

Air Quality and Dust Monitoring Monthly Report – October 2019

**London Borough of Hammersmith and
Fulham**



SKANSKA



Department for Transport

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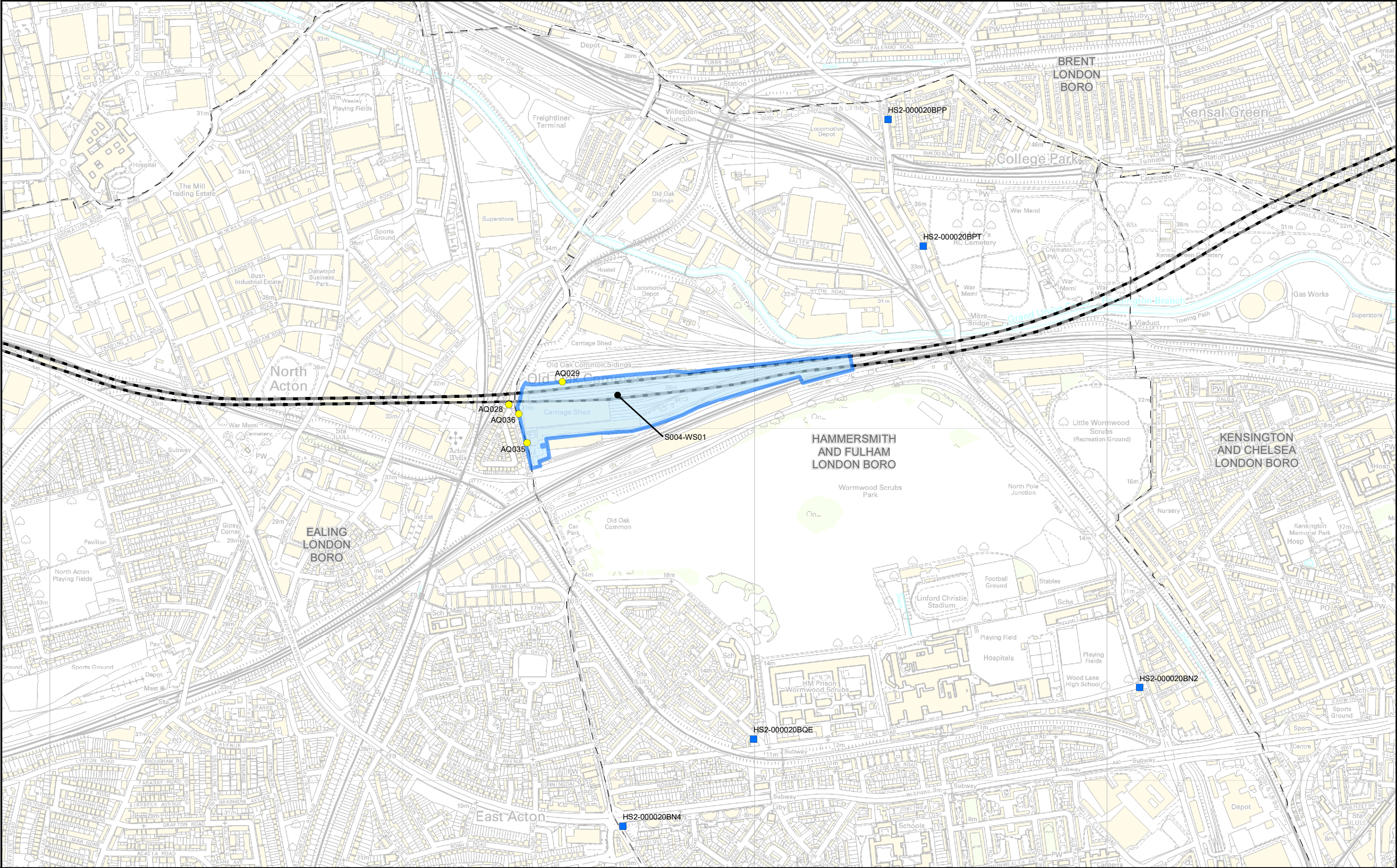
Monthly Summary


- 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 Hammersmith and Fulham (LBHF) during September 2019 and October 2019 respectively.
- 1.1.2 Figure 1 and Figure 2 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 LBHF during May 2018 and are expected to be completed by December 2019. The current worksite, as presented in Appendix A, Figure 1, includes:
- Demolition and groundworks at Old Oak Common Depot, worksite ref. S004-WS01.
- 1.1.5 Four (4) dust monitors were installed around the worksite, where demolition works are underway. This site returned a high dust risk rating.
- 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 3. 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 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 were five (5) dust trigger alerts recorded during this monitoring period (October 2019). Dust trigger alerts are presented in Appendix B, Table 2. All other results were in line with expected ranges.
- 1.1.9 Diffusion tube monitoring of Nitrogen Dioxide (NO₂) was undertaken at seven (7) locations in September 2019, around highways within the LBHF as part of the management of air quality where significant effects may occur as a result of the scheme.

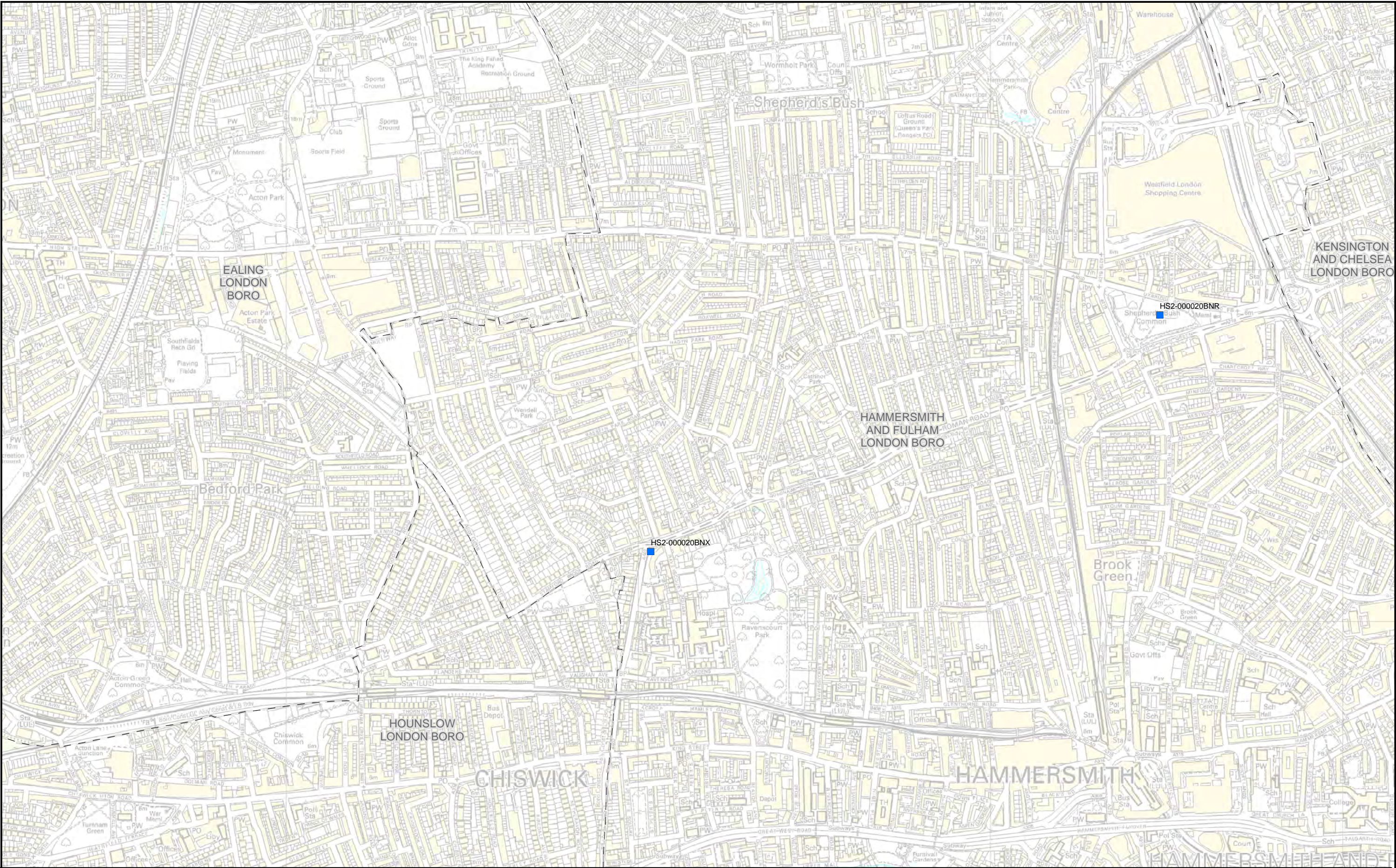
- 1.1.10 Diffusion tube monitoring results are provided from the laboratory analysis, and therefore still require various analysis and adjustments to be undertaken. Final corrected results will be presented and described in the annual report. However, based on the results to date, no unexpected values were recorded during the monitoring period.
- 1.1.11 NO₂ monitoring locations and results are presented in Appendix C, Table 3, together with the 2019 running mean.
- 1.1.12 There were no (0) complaints received, relating to dust or air quality, during this monitoring period (October 2019).

Appendix A – Worksites and Monitoring Locations

Figure 1 and 2: Worksites and monitoring locations within the LBHF



Legend <ul style="list-style-type: none">Route in tunnelRoute on surfaceDust monitoring locationDiffusion tube monitoring locationOld Oak Common worksite	Figure Number Figure Name Worksites and Monitoring locations in LBHF (sheet 1) London Borough of Hammersmith and Fulham	<div><div>HS2 Ltd accept no responsibility for any circumstances, which arise from the reproduction of this map after alteration, amendment or abbreviation or if it is issued in part or issued incomplete in any way.</div></div> <div><div>Scale at A3: 10,000</div><div><div>0 100 200 300 400 Metres</div></div><div><div>© Crown copyright and database rights 2016. Ordnance Survey Licence Number 100049190. Map Number: 1EW02-CSJ-EV-REP-S000-000017_appA_fig1.pdf</div><div>Date: 12/07/19</div></div></div>
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Legend

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

Figure Number

Figure Name

Worksites and Monitoring locations in LBHF (sheet 2)

London Borough of Hammersmith and Fulham

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Map Number: 1EW02-CSJ-EV-REP-S000-000017_appA_fig1.pdf **Date: 13/07/18**

Appendix B – Dust Monitoring Results

Table 1: Dust monitoring locations and October 2019 Results

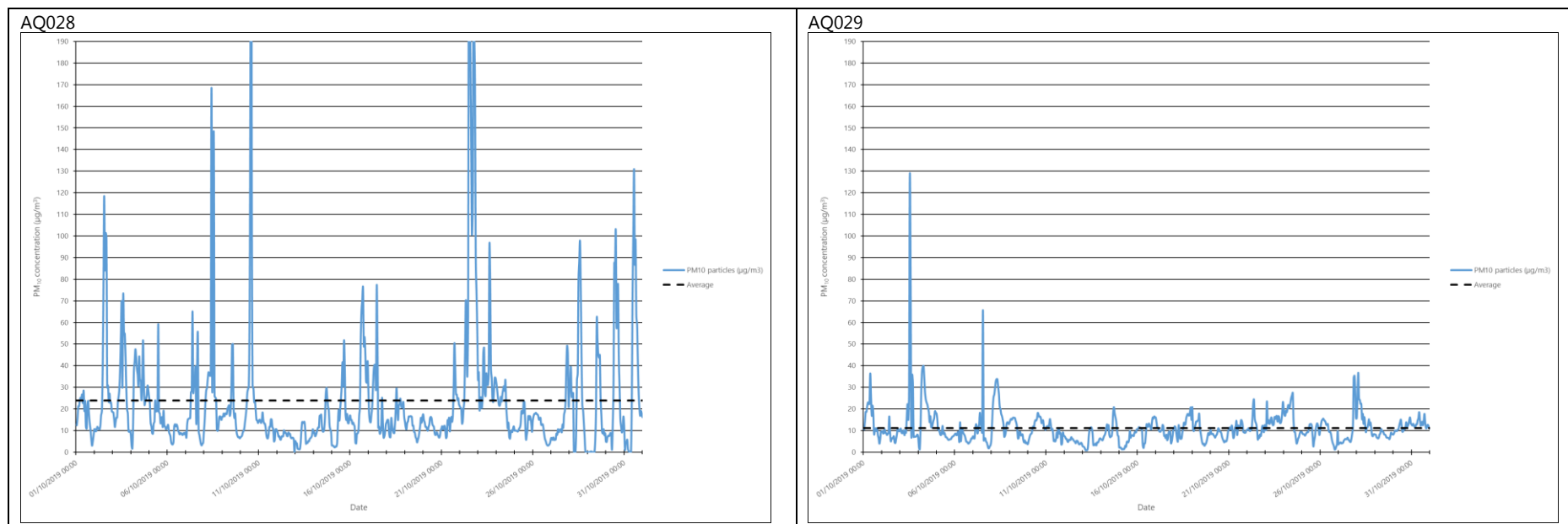
Monitoring site ID	Coordinates (X,Y)	Location description	Dust risk rating for site	Monitoring site active during period	Change to site since previous period report	Mean 1-hour PM ₁₀ concentration (µg/m ³)	Minimum 1-hour PM ₁₀ concentration (µg/m ³)	Maximum 1-hour PM ₁₀ concentration (µg/m ³)	Number of 1-hour periods exceeding trigger level of 190 µg/m ³	Data capture (%)
AQ028	521302, 182067	Wells House Road	H	Yes	N	24.0	0.3	364.3	5	97.7
AQ029	521451, 182148	Old Oak Common	H	Yes	N	11.1	0.8	127.3	0	100.0
AQ035	21354, 181954	Old Oak Common	H	Yes	N	12.3	1.3	49.6	0	99.6
AQ036	521331, 182061	Old Oak Common	H	Yes	N	11.7	1.1	41.0	0	100.0

Table 2: Summary of exceedances of trigger level in October 2019

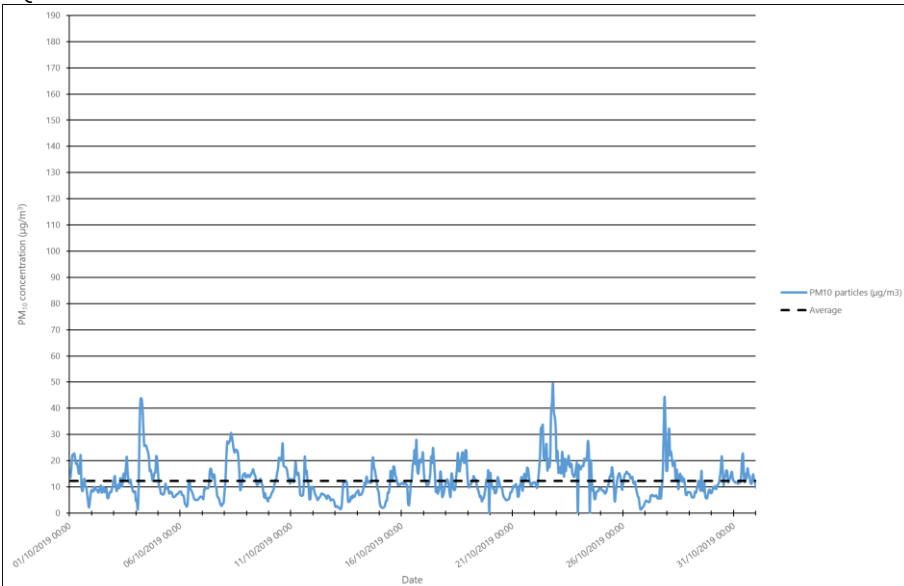
Period exceeding trigger level	Worksite reference	Monitoring site ID	Complaint reference number (if applicable)	Reason	Resolution
10/10/2019 13:01 – 14:00	S004-WS01	AQ028	n/a	<p>The alert was investigated by the site team and it was considered the trigger was not associated with HS2 works as all necessary dust suppression measures were being employed as they have throughout the works.</p> <p>The other three (3) boundary monitors which are closer to the works showed no increased levels over this same period.</p> <p>There were road works being carried out directly beneath the monitor (not HS2 related) – which appear to be new traffic calming measures being installed. It is considered this was the cause of the alert.</p>	n/a
22/10/2019 11:01 – 13:00 (x2 alerts)	S004-WS01	AQ028	n/a	<p>It was considered the triggers were due to dust on the road from dried out mud tracked-out from the HS2 Old Oak Common Depot site. The site usually deployed a road sweeper each day, throughout the day, which drove a circuit from the site, up Old Oak Common Lane to the junction with Victoria Road and back. The driver on the day called in sick and a replacement didn't arrive until late afternoon.</p>	<p>The road sweeper will continue its daily circuit. This includes internal road hardstanding on egress from the site</p> <p>The site wheel wash was cleaned out the following day as it is every two (2) months. This service period will be regularly kept under review during the autumn and winter months to ensure the wheel wash continues to be effective.</p> <p>A team of operatives was deployed to sweep the pavements/crossings etc along Old Oak Common Lane and will be deployed</p>
22/10/2019 17:01 – 19:00 (x2 alerts)	S004-WS01	AQ028	n/a		

					every two (2) to three (3) weeks thereafter. Gullies along Old Oak Common Lane will be checked and flushed where required. Continued implementation of HS2 CoCP road cleanliness measures.
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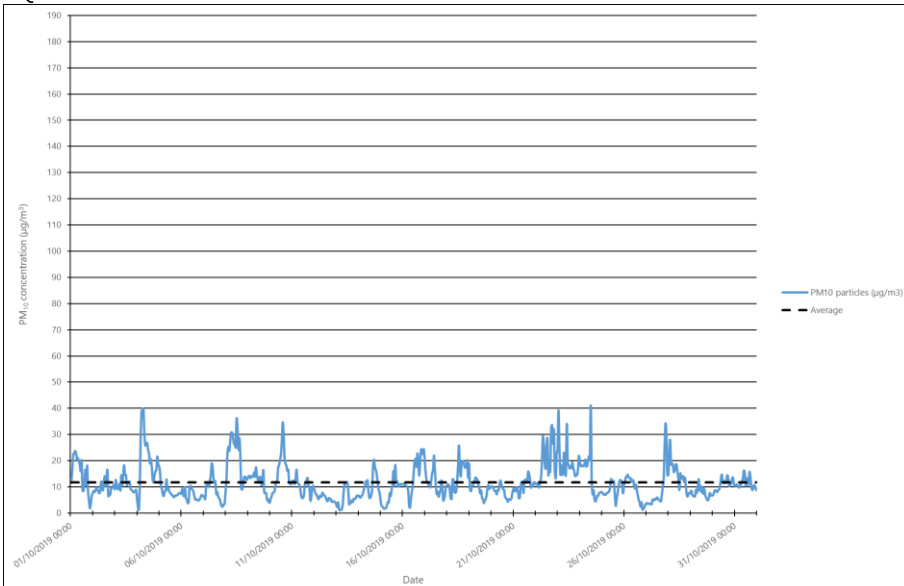
Figure 3: Construction dust 1-hour mean indicative PM₁₀ concentration for dust monitors



AQ035



AQ036



Appendix C – Air Quality Monitoring Results

Table 3: 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
HS2-000020BN2	Lamp post on Du Cane Road	523092, 181264	53	61	52	41	39	47	40	48	48				48
HS2-000020BN4	End of cycle lane sign on Old Oak Road	521625, 180871	52	56	47	58	43	43	40	39	46				47
HS2-000020BNR	Lamp posts in Shepherd's Bush Common	523481, 179871	52	50	42	43	33	35	31	37	38				40
HS2-000020BNX	Signpost on A402 Goldhawk Road	522035, 179199	48	45	36	42	31	39	Tube missing	36	47				40
HS2-000020BPP	Sign post on A219 Scrubs Lane, South of Harrow Road	522378, 182877	60	64	46	44	41	43	45	49	54				50
HS2-000020BPT	Controlled Zone/Zone Ends road sign on A219 Scrubs Lane, north of Hythe Road	522478, 182517	49	65	53	55	42	44	44	44	47				49
HS2-000020BQE	Lamp post next to No 11 Wulfstan Street	521996, 181118	No data	43	32	35	28	29	28	31	32				32

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.