

## **Air Quality and Dust Monitoring Monthly Report – October 2018**

**London Borough of Camden**



**SKANSKA**



## Department for Transport

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A report prepared by Costain Skanska on behalf of HS2 Ltd.

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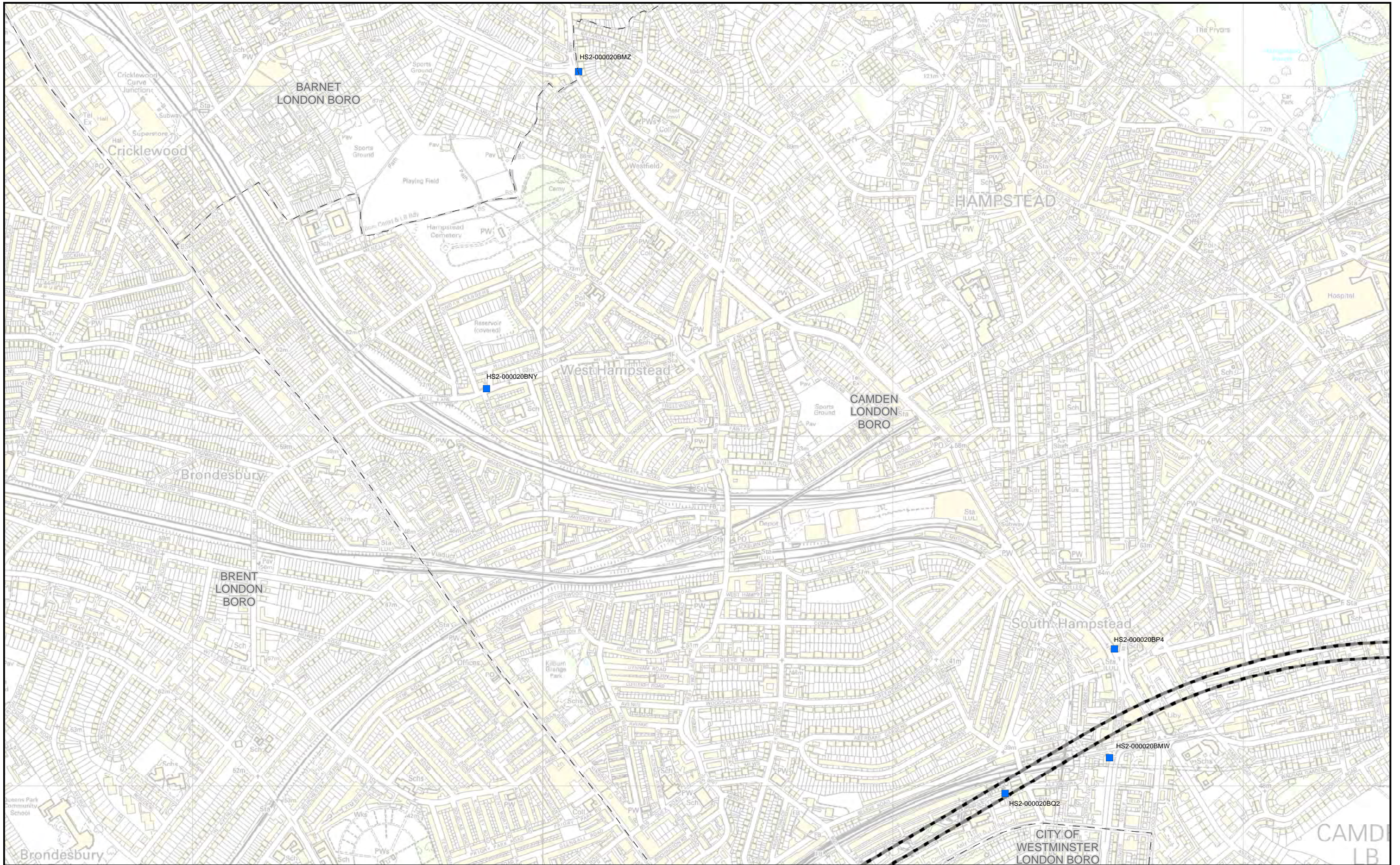
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# Monthly Summary

- 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 September and October 2018 respectively.
- 1.1.2 Figure 1 to Figure 3 in Appendix A indicate the current work sites 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](http://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 are expected to be completed by July 2019. The current worksites, include:
- Demolition of former accommodation block and train maintenance shed, at the DB Cargo shed is now complete. Site office and welfare on the adjacent former Addison Lee compound on Granby Terrace, worksite ref. S001-WS01.
  - Archaeological surveys at St James' Gardens and construction of an enclosure over the entire works site to facilitate the future archaeological dig, worksite ref. S003-WS01.
  - Demolition and continued internal soft strip at:
    - the IBIS Hotel, 3 Cardington Street, S003-WS05
    - National Temperance Hospital, Insull Wing, worksite ref. S003-WS02; and
    - 1-3 Cobourg Street, worksite ref. S003-WS05
  - Pre-demolition surveys and internal soft-strip at:
    - Walkden House, 67-75 & 77-79 Euston Street, worksite ref. S003-WS03;
    - Thistle Hotel, Cardington Street, worksite ref. S003-WS04;
    - 132 – 140 Hampstead Road and Petrol Station, worksite ref: S001-WS02;
    - Euston Street, Melton Street, Drummond Street block, worksite ref: S003-WS07; and
    - One Euston Square, 40 Melton Street and Grant Thornton House, 22 Melton Street, worksite ref: S003-WS09.
  - National Temperance Hospital, Site Office and Welfare 110-122 Hampstead Road and community garden, worksite ref. S003-WS06.
  - Groundworks and taxi rank construction in Euston Square Gardens, worksite ref: S003-WS08.
  - Thames Water Compound, worksite ref: S001-WS05.
  - Vehicle Holding Area, worksite ref: S001-WS04 (yet to be established).
-

- 1.1.5 Eighteen (18) dust monitors are installed around worksites, where demolition and pre-demolition works are underway. These sites returned a medium or high dust risk rating, in accordance with the methodology described in the Overview Monitoring Report, available from [www.gov.uk/government/collections/monitoring-the-environmental-effects-of-hs2](http://www.gov.uk/government/collections/monitoring-the-environmental-effects-of-hs2), in line with the IAQM Guidance (2014) on the assessment of dust from demolition and construction activities.
- 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 in Figure 4.
- 1.1.7 There were six (6) exceedances of the dust trigger level recorded during the month of October 2018.
- 1.1.8 Diffusion tube monitoring of Nitrogen Dioxide (NO<sub>2</sub>) was undertaken at sixty-six (66) locations in September 2018, around highways within the LBC as part of the management of air quality where significant effects may occur as a result of the scheme.
- 1.1.9 Diffusion tube monitoring results were 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.
- 1.1.10 NO<sub>2</sub> monitoring locations and results are presented in Appendix C, Table 2, together with the 2018 running mean.
- 1.1.11 There were no complaints received, relating to air quality, during this monitoring period.

# Appendix A – Worksites and Monitoring Locations



**Legend**

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

Figure Number

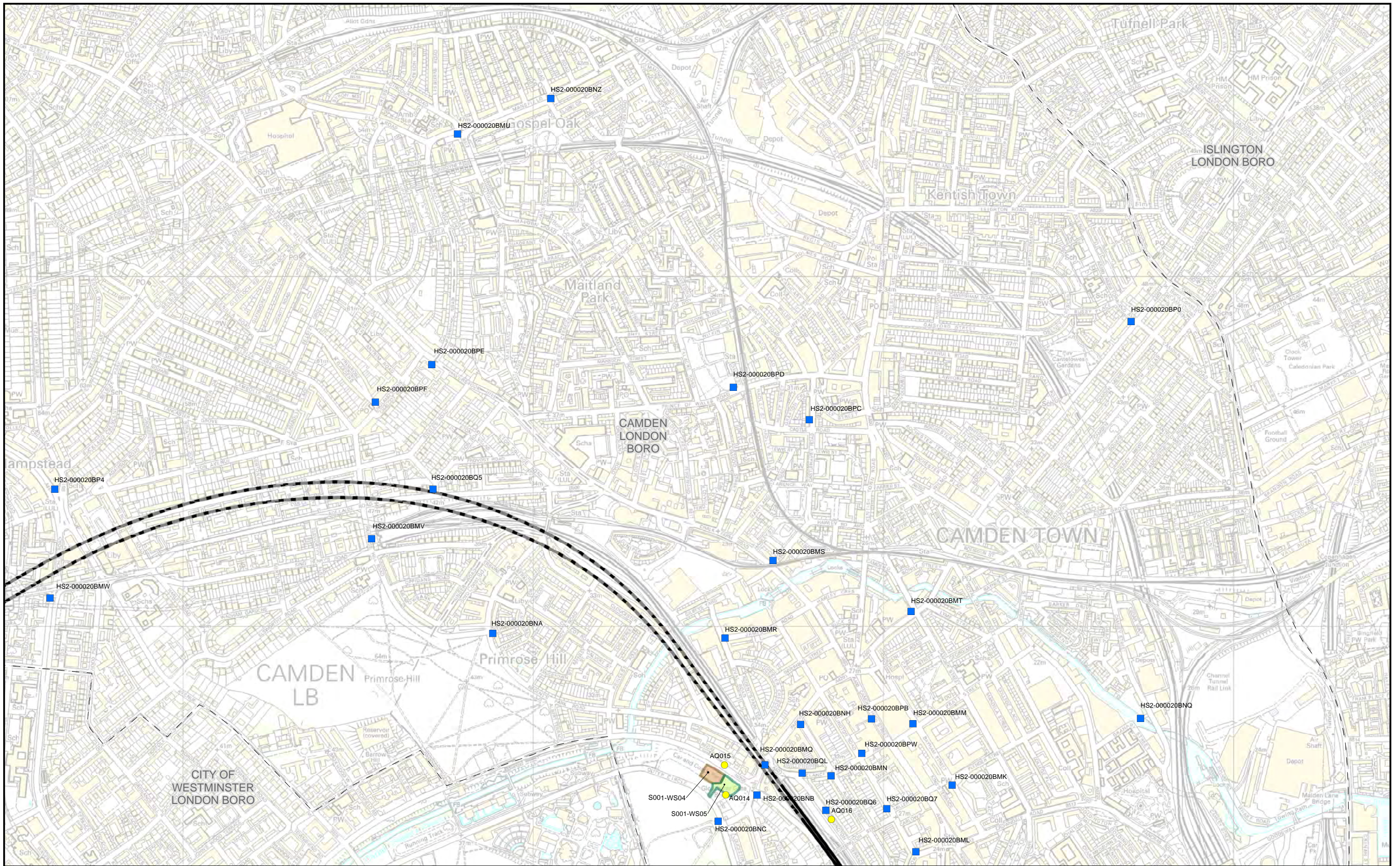
Figure Name  
**Worksites and Monitoring locations in LBC**

London Borough of Camden

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- Legend**
- Route in tunnel
  - Route on surface
  - Diffusion tube monitoring location
  - Dust monitoring location
  - Vehicle Holding Area
  - Thames Water Compound

Figure Number

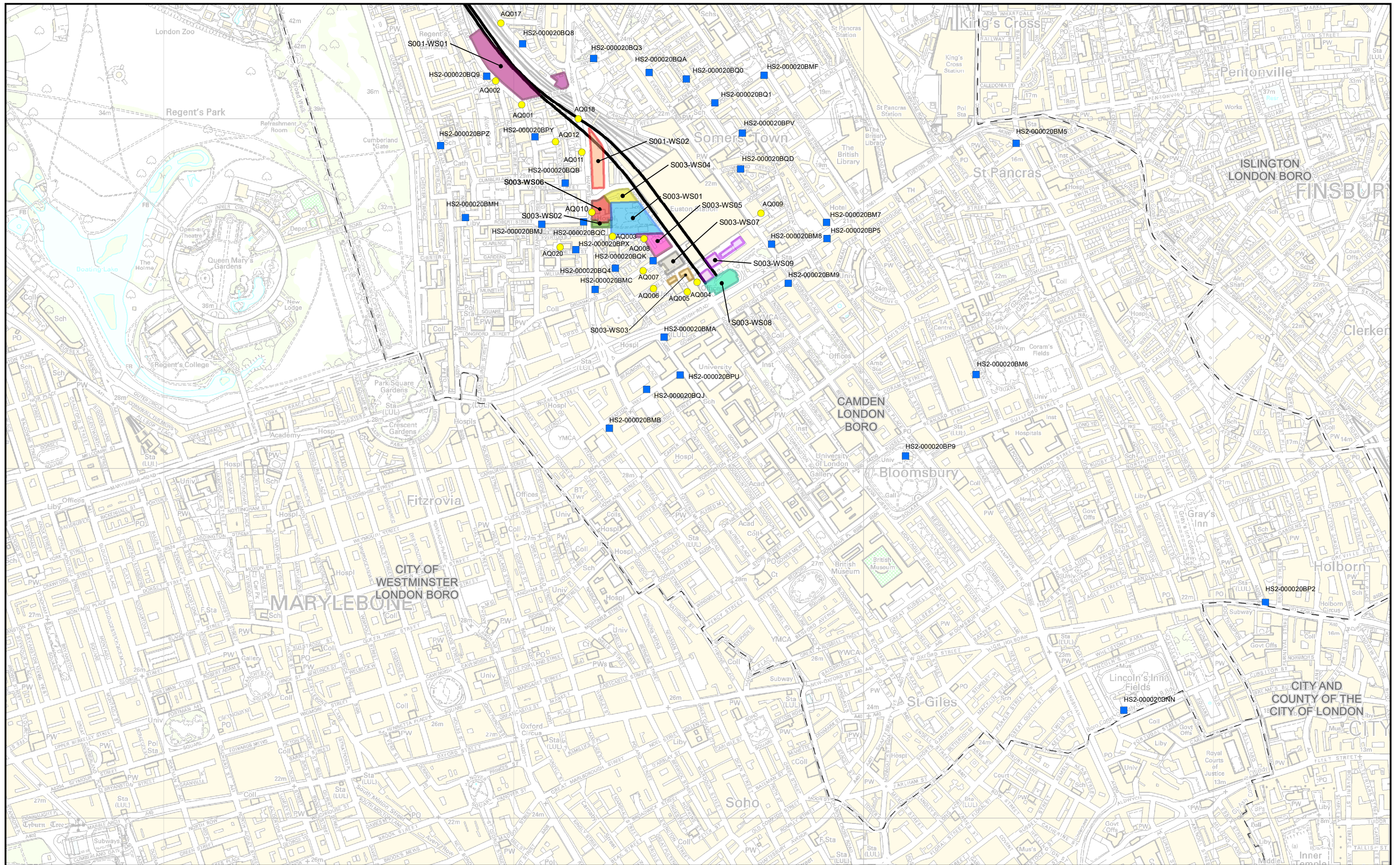
Figure Name  
**Worksites and Monitoring locations in LBC**  
 (sheet 2)

London Borough of Camden

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- Legend**
- Route in tunnel
  - Route on surface
  - Diffusion tube monitoring location
  - Dust monitoring location
  - DB Cargo Shed and Compound worksite
  - St. James' Gardens worksite
  - National Temperance Hospital worksite
  - Ibis Hotel, 3 Cardington Street & 1-3 Cobourg Street
  - National Temperance Hospital, Insull Wing
  - Walkden House, 65-75 & 77-79 Euston Street
  - Thistle Hotel, Cardington Street
  - Euston Street, Melton Street, Drummond Street block
  - Euston Square Gardens
  - One Euston Square, 40 Melston Street and Gran Thortorn House, 22 Melston Street
  - 132 and 140 Hampstead Road and Petrol Station

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 1: Dust monitoring locations and October 2018 Results

Monitoring site ID	Coordinates (X,Y)	Location description	Dust risk rating for site <sup>1</sup>	Monitoring site active during period	Change to site since previous period report	Mean 15-minute PM <sub>10</sub> concentration (µg/m <sup>3</sup> )	Minimum 15-minute PM <sub>10</sub> concentration (µg/m <sup>3</sup> )	Maximum 15-minute PM <sub>10</sub> concentration (µg/m <sup>3</sup> )	Number of 15-min periods exceeding trigger level of 250 µg/m <sup>3</sup>	15-min data capture (%)
AQ001	529022, 183040	Junction of Park Village East, Stanhope Street and Granby Terrace	H	Yes	N	11.1	0.9	87.7	0	100.0
AQ002	528947, 183107	Park Village East	H	Yes	N	10.2	0.8	46.8	0	100.0
AQ003	529282, 182663	St James Gardens	M	Yes	N	13.6	1.0	321.0	1	99.6
AQ004	529523, 182533	Melton Street	H	Yes	N	10.1	0.8	46.2	0	100.0
AQ005	529496, 182505	Stephenson Way	H	Yes	N	32.8	2.5	318.0	2	99.9
AQ006	529399, 182514	Euston Street	H	Yes	N	5.3	0.3	18.3	0	99.9
AQ007	529369, 182564	Drummond Street	H	Yes	N	10.7	1.0	37.3	0	100.0
AQ008	529369, 182648	Coburg Street	H	Yes	Y	16.0	2.3	893.9	3	45.3
AQ009	529707, 182730	Lancing Street	H	Yes	N	10.4	0.9	217.9	0	100.0
AQ010	529223, 182732	Hampstead Road South	H	Yes	N	12.0	1.2	99.7	0	100.0

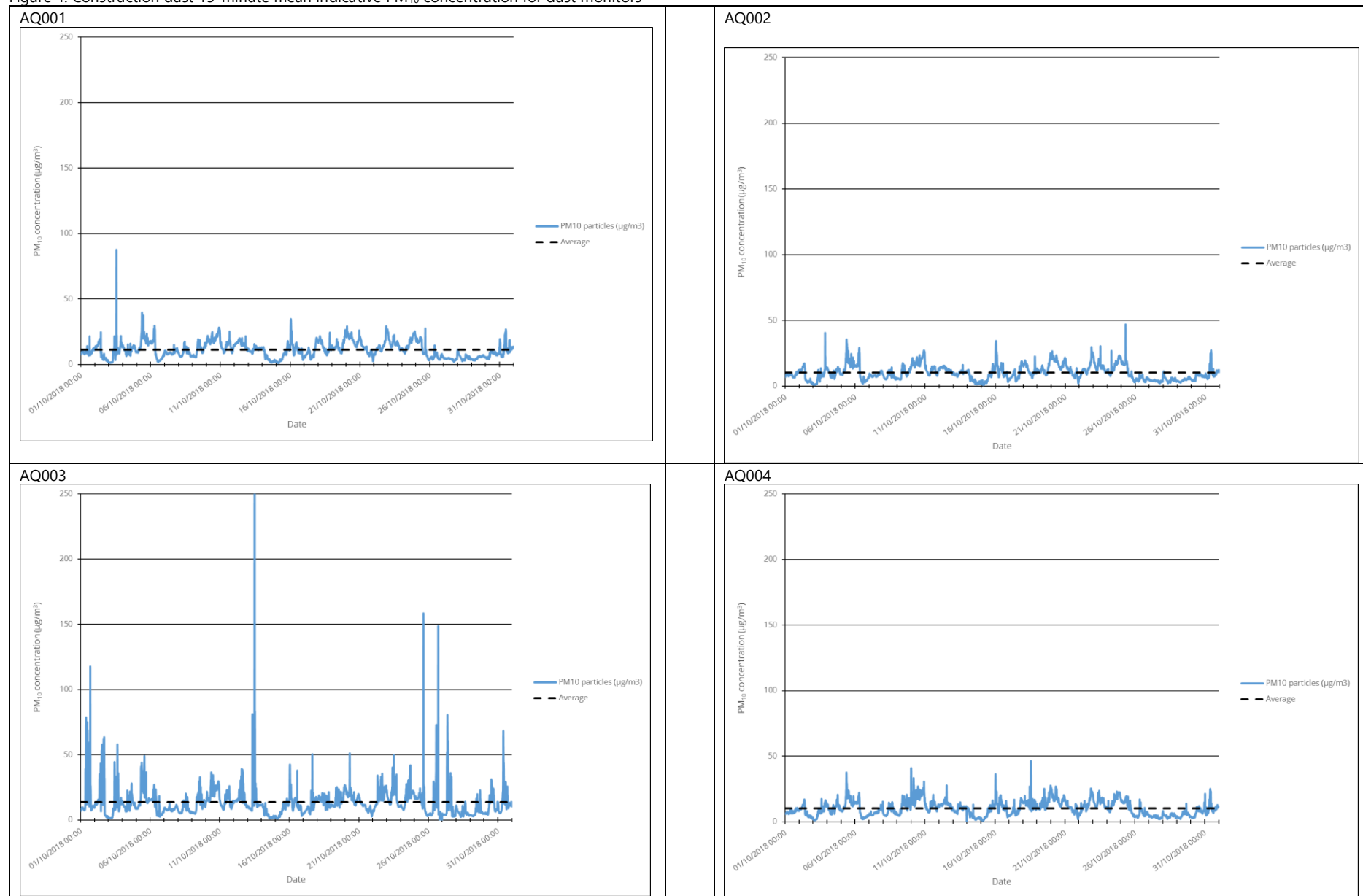
<sup>1</sup> The dust risk rating (H – High, M – Medium, L – Low) has been assigned in accordance with the methodology described in the Overview Monitoring Report, available from [www.gov.uk/government/collections/monitoring-the-environmental-effects-of-hs2](http://www.gov.uk/government/collections/monitoring-the-environmental-effects-of-hs2), in line with the IAQM Guidance (2014) on the assessment of dust from demolition and construction activities.

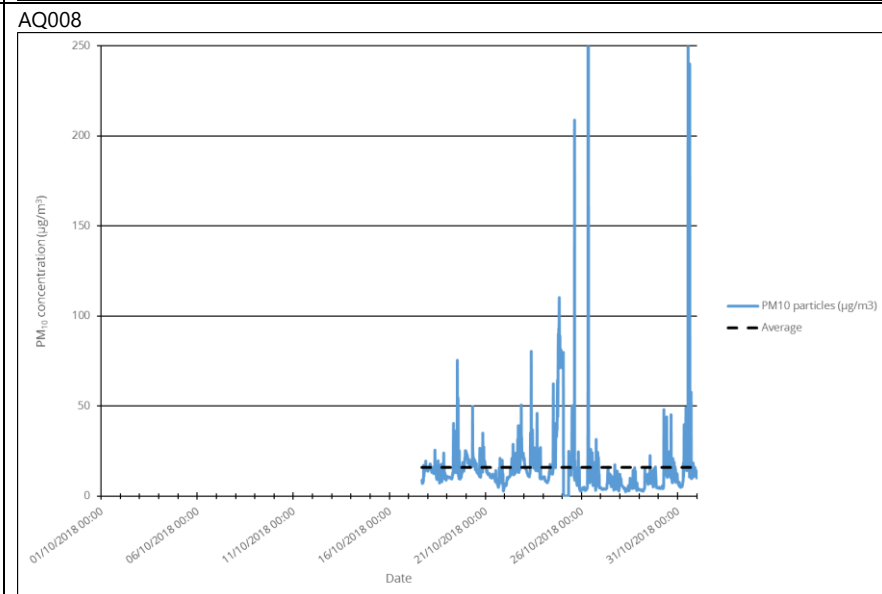
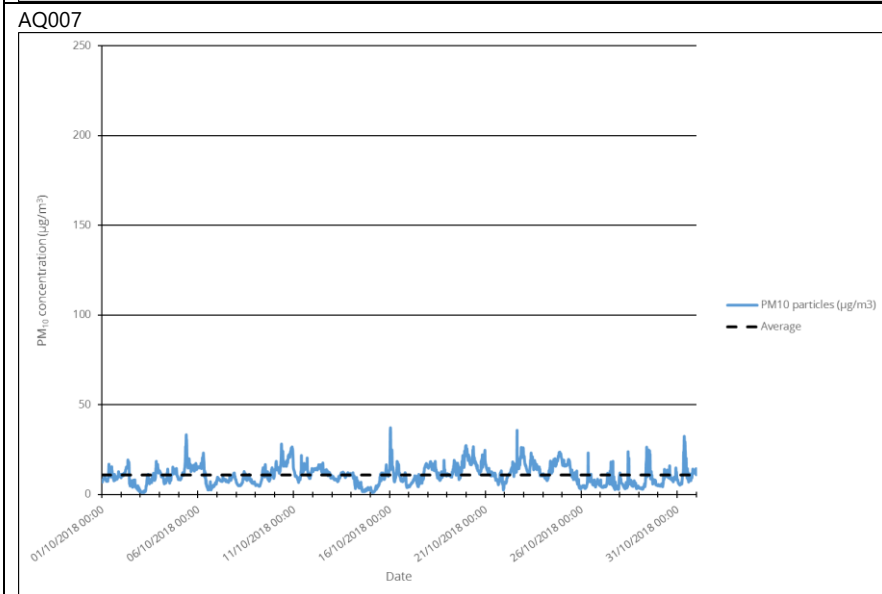
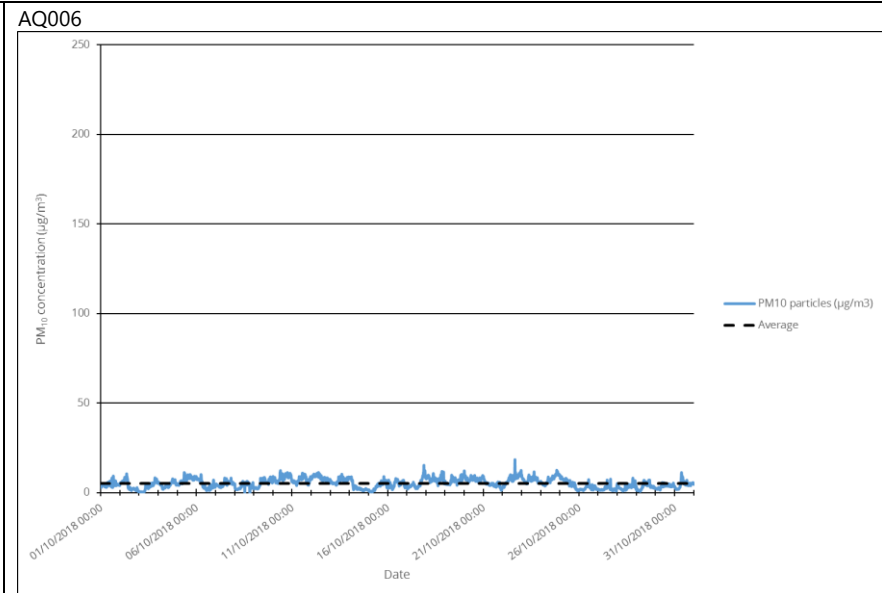
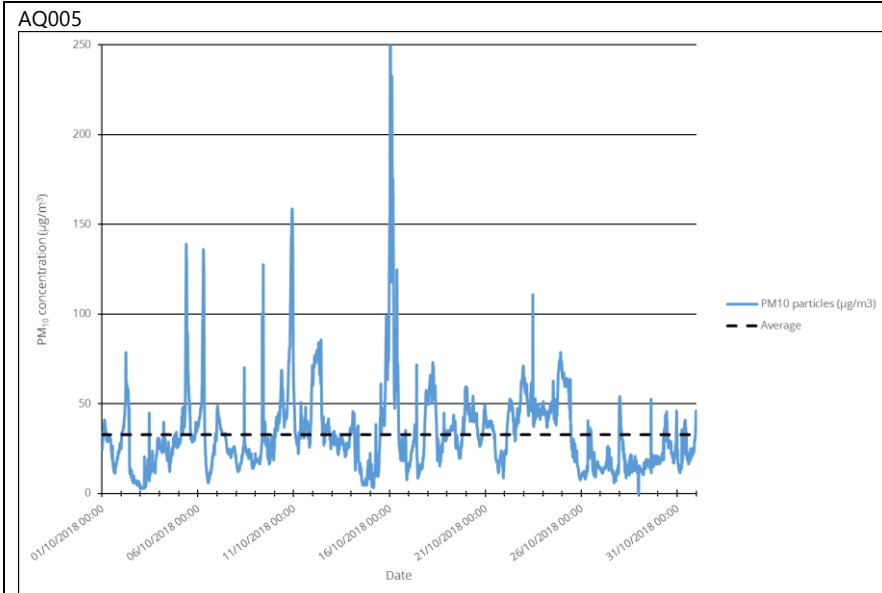
Monitoring site ID	Coordinates (X,Y)	Location description	Dust risk rating for site <sup>1</sup>	Monitoring site active during period	Change to site since previous period report	Mean 15-minute PM <sub>10</sub> concentration (µg/m <sup>3</sup> )	Minimum 15-minute PM <sub>10</sub> concentration (µg/m <sup>3</sup> )	Maximum 15-minute PM <sub>10</sub> concentration (µg/m <sup>3</sup> )	Number of 15-min periods exceeding trigger level of 250 µg/m <sup>3</sup>	15-min data capture (%)
AQ011	529195, 182904	Hampstead Road	H	Yes	N	13.9	1.1	230.9	0	100.0
AQ012	529119, 182934	Mackworth Street	H	Yes	N	10.3	1.0	52.5	0	100.0
AQ014	528550, 183518	Thames Water Compound	L	Yes	N	10.1	0.8	66.6	0	100.0
AQ015	528546, 183604	Prince Albert Road	L	Yes	N	12.0	1.0	79.8	0	100.0
AQ016	528851, 183448	Mornington Terrace North	H	Yes	N	8.6	0.7	41.0	0	100.0
AQ017	528963, 183274	Mornington Terrace South	H	Yes	N	10.0	0.8	37.5	0	100.0
AQ018	529184, 182999	Hampstead Road North	H	Yes	N	8.6	0.7	52.0	0	100.0
AQ020	529132, 182633	Netley School	n/a	Yes	N	13.5	1.4	106.7	0	96.4

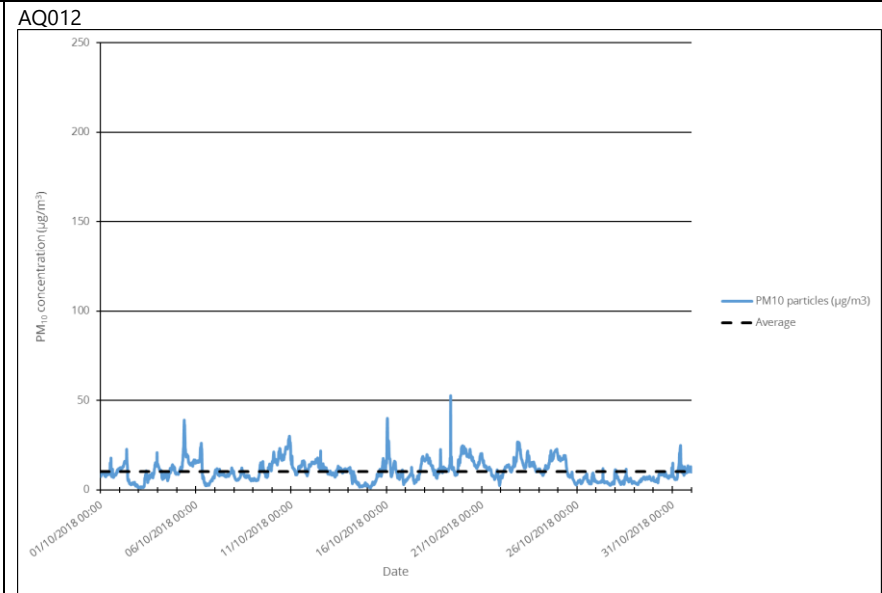
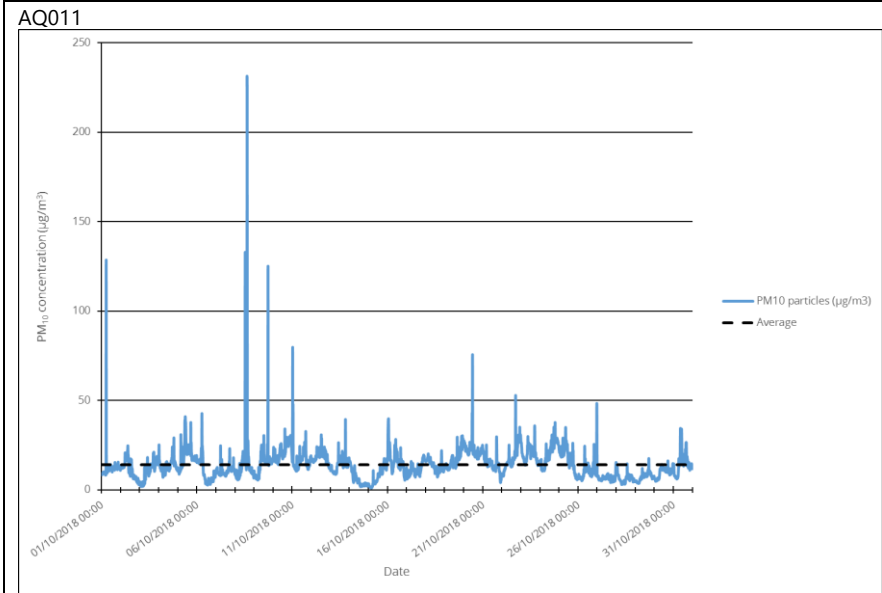
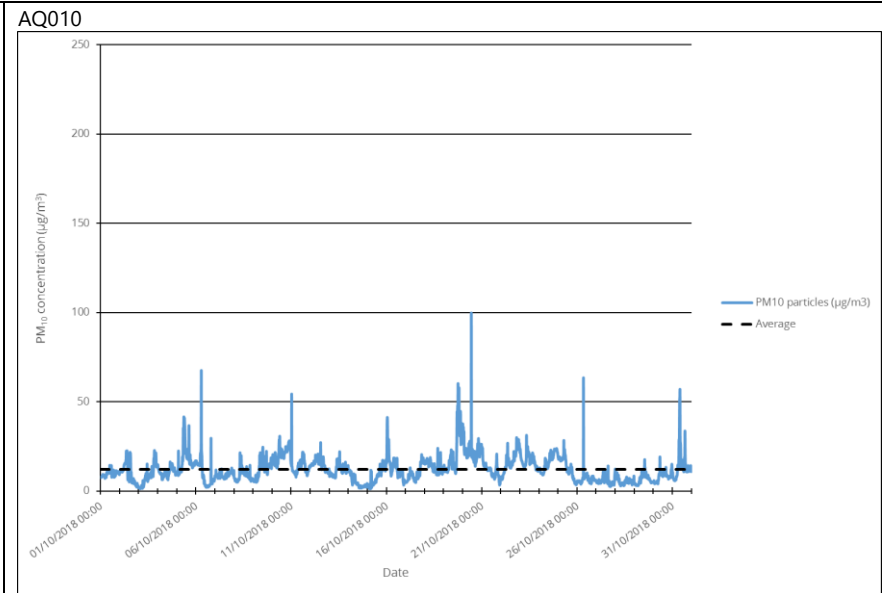
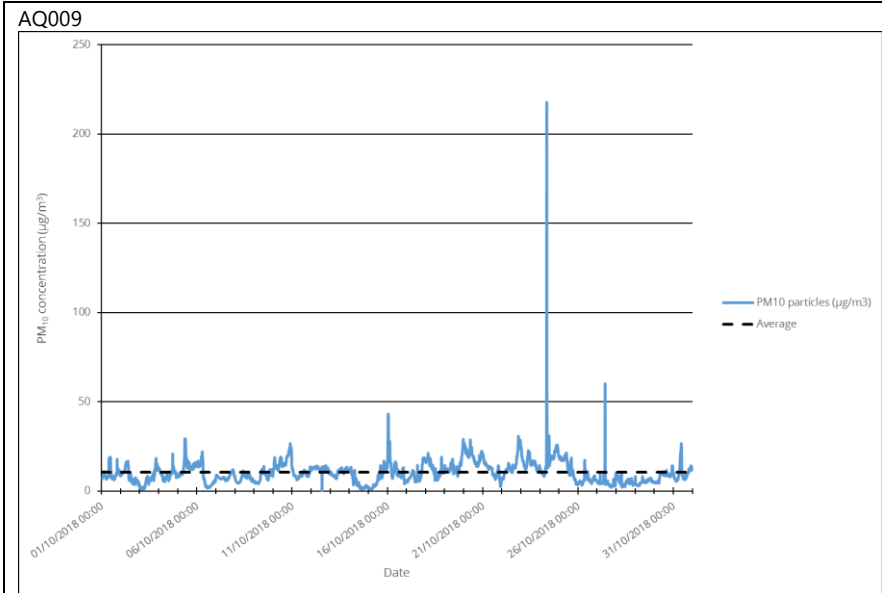
Table 2: Summary of exceedances of trigger level in October 2018

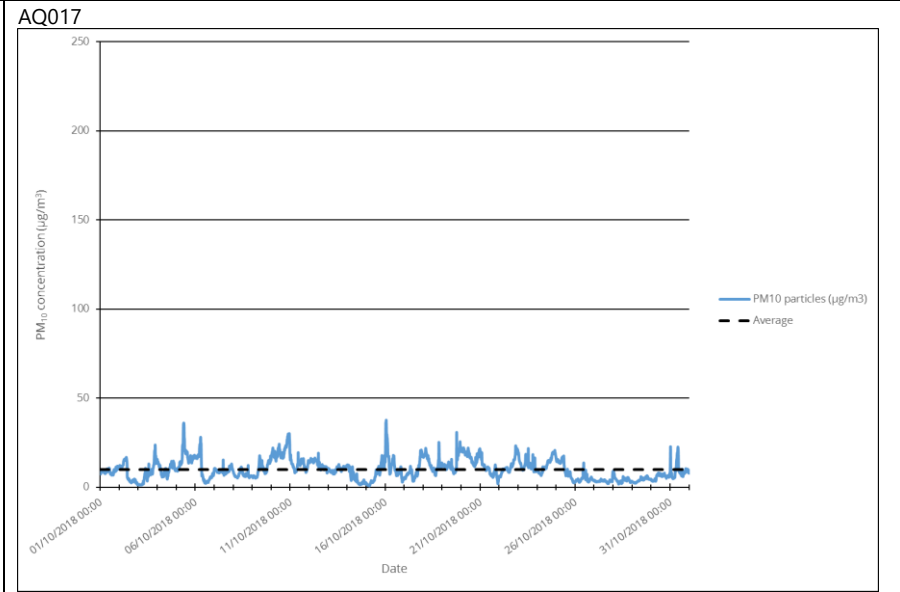
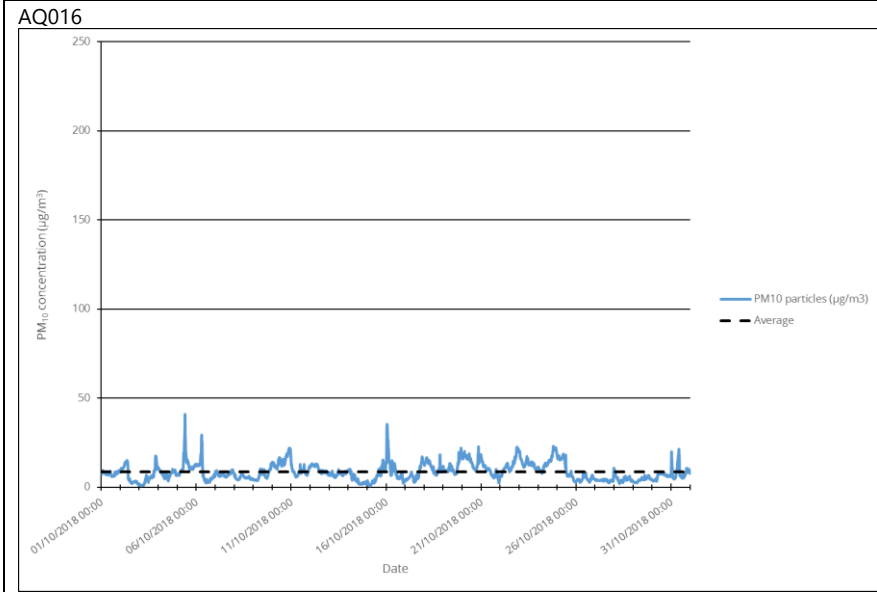
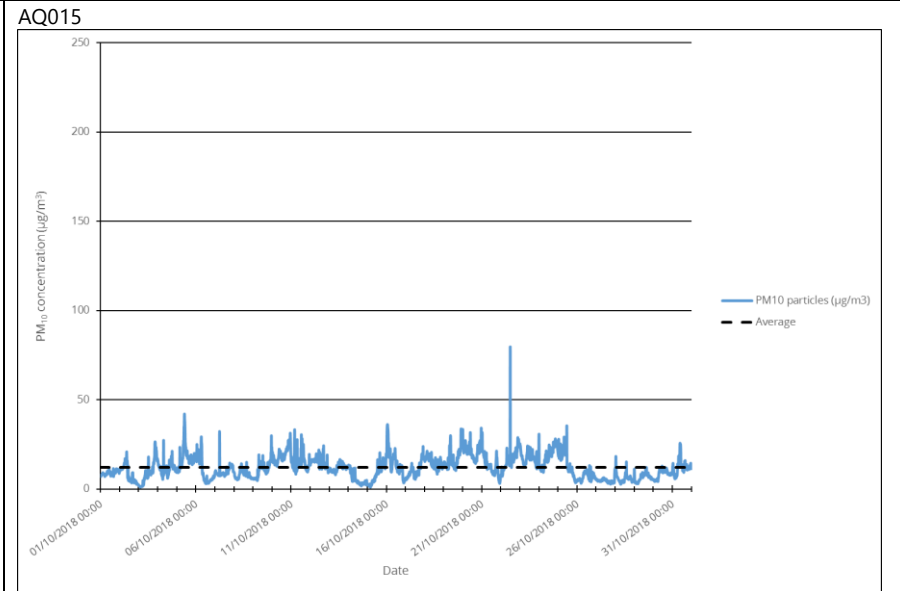
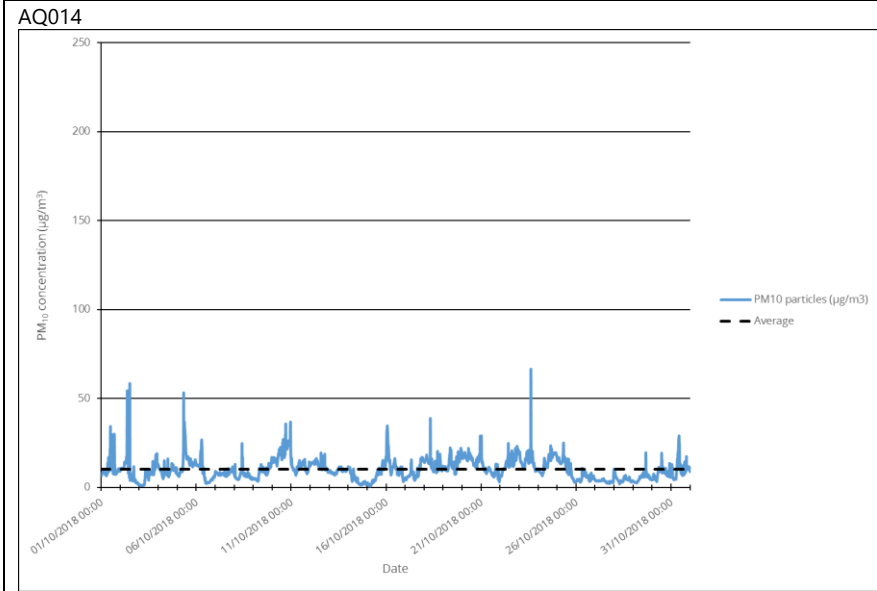
Period exceeding trigger level	Worksite reference	Monitoring site ID	Complaint reference number (if applicable)	Reason	Resolution
13/10/2018 12:16 – 13/10/2018 12:30	S003-WS01	AQ003	n/a	No clear reason for trigger. No works underway in St James Garden at the time of the exceedance. Demolition work on the roof of the former National Temperance Hospital Insull Wing being carried out but unlikely to be the source given the location and nature of the work. Dust suppression being fully employed in line with the HS2 EMRs.	n/a
16/10/2018 00:46 – 16/10/2018 01:15 (2 triggers)	S003-WS03	AQ005	n/a	No works were being undertaken at the time of the exceedance and no likely dust sources from nearby HS2 sites.	n/a
26/10/2018 08:16 – 26/10/2018 08:45 (2 triggers)	S003-WS05	AQ008	n/a	Triggers associated with the exhaust fumes from a works cabin installed directly beneath and adjacent to the dust monitor	Cabin relocated away from receptors on 1 <sup>st</sup> November
31/10/2018 13:01 – 31/10/2018 13:15	S003-WS05	AQ008	n/a	Trigger associated with the exhaust fumes from a works cabin installed directly beneath and adjacent to the dust monitor	Cabin relocated away from receptors on 1 <sup>st</sup> November

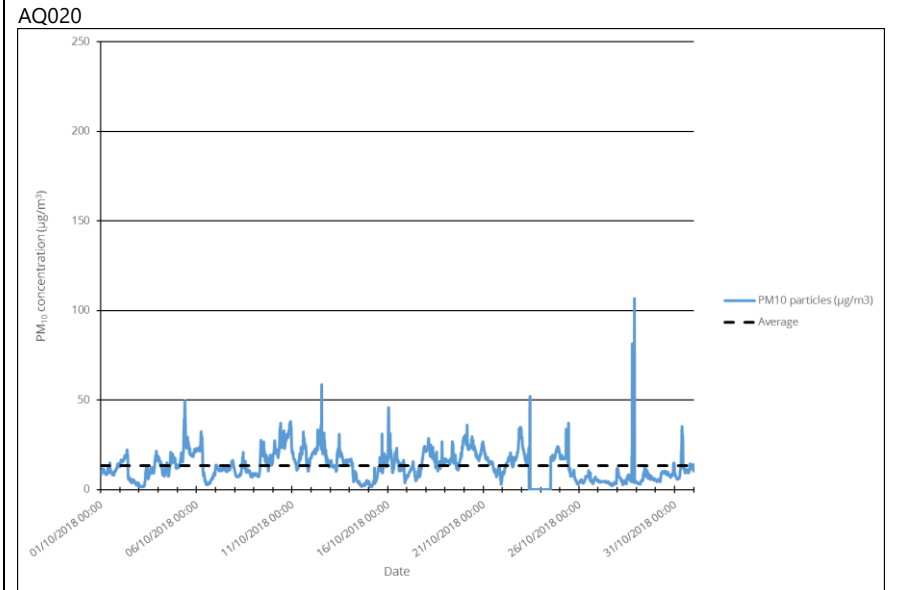
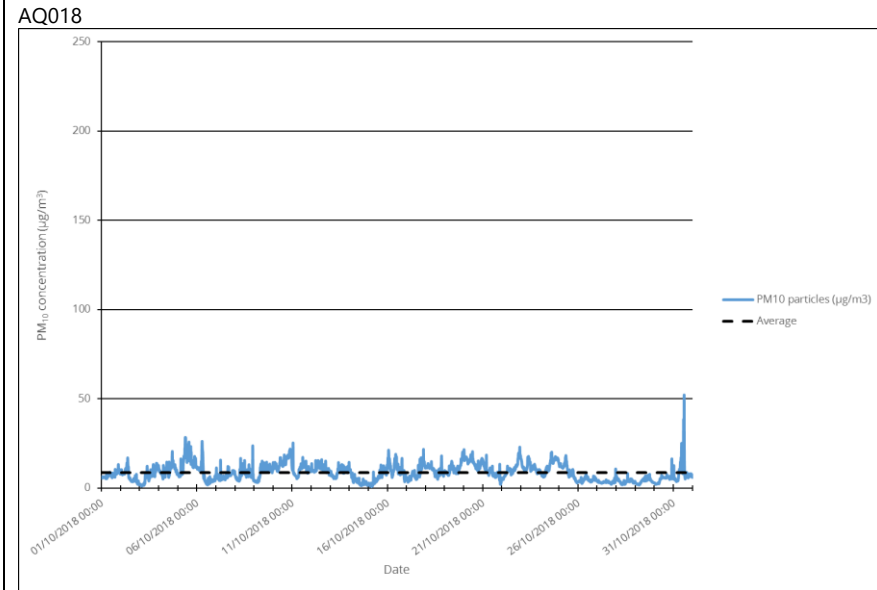
Figure 4: Construction dust 15-minute mean indicative PM<sub>10</sub> concentration for dust monitors













## Appendix C – Air Quality Monitoring Results

Table 2: NO<sub>2</sub> monitoring locations around highways, NO<sub>2</sub> concentrations and monthly monitoring results with running mean for 2018 (µg/m<sup>3</sup>)

Monitoring Site ID	Location description	Coordinates (X, Y)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean <sup>2</sup>
HS2-000020BM5	Junction of St Chad's Street and Grays Inn Road	530436, 182929	52	58	53	51	61	51	60	45	46				53
HS2-000020BM6	Brunswick Square	530321, 182268	60	41	53	41	43	31	48	44	46				45
HS2-000020BM7	Chalton Street	529894, 182702	62	65	55	53	59	53	60	46	Tube missing				57
HS2-000020BM8	Junction of Euston Square and Grafton Place	529737, 182641	66	64	63	Tube missing	65	60	68	57	62				63
HS2-000020BM9	Junction of Endsleigh Gardens and Upper Woburn Place	529785, 182529	74	80	59	57	68	65	63	49	52				63
HS2-000020BMA	Junction of Euston Road and Gower Street	529429, 182375	71	69	59	57	66	52	65	56	62				62
HS2-000020BMB	Whitfield Street	529273, 182114	56	52	50	42	43	38	39	31	38				43
HS2-000020BMC	Hampstead Road	529232, 182511	59	59	61	61	73	61	76	57	70				64
HS2-000020BMF	Junction of Polygon Road and Ossulston Street	529715, 183123	37	42	38	28	36	29	29	27	31				33
HS2-000020BMH	Nash Street	528861, 182717	42	42	42	37	38	Tube missing	Tube missing	35	36				39

<sup>2</sup> 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	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean <sup>2</sup>
HS2-000020BMJ	Junction on Robert Street and Stanhope Street	529080, 182698	48	45	42	39	40	35	38	32	34				39
HS2-000020BMK	Junction of Plender Street and Bayham Street	529196, 183546	61	56	54	47	57	43	48	51	51				52
HS2-000020BML	Junction of Arlington Road and Mornington Crescent	529093, 183356	47	43	45	40	39	30	30	33	34				38
HS2-000020BMM	Junction of Bayham Street and Pratt Street	529084, 183722	85	64	57	65	61	45	57	61	59				62
HS2-000020BMN	Junction of Delancey Street and Albert Street	528850, 183573	50	44	47	40	43	36	45	37	42				43
HS2-000020BMQ	Junction of Parkway and Delancey Street	528662, 183604	Tube missing	61	58	53	63	56	59	50	48				56
HS2-000020BMR	Junction of Oval Road and Jamestown Road	528548, 183967	47	43	49	38	39	35	43	34	41				41
HS2-000020BMS	Junction of Chalk Farm Road and Castlehaven Road	528685, 184188	57	61	58	58	66	54	66	53	53				58
HS2-000020BMT	Junction of Camden Road and Camden Street	529079, 184043	63	62	58	58	68	51	57	51	56				58
HS2-000020BMU	Junction of Southampton Road and Fleet Road	527783, 185407	51	50	47	44	48	42	45	30	40				44
HS2-000020BMV	Primrose Hill Road	527538, 184250	49	46	43	Tube missing	34	38	38	34	37				40
HS2-000020BMW	Junction of Finchley Road and Hilgrove Road	526619, 184081	55	70	53	55	65	57	Tube missing	57	59				59

Monitoring Site ID	Location description	Coordinates (X, Y)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean <sup>2</sup>
HS2-000020BMZ	Junction of Finchley Road and Hendon Way	525102, 186042	99	88	84	79	93	84	100	82	79				87
HS2-000020BNA	Junction of Regent's Park Road and Rothwell Street	527884, 183980	50	44	39	39	32	26	36	34	35				37
HS2-000020BNB	Junction of Gloucester Gate Bridge and Park Village East	528639, 183518	56	46	51	44	47	38	47	No data	No data				47
HS2-000020BNC	Junction of Outer Circle and Gloucester Gate	528528, 183443	36	37	42	31	40	36	29	25	Tube missing				34
HS2-000020BNH	Junction of Parkway and Albert Street	528763, 183720	56	51	Tube missing	43	52	42	42	37	43				46
HS2-000020BNN	Lincoln's Inn Fields	530744, 181308	Tube missing	Tube missing	Tube missing	50	42	24	40	38	43				40
HS2-000020BNQ	Camley Street	529735, 183737	Tube missing	51	49	Tube missing	41	Tube missing	35	35	37				41
HS2-000020BNY	Junction of Mill Lane and Hillfield Road	524839, 185136	52	49	50	35	47	37	43	40	42				44
HS2-000020BNZ	Mansfield Road	528050, 185508	46	44	46	39	32	27	35	34	37				38
HS2-000020BP0	Junction of Camden Road and Torriano Avenue	529708, 184871	68	74	68	66	70	61	68	63	67				67
HS2-000020BP2	Junction of Grays Inn Road and Holborn	531149, 181616	Tube missing	57	55	53	54	Tube missing	55	38	53				52
HS2-000020BPB	Camden High Street	528966, 183735	87	64	60	73	76	65	76	72	89				73
HS2-000020BPC	Castlehaven Road	528788, 184591	41	43	36	36	33	26	34	27	39				35

Monitoring Site ID	Location description	Coordinates (X, Y)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean <sup>2</sup>
HS2-000020BPD	Prince of Wales Road	528571, 184683	40	40	41	37	34	29	31	28	33				35
HS2-000020BPE	Haverstock Hill	527710, 184749	49	46	46	48	39	39	44	41	47				44
HS2-000020BPF	Junction of Primrose Gardens and England's Lane	527549, 184640	42	40	36	35	33	32	31	29	37				35
HS2-000020BPU	Junction of Gower Street and Grafton Way	529476, 182267	53	48	51	52	60	44	59	Tube missing	47				52
HS2-000020BPV	Phoenix Road	529653, 182958	45	23	40	41	37	28	34	Unable to access (inside a construction site)	No data				35
HS2-000020BPW	Junction of Delancey Street and Arlington Road	528939, 183637	48	51	51	38	60	44	51	41	42				47
HS2-000020BPX	Netley Street	529177, 182625	43	46	45	39	48	34	38	32	37				40
HS2-000020BPY	Stanhope Street	529060, 182947	50	43	41	36	39	29	26	29	34				36
HS2-000020BPZ	Albany Street	528790, 182923	49	46	51	43	38	31	41	40	32				41
HS2-000020BQ0	Werrington Street	529493, 183113	42	46	40	37	34	26	33	28	31				35
HS2-000020BQ1	Polygon Road	529574, 183045	42	50	44	36	36	28	32	32	34				37
HS2-000020BQ2	Alexandra Place	526320, 183980	37	37	37	33	34	25	28	26	25				31
HS2-000020BQ3	Harrington Square	529228, 183172	59	53	53	55	58	49	55	44	46				53

Monitoring Site ID	Location description	Coordinates (X, Y)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean <sup>2</sup>
HS2-000020BQ4	Junction of North Gower Street and Starcross Street	529290, 182572	50	55	44	44	44	33	37	35	38				42
HS2-000020BQ5	Adelaide Road	527713, 184392	53	45	44	42	41	34	41	36	37				41
HS2-000020BQ6	Mornington Terrace	528836, 183474	47	41	45	37	37	33	33	31	34				38
HS2-000020BQ7	Arlington Road	529009, 183479	42	46	41	39	36	27	34	32	32				36
HS2-000020BQ8	Clarkson Row	529024, 183213	50	46	39	30	35	28	33	28	33				36
HS2-000020BQ9	Park Village East	528923, 183121	44	48	32	37	34	26	34	25	29				34
HS2-000020BQA	Eversholt Street	529386, 183132	63	69	61	65	60	43	61	52	55				59
HS2-000020BQB	Junction of Harrington Street and Varndell Street	529147, 182816	51	48	47	39	36	Tube missing	31	30	32				39
HS2-000020BQC	Junction of Robert Street and Hampstead Road	529199, 182704	53	55	55	52	54	45	49	37	39				49
HS2-000020BQD	Drummond Crescent	529648, 182856	53	55	49	Tube missing	40	38	41	38	39				44
HS2-000020BQJ	Grafton Way	529380, 182225	72	75	56	49	61	55	62	49	55				59
HS2-000020BQK	Junction of Drummond Street and Cobourg Street	529398, 182593	49	54	47	36	42	35	37	35	Tube missing				42
HS2-000020BQL	Delancey Street	528768, 183581	60	55	53	45	64	59	59	47	45				54
HS2-000020BQR	Lamp post on Park Village East	528682, 183505	No data	No data	No data	No data	No data	No data	No data	30	36				33
HS2-000020BQS	Opposite Maria fidelis school on Pheonix Road	529670, 182982	No data	No data	No data	No data	No data	No data	No data	No data	36				36

Monitoring Site ID	Location description	Coordinates (X, Y)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean <sup>2</sup>
HS2-000020BP4	Triplicate site on Finchley Road next to Swiss Cottage kerbside automatic monitoring station	526633, 184392	Tubes missing	Tubes missing	Tubes missing	60	77	68	75	61	43				64
HS2-000020BP5	Triplicate site next to the Euston Road roadside automatic monitoring stations	529895, 182657	95	82	73	70	102	96	111	87	Tubes missing				90
HS2-000020BP9	Triplicate site in Russell Square next to Bloomsbury urban background automatic monitoring station	530120, 182034	47	46	43	41	41	39	34	30	38				40