

Air Quality and Dust Monitoring Monthly Report – June 2019

London Borough of Camden



SKANSKA



Department for Transport

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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 May 2019 and June 2019 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.
- 1.1.4 The current phase of works commenced within the LBC during December 2017 and are expected to be completed by December 2019. The current, completed and planned 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 dig at St James' Gardens and construction of an enclosure over the entire works' site; worksite ref. S003-WS01.
 - Demolition at:
 - the IBIS Hotel, 3 Cardington Street, worksite ref. S003-WS05;
 - National Temperance Hospital, Insull Wing is now complete, worksite ref. S003-WS02;
 - 1-3 Cobourg Street, worksite ref. S003-WS05 is now complete;
 - 132 – 140 Hampstead Road and Petrol Station, worksite ref. S001-WS02;
 - Thistle Hotel, Cardington Street, worksite ref. S003-WS04;
 - A number of sites in Euston Street, worksite ref. S003-WS07;
 - Regents Park Estate worksite ref. S001-WS07; and
 - Walkden House, 67-75 & 77-79 Euston Street, worksite ref. S003-WS03.
 - Pre-demolition surveys, scaffolding and internal soft-strip at:
 - 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.
 - Taxi rank in Euston Square Gardens is complete, 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 Twenty (20) dust monitors are installed around worksites, where demolition and pre-demolition works 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 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 mitigations.
- 1.1.7 The trigger level of $190 \mu\text{g}/\text{m}^3$, 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 were four (4) dust trigger alerts recorded during the month of June 2019. Triggers are presented in Appendix B, Table 3. All other results were in line with expected ranges.
- 1.1.9 Data capture was below 90% for the month of June 2019, where new monitors were installed or where power supply interruptions were experienced.
- 1.1.10 Diffusion tube monitoring of Nitrogen Dioxide (NO_2) was undertaken at sixty-five (65) locations in May 2019, 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 NO_2 monitoring locations and results are presented in Appendix C, Table 4, together with the 2019 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.

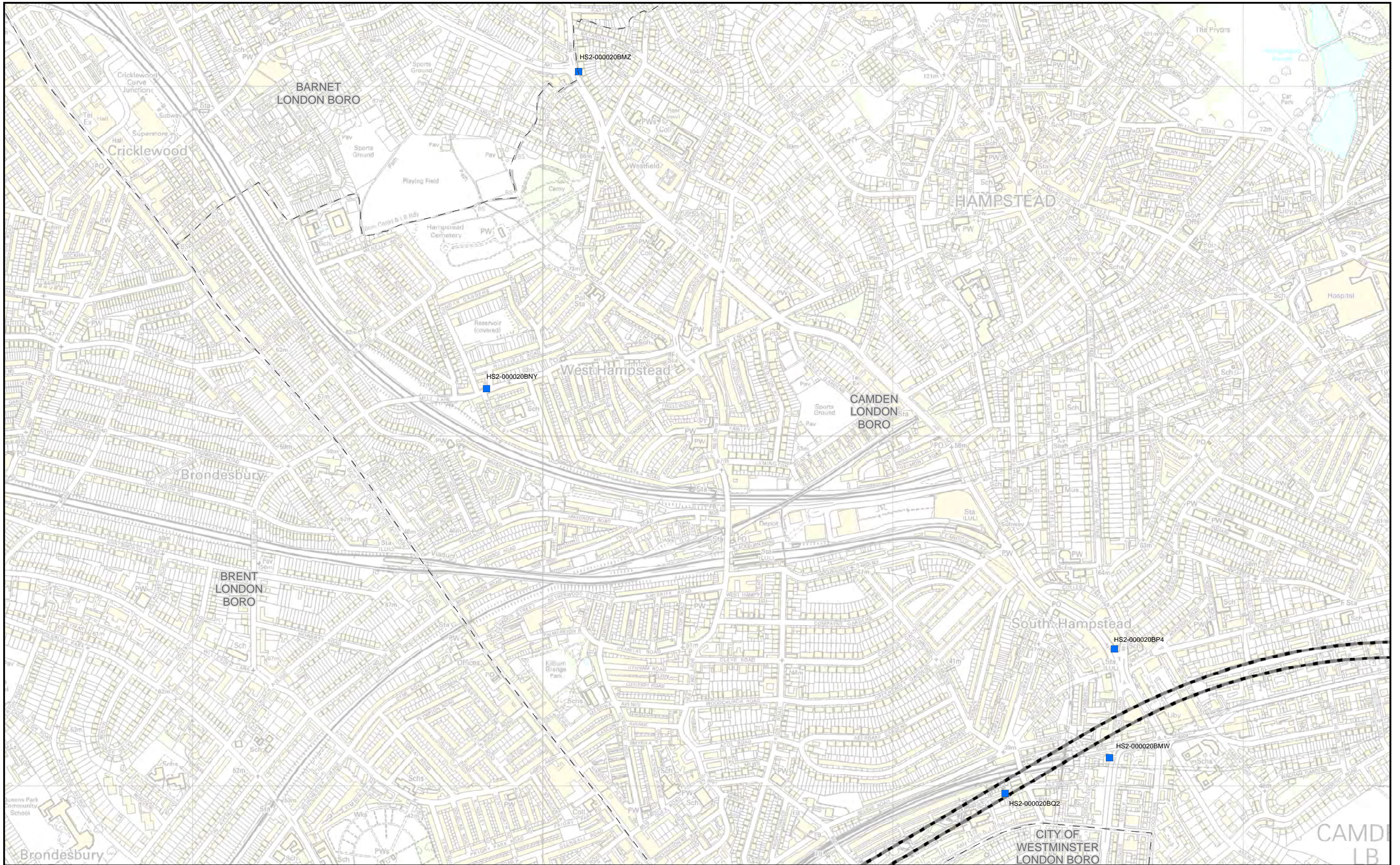
Table 1: Summary of complaints received during June 2019 in LBC

Complaint Reference No.	Worksite Reference	Description of complaint	Results of investigation
HS2-19-03755-C	S001-WS01	A concern was raised regarding noise and dust associated with the demolition activities being undertaken at Regent's Park and whether this could be linked to health impacts (specifically eye infections) (04/06/2019)	The complainant was contacted by the HS2 stakeholder engagement team where details of the mitigation measures that are being implemented at the site were explained to minimise and control dust within the site boundaries. Monitoring undertaken is to ensure the effectiveness of the mitigation being deployed.
AQComp11	S001-WS01	General complaint about dust and noise. (06/06/2019)	A follow-up email detailing the mitigations that the project is using to minimise its impact of noise and dust, in line with the Code of Construction Practise (CoCP).
HS2-19-04893-C	S001-WS01	A complaint was raised on 10/06/2019 that the dust suppression being employed across demolition works was not proving effective	Additional dust suppression has been deployed at the site. The demolition methodology and dust suppression techniques will continue to be kept under review to ensure that best practical means relating to dust mitigations are in place.

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

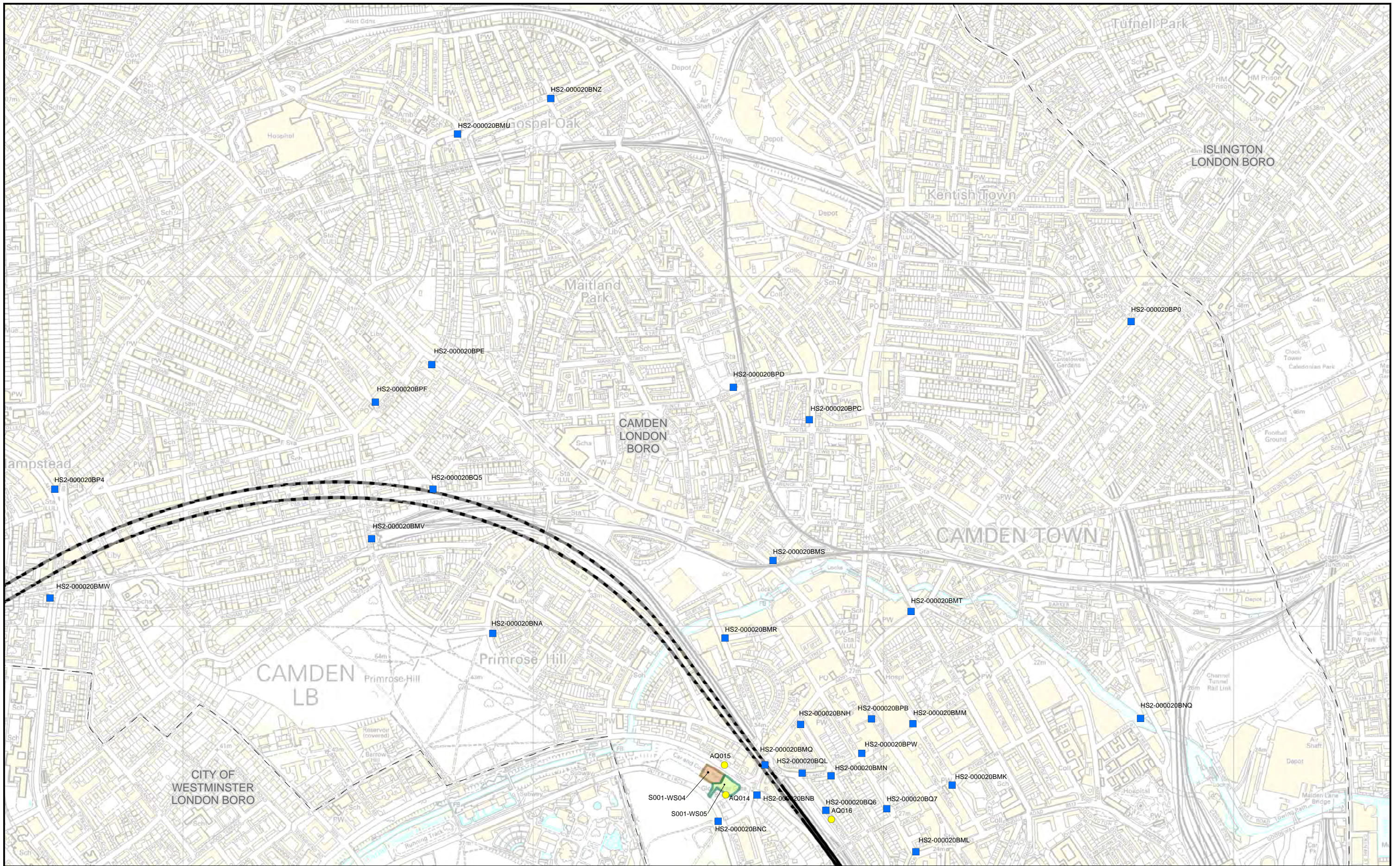
Figure Name
Worksites and Monitoring locations in LBC

London Borough of Camden

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- 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)

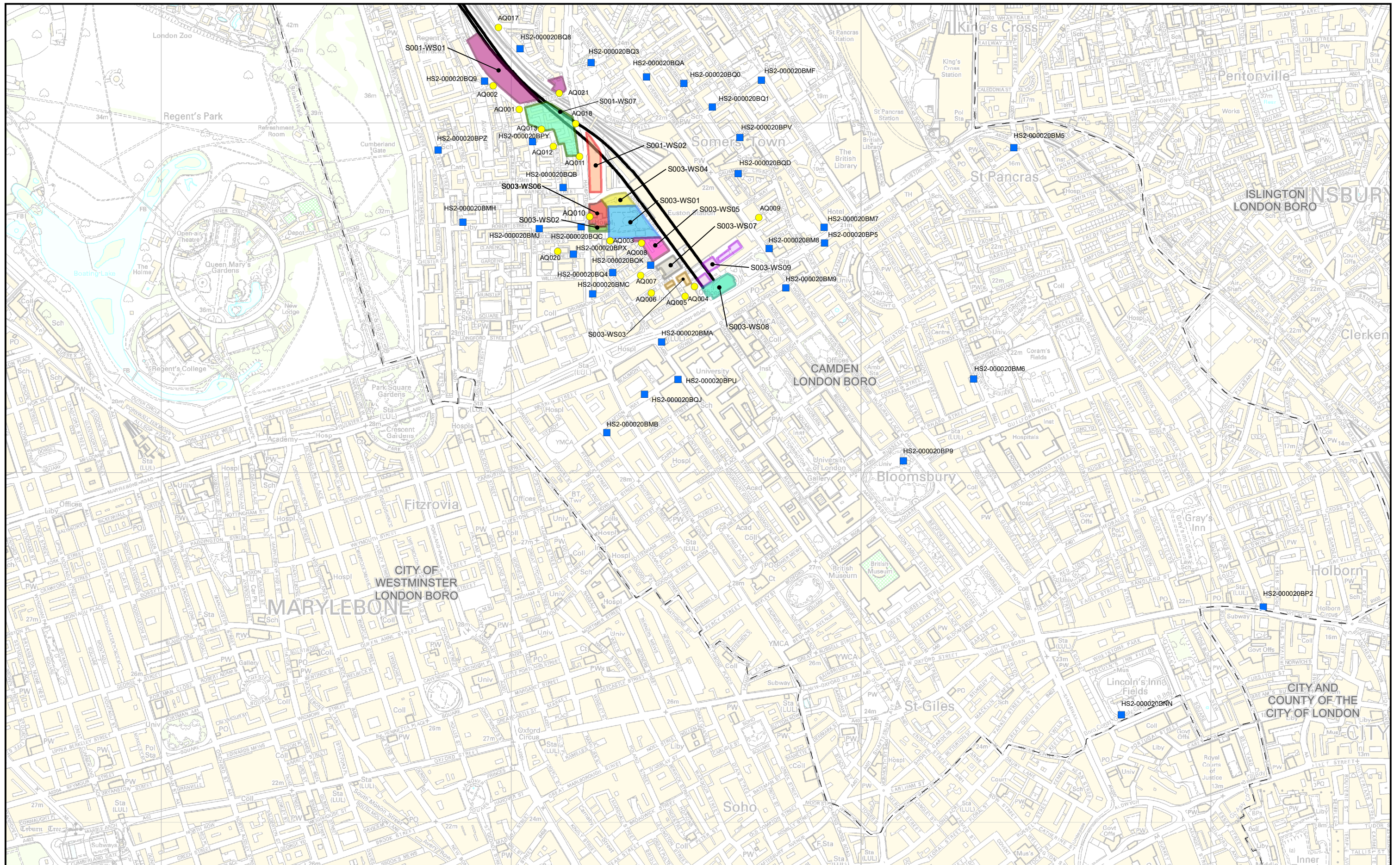
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Legend

- 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 Melton Street and Gran Thorton House, 22 Melton Street
- 132 and 140 Hampstead Road and Petrol Station
- Regents Park Estate

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 June 2019 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	1-hour data capture (%)
AQ001	529022, 183040	Junction of Park Village East, Stanhope Street and Granby Terrace	H	Yes	N	11.0	1.1	249.9	2	99.7
AQ002	528947, 183107	Park Village East	H	Yes	N	9.8	1.2	62.0	0	96.7
AQ003	529282, 182663	St James Gardens	M	Yes	N	12.2	1.9	48.8	0	65.6
AQ004	529523, 182533	Melton Street	H	Yes	N	6.8	1.2	30.3	0	100.0
AQ005	529496, 182505	Stephenson Way	H	Yes	N	30.3	3.0	616.7	1	100.0
AQ006	529399, 182514	Euston Street	H	Yes	N	10.8	1.4	220.8	1	100.0
AQ007	529369, 182564	Drummond Street	H	Yes	N	13.5	2.0	45.5	0	100.0
AQ008	529369, 182648	Cobourg Street	H	Yes	N	15.4	2.9	99.8	0	65.4
AQ009	529707, 182730	Lancing Street	H	Yes	N	14.4	2.2	175.6	0	99.9
AQ010	529223, 182732	Hampstead Road South	H	Yes	N	14.4	3.0	66.1	0	100.0
AQ011	529195, 182904	Hampstead Road	H	Yes	Y	17.7	2.7	150.2	0	96.8
AQ012	529119, 182934	Mackworth Street	H	Yes	Y	9.9	1.3	67.7	0	96.7

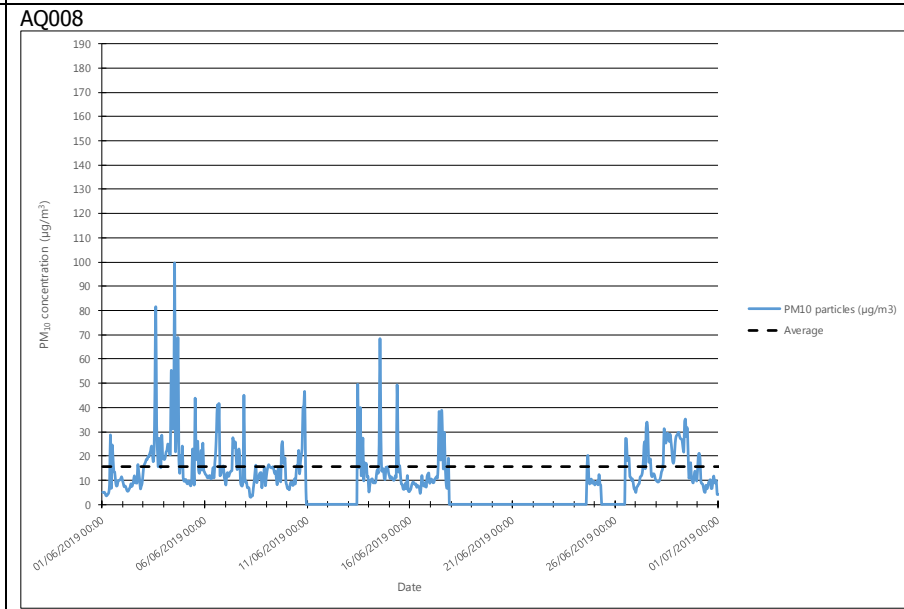
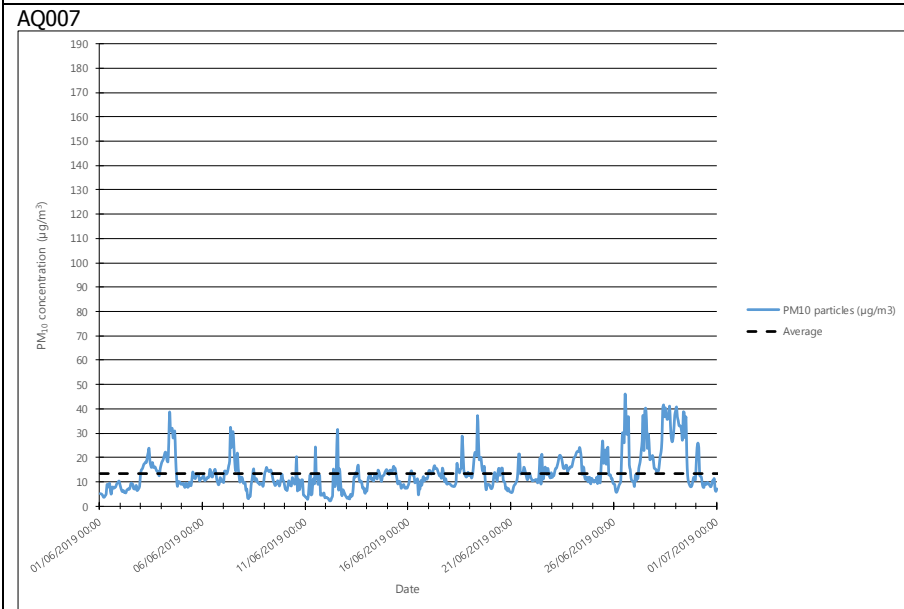
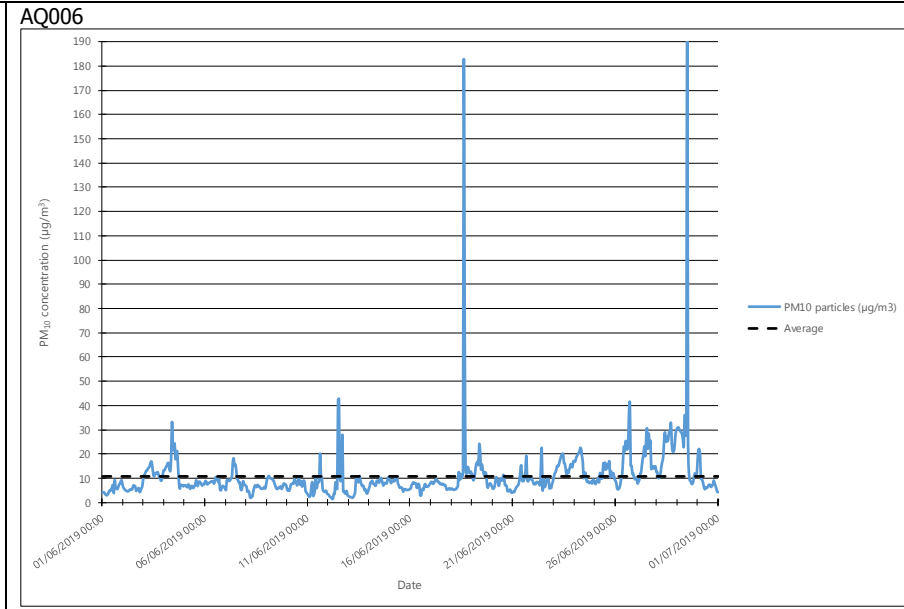
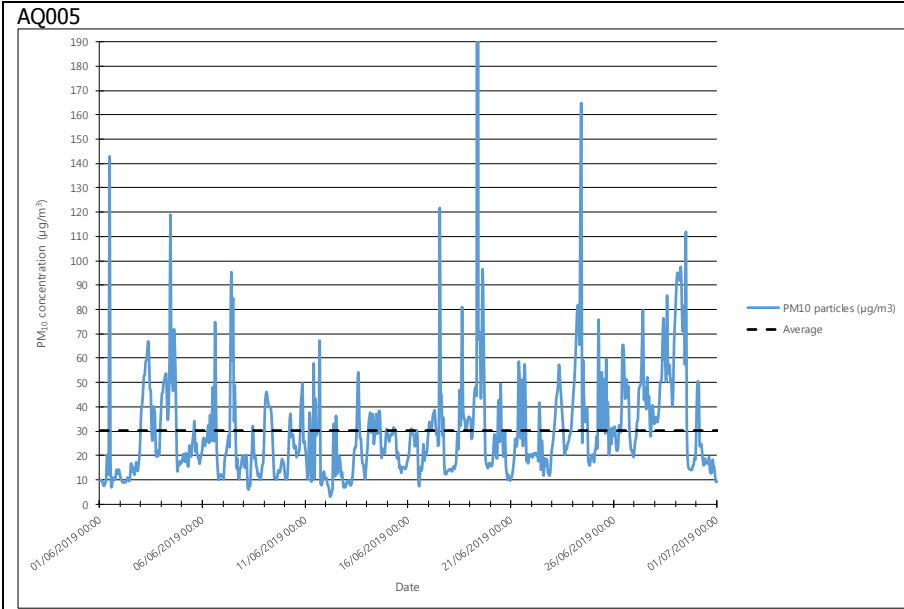
Monitoring site ID	Coordinates (X,Y)	Location description	Dust risk rating for site	Monitoring site active during period	Change to site since previous period report	Mean 1-hour PM ₁₀ concentration (µg/m ³)	Minimum 1-hour PM ₁₀ concentration (µg/m ³)	Maximum 1-hour PM ₁₀ concentration (µg/m ³)	Number of 1- hour periods exceeding trigger level of 190 µg/m ³	1-hour data capture (%)
AQ013	529066, 182990	Regents Park Estate	H	Yes	Y	19.1	4.0	101.1	0	11.5
AQ014	528550, 183518	Thames Water Compound	L	Yes	N	11.4	1.3	80.7	0	83.5
AQ015	528546, 183604	Prince Albert Road	L	Yes	N	15.3	2.2	42.4	0	100.0
AQ016	528851, 183448	Mornington Terrace North	H	Yes	N	6.1	0.9	21.7	0	100.0
AQ017	528963, 183274	Mornington Terrace South	H	Yes	N	6.9	1.0	26.2	0	100.0
AQ018	529184, 182999	Hampstead Road North	H	Yes	Y	14.6	2.8	91.8	0	96.7
AQ020	529132, 182633	Netley School	n/a	Yes	N	10.7	1.9	85.8	0	99.2
AQ021	529127, 183116	Site compound at the Junction of Hampstead Road & Granby Terrace Bridge.	H	Yes	N	10.8	1.8	74.7	0	99.7

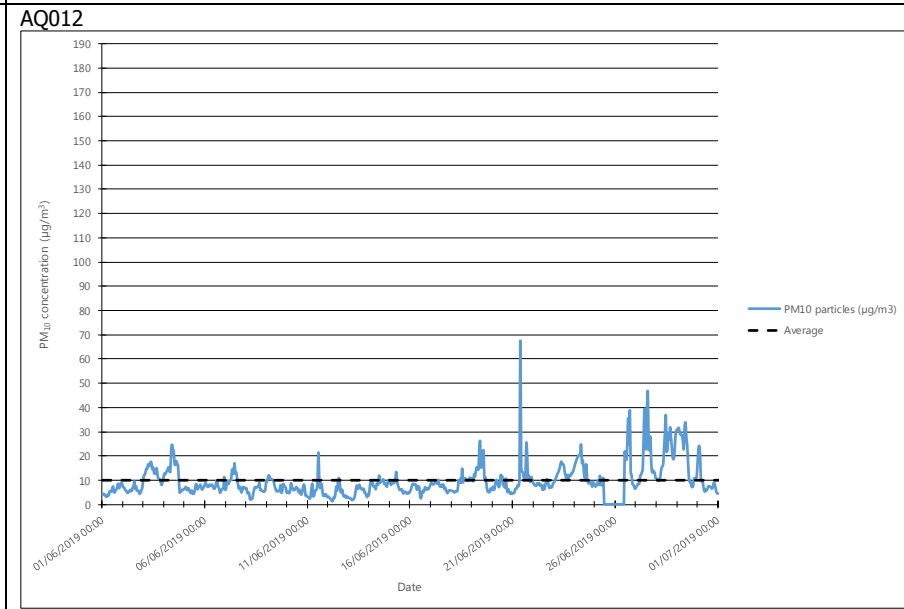
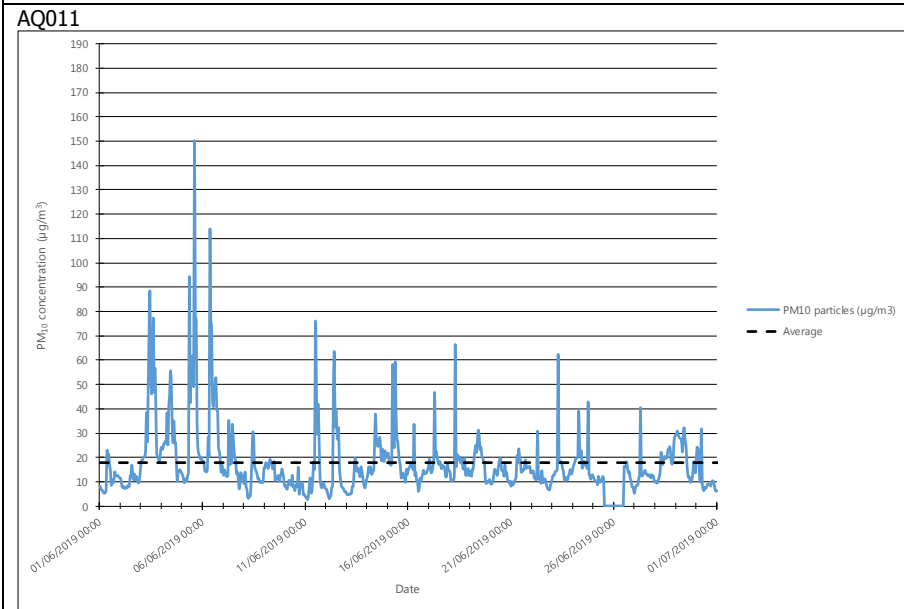
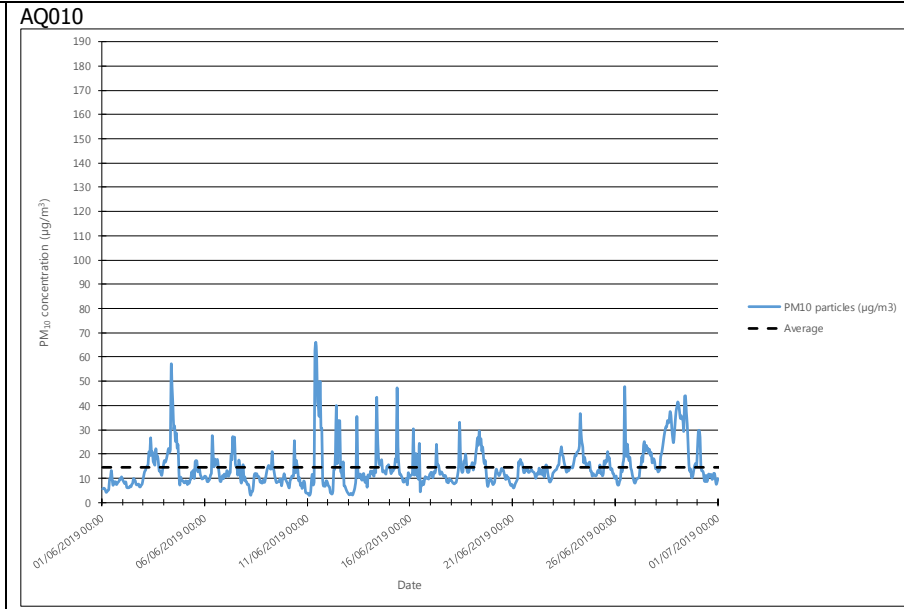
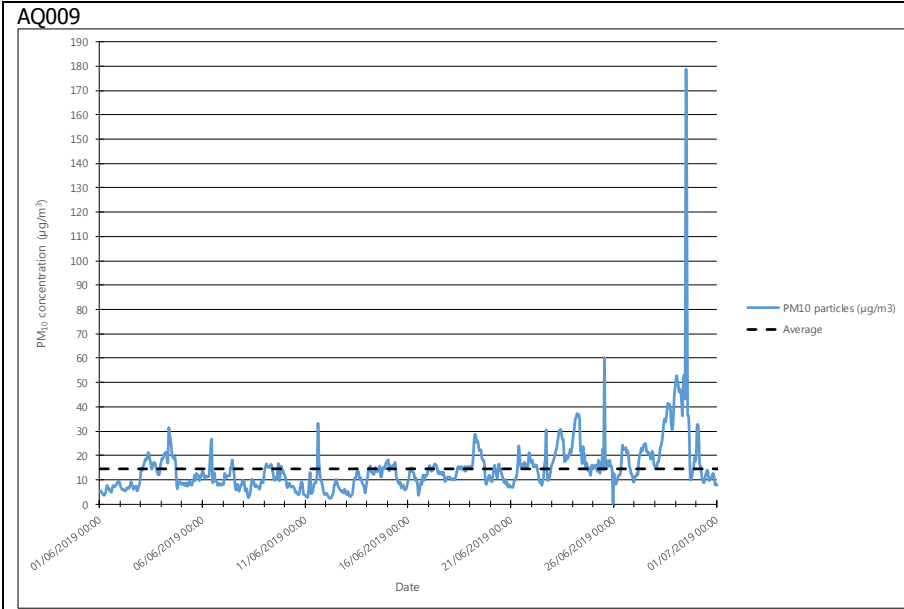
Table 3: Summary of exceedances of trigger level in June 2019

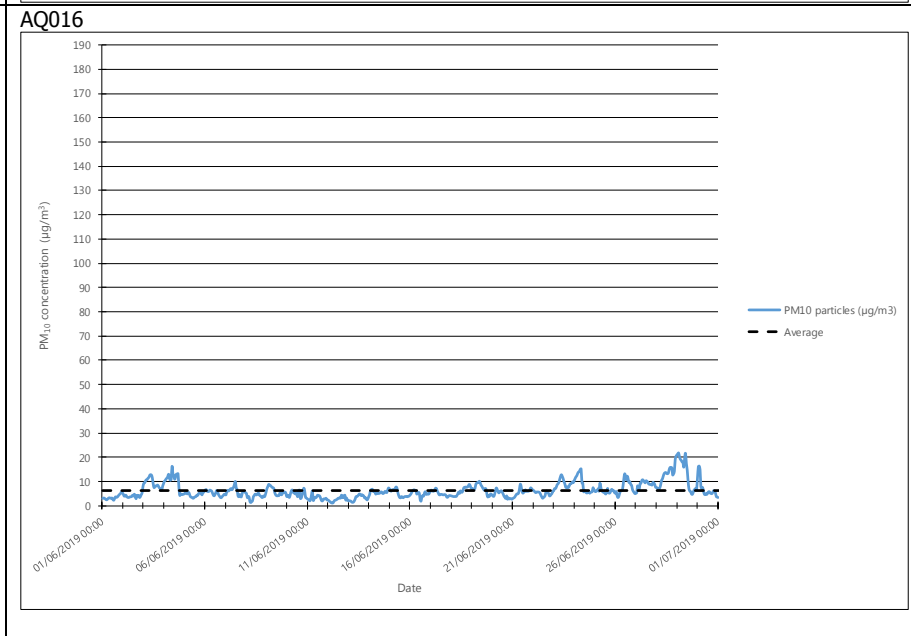
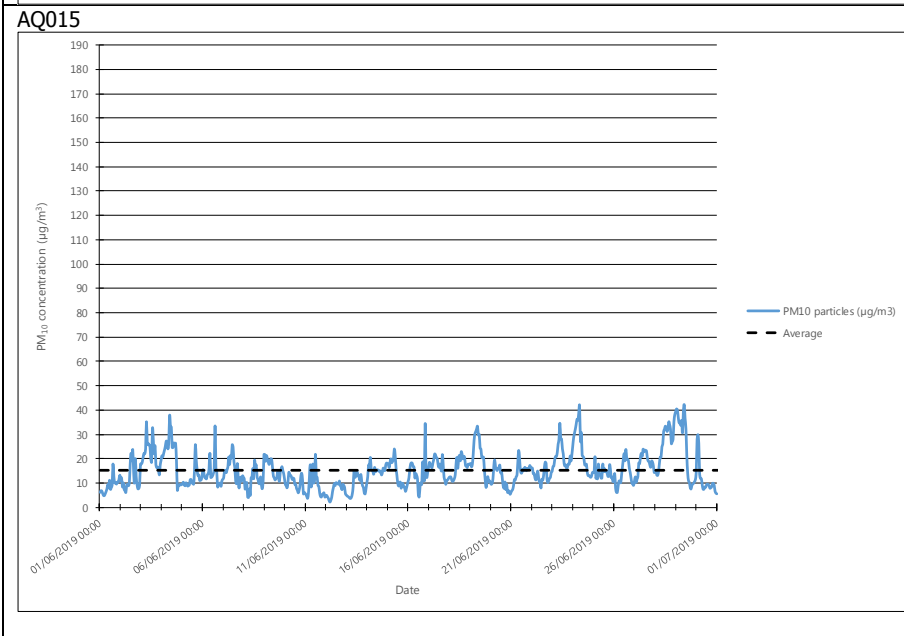
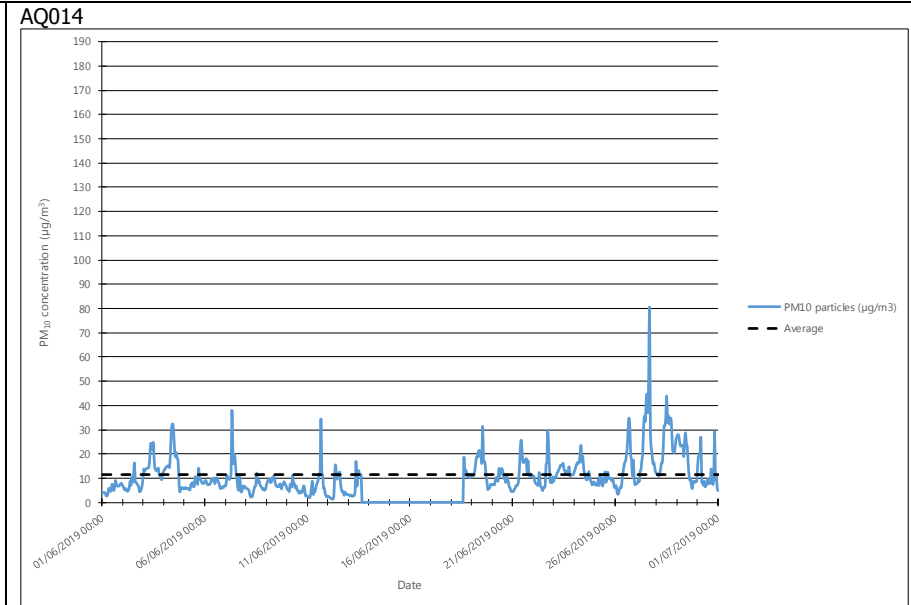
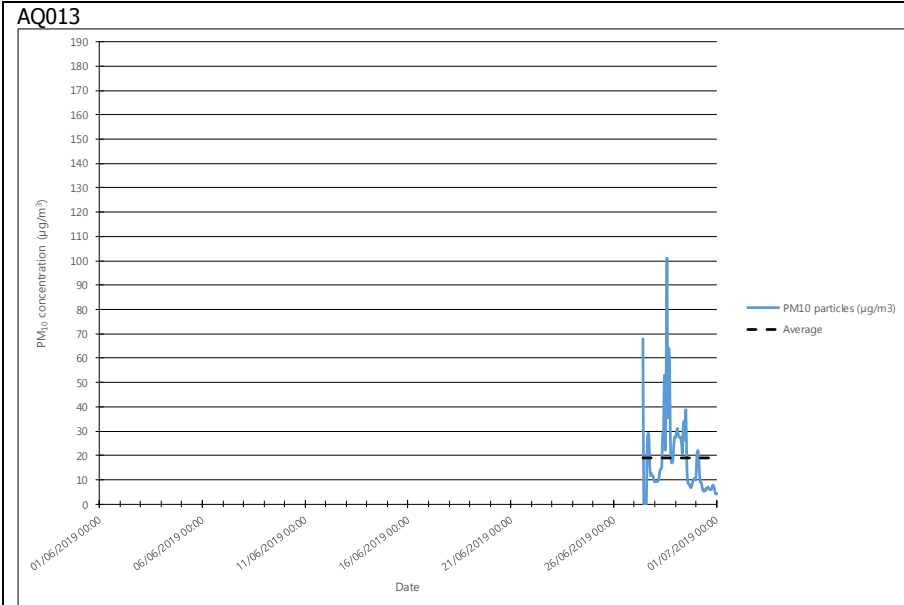
Period exceeding trigger level	Worksite reference	Monitoring site ID	Complaint reference number (if applicable)	Reason	Resolution
29/06/2019 08:01-10:00 (2x triggers)	S001-WS01	AQ001	n/a	The triggers (2) were associated with utility trench works being carried out directly beneath the monitor again.	Dust suppression was employed but due the works being within a couple of metres to the monitor a trigger was difficult to avoid.
19/06/2019 08:01-09:00	S003-WS03	AQ005	n/a	Utilities works unrelated to HS2.	n/a
29/06/2019 11:01-12:00	S003-WS03	AQ006	n/a	Demolition work on Euston/Cobourg Street. Hard demolition works have been underway in this location for several weeks and this is the first trigger caused by these works. The dust suppression has proved effective in the main.	Suppression was being deployed as usual but the activities at that time gave rise to more dust leading to this trigger. The works were stopped and more dust suppression applied before proceeding.

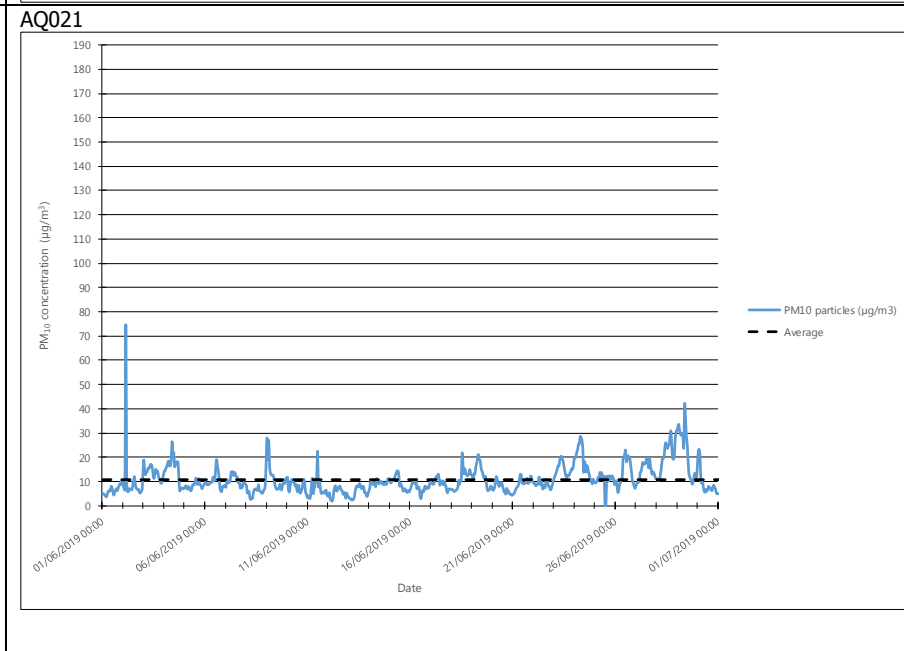
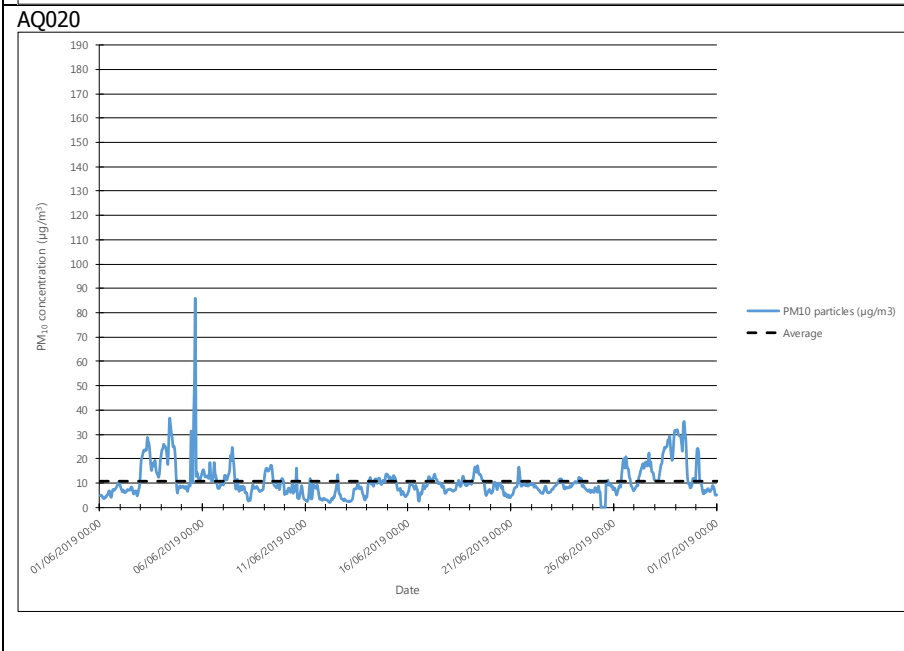
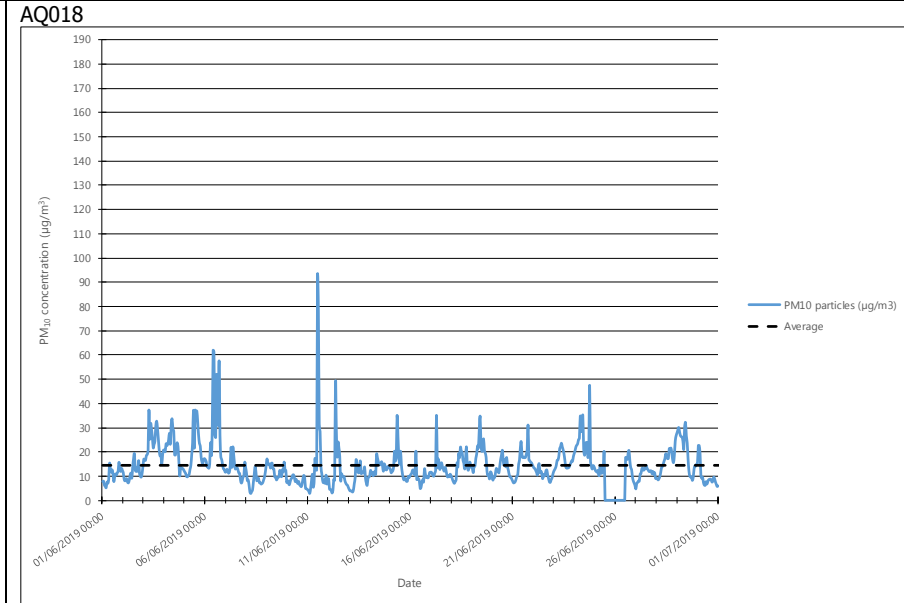
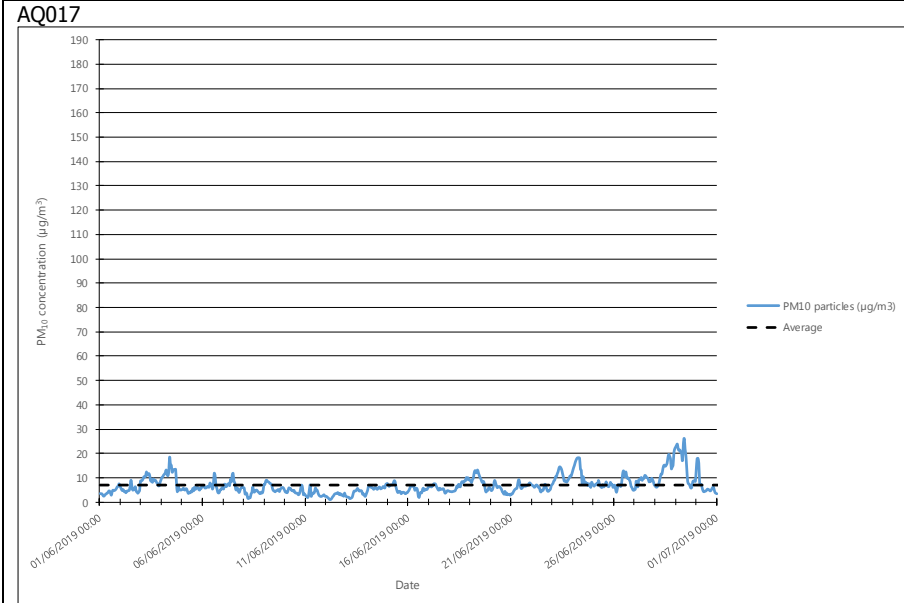
Figure 2: Construction dust 1-hour mean indicative PM₁₀ concentration for dust monitors











Appendix C – Air Quality Monitoring Results

Table 4: NO₂ monitoring locations around highways, NO₂ concentrations and monthly monitoring results with running mean for 2019 (µg/m³)

Monitoring Site ID	Location description	Coordinates (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	58	64	46	53	49								54
HS2-000020BM6	Brunswick Square	530321, 182268	51	63	49	42	35								48
HS2-000020BM7	Chalton Street	529894, 182702	63	83	66	72	Tube missing								71
HS2-000020BM8	Junction of Euston Square and Grafton Place	529737, 182641	63	72	66	75	61								67
HS2-000020BM9	Junction of Endsleigh Gardens and Upper Woburn Place	529785, 182529	47	63	56	59	56								56
HS2-000020BMA	Junction of Euston Road and Gower Street	529429, 182375	51	76	63	56	46								59
HS2-000020BMB	Whitfield Street	529273, 182114	49	58	43	48	33								46
HS2-000020BMC	Hampstead Road	529232, 182511	53	84	71	74	62								69
HS2-000020BMF	Junction of Polygon Road and Ossulston Street	529715, 183123	39	47	Tube missing	40	27								38
HS2-000020BMH	Nash Street	528861, 182717	43	51	35	37	30								39
HS2-000020BMJ	Junction on Robert Street and Stanhope Street	529080, 182698	39	43	37	30	28								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	Coordinates (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	66	68	55	50	39								56
HS2-000020BML	Junction of Arlington Road and Mornington Crescent	529093, 183356	47	44	38	41	26								39
HS2-000020BMM	Junction of Bayham Street and Pratt Street	529084, 183722	52	75	62	47	49								57
HS2-000020BMN	Junction of Delancey Street and Albert Street	528850, 183573	43	53	43	40	36								43
HS2-000020BMQ	Junction of Parkway and Delancey Street	528662, 183604	50	57	43	58	45								51
HS2-000020BMR	Junction of Oval Road and Jamestown Road	528548, 183967	44	49	41	41	30								41
HS2-000020BMS	Junction of Chalk Farm Road and Castlehaven Road	528685, 184188	59	52	50	52	47								52
HS2-000020BMT	Junction of Camden Road and Camden Street	529079, 184043	57	57	55	55	46								54
HS2-000020BMU	Junction of Southampton Road and Fleet Road	527783, 185407	47	51	39	43	28								42
HS2-000020BMV	Primrose Hill Road	527538, 184250	46	45	38	No data	29								39
HS2-000020BMW	Junction of Finchley Road and Hilgrove Road	526619, 184081	61	59	55	60	47								56
HS2-000020BMZ	Junction of Finchley Road and Hendon Way	525102, 186042	87	92	87	90	73								86
HS2-000020BNA	Junction of Regent's Park Road and Rothwell Street	527884, 183980	45	48	30	27	25								35
HS2-000020BNB	Junction of Gloucester Gate Bridge and Park Village East	528639, 183518	53	45	41	37	Tube missing								44

Monitoring Site ID	Location description	Coordinates (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	35	36	24	33	21								30
HS2-000020BNH	Junction of Parkway and Albert Street	528763, 183720	43	53	37	41	30								41
HS2-000020BNN	Lincoln's Inn Fields	530744, 181308	50	Tube missing	Tube missing	35	29								38
HS2-000020BNQ	Camley Street	529735, 183737	50	49	Tube missing	Tube missing	19								39
HS2-000020BNY	Junction of Mill Lane and Hillfield Road	524839, 185136	53	50	44	38	34								44
HS2-000020BNZ	Mansfield Road	528050, 185508	24	44	34	30	Tube missing								33
HS2-000020BP0	Junction of Camden Road and Torriano Avenue	529708, 184871	52	70	56	54	46								56
HS2-000020BP2	Junction of Grays Inn Road and Holborn	531149, 181616	65	52	49	48	43								51
HS2-000020BPB	Camden High Street	528966, 183735	65	81	75	58	63								68
HS2-000020BPC	Castlehaven Road	528788, 184591	45	47	40	33	31								39
HS2-000020BPD	Prince of Wales Road	528571, 184683	35	43	37	28	28								34
HS2-000020BPE	Haverstock Hill	527710, 184749	54	62	53	37	Tube missing								51
HS2-000020BPF	Junction of Primrose Gardens and England's Lane	527549, 184640	44	52	41	35	32								41
HS2-000020BPU	Junction of Gower Street and Grafton Way	529476, 182267	54	60	56	50	Tube missing								55

Monitoring Site ID	Location description	Coordinates (X, Y)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean ¹
HS2-000020BPW	Junction of Delancey Street and Arlington Road	528939, 183637	48	51	44	44	40								45
HS2-000020BPX	Netley Street	529177, 182625	43	50	40	48	32								43
HS2-000020BPY	Stanhope Street	529060, 182947	34	46	32	36	24								34
HS2-000020BPZ	Albany Street	528790, 182923	44	57	42	43	34								44
HS2-000020BQ0	Werrington Street	529493, 183113	43	Tube missing	39	39	26								37
HS2-000020BQ1	Polygon Road	529574, 183045	41	46	37	34	Tube missing								39
HS2-000020BQ2	Alexandra Place	526320, 183980	42	Tube missing	30	39	25								34
HS2-000020BQ3	Harrington Square	529228, 183172	46	60	45	48	40								48
HS2-000020BQ4	Junction of North Gower Street and Starcross Street	529290, 182572	51	54	41	44	23								43
HS2-000020BQ5	Adelaide Road	527713, 184392	50	54	43	41	32								44
HS2-000020BQ6	Mornington Terrace	528836, 183474	45	46	35	34	28								38
HS2-000020BQ7	Arlington Road	529009, 183479	43	40	37	33	28								36
HS2-000020BQ8	Clarkson Row	529024, 183213	42	45	34	36	26								36
HS2-000020BQ9	Park Village East	528923, 183121	40	44	Tube missing	Tube missing	24								36
HS2-000020BQA	Eversholt Street	529386, 183132	57	67	56	49	46								55
HS2-000020BQB	Junction of Harrington Street and Vardell Street	529147, 182816	42	43	32	40	26								37

Monitoring Site ID	Location description	Coordinates (X, Y)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean ¹
HS2-000020BQC	Junction of Robert Street and Hampstead Road	529199, 182704	49	48	42	56	33								46
HS2-000020BQD	Drummond Crescent	529648, 182856	50	51	45	44	33								44
HS2-000020BQJ	Grafton Way	529380, 182225	64	70	59	56	51								60
HS2-000020BQL	Delancey Street	528768, 183581	58	57	47	51	45								52
HS2-000020BQR	Lamp post on Park Village East	528682, 183505	46	42	36	34	26								37
HS2-000020BQS	Opposite Maria fidelis school on Pheonix Road	529670, 182982	43	43	37	41	Tube missing								41
HS2-000020BQT	Drummond Street	529385, 182581	52	51	43	47	31								45
HS2-000020BP4	Triplicate site on Finchley Road next to Swiss Cottage kerbside automatic monitoring station	526633, 184392	64	Tubes missing	Tubes missing	Tubes missing	46								55
HS2-000020BP5	Triplicate site next to the Euston Road roadside automatic monitoring stations	529895, 182657	Tubes missing	81	69	78	63								73
HS2-000020BP9	Triplicate site in Russell Square next to Bloomsbury urban background automatic monitoring station	530120, 182034	55	47	38	38	36								43