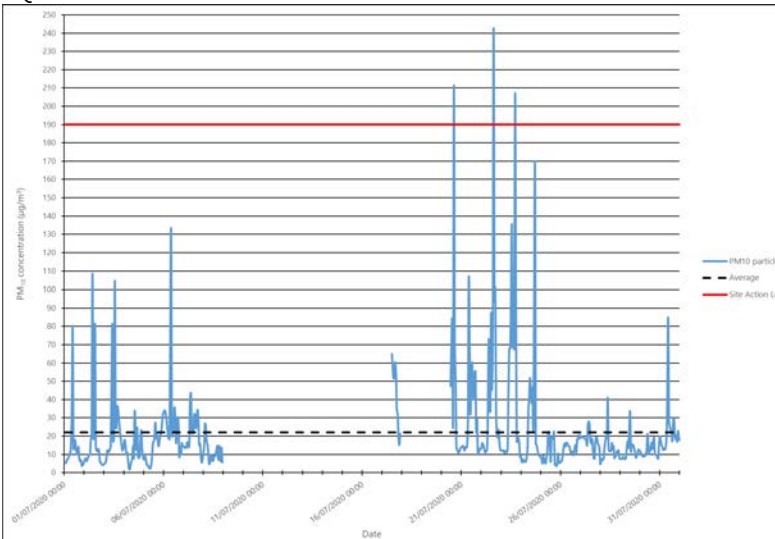
AQ006

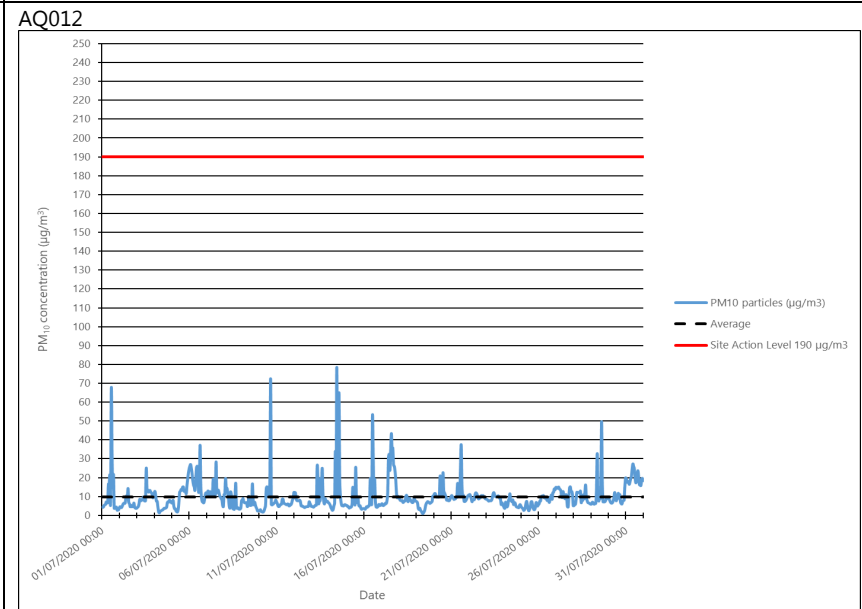
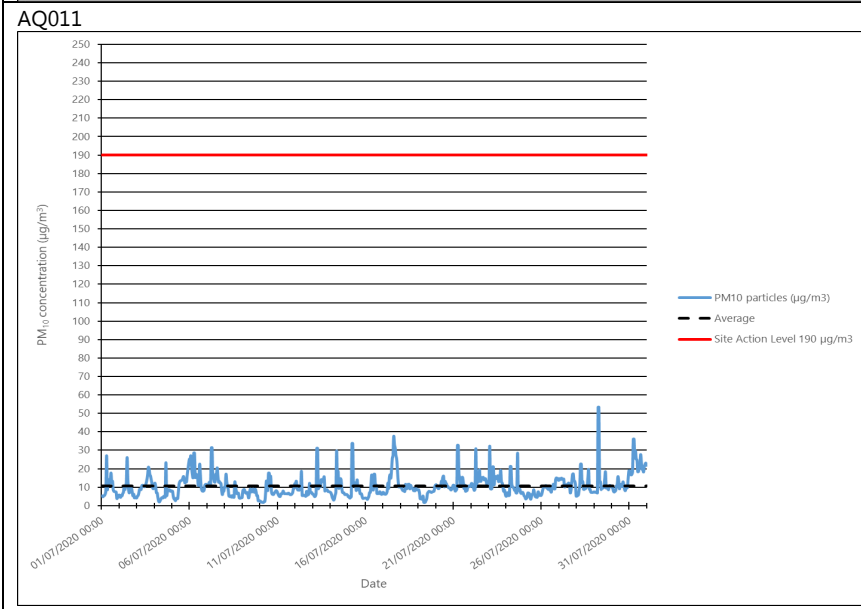
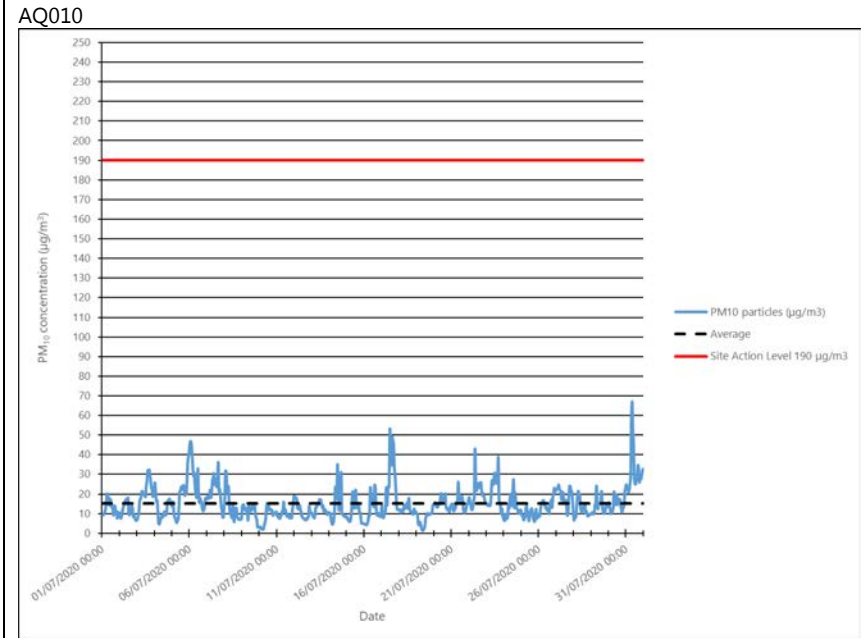
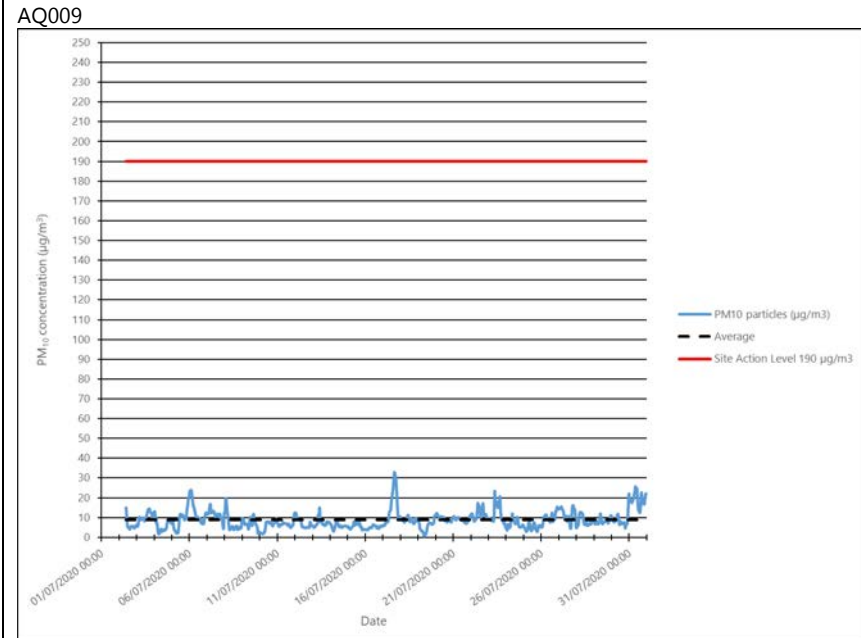


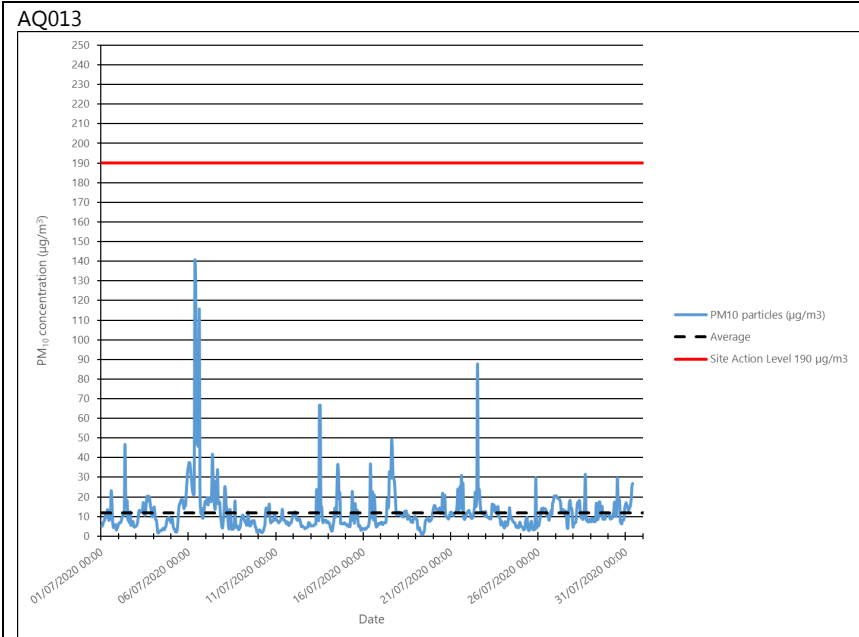
AQ007



AQ008

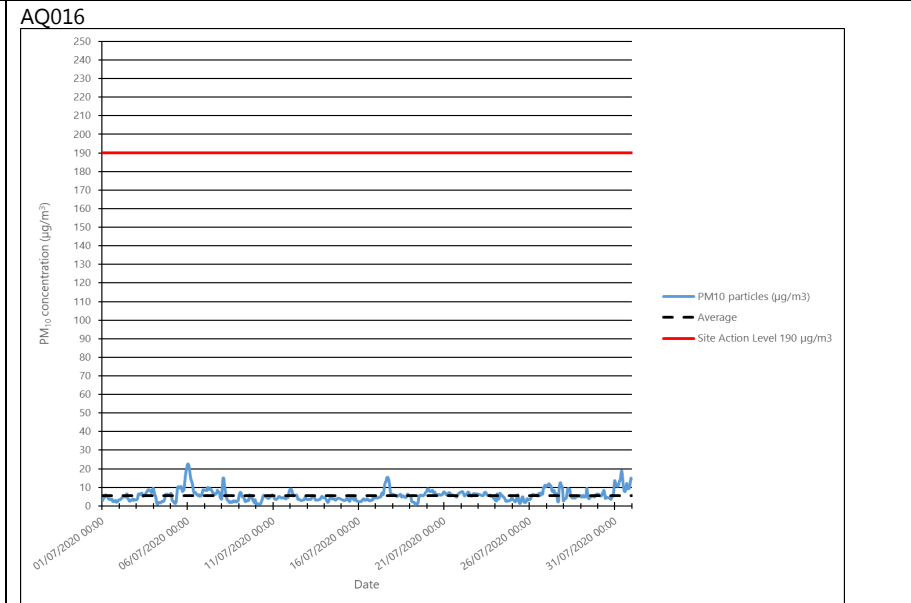
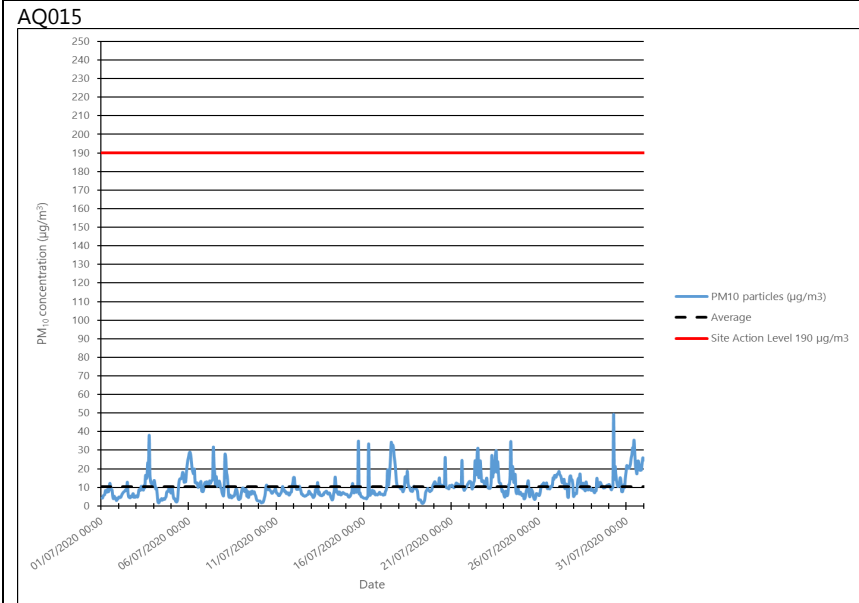


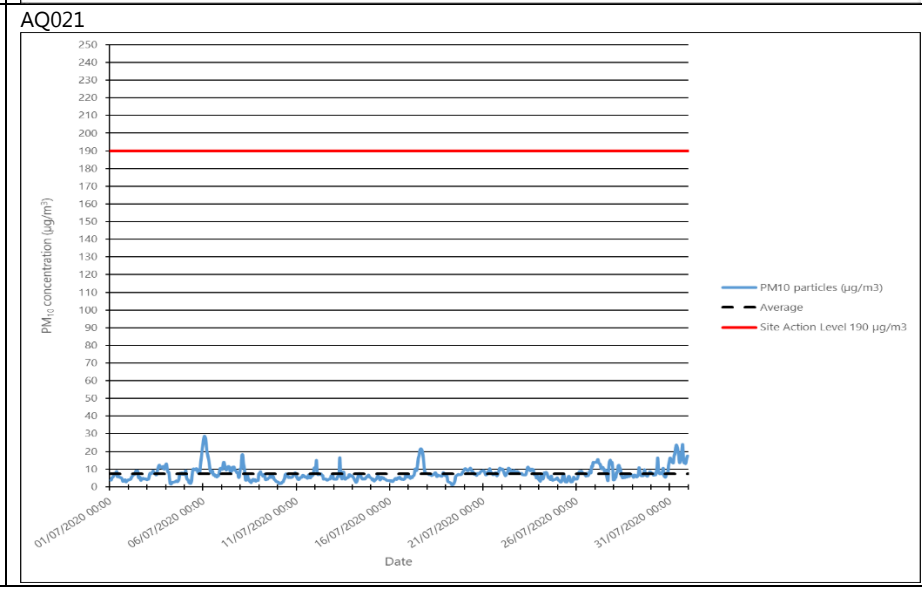
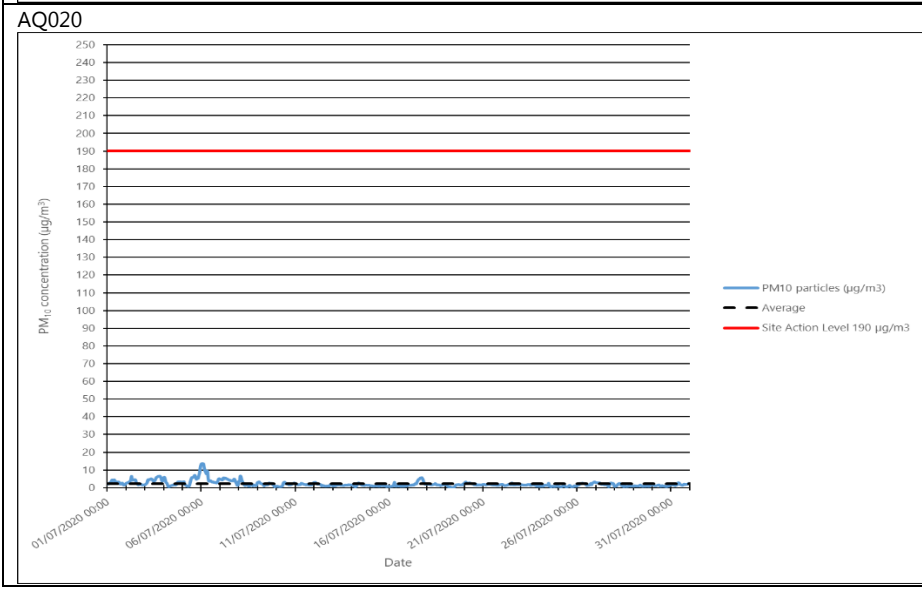
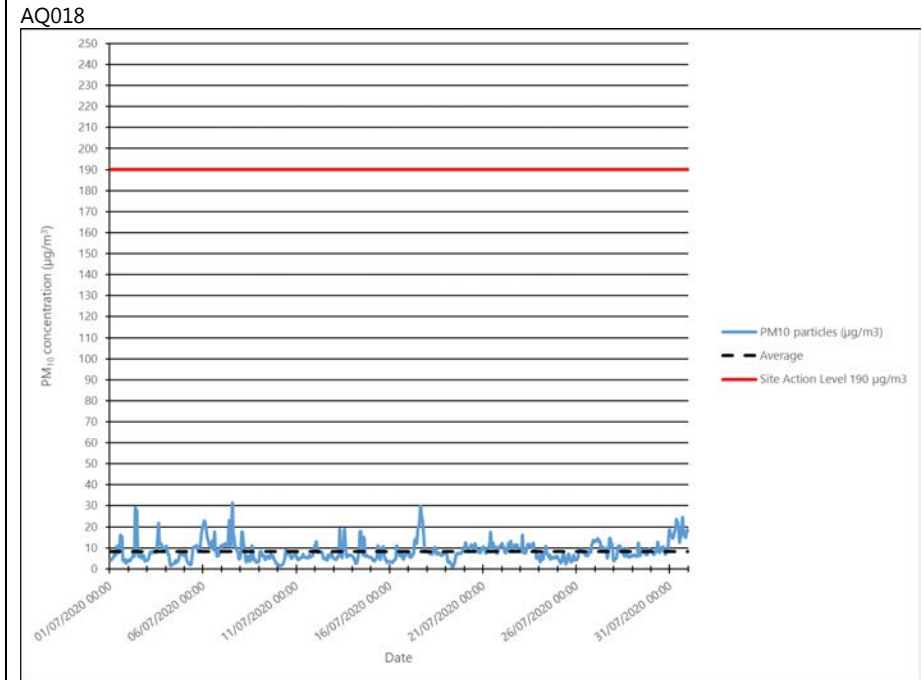
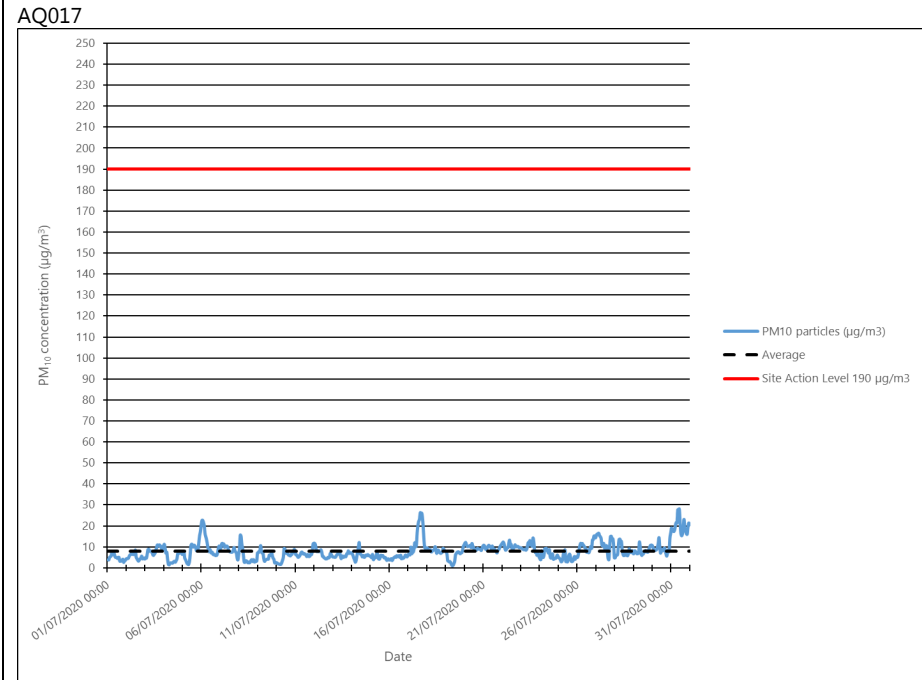




AQ014

No data





Appendix C – Air Quality Monitoring Results

Table 4: NO₂ monitoring locations around highways, NO₂ concentrations and monthly monitoring results with running mean for 2020 (µg/m³)

Monitoring Site ID	Location description	Coordinates (X, Y)	Jan	Feb	Mar ¹	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean ²
HS2-000020BM5	Junction of St Chad's Street and Grays Inn Road	530436, 182929	56	51	No data			34							47
HS2-000020BM6	Brunswick Square	530321, 182268	55	57	No data			No data							56
HS2-000020BM7	Chalton Street	529894, 182702	66	65	No data			Tube missing							43
HS2-000020BM8	Junction of Euston Square and Grafton Place	529737, 182641	57	57	No data			40							51
HS2-000020BM9	Junction of Endsleigh Gardens and Upper Woburn Place	529785, 182529	56	58	No data			38							50
HS2-000020BMA	Junction of Euston Road and Gower Street	529429, 182375	59	54	No data			33							49
HS2-000020BMB	Whitfield Street	529273, 182114	45	43	No data			26							38
HS2-000020BMC	Hampstead Road	529232, 182511	58	53	No data			Tube missing							56
HS2-000020BMF	Junction of Polygon Road and Ossulston Street	529715, 183123	38	Tube missing	No data			24							31
HS2-000020BMH	Nash Street	528861, 182717	44	37	No data			Tube missing							40
HS2-000020BMJ	Junction on Robert Street and Stanhope Street	529080, 182698	39	33	No data			26							33

¹ Note: Due to the COVID-19 pandemic and government lockdown it was not possible to conduct diffusion tube air quality monitoring in March, April and May 2020.

² 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	Coordinates (X, Y)	Jan	Feb	Mar ¹	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean ²
HS2-000020BMK	Junction of Plender Street and Bayham Street	529196, 183546	56	49	No data			38							48
HS2-000020BML	Junction of Arlington Road and Mornington Crescent	529093, 183356	44	38	No data			23							35
HS2-000020BMM	Junction of Bayham Street and Pratt Street	529084, 183722	62	58	No data			40							53
HS2-000020BMN	Junction of Delancey Street and Albert Street	528850, 183573	45	41	No data			28							38
HS2-000020BMQ	Junction of Parkway and Delancey Street	528662, 183604	51	43	No data			32							42
HS2-000020BMR	Junction of Oval Road and Jamestown Road	528548, 183967	42	36	No data			24							34
HS2-000020BMS	Junction of Chalk Farm Road and Castlehaven Road	528685, 184188	52	50	No data			39							47
HS2-000020BMT	Junction of Camden Road and Camden Street	529079, 184043	51	43	No data			34							43
HS2-000020BMU	Junction of Southampton Road and Fleet Road	527783, 185407	45	No data	No data			29							37
HS2-000020BMV	Primrose Hill Road	527538, 184250	44	38	No data			22							35
HS2-000020BMW	Junction of Finchley Road and Hilgrove Road	526619, 184081	Tube missing												0
HS2-000020BMZ	Junction of Finchley Road and Hendon Way	525102, 186042	82	61	No data			56							66
HS2-000020BNA	Junction of Regent's Park Road and Rothwell Street	527884, 183980	42	30	No data			Tube missing							24
HS2-000020BNC	Junction of Outer Circle and Gloucester Gate	528528, 183443	33	25	No data			19							26

Monitoring Site ID	Location description	Coordinates (X, Y)	Jan	Feb	Mar ¹	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean ²
HS2-000020BNH	Junction of Parkway and Albert Street	528763, 183720	46	35		No data		29							37
HS2-000020BNN	Lincoln's Inn Fields	530744, 181308	41	41		No data		20							34
HS2-000020BNQ	Camley Street	529735, 183737	Tube missing	31		No data		27							29
HS2-000020BNY	Junction of Mill Lane and Hillfield Road	524839, 185136	45	41		No data		29							38
HS2-000020BNZ	Mansfield Road	528050, 185508	40	33		No data		25							33
HS2-000020BP0	Junction of Camden Road and Torriano Avenue	529708, 184871	58	51		No data		47							52
HS2-000020BP2	Junction of Grays Inn Road and Holborn	531149, 181616	48	45		No data		27							40
HS2-000020BPB	Camden High Street	528966, 183735	65	54		No data		50							56
HS2-000020BPC	Castlehaven Road	528788, 184591	43	36		No data		24							35
HS2-000020BPD	Prince of Wales Road	528571, 184683	39	27		No data		20							29
HS2-000020BPE	Haverstock Hill	527710, 184749	52	41		No data		33							42
HS2-000020BPF	Junction of Primrose Gardens and England's Lane	527549, 184640	47	33		No data		27							36
HS2-000020BPU	Junction of Gower Street and Grafton Way	529476, 182267	56	50		No data		31							46
HS2-000020BPW	Junction of Delancey Street and Arlington Road	528939, 183637	50	37		No data		31							40
HS2-000020BPX	Netley Street	529177, 182625	34	28		No data		29							30
HS2-000020BPY	Stanhope Street	529060, 182947	40	29		No data		22							30

Monitoring Site ID	Location description	Coordinates (X, Y)	Jan	Feb	Mar ¹	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean ²
HS2-000020BPZ	Albany Street	528790, 182923	44	36		No data		24							35
HS2-000020BQ0	Werrington Street	529493, 183113	42	36		No data		22							33
HS2-000020BQ1	Polygon Road	529574, 183045	44	35		No data		23							34
HS2-000020BQ2	Alexandra Place	526320, 183980	39	31		No data		21							30
HS2-000020BQ3	Harrington Square	529228, 183172	50	38		No data		35							41
HS2-000020BQ4	Junction of North Gower Street and Starcross Street	529290, 182572	44	36		No data		25							35
HS2-000020BQ5	Adelaide Road	527713, 184392	Tube missing	40		No data		25							33
HS2-000020BQ6	Mornington Terrace	528836, 183474	39	30		No data		20							29
HS2-000020BQ7	Arlington Road	529009, 183479	40	33		No data		24							32
HS2-000020BQ8	Clarkson Row	529024, 183213	39	31		No data		20							30
HS2-000020BQ9	Park Village East	528923, 183121	37	29		No data		21							29
HS2-000020BQA	Eversholt Street	529386, 183132	60	48		No data		35							48
HS2-000020BQB	Junction of Harrington Street and Varndell Street	529147, 182816	41	30		No data		23							32
HS2-000020BQC	Junction of Robert Street and Hampstead Road	529199, 182704	47	37		No data		32							39
HS2-000020BQD	Drummond Crescent	529648, 182856	Tube missing	42		No data		27							35
HS2-000020BQJ	Grafton Way	529380, 182225	55	54		No data		36							48
HS2-000020BQL	Delancey Street	528768, 183581	44	No data		No data		33							38

Monitoring Site ID	Location description	Coordinates (X, Y)	Jan	Feb	Mar ¹	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean ²
HS2-000020BQR	Lamp post on Park Village East	528682, 183505	37	33	No data			21							30
HS2-000020BQS	Opposite Maria fidelis school on Phoenix Road	529670, 182982	40	36	No data			21							32
HS2-000020BQT	Drummond Street	529385, 182581	47	35	No data			25							35
HS2-000020BQX	Lamp post on Brunswick Square	530344, 182236	No data	No data	No data			28							28
HS2-000020BP4	Triplicate site on Finchley Road next to Swiss Cottage kerbside automatic monitoring station	526633, 184392	54	Tubes missing	No data			41							48
HS2-000020BP5	Triplicate site next to the Euston Road roadside automatic monitoring stations	529895, 182657	69	67	No data			54							63
HS2-000020BP9	Triplicate site in Russell Square next to Bloomsbury urban background automatic monitoring station	530120, 182034	44	43	No data			23							37