London Borough of Camden Air Quality Annual Status Report for 2023

Date of publication: 30th August 2024

This report provides a detailed overview of air quality in London Borough of Camden during 2023. It has been produced to meet the requirements of the London Local Air Quality Management (LLAQM) statutory process[1].

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[1] LLAQM Policy and Technical Guidance 2019 (LLAQM.TG(19))

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Abbreviations

Abbreviation	Description
AQAP	Air Quality Action Plan
AQMA	Air Quality Management Area
AQN	Air Quality Neutral
AQO	Air Quality Objective
AQP	Air Quality Positive
BEB	Buildings Emission Benchmark
CAB	Cleaner Air Borough
EV	Electric Vehicle
GLA	Greater London Authority
LAEI	London Atmospheric Emissions Inventory
LAQM	Local Air Quality Management
LLAQM	London Local Air Quality Management
NRMM	Non-Road Mobile Machinery
PM_{10}	Particulate matter less than 10 micron in diameter
$PM_{2.5}$	Particulate matter less than 2.5 micron in diameter
TEB	Transport Emissions Benchmark
TfL	Transport for London

Table A. Summary of National Air Quality and International Standards, Objectives and Guidelines

Pollutant	Standard / Objective / Guideline	Averaging Period	Date[1]
Nitrogen dioxide (NO_2)	200 µg m^{-3} not to be exceeded more than 18 times a year	1-hour mean	31 Dec 2005
Nitrogen dioxide (NO_2)	40 µg m^{-3}	Annual mean	31 Dec 2005
Nitrogen dioxide (NO_2)	WHO AQG[2]: 10 µg m^{-3}	Annual mean	
Particles (PM_{10})	50 µg m^{-3} not to be exceeded more than 35 times a year	24-hour mean	31 Dec 2004
Particles (PM_{10})	WHO AQG[2]: 45 µg m^{-3} not to be exceeded more than 3-4 times a year	24-hour mean	
Particles (PM_{10})	40 µg m^{-3}	Annual mean	31 Dec 2004
Particles (PM_{10})	WHO AQG[2]: 15 µg m^{-3}	Annual mean	
Particles ($PM_{2.5}$)	20 µg m^{-3}	Annual mean	2020
Particles ($PM_{2.5}$)	London Mayoral Objective[3]: 10 µg m^{-3}	Annual mean	2030
Particles ($PM_{2.5}$)	WHO AQG[2]: 5 µg m^{-3}	Annual mean	
Particles ($PM_{2.5}$)	Target of 15% reduction in concentration at urban background locations	3-year mean	Between 2010 and 2021
Particles ($PM_{2.5}$)	WHO AQG[2]: 5 µg m^{-3}	24-hour mean	
Sulphur dioxide (SO_2)	266 µg m^{-3} not to be exceeded more than 35 times a year	15-minute mean	31 Dec 2005
Sulphur dioxide (SO_2)	350 µg m^{-3} not to be exceeded more than 24 times a year	1-hour mean	31 Dec 2004
Sulphur dioxide (SO_2)	125 µg m^{-3} mot to be exceeded more than 3 times a year	24-hour mean	31 Dec 2004
Sulphur dioxide (SO_2)	WHO AQG[2]: 40 µg m^{-3} not to be exceeded more than 3-4 times a year	24-hour mean	

Notes:

(1) Date by which to be achieved by and maintained thereafter

(2) 2021 World Health Organisation Air Quality Guidelines

(3) London Mayoral Objective

1. Air Quality Monitoring

1.1 Locations

Table B. Details of Automatic Monitoring Sites for 2023

Site ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA? Which AQMA?	Monitoring Technique	Distance to Relevant Exposure (m) [1]	Distance to kerb of nearest road (m) [2]	Inlet Height (m)
BL0	London Bloomsbury (Russell Square Gardens)	Urban Background	530123	182014	NO_2 PM_{10} $PM_{2.5}$ SO_2 O_3	Y	TEOM-FDMS, API NOx	4	40	4
CD1	Swiss Cottage (Finchley Road)	Kerbside	526629	184391	NO_2 PM_{10} $PM_{2.5}$	Y	BAM PM_{10}, BAM $PM_{2.5}$, T200 NOx	3	7	3
CD9	Euston Road	Roadside	529878	182648	NO_2 PM_{10} $PM_{2.5}$	Y	TEOM-FDMS, API NOx	2.5	1	2.5
KGX	Coopers Lane	Urban Background/ Industrial*	529831	183250	PM_{10} $PM_{2.5}$	Y	TEOM-FDMS	2.5	8	2.5
CD010	Camden High Street	Roadside	528832	183995	NO_2	Y	Teledyne API M200A NOx	2.5	1	2.5

Notes:

(1) 0m if the monitoring site is at a location of exposure (e.g. installed on the façade of a residential property).

(2) N/A if not applicable

- 'Kerbside' refers to sites with sample inlets within 1m of the kerb of a busy road. Sampling heights are within 2-3m of the ground.
- 'Roadside' refers to sites with sample inlets between 1m and 5m of the kerbside. Sampling heights are within 2-3m of the ground.
- 'Urban background' locations away from major sources and broadly representative of town/city-wide background concentrations, e.g., urban residential areas.[2]

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[2] https://www.londonair.org.uk/london/asp/classification.asp?region=13&site=SK2&details=general&mapview=all&la_id=&network=All&MapType=Static

Table C. Details of Non-Automatic Monitoring Sites for 2023

Site ID	Site Name	X (m)	Y (m)	Site Type	In AQMA? If so, which AQMA?	Distance to Relevant Exposure (m)	Distance to Kerb of Nearest Road (N/A if not applicable) (m)	Inlet height (m)	Pollutants monitored	Tube co-located with an automatic monitor. (Y/N)
CAM70	Euston Road	530093	182792	Kerbside	Y	1	0.5	2.2	NO$_2$	N
CAM71	Euston Road LAQN colocation	529907	182670	Roadside	Y	1	0.5	2	NO$_2$	Y
CAM72	St. George's Gardens (prev. 'Wakefield Gardens')	530430	182430	Urban Background	Y	18	30	1.8	NO$_2$	N
CAM73	St. George's Gardens East	530512	182511	Urban Background	Y	10	29	1.5	NO$_2$	N
CAM75	Frognal Way	526213	185519	Urban Background	Y	6	30	3	NO$_2$	N
CAM79	Tavistock Gardens	529880	182334	Urban Background	Y	35	25	2.5	NO$_2$	N
CAM81	Tottenham Court Road*	529568	181728	Kerbside	Y	4	<1	3.5	NO$_2$	N
CAM77	Swiss Cottage	526633	184392	Kerbside	Y	7	<1	2.5	NO$_2$	Y
CAM74	Kentish Town Road	529013	185102	Roadside	Y	1	1	2.5	NO$_2$	N
CAM76	47 Fitzjohn's Road	526547	185125	Roadside	Y	5	5	2	NO$_2$	N
CAM78	Brill Place	529904	183138	Roadside	Y	12	0.5	2.5	NO$_2$	N
CAM86	Bloomsbury Street	529962	181620	Kerbside	Y	4	<1	2.2	NO$_2$	N
CAM84	Camden Road	529173	184129	Kerbside	Y	5	<1	2.2	NO$_2$	N
CAM85	Chetwynd Road	528722	185950	Roadside	Y	2	1	2.5	NO$_2$	N
CAM82	Emmanuel Primary School	525362	185255	Roadside	Y	3	2	2	NO$_2$	N
CAM83	Witanhurst Lane	528213	187203	Roadside	Y	3	1.5	2.2	NO$_2$	N
CAM80	Endsleigh Gardens	529689	182470	Roadside	Y	6	0.5	2	NO$_2$	N
CAM87	Dartmouth Park Hill	529118	185913	Roadside	Y	10	0.5	2.5	NO$_2$	N
CAM88	Acland Burghley School (Burghley Road)	529099	185881	Roadside	Y	1	7	2.2	NO$_2$	N
CAM89	Oakford Road	529060	185848	Roadside	Y	8	1	2.5	NO$_2$	N
CAM121	Haverstock School (Haverstock Hill)	528081	184490	Roadside	Y	4	0.5	2.2	NO$_2$	N
CAM122	Harmood Street	528558	184331	Roadside	Y	7	1	2.2	NO$_2$	N
CAM123	Hartland Road	528619	184315	Roadside	Y	3	1	2.2	NO$_2$	N
CAM124	Hawley Primary School (Hawley Road)	528881	184287	Roadside	Y	1	6	2.2	NO$_2$	N

CAM125	Kentish Town Road	528935	184053	Roadside	Y	5	0.5	2.2	NO$_2$	N
CAM126	Hawley Crescent	528898	184094	Roadside	Y	4	0.5	2.2	NO$_2$	N
CAM127	Jamestown Road	528704	184011	Roadside	Y	5	0.5	2.2	NO$_2$	N
CAM128	Camden High Street (Bridge)	528722	184127	Roadside	Y	6	2	2.5	NO$_2$	N
CAM129	Camden High Street (Camden News)	528845	183970	Roadside	Y	5	2	2.2	NO$_2$	N
CAM130	Camden High Street (American Candy)	528884	183901	Roadside	Y	6	1	2.2	NO$_2$	N
CAM131	Britannia Junction	528915	183870	Kerbside	Y	15	0.5	2.5	NO$_2$	N
CAM132	Cavendish School (Arlington Road)	528770	183887	Roadside	Y	3	2	2.5	NO$_2$	N
CAM133	Holy Trinity & St. Silas School (Hartland Road)	528715	184456	Roadside	Y	3	1.5	2.5	NO$_2$	N
CAM133	Holy Trinity & St. Silas School (Hartland Road)	528715	184456	Roadside	Y	3	1.5	2.5	NO$_2$	N
CAM1	Schools AQ 1 - Lady Somerset Road	529030	185687	Roadside	Y	7.5	1	2.5	NO$_2$	N
CAM2	Schools AQ 2 - New End/Streatley Place	526518	185938	Roadside	Y	5.5	0.5	2.5	NO$_2$	N
CAM3	Schools AQ 3 - New End T-Junction	526518	185989	Roadside	Y	3	<0.5	2.5	NO$_2$	N
CAM4	Schools AQ 4 - Savernake Road (Gospel Oak Primary School)	528159	185641	Roadside	Y	5	0.5	2.5	NO$_2$	N
CAM5	Schools AQ 5 - Rona Road	528098	185597	Roadside	Y	7.5	0.5	2.5	NO$_2$	N
CAM6	Schools AQ 6 - South Hampstead High School Junior School	526345	184876	Roadside	Y	10	0.5	2.5	NO$_2$	N
CAM7	Schools AQ 7 - Devonshire House Preparatory School	526479	185411	Roadside	Y	14	0.5	2.5	NO$_2$	N
CAM8	Schools AQ 8 - University College School Senior School	526226	185337	Roadside	Y	10	0.5	2.5	NO$_2$	N

CAM9	Schools AQ 9 - Christchurch Primary School	526499	186122	Roadside	Y	24	9.5	2.5	NO_2	N
CAM10	Schools AQ 10 - Princess Road (Primrose Hill School)	528302	183932	Roadside	Y	10	0.5	2.5	NO_2	N
CAM11	Schools AQ 11 - Minster Road (Mulberry House School)	524345	185133	Roadside	Y	8	0.5	2.5	NO_2	N
CAM12	Schools AQ 12 - Cliff Villas (Brecknock Primary School)	529918	184786	Roadside	Y	7	0.5	2.5	NO_2	N
CAM13	HSS Phase 4&5 1 - Ecole Jeannine Manuel - Bedford Square south (outside school)	529845	181595	Roadside	Y	5	1	2.5	NO_2	N
CAM14	HSS Phase 4&5 2 - Ecole Jeannine Manuel - Bedford Avenue between Adeline Place and Morwell Street (LC5)	529804	181519	Roadside	Y	5	0.5	2.5	NO_2	N
CAM15	HSS Phase 4&5 3 - Ecole Jeannine Manuel - Bedford Square north (opposite side to school)	529805	181703	Roadside	Y	4	0.5	2.5	NO_2	N
CAM16	HSS Phase 4&5 4 - Argyle Primary School - Tonbridge Street	530210	182748	Roadside	Y	6.5	1.5	2.5	NO_2	N
CAM17	HSS Phase 4&5 5 - St Mary & St Pancras - Polygon Road	529583	183051	Roadside	Y	17.5	2.5	2.5	NO_2	N
CAM18	HSS Phase 4&5 6 - St Mary & St Pancras - Phoenix Road	529617	182935	Roadside	Y	6	<1	2.5	NO_2	N

CAM19	HSS Phase 4&5 7 - St Mary & St Pancras - Aldenham Road	529522	183089	Roadside	Y	5	0.5	2.5	NO_2	N
CAM20	HSS Phase 4&5 8 - Lyndhurst House Prep - Lyndhurst Gardens	526856	185301	Roadside	Y	13	<0.5	2.5	NO_2	N
CAM21	HSS Phase 4&5 9 - Lyndhurst House Prep - Wedderburn Road	526929	185226	Roadside	Y	13.5	0.5	2.5	NO_2	N
CAM22	HSS Phase 4&5 10 - St Christopher's - Belsize Lane	527006	185160	Roadside	Y	15	<0.5	2.5	NO_2	N
CAM23	HSS Phase 4&5 11 - St Christopher's - Orman Road	527067	185152	Roadside	Y	8.5	0.5	2.5	NO_2	N
CAM24	HSS Phase 4&5 12 - Kingsgate Lower school - Liddell Road	525116	184772	Roadside	Y	20	<1	2.5	NO_2	N
CAM25	HSS Phase 4&5 13 - Kingsgate Lower school - Iverson Road	525199	184709	Roadside	Y	4	<0.5	2.5	NO_2	N
CAM26	HSS Phase 4&5 14 - Kingsgate Lower school - Ariel Road	525030	184701	Roadside	Y	5	0.5	2.5	NO_2	N
CAM27	HSS Phase 4&5 15 - Kentish Town CofE - Islip Street	529114	185052	Roadside	Y	5	0.5	2.5	NO_2	N
CAM28	HSS Phase 4&5 16 - Kentish Town CofE - Caversham Road	529112	184960	Roadside	Y	9	0.5	2.5	NO_2	N
CAM29	HSS Phase 4&5 17 - Kentish Town CofE - Gaisford Street	529113	184869	Roadside	Y	7.5	0.5	2.5	NO_2	N
CAM30	HSS Phase 4&5 18 - Christopher Hatton - Mount Pleasant	531028	182092	Roadside	Y	3.5	<0.5	2.5	NO_2	N

CAM31	HSS Phase 4&5 19 - Brookfield School - Croftdown Road	528745	186598	Roadside	Y	8	0.5	2.5	NO$_2$	N
CAM32	HSS Phase 4&5 20 - Brookfield School - Chester Road	528685	186614	Roadside	Y	6	0.5	2.5	NO$_2$	N
CAM33	HSS Phase 4&5 21 - Brookfield School - Bramshill Gardens	528876	186421	Roadside	Y	6.5	0.5	2.5	NO$_2$	N
CAM34	HSS Phase 4&5 22 - Christ Church School - Redhill Street	528835	182980	Roadside	Y	10.5	1	2.5	NO$_2$	N
CAM35	HSS Phase 4&5 23 - Christ Church School - Redhill Street	528814	182873	Roadside	Y	6	0.5	2.5	NO$_2$	N
CAM36	HSS Phase 4&5 24 - Beckford School - Dornfell Street	524928	185092	Roadside	Y	7	0.5	2.5	NO$_2$	N
CAM37	HSS Phase 4&5 25 - Beckford School - Sumatra Road	525036	185121	Roadside	Y	5	0.5	2.5	NO$_2$	N
CAM38	HSS Phase 4&5 26 - Beckford School - Ravenshaw Road	524860	185039	Roadside	Y	4	0.5	2.5	NO$_2$	N
CAM39	HSS Phase 4&5 27 - Broadhurst School - Greencroft Gardens	526216	184457	Roadside	Y	10.5	0.5	2.5	NO$_2$	N
CAM40	HSS Phase 4&5 28 - St Patricks - Raglan Street	528903	185009	Roadside	Y	9	0.5	2.5	NO$_2$	N
CAM41	HSS Phase 4&5 29 - St Patricks - Inkerman Road	528853	184975	Roadside	Y	6.5	0.5	2.5	NO$_2$	N
CAM42	HSS Phase 3 1 - Camden School for Girls - Sandall Road	529409	184720	Roadside	Y	3	<0.5	2.5	NO$_2$	N

CAM43	HSS Phase 3 2 - Hampstead Parochial and UCS Junior - Holly Bush Vale	526343	185755	Roadside	Y	1.5	<0.5	2.5	NO_2	N
CAM44	HSS Phase 3 3 - Rhyl Primary School - Marsden Street	528338	184776	Roadside	Y	6.5	0.5	2.5	NO_2	N
CAM45	HSS Phase 3 4 - Haverstock School - Crogsland Road south	528233	184430	Roadside	Y	2.5	<0.5	2.5	NO_2	N
CAM46	HSS Phase 3 5 - Netley Primary School - William Road	529113	182561	Roadside	Y	11	<0.5	2.5	NO_2	N
CAM47	Farringdon 1 - Acton Street	530760	182782	Roadside	Y	4	<0.5	2.5	NO_2	N
CAM48	Farringdon 2 - Frederick Street	530705	182701	Roadside	Y	4	<0.5	2.5	NO_2	N
CAM49	Farringdon 3 - Calthorpe Street	530879	182342	Roadside	Y	5	<0.5	2.5	NO_2	N
CAM50	Farringdon 4 - Grays Inn Road/Calthorpe Street	530822	182276	Roadside	Y	5	<0.5	2.5	NO_2	N
CAM51	Farringdon 5 - Ray Street/Herbal Hill	531294	182146	Roadside	Y	2	<0.5	2.5	NO_2	N
CAM52	Farringdon 6 - Summers Street	531239	182105	Roadside	Y	2	<0.5	2.5	NO_2	N
CAM53	Farringdon 7 - Lloyd Baker Street	530990	182574	Roadside	Y	4	<0.5	2.5	NO_2	N
CAM54	Farringdon 8 - Warner Street	531147	182179	Roadside	Y	3	<0.5	2.5	NO_2	N
CAM55	Farringdon 9 - Grays Inn Road North	530620	182633	Roadside	Y	4	<0.5	2.5	NO_2	N
CAM56	Farringdon 10 - Grays Inn Road/Wren Street	530775	182346	Roadside	Y	9	<0.5	2.5	NO_2	N
CAM57	Farringdon 11 - Grays Inn Road South	531056	181822	Roadside	Y	4	<0.5	2.5	NO_2	N

CAM58	Grays Inn Road South 1 - Northington Street / King's Mews	530915	182046	Roadside	Y	2.5	<0.5	2.5	NO_2	N
CAM59	Grays Inn Road South 2 - John Street	530823	182079	Roadside	Y	6.5	0.5	2.5	NO_2	N
CAM60	Grays Inn Road South 3 - Roger Street	530884	182124	Roadside	Y	1.5	0.5	2.5	NO_2	N
CAM61	Grays Inn Road South 4 - Elm Street	530965	182112	Roadside	Y	6.5	<0.5	2.5	NO_2	N
CAM62	Prince of Wales 1 - Malden Road north	528305	184657	Roadside	Y	4	<0.5	2.5	NO_2	N
CAM63	Prince of Wales 2 - Prince of Wales Road/Truro Street	528179	184606	Roadside	Y	8	0.5	2.5	NO_2	N
CAM64	Prince of Wales 3 - Prince of Wales Road/Haverstock Hill	527990	184602	Roadside	Y	16.5	1	2.5	NO_2	N
CAM65	Prince of Wales 4 - Crogsland Road	528244	184587	Roadside	Y	10	0.5	2.5	NO_2	N
CAM66	Prince of Wales 5 - Malden Crescent	528377	184599	Roadside	Y	8	0.5	2.5	NO_2	N
CAM67	Prince of Wales 6 - Prince of Wales Road/Malden Road	528380	184636	Roadside	Y	4.5	<0.5	2.5	NO_2	N
CAM68	Prince of Wales 7 - Harmood Street	528537	184626	Roadside	Y	3.5	<0.5	2.5	NO_2	N
CAM69	Prince of Wales 8 - Prince of Wales Road/Grafton Road	528736	184719	Roadside	Y	5.5	<0.5	2.5	NO_2	N
CAM90	Pratt-Delancey 1 - Pratt Street (between College Place and Royal College Street)	529334	183868	Roadside	Y	2	<0.5	2.5	NO_2	N
CAM91	Pratt-Delancey 2 - Pratt Street (between Bayham Street and Camden Street)	529142	183738	Roadside	Y	10	<0.5	2.5	NO_2	N

CAM92	Pratt-Delancey 3 - Bayham Street	529054	183772	Roadside	Y	4	0.5	2.5	NO$_2$	N
CAM93	Pratt-Delancey 4 - Greenland Street	529010	183795	Roadside	Y	1	<0.5	2.5	NO$_2$	N
CAM94	Pratt-Delancey 5 - Delancey Street/Delancey Passage	528971	183636	Roadside	Y	1	1.5	2.5	NO$_2$	N
CAM95	Pratt-Delancey 6 - Arlington Road (south of Delancey Street)	528968	183551	Roadside	Y	4	1	2.5	NO$_2$	N
CAM96	Pratt-Delancey 7 - Arlington Road (north of Delancey Street))	528881	183697	Roadside	Y	2.5	<0.5	2.5	NO$_2$	N
CAM97	Pratt-Delancey 8 - Albert Street (south of Delancey Street)	528867	183547	Roadside	Y	2.5	<0.5	2.5	NO$_2$	N
CAM98	Pratt-Delancey 9 - Delancey Street/Albert Street	528866	183590	Roadside	Y	3	2	2.5	NO$_2$	N
CAM99	Pratt-Delancey 10 - Albert Street (north of Delancey Street)	528836	183625	Roadside	Y	3	0.5	2.5	NO$_2$	N
CAM100	Pratt-Delancey 11 - Delancey Street/Parkway	528695	183596	Roadside	Y	4.5	<0.5	2.5	NO$_2$	N
CAM101	Pratt-Delancey 12 - Parkway/A4201	528654	183570	Roadside	Y	6	<0.5	2.5	NO$_2$	N
CAM102	Pratt-Delancey 13 - Gloucester Gate	528604	183457	Roadside	Y	6.5	<0.5	2.5	NO$_2$	N
CAM103	Pratt-Delancey 14 - North Bridge School	528636	183577	Roadside	Y	16	<0.5	2.5	NO$_2$	N
CAM104	Pratt-Delancey 15 - Gloucester Avenue	528560	183695	Roadside	Y	20	<0.5	2.5	NO$_2$	N
CAM105	Pratt-Delancey 16 - Parkway	528724	183702	Roadside	Y	5	<0.5	2.5	NO$_2$	N
CAM106	Camden Square 1 - Murray Street	529548	184449	Roadside	Y	20	<0.5	2.5	NO$_2$	N

CAM107	Camden Square 2 - Camden Square East	529677	184531	Roadside	Y	10.5	<0.5	2.5	NO_2	N
CAM108	Camden Square 3 - Camden Terrace	529725	184680	Roadside	Y	10	<0.5	2.5	NO_2	N
CAM109	Camden Square 4 - North Villas	529767	184734	Roadside	Y	7	<0.5	2.5	NO_2	N
CAM110	Camden Square 5 - St. Augustine's Road	529754	184457	Roadside	Y	8.5	<0.5	2.5	NO_2	N
CAM111*	Belsize Park/Swiss Cottage 1 - Maresfield Gardens/Nutley Terrace	526456	184931	Roadside	Y	9	<0.5	2.5	NO_2	N
CAM112*	Belsize Park/Swiss Cottage 2 - Belsize Lane /Fitzjohn's Avenue	526586	184586	Roadside	Y	8	1	2.5	NO_2	N
CAM113*	Belsize Park/Swiss Cottage 3 - Hilgrove Estate	526559	184324	Roadside	Y	12	<0.5	2.5	NO_2	N
CAM114*	Belsize Park/Swiss Cottage 4 - Winchester Road	526815	184322	Roadside	Y	7	<0.5	2.5	NO_2	N
CAM115*	Belsize Park/Swiss Cottage 5 - Eton Avenue	527010	184452	Roadside	Y	6.5	<0.5	2.5	NO_2	N
CAM116*	Belsize Park/Swiss Cottage 6 - Adelaide Road	526984	184239	Roadside	Y	15	<0.5	2.5	NO_2	N
CAM117*	Belsize Park/Swiss Cottage 7 - England's Lane	527318	184555	Roadside	Y	1	<0.5	2.5	NO_2	N
CAM118*	Belsize Park/Swiss Cottage 8 - Belsize Avenue/Belsize Park Gardens	526948	184906	Roadside	Y	7.5	<0.5	2.5	NO_2	N
CAM119*	Belsize Park/Swiss Cottage 9 - Haverstock Hill	527278	185153	Roadside	Y	11.5	<0.5	2.5	NO_2	N

CAM120*	Belsize Park/Swiss Cottage 10 - Pond Street/Fleet Road	527314	185509	Roadside	Y	6.5	1	2.5	NO$_2$	N
CAM134	Chalk Farm Road 1 - Regent's Park Road	528119	184354	Roadside	Y	<0.5	1.5	2.5	NO$_2$	N
CAM135	Chalk Farm Road 2 - Chalk Farm Road	528335	184338	Roadside	Y	11	0.5	2.5	NO$_2$	N
CAM136	Chalk Farm Road 3 - Ferdinand Street	528456	184345	Roadside	Y	2	<0.5	2.5	NO$_2$	N
CAM137	Chalk Farm Road 4 - Hartland Road	528582	184265	Roadside	Y	3	<0.5	2.5	NO$_2$	N
CAM138	Haverstock Hill 1 - Haverstock Hill northbound	527278	185153	Roadside	Y	10	<0.5	2.5	NO$_2$	N
CAM139	Haverstock Hill 2 - Haverstock Hill southbound	527184	185274	Roadside	Y	7	<0.5	2.5	NO$_2$	N
CAM140	Haverstock Hill 3 - Glenloch Road	527299	185071	Roadside	Y	5.5	<0.5	2.5	NO$_2$	N
CAM141	Haverstock Hill 4 - Haverstock Hill (between Upper Park Road and Downside Crescent)	527500	184974	Roadside	Y	12.5	<0.5	2.5	NO$_2$	N
CAM142	St. Pancras Way 1 - St. Pancras Way south	529606	183589	Roadside	Y	3	<0.5	2.5	NO$_2$	N
CAM143	St. Pancras Way 2 - Junction of St. Pancras Way and Pratt Street	529443	183941	Roadside	Y	2	<0.5	2.5	NO$_2$	N
CAM144	St. Pancras Way 3 - St. Pancras Way adjacent to Caulfield Ct.	529405	184139	Roadside	Y	3	<0.5	2.5	NO$_2$	N
CAM145	St. Pancras Way 4 - St. Pancras Way adjacent to Camden Courtyards	529233	184325	Roadside	Y	3	<0.5	2.5	NO$_2$	N
CAM146	St. Pancras Way 5 - Camden Street	529289	183697	Roadside	Y	10	<0.5	2.5	NO$_2$	N

CAM147	York Way 1 - York Way near junction with Camden Park Road	530004	184626	Roadside	Y	3	<0.5	2.5	NO$_2$	N
CAM148	York Way 2 - York Way Sainsbury's Local	530067	184286	Roadside	Y	6	0.5	2.5	NO$_2$	N
CAM149	York Way 3 - York Way Art House	530320	183606	Roadside	Y	6	<0.5	2.5	NO$_2$	N
CAM150	Queens Crescent 1 - Junction of Queens Crescent and Allcroft Road	528259	185061	Roadside	Y	4.5	<0.5	2.5	NO$_2$	N
CAM151	Queens Crescent 2 - Gilden Crescent	528191	185041	Roadside	Y	1.5	<0.5	2.5	NO$_2$	N
CAM152	Queens Crescent 3 - Junction of Grafton Road and Vicar's Road	528248	185360	Roadside	Y	20	<1	2.5	NO$_2$	N
CAM153	Queens Crescent 4 - Grafton Road south of Queens Crescent	528404	185130	Roadside	Y	10	<0.5	2.5	NO$_2$	N
CAM154	Queens Crescent 5 - Spring Place south of Arctic Street	528516	185100	Roadside	Y	3.5	<0.5	2.5	NO$_2$	N
CAM155	Queens Crescent 6 - Holmes Road outside St. Patrick's Catholic Primary School	528874	185037	Roadside	Y	10.5	<0.5	2.5	NO$_2$	N
CAM156	Queens Crescent 7 - Malden Road outside St. Dominic Primary School	527865	185224	Roadside	Y	10	<0.5	2.5	NO$_2$	N
CAM157	Queens Crescent 8 - Malden Road at the junction with Marsden Street	528251	184767	Roadside	Y	16	<0.5	2.5	NO$_2$	N
CAM158	Queens Crescent 9 - Rhyl Street outside Rhyl Primary School	528334	184832	Roadside	Y	4.5	<0.5	2.5	NO$_2$	N

CAM159	Queens Crescent 10 - Weedington Road south of Queens Crescent	528309	185097	Roadside	Y	8	<0.5	2.5	NO$_2$	N
CAM160	Queens Crescent 11 - Junction of Wilkin Street and Talacre Road	528430	184837	Roadside	Y	4	<0.5	2.5	NO$_2$	N
CAM161	Camden Park Road / Torriano Avenue 1 - Torriano Avenue outside Torriano Primary School	529595	185067	Roadside	Y	10	<0.5	2.5	NO$_2$	N
CAM162	Camden Park Road / Torriano Avenue 2 - Camden Park Road between South Villas and North Villas	529842	184780	Roadside	Y	8.5	<0.5	2.5	NO$_2$	N
CAM163	Baynes Street (opposite K&I Kitchens, 31-37 Baynes Street)	529317	184124	Roadside	Y	2.5	<0.5	2.5	NO$_2$	N
CAM164	Randolph Street	529264	184155	Roadside	Y	5.5	<0.5	2.5	NO$_2$	N
CAM165	Royal College Street near junction with Georgiana Street	529310	183998	Roadside	Y	4.5	<0.5	2.5	NO$_2$	N
CAM166	Crowndale Road (opposite junction with Bayham Street)	529279	183390	Roadside	Y	6	<0.5	2.5	NO$_2$	N
CAM167	King Henry's Road 1 - Adelaide Road between Elsworthy Rise and Primrose Hill	527440	184319	Roadside	Y	8	<0.5	2.5	NO$_2$	N
CAM168	King Henry's Road 2 - Adelaide Road/B509 UCL Academy	526852	184138	Roadside	Y	10	<0.5	2.5	NO$_2$	N
CAM169	King Henry's Road 3 - Avenue Road	526885	183959	Roadside	Y	18.5	<0.5	2.5	NO$_2$	N
CAM170	King Henry's Road 4 - Queens Grove	526924	183780	Roadside	Y	8	<0.5	2.5	NO$_2$	N

CAM171	King Henry's Road 5 - Elsworthy Road between Avenue Road and Wadham Gardens	527018	183899	Roadside	Y	15	<0.5	2.5	NO_2	N
CAM172	King Henry's Road 6 - Elsworthy Road between Lower Merton Rise and Elsworthy Terrace	527372	184086	Roadside	Y	10	<0.5	2.5	NO_2	N
CAM173	King Henry's Road 7 - Elsworthy Road between Elsworth Rise and Primrose Hill Road	527517	184159	Roadside	Y	12	<0.5	2.5	NO_2	N
CAM174	King Henry's Road 8 - King Henry's Road between Adelaide Road and Harley Road	526930	184135	Roadside	Y	9	<0.5	2.5	NO_2	N
CAM175	King Henry's Road 9 - King Henry's Road between Lyttleton Close and Lower Merton Rise	527213	184163	Roadside	Y	7	<0.5	2.5	NO_2	N
CAM176	King Henry's Road 10 - King Henry's Road between Quickswood and Primrose Hill Road	527496	184210	Roadside	Y	10.5	<0.5	2.5	NO_2	N
CAM177	King Henry's Road 11 - King Henry's Road east of Primrose Hill Road	527595	184210	Roadside	Y	4	<0.5	2.5	NO_2	N
CAM178	King Henry's Road 12 - Primrose Hill Road between Elsworthy Road and Oppidans Road	527582	184132	Roadside	Y	11.5	<0.5	2.5	NO_2	N
CAM179	Torrington-Tavistock/Midland-Judd 1 - Herbrand Street	530221	182086	Roadside	Y	3.5	<0.5	2.5	NO_2	N

CAM180	Torrington-Tavistock/Midland-Judd 2 - Guildford Street (west end)	530234	182066	Roadside	Y	5.5	<0.5	2.5	NO_2	N
CAM181	Torrington-Tavistock/Midland-Judd 3 - Bernard Street	530292	182162	Roadside	Y	3	<0.5	2.5	NO_2	N
CAM182	Torrington-Tavistock/Midland-Judd 4 - Grenville Street	530386	182171	Roadside	Y	6	<0.5	2.5	NO_2	N
CAM183	Torrington-Tavistock/Midland-Judd 5 - Russell Square south	530210	181917	Roadside	Y	2	<0.5	2.5	NO_2	N
CAM184	Torrington-Tavistock/Midland-Judd 6 - Russell Square nouth	530057	182060	Roadside	Y	6	<0.5	2.5	NO_2	N
CAM185	Torrington-Tavistock/Midland-Judd 7 - Woburn Place	530098	182122	Roadside	Y	3.5	<0.5	2.5	NO_2	N
CAM186	Torrington-Tavistock/Midland-Judd 8 - Bedford Way	530001	182105	Roadside	Y	4.5	<0.5	2.5	NO_2	N
CAM187	Torrington-Tavistock/Midland-Judd 9 - Montague Place	530015	181854	Roadside	Y	16	<0.5	2.5	NO_2	N
CAM188	Torrington-Tavistock/Midland-Judd 10 - Keppel Street	529854	181852	Roadside	Y	3	<0.5	2.5	NO_2	N
CAM189	Torrington-Tavistock/Midland-Judd 11 - Tavistock Place	530104	182388	Roadside	Y	4	<0.5	2.5	NO_2	N
CAM190	Torrington-Tavistock/Midland-Judd 12 - Coram Street	530097	182242	Roadside	Y	12	<0.5	2.5	NO_2	N

CAM191	Torrington-Tavistock/Midland-Judd 13 - Marchmont Street	530177	182316	Roadside	Y	1.5	<0.5	2.5	NO$_2$	N
CAM192	Torrington-Tavistock/Midland-Judd 14 - Hunter Street	530280	182407	Roadside	Y	9	<0.5	2.5	NO$_2$	N
CAM193	Torrington-Tavistock/Midland-Judd 15 - Handel Street	530338	182420	Roadside	Y	2.5	<0.5	2.5	NO$_2$	N
CAM194	Torrington-Tavistock/Midland-Judd 16 - Tavistock Place/Regent's Square	530343	182500	Roadside	Y	2	<0.5	2.5	NO$_2$	N
CAM195	Torrington-Tavistock/Midland-Judd 17 - Marchmont Street	530122	182465	Roadside	Y	4.5	<0.5	2.5	NO$_2$	N
CAM196	Torrington-Tavistock/Midland-Judd 18 - Leigh Street	530193	182529	Roadside	Y	3	<0.5	2.5	NO$_2$	N
CAM197	Torrington-Tavistock/Midland-Judd 19 - Sandwich Street	530109	182567	Roadside	Y	2.5	<0.5	2.5	NO$_2$	N
CAM198	Torrington-Tavistock/Midland-Judd 20 - Hastings Street	530100	182682	Roadside	Y	4.5	<0.5	2.5	NO$_2$	N
CAM199	Torrington-Tavistock/Midland-Judd 21 - Judd Street	530138	182696	Roadside	Y	5	<0.5	2.5	NO$_2$	N
CAM200	Torrington-Tavistock/Midland-Judd 22 - Midland Road	530044	182947	Roadside	Y	<1	<0.5	2.5	NO$_2$	N
CAM201	Torrington-Tavistock/Midland-Judd 23 - Bidborough Street	530054	182710	Roadside	Y	2.5	<0.5	2.5	NO$_2$	N
CAM202	Torrington-Tavistock/Midland-Judd 24 - Mabledon Place	529985	182674	Roadside	Y	5	<0.5	2.5	NO$_2$	N
CAM203	Torrington-Tavistock/Midland-Judd 25 - Duke's Road	529893	182540	Roadside	Y	5.5	<0.5	2.5	NO$_2$	N

CAM204	Torrington-Tavistock/Midland-Judd 26 - Upper Woburn Place	529860	182451	Roadside	Y	7	<0.5	2.5	NO$_2$	N
CAM205	Torrington-Tavistock/Midland-Judd 27 - Endsleigh Street	529753	182452	Roadside	Y	4.5	<0.5	2.5	NO$_2$	N
CAM206	Torrington-Tavistock/Midland-Judd 28 - Gower Place	529509	182363	Roadside	Y	3	<0.5	2.5	NO$_2$	N
CAM207	Torrington-Tavistock/Midland-Judd 29 - Cleveland Street	529236	181811	Roadside	Y	0.5	<0.5	2.5	NO$_2$	N
CAM208	Torrington-Tavistock/Midland-Judd 30 - Guildford Street	530352	182100	Roadside	Y	5	<0.5	2.5	NO$_2$	N
CAM209	Torrington-Tavistock/Midland-Judd 31 - Bloomsbury Square	530402	181627	Roadside	Y	2.5	<0.5	2.5	NO$_2$	N
CAM210	Torrington-Tavistock/Midland-Judd 32 - St. Joseph's Roman Catholic Primary School (Macklin Street)	530385	181352	Roadside	Y	3	<0.5	2.5	NO$_2$	N
CAM211	Torrington-Tavistock/Midland-Judd 33 - High Holborn (174-177)	530165	181329	Roadside	Y	2.5	<0.5	2.5	NO$_2$	N
CAM212	Torrington-Tavistock/Midland-Judd 34 - Southampton Row	530278	181926	Roadside	Y	3.5	<0.5	2.5	NO$_2$	N
CAM213	Torrington-Tavistock/Midland-Judd 35 - High Holborn (199-206)	530386	181485	Roadside	Y	2	<0.5	2.5	NO$_2$	N
CAM214	Torrington-Tavistock/Midland-Judd 36 - Great Russell Street	530205	181673	Roadside	Y	2.5	<0.5	2.5	NO$_2$	N
CAM215	Torrington-Tavistock/Midland-Judd 37 - UCL Department of Chemistry - Christopher Ingold Building (Gordon Street)	529649	182364	Roadside	Y	7	<0.5	2.5	NO$_2$	N
CAM216	WEP 1 - Warren Street (5)	529281	182256	Roadside	Y	4.5	<0.5	2.5	NO$_2$	N

CAM217	WEP 2 - Grafton Way (40)	529364	182207	Roadside	Y	5.5	<0.5	2.5	NO_2	N
CAM218	WEP 3 - Tottenham Court Road (188)	529467	181964	Roadside	Y	6.5	<0.5	2.5	NO_2	N
CAM219	WEP 4 - Woburn Mansions (30 Torrington Place)	529555	181988	Roadside	Y	3	<0.5	2.5	NO_2	N
CAM220	WEP 5 - Tottenham Court Road (216)	529608	181749	Roadside	Y	2.5	<0.5	2.5	NO_2	N
CAM221	WEP 6 - Alfred Place (9)	529646	181775	Roadside	Y	6	<0.5	2.5	NO_2	N
CAM222	WEP 7 - Charlotte Street (12)	529531	181588	Roadside	Y	4	<0.5	2.5	NO_2	N
CAM223	WEP 8 - Tottenham Court Road (24-27)	529725	181553	Roadside	Y	10.5	<0.5	2.5	NO_2	N
CAM224	WEP 9 - Tottenham Court Road (279)	529816	181391	Roadside	Y	6.5	<0.5	2.5	NO_2	N
CAM225	WEP 10 - Denmark Street (5)	529901	181254	Roadside	Y	2	<0.5	2.5	NO_2	N
CAM226	WEP 11 - Shaftesbury Avenue (109)	530095	181327	Roadside	Y	16	<0.5	2.5	NO_2	N
CAM227	WEP 12 - Bloomsbury Street (1)	530051	181454	Roadside	Y	1.5	<0.5	2.5	NO_2	N
CAM228	WEP 13 - Bedford Square (7A)	529900	181708	Roadside	Y	5.5	<0.5	2.5	NO_2	N
CAM229	WEP 14 - Gower Street (89)	529650	182060	Roadside	Y	3.5	<0.5	2.5	NO_2	N
CAM230	WEP 15 - Gower Street (136)	529443	182350	Roadside	Y	10	<0.5	2.5	NO_2	N
CAM231	WEP 16 - Gordon Street (20)	529682	182314	Roadside	Y	5	<0.5	2.5	NO_2	N
CAM232	WEP 17 - Euston Road (137)	529905	182667	Roadside	Y	3.5	<0.5	2.5	NO_2	N
CAM233	WEP 18 - Bedford Square (41)	529844	181551	Roadside	Y	1.5	1	2.5	NO_2	N
CAM234	WEP 19 - Monmouth Street (25)	530074	181163	Roadside	Y	2.5	<0.5	2.5	NO_2	N

CAM235	WEP 20 - Monmouth Street (30)	530056	181082	Roadside	Y	1.5	<0.5	2.5	NO$_2$	N
CAM236	WEP 21 - Tottenham Court Road (185-186)	529460	181975	Roadside	Y	7.5	<0.5	2.5	NO$_2$	N
CAM237	WEP 22 - Tottenham Court Road (55)	529590	181751	Roadside	Y	4	<0.5	2.5	NO$_2$	N
CAM238	WEP 23 - Tottenham Court Road (279)	529812	181400	Roadside	Y	5	<0.5	2.5	NO$_2$	N
CAM239	WEP 24 - Tower Street	530032	181005	Roadside	Y	1	<0.5	2.5	NO$_2$	N
CAM240	WEP 25 - Neal Street	530178	181127	Roadside	1.5Y	1.5	<0.5	2.5	NO$_2$	N
CAM241	Shaftesbury 1 - Shelton Street	530042	181188	Roadside	Y	1.5	0.5	2.5	NO$_2$	N
CAM242	Shaftesbury 2 - Mercer Street South	529978	181100	Roadside	Y	1.5	0.5	2.5	NO$_2$	N
CAM243	Shaftesbury 3 - Monmouth Street South	530073	181169	Roadside	Y	1.5	0.5	2.5	NO$_2$	N
CAM244	Shaftesbury 4 - Tower Street	530059	181041	Roadside	Y	1	0.5	2.5	NO$_2$	N
CAM245	Shaftesbury 5 - Earlham Street West	530036	181120	Roadside	Y	3	0.5	2.5	NO$_2$	N
CAM246	Shaftesbury 6 - Shaftesbury Avenue South	530086	181070	Roadside	Y	3	0.5	2.5	NO$_2$	N
CAM247	Shaftesbury 7 - Mercer Street North	530131	181105	Roadside	Y	1.5	0.5	2.5	NO$_2$	N
CAM248	Shaftesbury 8 - Shaftesbury Avenue North	530018	181078	Roadside	Y	3	0.5	2.5	NO$_2$	N
CAM249	Shaftesbury 9 - Monmouth Street North	530009	181037	Roadside	Y	2	0.5	2.5	NO$_2$	N
CAM250	Shaftesbury 10 - Neal Street	530100	181029	Roadside	Y	2	0.5	2.5	NO$_2$	N
CAM251	Shaftesbury 11 - Shorts Gardens	530114	181134	Roadside	Y	1	0.5	2.5	NO$_2$	N
CAM252	Shaftesbury 12 - Earlham Street East	530139	181178	Roadside	Y	2	0.5	2.5	NO$_2$	N

CAM253	Canal Location 1 - Rossendale Way	529497	183948	Roadside	Y	6.5	20	2.5	NO_2	N
CAM254	Canal Location 2 - Belsize primary School	529660	183797	Roadside	Y	<1	42.5	2.5	NO_2	N
CAM255	Canal Location 3 - Temple	529698	183770	Roadside	Y	6	49	2.5	NO_2	N
CAM256	Canal Location 4 - Co-op	529748	183733	Roadside	Y	4	22.5	2.5	NO_2	N
CAM257	Canal Location 5 - Granary Square	529988	183524	Roadside	Y	2	79	2.5	NO_2	N
CAM258	Estelle Road	528021	185593	Roadside	Y	5.5	0.5	2.5	NO_2	N
CAM259	Courthorpe Road	527926	185614	Roadside	Y	5	0.5	2.5	NO_2	N
CAM260	Shirlock Road	527865	185604	Roadside	Y	5	0.5	2.5	NO_2	N
CAM261	Kilburn High Road at junction with Kilburn Park Road	525668	183335	Roadside	Y	12.5	6.5	2.5	NO_2	N
CAM262	Kilburn High Road at junction with Oxford Road	525557	183462	Roadside	Y	6	2	2.5	NO_2	N
CAM263	Kilburn High Road opposite Kilburn High Road LO station	525439	183589	Roadside	Y	7	1	2.5	NO_2	N
CAM264	West End Lane (15m down West End Lane from junction with Kilburn High Road)	525381	183708	Roadside	Y	1	0.5	2.5	NO_2	N
CAM265	Kilburn High Road near junction with Victoria Rd. and Quex Rd.	525258	183828	Roadside	Y	6	0.5	2.5	NO_2	N
CAM266	Kilburn High Road between Priory Park Road and The Terrace	525156	183991	Roadside	Y	3	0.5	2.5	NO_2	N
CAM267	Kilburn High Road at junction with Willesden Lane and Gascony Avenue	525077	184067	Roadside	Y	5	0.5	2.5	NO_2	N
CAM268	Kilburn High Road at corner with Grangeway	524998	184185	Roadside	Y	5.5	1	2.5	NO_2	N

CAM269	Kilburn High Road between Buckley Road and Dyne Road	524904	184281	Roadside	Y	4.5	0.5	2.5	NO$_2$	N
CAM270	Kilburn High Road at junction with Cavendish Rd. & Iverson Rd.	524747	184500	Roadside	Y	3	1	2.5	NO$_2$	N
CAM271	Kilburn High Road at junction with Exeter Road	524631	184665	Roadside	Y	5	6	2.5	NO$_2$	N
CAM272	Swain's Lane north at corner of Bisham Gardens	528437	187270	Roadside	Y	6	<0.5	2.5	NO$_2$	N
CAM273	Swain's Lane south between Hillway and Highgate West Hill	528324	186396	Roadside	Y	8	1	2.5	NO$_2$	N
CAM274	Dartmouth Park Hill north	528918	186959	Roadside	Y	15	<0.5	2.5	NO$_2$	N
CAM275	Darmouth Park Hill between Bredgar Road and Hargreave Park	528967	186654	Roadside	Y	6	0.5	2.5	NO$_2$	N
CAM276	Dartmouth Park Hill south	529025	186145	Roadside	Y	8	<0.5	2.5	NO$_2$	N
CAM277	Highgate Road north	528364	186173	Roadside	Y	16	1	2.5	NO$_2$	N
CAM278	Highgate Road south	528763	185546	Roadside	Y	3	0.5	2.5	NO$_2$	N
CAM279	Gordon House Road	528523	185778	Roadside	Y	3.5	0.5	2.5	NO$_2$	N
CAM280	Fortess Walk	528939	185366	Roadside	Y	3.5	0.5	2.5	NO$_2$	N
CAM281	York Rise	528788	186048	Roadside	Y	5.5	<0.5	2.5	NO$_2$	N
CAM282	Chetwynd Road east	528924	186085	Roadside	Y	6	0.5	2.5	NO$_2$	N
CAM283	Cathcart Hill	529119	186219	Roadside	Y	7.5	1	2.5	NO$_2$	N
CAM284	Junction Road	529179	186011	Roadside	Y	7	0.5	2.5	NO$_2$	N
CAM285	Fortess Road	529016	185533	Roadside	Y	13	<0.5	2.5	NO$_2$	N
CAM286	Somers Town 1 - Midland Road/Pancras Road	529885	183280	Roadside	Y	6.5	<0.5	2.5	NO$_2$	N
CAM287	Somers Town 2 - Chenies Place East	529813	183349	Roadside	Y	7.5	<0.5	2.5	NO$_2$	N
CAM288	Somers Town 3 - Chenies Place West	529750	183288	Roadside	Y	5	<0.5	2.5	NO$_2$	N

CAM289	Somers Town 4 - Edith Neville Primary School	529797	183187	Roadside	Y	13	<0.5	2.5	NO_2	N
CAM290	Somers Town 5 - Charrington Street	529641	183282	Roadside	Y	4.5	<0.5	2.5	NO_2	N
CAM291	Somers Town 6 - Goldington Crescent	529611	183444	Roadside	Y	5	<0.5	2.5	NO_2	N
CAM292	Somers Town 7 - Oakley Square North	529424	183445	Roadside	Y	5.5	<0.5	2.5	NO_2	N
CAM293	Somers Town 8 - Crowndale Centre, Eversholt Street	529224	183362	Roadside	Y	4	<1	2.5	NO_2	N
CAM294	Somers Town 9 - Harrington Square Gardens	529229	183231	Roadside	Y	3.5	0.5	2.5	NO_2	N
CAM295	Somers Town 10 - Oakley Square South	529321	183239	Roadside	Y	18.5	<0.5	2.5	NO_2	N
CAM296	Somers Town 11 - Regent High School, Chalton Street	529527	183264	Roadside	Y	5	<1	2.5	NO_2	N
CAM297	Somers Town 12 - Somers Town Sports Centre, Chalton Street	529601	183148	Roadside	Y	5	<0.5	2.5	NO_2	N
CAM298	Somers Town 13 - St. Aloysius Church, Phoenix Road	529555	182900	Roadside	Y	2.5	<1	2.5	NO_2	N
CAM299	Somers Town 14 - Chalton Street North/Phoenix Road	529717	182992	Roadside	Y	4.5	<0.5	2.5	NO_2	N
CAM300	Somers Town 15 - Chalton Street South	529815	182830	Roadside	Y	2	<0.5	2.5	NO_2	N
CAM301	Somers Town 16 - Churchway	529802	182703	Roadside	Y	6.5	2	2.5	NO_2	N
CAM302	Somers Town 17 - Ossulston Street South	529949	182798	Roadside	Y	13.5	<0.5	2.5	NO_2	N
CAM303	Somers Town 18 - Levita House	529887	182813	Roadside	Y	15	40	2.5	NO_2	N
CAM304	Somers Town 19 - Ossulston Street North	529786	183038	Roadside		13	<0.5	2.5	NO_2	N

CAM305	Somers Town 20 - Francis Crick Institute/Midland Road	529987	183060	Roadside	Y	20	0.5	2.5	NO_2	N
CAM306	Somers Town 21 - Goods Way	530231	183453	Roadside	Y	41	<0.5	2.5	NO_2	N
CAM307	Agar Grove eastbound	529874	184379	Roadside	Y	4.5	<0.5	2.5	NO_2	N
CAM308	Agar Grove westbound	529515	184274	Roadside	Y	5	<0.5	2.5	NO_2	N
CAM309	Holmes Road	528687	185016	Roadside	Y	2.5	<0.5	2.5	NO_2	N
CAM310	Holborn 1 - Great Russell Street	530149	181611	Roadside	Y	1	<0.5	2.5	NO_2	N
CAM311	Holborn 2 - New Oxford Street	530250	181473	Roadside	Y	2	<0.5	2.5	NO_2	N
CAM312	Holborn 3 - Vernon Place	530414	181645	Roadside	Y	1	<0.5	2.5	NO_2	N
CAM313	Holborn 4 - Newton Street	530429	181459	Roadside	Y	3	<0.5	2.5	NO_2	N
CAM314	Holborn 5 - Kingsway	530608	181291	Roadside	Y	2	<0.5	2.5	NO_2	N
CAM315	Holborn 6 - High Holborn	530755	181566	Roadside	Y	2	<0.5	2.5	NO_2	N
CAM316	Holborn 7 - Red Lion Square East	530573	181653	Roadside	Y	3	<0.5	2.5	NO_2	N
CAM317	Holborn 8 - Red Lion Square West	530743	181719	Roadside	Y	3	<0.5	2.5	NO_2	N
CAM318	Holborn 9 - Theobalds Road	530845	181904	Roadside	Y	1	<0.5	2.5	NO_2	N
CAM319	Holborn 10 - Great Ormond Street	530529	182013	Roadside	Y	1	<0.5	2.5	NO_2	N
CAM320	Clerkenwell 1 - Clerkenwell Road between Herbal Hill and Back Hill	531321	182050	Roadside	Y	7	<0.5	2.5	NO_2	N
CAM321	Clerkenwell 2 - Clerkenwell Road at junction with Back Hill	531223	182034	Roadside	Y	7	<0.5	2.5	NO_2	N
CAM322	Clerkenwell 3 - Laystall Road south	531160	182039	Roadside	Y	14	<0.5	2.5	NO_2	N
CAM323	Clerkenwell 4 - Clerkenwell Road at junction with Rosebery Avenue	531012	181982	Roadside	Y	12	<0.5	2.5	NO_2	N

CAM324	Clerkenwell 5 - Rosebery Ave/Laystall St	531092	182097	Roadside	Y	10	<0.5	2.5	NO_2	N
CAM325	Clerkenwell 6 - Rosebery Ave/Warner St	531123	182188	Roadside	Y	7	<0.5	2.5	NO_2	N
CAM326	CT Cycle 1 - Pratt Street between Bayham Street and Pratt Mews	529042	183678	Roadside	Y	3	<0.5	2.5	NO_2	N
CAM327	CT Cycle 2 - Farrier Street	529011	184402	Roadside	Y	3	<0.5	2.5	NO_2	N
CAM328	CT Cycle 3 - Prince Albert Road between car park and St. Mark's Church	528379	183669	Roadside	Y	5	<0.5	2.5	NO_2	N
CAM329	CT Cycle 4 - Pratt Street at junction with Camden Street	529231	183805	Roadside	Y	3	<0.5	2.5	NO_2	N

Notes:

(1) 0m if the monitoring site is at a location of exposure (e.g. installed on the façade of a residential property).

(2) N/A if not applicable.

1.2 Comparison of Monitoring Results with AQOs

Concentration values are those at the location of the monitoring site (bias adjusted and annualised, as required), not those following any fall-off with distance correction.

Table D. Annual Mean NO$_2$ Monitoring Results: Automatic Monitoring (µg/m^3)

Site ID	Site type	Valid data capture for monitoring period %[a]	Valid data capture 2023 %[b]	2017	2018	2019	2020	2021	2022	2023
BL0	Urban Background	-	99.06	38	36	32	28	27	26	24
CD1	Kerbside	-	99.46	**53**	**54**	**43**	33	**44**	37	33
CD9	Roadside	-	99.34	**83**	**82**[c]	**70**	43	**48**	**45**	**46**
CD010	Roadside	-	97.89	-	-	-	-	30	29	28

Notes:

The annual mean concentrations are presented as µg m^{-3}

Exceedances of the NO$_2$ annual mean AQO of 40 µg m^{-3} are shown in **bold**.

NO$_2$ annual means in excess of 60 µg m^{-3}, indicating a potential exceedance of the NO$_2$ hourly mean AQS objective are shown in **bold and underlined**.

Means for diffusion tubes have been corrected for bias.

All means have been "annualised" in accordance with LLAQM Technical Guidance if valid data capture for the calendar year is less than 75% and greater than 25%.

Concentrations are those at the location of monitoring and not those following any fall-off with distance adjustment.

(a) Data capture for the monitoring period, in cases where monitoring was only carried out for part of the year.

(b) Data capture for the full calendar year (e.g. if monitoring was carried out for six months the maximum data capture for the full calendar year would be 50%).

Commentary on annual mean NO$_2$ data from automatic monitoring

There has been an overall downward trend in annual NO$_2$ concentrations recorded over the last seven years by automatic monitoring sites, which continued in 2023 with three out of the four sites recording a reduction in annual NO$_2$ concentration when compared to the previous year; only Euston Road (CD9) recorded a marginal increase of 0.3 µg m^{-3}. In 2023, there has been an average reduction in annual mean NO$_2$ concentrations of 1.5 µg m^{-3} (five percent) across Camden's automatic monitoring portfolio when compared to 2022.

In the last seven years of monitoring, the London Bloomsbury (BL0) urban background monitoring site has consistently recorded decreasing NO$_2$ concentrations year on year. The other three monitoring sites have similarly recorded reduced concentrations of NO$_2$ during this period. However, the impact of the COVID pandemic and associative lockdowns on local traffic flow and air quality can be gleaned from the significant decrease recorded in 2020, emphasising the relationship between vehicle use and air pollution at these roadside locations. It is therefore important to note the improvements in ambient air quality that have since been made in the intervening period, which has resulted in annual NO$_2$ concentrations for 2023 recording on average two percent lower than in 2020 across Camden's automatic monitoring network despite significantly reduced vehicular traffic throughout much of the 2020 monitoring year.

Figure 1 shows annual mean NO$_2$ concentration as measured at four automatic monitoring sites in Camden, illustrating the long-term reduction in this pollutant however, the gap to achieving the WHO 2021 standards is clear to see.

Figure 1. Automatic Monitoring Annual Mean NO₂ Concentration

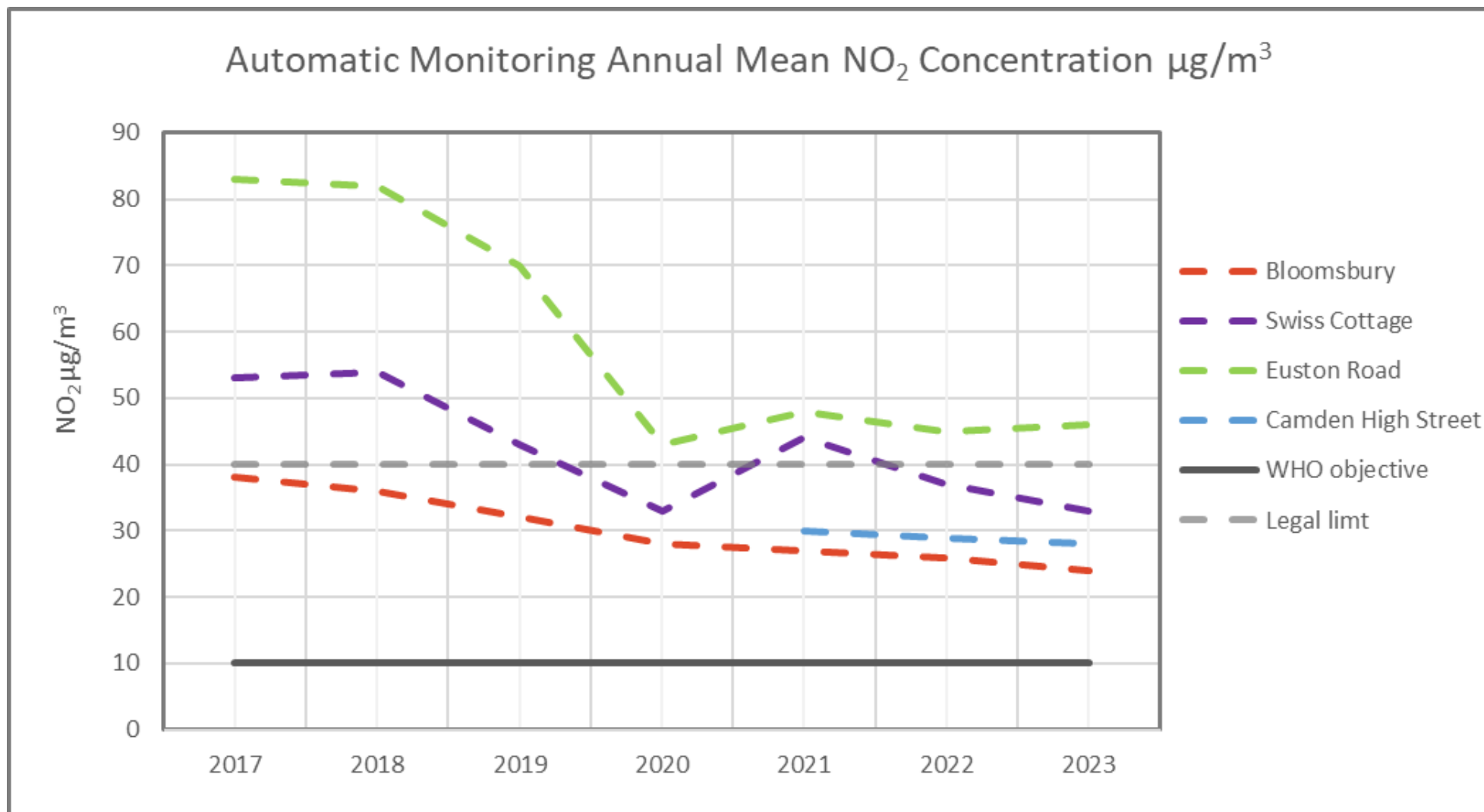Automatic Monitoring Annual Mean NO$_2$ Concentration µg/m^3

Table E. Annual Mean NO₂ Monitoring Results: Non-Automatic Monitoring (µg/m³)

Diffusion Tube ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2023 (%) (2)	2017	2018	2019	2020	2021	2022	2023
CAM1	529030	185687	Roadside	-	100%	-	33.7	31.25	22.74	21.63	19.84	18.90
CAM2	526518	185938	Roadside	-	100%	-	29.57	24.46	18.99	17.25	16.17	19.76
CAM3	526518	185989	Roadside	-	100%	-	32.16	26.41	20.24	19.07	17.6	21.26
CAM4	528159	185641	Roadside	-	92%	-	30.24	24.44	19.18	18.06	17.98	19.39
CAM5	528098	185597	Roadside	-	100%	-	30.58	26.47	20.31	19.34	19.87	21.35
CAM6	526345	184876	Roadside	-	100%	-	-	31.65	23.55	22.37	20.39	25.02
CAM7	526479	185411	Roadside	-	83%	-	-	39.5	30.61	29.19	28.31	23.71
CAM8	526226	185337	Roadside	-	100%	-	-	29.75	22.69	22	19.85	22.27
CAM9	526499	186122	Roadside	-	50%	-	-	20.9	17.79	16.82	16.13	15.75
CAM10	528302	183932	Roadside	-	83%	-	-	-	23.47	20.19	19.93	22.57
CAM11	524345	185133	Roadside	-	92%	-	-	-	-	24.4	23.6	24.42
CAM12	529918	184786	Roadside	-	92%	-	-	-	24.09	21.32	19.88	23.48
CAM13	529845	181595	Roadside	-	83%	-	-	-	-	22.95	22.62	24.51
CAM14	529804	181519	Roadside	-	83%	-	-	-	-	26.2	27.04	31.70
CAM15	529805	181703	Roadside	-	67%	-	-	-	-	24.09	24.31	26.53
CAM16	530210	182748	Roadside	-	83%	-	-	-	-	24.91	24.22	25.71
CAM17	529583	183051	Roadside	-	92%	-	-	-	-	22.3	22.76	24.20
CAM18	529617	182935	Roadside	-	100%	-	-	-	-	23.75	23.68	27.16
CAM19	529522	183089	Roadside	-	58%	-	-	-	-	22.9	21.92	22.78
CAM20	526856	185301	Roadside	-	100%	-	-	-	-	19.56	19	20.85
CAM21	526929	185226	Roadside	-	100%	-	-	-	-	19.26	19.03	20.82
CAM22	527006	185160	Roadside	-	100%	-	-	-	-	19.47	19.48	21.50
CAM23	527067	185152	Roadside	-	100%	-	-	-	-	20.31	20.99	22.71
CAM24	525116	184772	Roadside	-	100%	-	-	-	-	19.6	19.3	23.20
CAM25	525199	184709	Roadside	-	83%	-	-	-	-	24.24	24.56	24.59
CAM26	525030	184701	Roadside	-	100%	-	-	-	-	21.92	21.3	24.17
CAM27	529114	185052	Roadside	-	92%	-	-	-	-	20.11	19.05	22.07
CAM28	529112	184960	Roadside	-	58%	-	-	-	-	18.98	21.69	24.77
CAM29	529113	184869	Roadside	-	100%	-	-	-	-	19.7	19.86	21.36
CAM30	531028	182092	Roadside	-	92%	-	-	-	-	33.33	33.7	32.48
CAM31	528745	186598	Roadside	-	100%	-	-	-	-	18.4	17.78	20.16

Diffusion Tube ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2023 (%) (2)	2017	2018	2019	2020	2021	2022	2023
CAM32	528685	186614	Roadside	-	92%	-	-	-	-	22.79	21.61	23.73
CAM33	528876	186421	Roadside	-	92%	-	-	-	-	17.61	16.48	19.42
CAM34	528835	182980	Roadside	-	100%	-	-	-	-	19.51	19.33	20.68
CAM35	528814	182873	Roadside	-	92%	-	-	-	-	22.86	21.93	21.27
CAM36	524928	185092	Roadside	-	100%	-	-	-	-	21.21	19.8	22.61
CAM37	525036	185121	Roadside	-	83%	-	-	-	-	21.36	19.2	22.46
CAM38	524860	185039	Roadside	-	100%	-	-	-	-	20.9	20.01	22.48
CAM39	526216	184457	Roadside	-	92%	-	-	-	-	21.08	19.79	23.84
CAM40	528903	185009	Roadside	-	92%	-	-	-	-	18.46	18.58	20.86
CAM41	528853	184975	Roadside	-	83%	-	-	-	-	18.73	18.78	19.86
CAM42	529409	184720	Roadside	-	50%	-	-	-	-	22.11	20.24	26.82
CAM43	526343	185755	Roadside	-	92%	-	-	-	-	19.46	19.54	21.61
CAM44	528338	184776	Roadside	-	100%	-	-	-	-	19.27	19.31	22.66
CAM45	528233	184430	Roadside	-	92%	-	-	-	-	23.4	23.43	23.24
CAM46	529113	182561	Roadside	-	92%	-	-	-	-	23.76	22.87	23.09
CAM47	530760	182782	Roadside	-	58%	-	**55.49**	**48.27**	30.91	34.82	32.26	36.39
CAM48	530705	182701	Roadside	-	75%	-	38.97	32.93	23.97	23.88	24.48	25.37
CAM49	530879	182342	Roadside	-	92%	-	**43.12**	37.79	25.98	24.07	27.77	30.33
CAM50	530822	182276	Roadside	-	83%	-	**51.12**	**46.62**	27.96	29.35	29.69	36.25
CAM51	531294	182146	Roadside	-	92%	-	39.14	33.42	22.9	23.04	22.53	25.07
CAM52	531239	182105	Roadside	-	92%	-	37.17	32.7	23.77	22.22	23.46	25.35
CAM53	530990	182574	Roadside	-	83%	-	**42.8**	37.01	26.27	25.09	23.85	27.93
CAM54	531147	182179	Roadside	-	67%	-	**42.98**	36.01	24.66	23.9	24.95	25.04
CAM55	530620	182633	Roadside	-	83%	-	-	-	28.35	30.11	30.21	33.18
CAM56	530775	182346	Roadside	-	92%	-	-	-	25.57	24.26	23.08	28.34
CAM57	531056	181822	Roadside	-	75%	-	-	-	27	27.17	29.55	29.82
CAM58	530915	182046	Roadside	-	92%	-	-	-	-	23.53	24.59	26.92
CAM59	530823	182079	Roadside	-	92%	-	-	-	-	25.29	26.31	29.51
CAM60	530884	182124	Roadside	-	92%	-	-	-	-	27.86	30.53	31.95
CAM61	530965	182112	Roadside	-	92%	-	-	-	-	27.3	28.69	28.63
CAM62	528305	184657	Roadside	-	75%	-	**49.8**	**42.59**	-	30.21	29.13	30.24
CAM63	528179	184606	Roadside	-	92%	-	35.1	33.72	21.93	22.49	20.67	24.04
CAM64	527990	184602	Roadside	-	75%	-	38.26	36.59	22.05	23.53	22.49	22.29

Diffusion Tube ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2023 (%) (2)	2017	2018	2019	2020	2021	2022	2023
CAM65	528244	184587	Roadside	-	92%	-	35.61	33.06	21.59	20.41	21.35	24.23
CAM66	528377	184599	Roadside	-	92%	-	38.45	34.47	23.7	24.46	23.62	27.17
CAM67	528380	184636	Roadside	-	92%	-	**46.54**	**41.21**	26.66	30.32	28.55	31.83
CAM68	528537	184626	Roadside	-	92%	-	36.54	32.23	21.65	21.67	22.79	22.94
CAM69	528736	184719	Roadside	-	75%	-	**45.92**	39.14	25.47	27.14	26	25.51
CAM70	530093	182792	Kerbside	-	92%	-	-	**70.65**	**53.68**	**56.9**	**50.64**	**51.57**
CAM71	529907	182670	Roadside	-	100%	-	-	**65.28**	**46.57**	**46.49**	**43.15**	**47.52**
CAM72	530430	182430	Urban Background	-	0%	34.83[c]	26.67	25.22	-	-	-	
CAM73	530512	182511	Urban Background	-	100%	-	-	28.31	22.47	17.23	19.21	17.74
CAM74	529013	185102	Roadside	-	100%	**68.84**[c]	**54.66**	**46.07**	34.23	32.57	28.97	28.14
CAM75	526213	185519	Urban Background	-	83%	29.64c	22.12	23.34	18.68	15.14	16.35	14.72
CAM76	526547	185125	Roadside	-	83%	**66.27**[c]	**48.13**	**43.51**	34.47	29.75	27.61	26.65
CAM77	526633	184392	Kerbside	-	100%	-	**62.30**[c]	**50.89**	-	-	35.06	34.37
CAM78	529904	183138	Roadside	-	92%	-	-	**44.12**	**43.89**	34.19	33.13	35.08
CAM79	529880	182334	Urban Background	-	50%	**46.18**[c]	35.35	33.9	26.78	22.2	23.91	21.30
CAM80	529689	182470	Roadside	-	75%	-	-	**49.45**	35.32	34.32	30.15	27.70
CAM81	529568	181728	Kerbside	-	58%	**74.04**[c]	**65.75**	**62.62**	**43.27**	**44.18**	39.95	**43.87**
CAM82	525362	185255	Roadside	-	100%	-	-	38.75	31.8	29.36	29.81	29.03
CAM83	528213	187203	Roadside	-	100%	**44.91**[c]	37.37	33.26	24.87	22.31	21.95	17.74
CAM84	529173	184129	Kerbside	-	100%	**69.30**[c]	**55.57**	**53.69**	**44.26**	36.85	38.08	36.49
CAM85	528722	185950	Roadside	-	100%	**50.55**[c]	38.68	36.06	29.97	24.48	25.46	23.96
CAM86	529962	181620	Kerbside	-	100%	**71.18**[c]	**59.43**	**49.60**	29.52	32.91	30.8	29.49
CAM87	529118	185913	Roadside	-	100%	-	**42.55**	37.89	28.54	25.83	24.86	24.23
CAM88	529099	185881	Roadside	-	75%	-	27.11	28.05	20.44	19.58	20.12	18.81
CAM89	529060	185848	Roadside	-	92%	-	30.51	29.9	23.14	22.85	20.2	19.73
CAM90	529334	183868	Roadside	-	67%	-	-	32.25	24.62	23.81	22.57	22.41
CAM91	529142	183738	Roadside	-	100%	-	-	33.38	28.15	24.05	23.06	28.33
CAM92	529054	183772	Roadside	-	100%	-	-	**57.88**	**47.58**	39.85	36.05	39.42
CAM93	529010	183795	Roadside	-	100%	-	-	39.78	32.34	27.88	28.48	31.59

Diffusion Tube ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2023 (%) (2)	2017	2018	2019	2020	2021	2022	2023
CAM94	528971	183636	Roadside	-	92%	-	-	34.5	27.32	31.8	28.33	36.10
CAM95	528968	183551	Roadside	-	92%	-	-	31.88	25.98	23.38	22.7	25.60
CAM96	528881	183697	Roadside	-	75%	-	-	34.03	27.27	25.03	23.38	27.48
CAM97	528867	183547	Roadside	-	92%	-	-	33.06	25.61	23.98	23.41	24.77
CAM98	528866	183590	Roadside	-	100%	-	-	**42.99**	34.65	31.28	31.87	34.22
CAM99	528836	183625	Roadside	-	92%	-	-	29.72	23.1	21.68	20.27	23.07
CAM100	528695	183596	Roadside	-	100%	-	-	35.61	29.24	30.08	26.98	30.15
CAM101	528654	183570	Roadside	-	92%	-	-	**46.32**	38.58	36.17	32.88	34.66
CAM102	528604	183457	Roadside	-	100%	-	-	35.01	31.47	28.49	26.71	30.32
CAM103	528636	183577	Roadside	-	92%	-	-	**41.85**	35.74	30.81	29.97	33.45
CAM104	528560	183695	Roadside	-	83%	-	-	31.04	27.56	24.66	23.26	28.60
CAM105	528724	183702	Roadside	-	50%	-	-	**41.99**	35.9	33.98	31.04	30.58
CAM106	529548	184449	Roadside	-	92%	-	-	30.49	-	20.87	18.93	21.65
CAM107	529677	184531	Roadside	-	100%	-	-	29.02	-	20.32	19.52	22.50
CAM108	529725	184680	Roadside	-	100%	-	-	29.46	-	20.59	19.29	22.59
CAM109	529767	184734	Roadside	-	92%	-	-	31.17	-	20.67	20.16	25.78
CAM110	529754	184457	Roadside	-	92%	-	-	31.26	-	21.49	20.51	24.39
CAM111	526456	184931	Roadside	-		-	-	27.57	-	-	-	-
CAM112	526586	184586	Roadside	-		-	-	**40.11**	-	-	-	-
CAM113	526559	184324	Roadside	-		-	-	28.66	-	-	-	-
CAM114	526815	184322	Roadside	-		-	-	36.15	-	-	-	-
CAM115	527010	184452	Roadside	-		-	-	29.7	-	-	-	-
CAM116	526984	184239	Roadside	-		-	-	33.15	-	-	-	-
CAM117	527318	184555	Roadside	-		-	-	38	-	-	-	-
CAM118	526948	184906	Roadside	-		-	-	31.92	-	-	-	-
CAM119	527278	185153	Roadside	-		-	-	**40.39**	-	-	-	-
CAM120	527314	185509	Roadside	-		-	-	**44.99**	-	-	-	-
CAM121	528081	184490	Roadside	-	100%	-	-	33.06	23.51	20.97	22.04	21.20
CAM122	528558	184331	Roadside	-	100%	-	-	31.74	24.89	20.65	18.49	18.40
CAM123	528619	184315	Roadside	-	100%	-	-	31.8	26.13	20.65	21.42	19.64
CAM124	528881	184287	Roadside	-	100%	-	-	**42.93**	34.11	26.78	27.86	28.39
CAM125	528935	184053	Roadside	-	100%	-	-	**45.01**	33.81	27.76	27.98	26.10
CAM126	528898	184094	Roadside	-	67%	-	-	38.89	32.26	25.71	26.4	22.12

Diffusion Tube ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2023 (%) (2)	2017	2018	2019	2020	2021	2022	2023
CAM127	528704	184011	Roadside	-	75%	-	-	38.7	29.87	25.8	22.56	21.06
CAM128	528722	184127	Roadside	-	58%	-	-	**41.47**	33.09	26.31	27.18	25.52
CAM129	528845	183970	Roadside	-	92%	-	-	38.81	30.51	29.66	27.79	26.19
CAM130	528884	183901	Roadside	-	92%	-	-	**47.65**	37.79	31.35	30.19	30.51
CAM131	528915	183870	Kerbside	-	83%	-	-	**53.9**	**40.71**	37.04	36.87	36.50
CAM132	528770	183887	Roadside	-	100%	-	-	33.97	26.9	22.71	23.27	20.60
CAM133	528715	184456	Roadside	-	83%	-	-	28.09	22.1	17.93	19.94	18.03
CAM134	528119	184354	Roadside	-	92%	-	-	31.43	22.15	20.87	21.46	23.33
CAM135	528335	184338	Roadside	-	83%	-	-	**42.38**	33.28	27.11	26.69	31.98
CAM136	528456	184345	Roadside	-	83%	-	-	36.73	30.33	29.4	27.76	31.06
CAM137	528582	184265	Roadside	-	92%	-	-	33.72	25.18	22.66	22.76	25.45
CAM138	527278	185153	Roadside	-	100%	-	-	-	30.83	30.93	32.1	32.75
CAM139	527184	185274	Roadside	-	92%	-	-	-	32.23	37.29	34.53	35.65
CAM140	527299	185071	Roadside	-	100%	-	-	-	22.51	21.83	20.65	24.25
CAM141	527500	184974	Roadside	-	100%	-	-	-	26.53	26.32	26.32	26.24
CAM142	529606	183589	Roadside	-	92%	-	-	-	-	28.34	25.39	32.29
CAM143	529443	183941	Roadside	-	100%	-	-	-	27.64	25.14	24.76	28.48
CAM144	529405	184139	Roadside	-	50%	-	-	-	-	26.99	-	32.03
CAM145	529233	184325	Roadside	-	100%	-	-	-	-	27.2	26.39	28.97
CAM146	529289	183697	Roadside	-	100%	-	-	-	23.37	23.15	21.53	26.24
CAM147	530004	184626	Roadside	-	100%	-	-	-	32.25	32.04	29.04	32.34
CAM148	530067	184286	Roadside	-	100%	-	-	-		36.39	31.92	34.80
CAM149	530320	183606	Roadside	-	92%	-	-	-	29.66	31.45	28.66	29.85
CAM150	528259	185061	Roadside	-	75%	-	-	-	-	21.21	20.08	22.49
CAM151	528191	185041	Roadside	-	92%	-	-	-	-	20.46	19.98	21.40
CAM152	528248	185360	Roadside	-	100%	-	-	-	-	21.39	21.51	23.11
CAM153	528404	185130	Roadside	-	92%	-	-	-	-	20.08	20.13	21.72
CAM154	528516	185100	Roadside	-	92%	-	-	-	-	21.28	20.93	22.79
CAM155	528874	185037	Roadside	-	92%	-	-	-	-	20.97	20.11	19.61
CAM156	527865	185224	Roadside	-	100%	-	-	-	-	25.06	26.1	26.60
CAM157	528251	184767	Roadside	-	92%	-	-	-	-	21.29	22.44	24.84
CAM158	528334	184832	Roadside	-	92%	-	-	-	-	18.27	19.53	21.67
CAM159	528309	185097	Roadside	-	92%	-	-	-	-	20.02	20.05	22.03

Diffusion Tube ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2023 (%) (2)	2017	2018	2019	2020	2021	2022	2023
CAM160	528430	184837	Roadside	-	92%	-	-	-	-	17.06	19.61	20.18
CAM161	529595	185067	Roadside	-	67%	-	-	-	-	21.47	20.78	23.22
CAM162	529842	184780	Roadside	-	92%	-	-	-	-	26.14	24.71	27.73
CAM163	529317	184124	Roadside	-	75%	-	-	-	-	21.28	22.77	24.21
CAM164	529264	184155	Roadside	-	100%	-	-	-	-	26.22	24.48	28.84
CAM165	529310	183998	Roadside	-	92%	-	-	-	-	27.07	26.48	29.90
CAM166	529279	183390	Roadside	-	92%	-	-	-	-	**42.58**	**40.69**	**46.11**
CAM167	527440	184319	Roadside	-	83%	-	-	-	-	33.59	38.92	**41.99**
CAM168	526852	184138	Roadside	-	92%	-	-	-	-	31.14	33.83	37.22
CAM169	526885	183959	Roadside	-	92%	-	-	-	-	26.47	26.06	28.83
CAM170	526924	183780	Roadside	-	100%	-	-	-	-	22.59	21.38	23.16
CAM171	527018	183899	Roadside	-	100%	-	-	-	-	25.47	24.54	25.62
CAM172	527372	184086	Roadside	-	100%	-	-	-	-	21.6	19.56	23.58
CAM173	527517	184159	Roadside	-	100%	-	-	-	-	21.78	19.07	22.04
CAM174	526930	184135	Roadside	-	67%	-	-	-	-	27.78	29.24	28.47
CAM175	527213	184163	Roadside	-	92%	-	-	-	-	24.26	22.76	23.50
CAM176	527496	184210	Roadside	-	92%	-	-	-	-	23.96	22.28	23.55
CAM177	527595	184210	Roadside	-	83%	-	-	-	-	23	22.13	24.50
CAM178	527582	184132	Roadside	-	100%	-	-	-	-	25.03	21.98	24.52
CAM179	530221	182086	Roadside	-		-	**53.4**	**49.02**	34.71	-	-	
CAM180	530234	182066	Roadside	-		-	**56.93**	**54.13**	36.64	-	-	
CAM181	530292	182162	Roadside	-		-	**43.16**	**41.53**	31.02	-	-	
CAM182	530386	182171	Roadside	-	92%	-	**45.73**	**43.83**	31.97	27.61	29.57	30.10
CAM183	530210	181917	Roadside	-		-	**45.65**	**41.53**	29.93	-	-	-
CAM184	530057	182060	Roadside	-		-	53.78	46.98	31.62	-	-	-
CAM185	530098	182122	Roadside	-		-	**70.46**	**64.49**	**43.26**	-	-	-
CAM186	530001	182105	Roadside	-		-	**51.49**	**49.25**	34.82	-	-	-
CAM187	530015	181854	Roadside	-		-	**42.69**	**40.69**	29.53	-	-	-
CAM188	529854	181852	Roadside	-		-	**45.57**	38.82	25.42	-	-	-
CAM189	530104	182388	Roadside	-	83%	-	**46.58**	39.95	32.22	29.64	29.67	32.50
CAM190	530097	182242	Roadside	-		-	**49.73**	**45.74**	37.09	-	-	-
CAM191	530177	182316	Roadside	-		-	**45.55**	**40.05**	32.09	-	-	-
CAM192	530280	182407	Roadside	-		-	**52.22**	**41.05**	30.41	-	-	-

Diffusion Tube ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2023 (%) (2)	2017	2018	2019	2020	2021	2022	2023
CAM193	530338	182420	Roadside	-		-	**41.26**	36.2	26.79	-	-	-
CAM194	530343	182500	Roadside	-	100%	-	**48.34**	**41.15**	28.63	27.95	26.66	29.89
CAM195	530122	182465	Roadside	-		-	**46.2**	37.89	32.3	-	-	-
CAM196	530193	182529	Roadside	-	92%	-	**46.69**	38.61	30.07	27.2	26.21	28.47
CAM197	530109	182567	Roadside	-		-	**43.54**	36.89	27.54	-	-	-
CAM198	530100	182682	Roadside	-		-	**42.6**	37.74	26.85	-	-	-
CAM199	530138	182696	Roadside	-		-	**53.85**	**42.17**	31.74	-	-	-
CAM200	530044	182947	Roadside	-	83%	-	**71.2**	**57.86**	39.85	35.17	35.09	38.47
CAM201	530054	182710	Roadside	-		-	**48.48**	**41.84**	28.07	-	-	-
CAM202	529985	182674	Roadside	-		-	**57.55**	**47.56**	36.25	-	-	-
CAM203	529893	182540	Roadside	-		-	**50.38**	**42.3**	31	-	-	-
CAM204	529860	182451	Roadside	-	83%	-	**68.26**	**59.37**	**43.16**	37.01	37.27	
CAM205	529753	182452	Roadside	-		-	**50.69**	**44.64**	33.24	-	-	-
CAM206	529509	182363	Roadside	-		-		47.88	32.47	-	-	-
CAM207	529236	181811	Roadside	-		-		39.03	28.36	-	-	-
CAM208	530352	182100	Roadside	-		-	**45.54**	**46.49**	31.39	-	-	-
CAM209	530402	181627	Roadside	-		-	**71.25**	**60.36**	**40.34**	-	-	-
CAM210	530385	181352	Roadside	-		-	37.27	36.26	25.42	-	-	-
CAM211	530165	181329	Roadside	-		-	**58.48**	**54.81**	35.46	-	-	-
CAM212	530278	181926	Roadside	-		-	**56.02**	**51.48**	33.98	-	-	-
CAM213	530386	181485	Roadside	-		-	**58.99**	**50.14**	33.17	-	-	-
CAM214	530205	181673	Roadside	-		-	**52.36**	**44.64**	29.57	-	-	-
CAM215	529649	182364	Roadside	-		-	**44.12**	**40.04**	31.17	-	-	-
CAM216	529281	182256	Roadside	-		-	**55.99**	**53.8**	**50.93**	31.36	-	-
CAM217	529364	182207	Roadside	-		-	**57.56**	**54.1**	**42.19**	35.13	-	-
CAM218	529467	181964	Roadside	-		-	**50.39**	-	-	-	-	-
CAM219	529555	181988	Roadside	-		-	**42.6**	**42.6**	31.57	31.38	-	-
CAM220	529608	181749	Roadside	-		-	**57.75**	-	-	-	-	-
CAM221	529646	181775	Roadside	-		-	38.46	35.5	27.99	26.96	-	-
CAM222	529531	181588	Roadside	-		-	39.7	36.4	28.3	26.1	-	-
CAM223	529725	181553	Roadside	-		-	**69.44**	**71.8**	**55.42**	**42.02**	-	-
CAM224	529816	181391	Roadside	-		-	**70.66**	-	-	-	-	-
CAM225	529901	181254	Roadside	-		-	**71.59**	**67.2**	**45.35**	30.63	-	-

Diffusion Tube ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2023 (%) (2)	2017	2018	2019	2020	2021	2022	2023
CAM226	530095	181327	Roadside	-		-	**64.71**	**56.5**	33.81	39.55	-	-
CAM227	530051	181454	Roadside	-		-	**92.31**	**77.5**	36.93	**43.92**	-	-
CAM228	529900	181708	Roadside	-		-	**64.88**	**50.5**	28.04	30.77	-	-
CAM229	529650	182060	Roadside	-		-	**57.51**	**45.7**	26.95	32.03	-	-
CAM230	529443	182350	Roadside	-		-	**64.31**	**55.1**	32.34	32.1	-	-
CAM231	529682	182314	Roadside	-		-	**43.71**	**40.3**	31.46	30.56	-	-
CAM232	529905	182667	Roadside	-		-	**74.74**	**69.6**	**47.21**	**46.08**	-	-
CAM233	529844	181551	Roadside	-		-	**46.55**	39.8	27.89	26.02	-	-
CAM234	530074	181163	Roadside	-		-	-	**46.1**	28	25.31	-	-
CAM235	530056	181082	Roadside	-		-	-	**44.6**	29.84	30.49	-	-
CAM236	529460	181975	Roadside	-		-	-	**55.5**	**40.05**	38.09	-	-
CAM237	529590	181751	Roadside	-		-	-	**62**	**51.21**	**48.65**	-	-
CAM238	529812	181400	Roadside	-		-	-	**57.8**	47.93	43.47	-	-
CAM239	530032	181005	Roadside	-		-	-	-	-	26.35	-	-
CAM240	530178	181127	Roadside	-		-	-	-	-	27.11	-	-
CAM241	530042	181188	Roadside	-	75%	-	-	-	34.2	33.1	31.31	32.55
CAM242	529978	181100	Roadside	-	33%	-	-	-	32.09	27.94	28.48	26.42
CAM243	530073	181169	Roadside	-	75%	-	-	-	30.25	27.09	26.75	31.97
CAM244	530059	181041	Roadside	-	92%	-	-	-	30.98	25.03	26.86	29.41
CAM245	530036	181120	Roadside	-	92%	-	-	-	35.88	30.21	31.03	35.93
CAM246	530086	181070	Roadside	-	92%	-	-	-	**46.33**	38.14	**43.9**	**49.64**
CAM247	530131	181105	Roadside	-	83%	-	-	-	31.25	25.74	26.6	29.56
CAM248	530018	181078	Roadside	-	67%	-	-	-	**44.43**	37.9	**42.63**	**50.91**
CAM249	530009	181037	Roadside	-	50%	-	-	-	29.42	26.78	28.39	31.93
CAM250	530100	181029	Roadside	-	67%	-	-	-	26.74	23.68	25.51	30.04
CAM251	530114	181134	Roadside	-	67%	-	-	-	29.28	23.91	26.55	29.29
CAM252	530139	181178	Roadside	-	83%	-	-	-	27.67	25.18	25.59	27.54
CAM253	529497	183948	Roadside	-	67%	-	-	-	-	21.78	21	17.09
CAM254	529660	183797	Roadside	-	92%	-	-	-	-	19.85	21.5	21.01
CAM255	529698	183770	Roadside	-	92%	-	-	-	-	19	19.95	19.05
CAM256	529748	183733	Roadside	-	92%	-	-	-	-	22.12	19.86	19.13
CAM257	529988	183524	Roadside	-	100%	-	-	-	-	23.42	23.59	24.36
CAM258	528021	185593	Roadside	-	100%	-	-	-	-	16.57	17.97	19.77

Diffusion Tube ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2023 (%) (2)	2017	2018	2019	2020	2021	2022	2023
CAM259	527926	185614	Roadside	-	100%	-	-	-	-	17.55	17.62	20.29
CAM260	527865	185604	Roadside	-	100%	-	-	-	-	17.24	17.78	20.11
CAM261	525668	183335	Roadside	-	92%	-	-	-	-	25.64	24.85	32.44
CAM262	525557	183462	Roadside	-	100%	-	-	-	-	28.22	28.67	33.97
CAM263	525439	183589	Roadside	-	75%	-	-	-	-	**50.98**	**50.93**	**41.99**
CAM264	525381	183708	Roadside	-	83%	-	-	-	-	30.93	30.58	32.74
CAM265	525258	183828	Roadside	-	50%	-	-	-	-	**42.83**	**49.99**	37.21
CAM266	525156	183991	Roadside	-	83%	-	-	-	-	**42.26**	**45.58**	**44.06**
CAM267	525077	184067	Roadside	-	83%	-	-	-	-	**43.69**	**45.29**	**41.93**
CAM268	524998	184185	Roadside	-	58%	-	-	-	-	29.98	31.41	31.77
CAM269	524904	184281	Roadside	-	83%	-	-	-	-	37.84	**40.87**	38.63
CAM270	524747	184500	Roadside	-	83%	-	-	-	-	**43.84**	35.22	33.21
CAM271	524631	184665	Roadside	-	67%	-	-	-	-	35.67	36.19	38.09
CAM272	528437	187270	Roadside	-	100%	-	-	-	-	23.31	19.49	21.32
CAM273	528324	186396	Roadside	-	83%	-	-	-	-	22.07	21.56	23.21
CAM274	528918	186959	Roadside	-	100%	-	-	-	-	24.22	20.7	22.50
CAM275	528967	186654	Roadside	-	92%	-	-	-	-	24.85	23.18	25.20
CAM276	529025	186145	Roadside	-	100%	-	-	-	-	26.56	25.26	27.59
CAM277	528364	186173	Roadside	-	100%	-	-	-	-	**41.69**	31.46	32.78
CAM278	528763	185546	Roadside	-	100%	-	-	-	-	27.36	26.77	28.87
CAM279	528523	185778	Roadside	-	100%	-	-	-	-	28.73	27.08	31.73
CAM280	528939	185366	Roadside	-	100%	-	-	-	-	27.21	26.23	29.35
CAM281	528788	186048	Roadside	-	100%	-	-	-	-	21.02	20.05	22.67
CAM282	528924	186085	Roadside	-	92%	-	-	-	-	24.91	23.48	26.22
CAM283	529119	186219	Roadside	-	100%	-	-	-	-	21.62	20.77	24.12
CAM284	529179	186011	Roadside	-	92%	-	-	-	-	26.97	26.03	29.71
CAM285	529016	185533	Roadside	-	100%	-	-	-	-	25.29	25.18	27.85
CAM286	529885	183280	Roadside	-	100%	-	-	-	-	-	38.49	**40.39**
CAM287	529813	183349	Roadside	-	100%	-	-	-	-	-	25.91	23.47
CAM288	529750	183288	Roadside	-	100%	-	-	-	-	-	20.91	21.51
CAM289	529797	183187	Roadside	-	100%	-	-	-	-	-	22.36	22.50
CAM290	529641	183282	Roadside	-	100%	-	-	-	-	-	20.34	19.21
CAM291	529611	183444	Roadside	-	100%	-	-	-	-	-	20.76	20.54

Diffusion Tube ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2023 (%) (2)	2017	2018	2019	2020	2021	2022	2023
CAM292	529424	183445	Roadside	-	100%	-	-	-	-	-	25.29	25.24
CAM293	529224	183362	Roadside	-	83%	-	-	-	-	-	28.39	29.56
CAM294	529229	183231	Roadside	-	92%	-	-	-	-	-	27.41	26.99
CAM295	529321	183239	Roadside	-	100%	-	-	-	-	-	28	29.64
CAM296	529527	183264	Roadside	-	92%	-	-	-	-	-	20.84	19.66
CAM297	529601	183148	Roadside	-	83%	-	-	-	-	-	21.08	20.17
CAM298	529555	182900	Roadside	-	100%	-	-	-	-	-	23.91	23.21
CAM299	529717	182992	Roadside	-	100%	-	-	-	-	-	22.91	22.60
CAM300	529815	182830	Roadside	-	100%	-	-	-	-	-	23.05	22.47
CAM301	529802	182703	Roadside	-	100%	-	-	-	-	-	27.86	27.17
CAM302	529949	182798	Roadside	-	100%	-	-	-	-	-	25.15	26.09
CAM303	529887	182813	Roadside	-	100%	-	-	-	-	-	23.76	22.64
CAM304	529786	183038	Roadside	-	100%	-	-	-	-	-	27.53	26.14
CAM305	529987	183060	Roadside	-	100%	-	-	-	-	-	32.09	33.31
CAM306	530231	183453	Roadside	-	92%	-	-	-	-	-	30.48	28.60
CAM307	529874	184379	Roadside	-	100%	-	-	-	-	-	26.59	30.33
CAM308	529515	184274	Roadside	-	92%	-	-	-	-	-	25.07	28.31
CAM309	528687	185016	Roadside	-	92%	-	-	-	-	-	24.16	25.33
CAM310	530149	181611	Roadside	-	83%	-	-	-	-	-	-	34.42
CAM311	530250	181473	Roadside	-	92%	-	-	-	-	-	-	28.47
CAM312	530414	181645	Roadside	-	92%	-	-	-	-	-	-	**40.47**
CAM313	530429	181459	Roadside	-	92%	-	-	-	-	-	-	29.32
CAM314	530608	181291	Roadside	-	92%	-	-	-	-	-	-	39.97
CAM315	530755	181566	Roadside	-	92%	-	-	-	-	-	-	**44.07**
CAM316	530573	181653	Roadside	-	92%	-	-	-	-	-	-	34.86
CAM317	530743	181719	Roadside	-	83%	-	-	-	-	-	-	26.30
CAM318	530845	181904	Roadside	-	92%	-	-	-	-	-	-	**40.27**
CAM319	530529	182013	Roadside	-	83%	-	-	-	-	-	-	31.50
CAM320	531321	182050	Roadside	-	92%	-	-	-	-	-	-	33.01
CAM321	531223	182034	Roadside	-	83%	-	-	-	-	-	-	34.86
CAM322	531160	182039	Roadside	-	92%	-	-	-	-	-	-	31.20
CAM323	531012	181982	Roadside	-	92%	-	-	-	-	-	-	**41.16**
CAM324	531092	182097	Roadside	-	92%	-	-	-	-	-	-	39.23

Diffusion Tube ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2023 (%) (2)	2017	2018	2019	2020	2021	2022	2023
CAM325	531123	182188	Roadside	-	92%	-	-	-	-	-	-	31.95
CAM326	529042	183678	Roadside	-	92%	-	-	-	-	-	-	**42.47**
CAM327	529011	184402	Roadside	-	92%	-	-	-	-	-	-	25.76
CAM328	528379	183669	Roadside	-	67%	-	-	-	-	-	-	35.05
CAM329	529231	183805	Roadside	-	83%	-	-	-	-	-	-	27.34

☒ **Annualisation has been conducted where data capture is <75% and >25% in line with LLAQM.TG19**

☒ **Diffusion tube data has been bias adjusted.**

☒ **Reported concentrations are those at the location of the monitoring site (bias adjusted and annualised, as required), i.e. prior to any fall-off with distance correction.**

Notes:

The annual mean concentrations are presented as $\mu g/m^3$.

Exceedances of the NO_2 annual mean objective of $40\mu g/m^3$ are shown in **bold**.

NO_2 annual means exceeding $60\mu g/m^3$, indicating a potential exceedance of the NO_2 1-hour mean objective are shown in **bold and underlined**.

Means for diffusion tubes have been corrected for bias. All means have been "annualised" in accordance with LLAQM Technical Guidance if valid data capture for the calendar year is less than 75% and greater than 25%.

Concentrations are those at the location of monitoring and not those following any fall-off with distance adjustment.

(1) Data capture for the monitoring period, in cases where monitoring was only carried out for part of the year.

(2) Data capture for the full calendar year (e.g. if monitoring was carried out for 6 months, the maximum data capture for the full calendar year is 50%).

Commentary on annual mean NO$_2$ data from diffusion tube monitoring

In 2023 Camden commenced diffusion tube monitoring at ten new locations (CAM320-CAM329; Clerkenwell and CT Cycle) and are also able to report data collected at a further ten sites at which monitoring commenced in late 2022 (CAM310-CAM319). By the end of 2023, Camden Council was actively measuring NO$_2$ at 262 diffusion tube sites and four automatic sites. This monitoring network will continue to be reviewed and expanded where appropriate.

The annual mean NO$_2$ concentrations for 2023 have decreased at 26 of the 32 long-term monitoring locations within the borough when compared to 2022 data, with an average reduction in bias adjusted (and annualised, where necessary) recordings of 1.58 µg/m^3 (four percent) across these 26 sites. Of these long-term monitoring sites, there are nine which have had data collected since 2017. During this period, there has been an average reduction in annual NO$_2$ concentration of 30.95 µg/m^3 (54%); this is illustrated in Figure 2 below. The continued reduction in NO$_2$ over the past seven years is clear, with several sites that were historically far in exceedance of the 40µg/m^3 legal limit for NO$_2$ (such as Kentish Town Road, Tottenham Court Road, and Camden Road) now recording below this level. This does not mean that there will be any reduction in effort to improve air quality throughout Camden: The Council's commitment is to realise the community's vision for a borough in which no person experiences ill health because of the air they breathe.

In total, there have been 240 diffusion tube monitoring locations in Camden with data collected in both 2022 and 2023, with 85 of these recording improved or equivalent NO$_2$ concentrations in 2023. For the fourth year in a row, no monitoring site has recorded an annual mean above 60 µg/m^3, which indicates that the short-term (one-hour) NO$_2$ objective is likely to have not been exceeded at any of the sites during 2023.

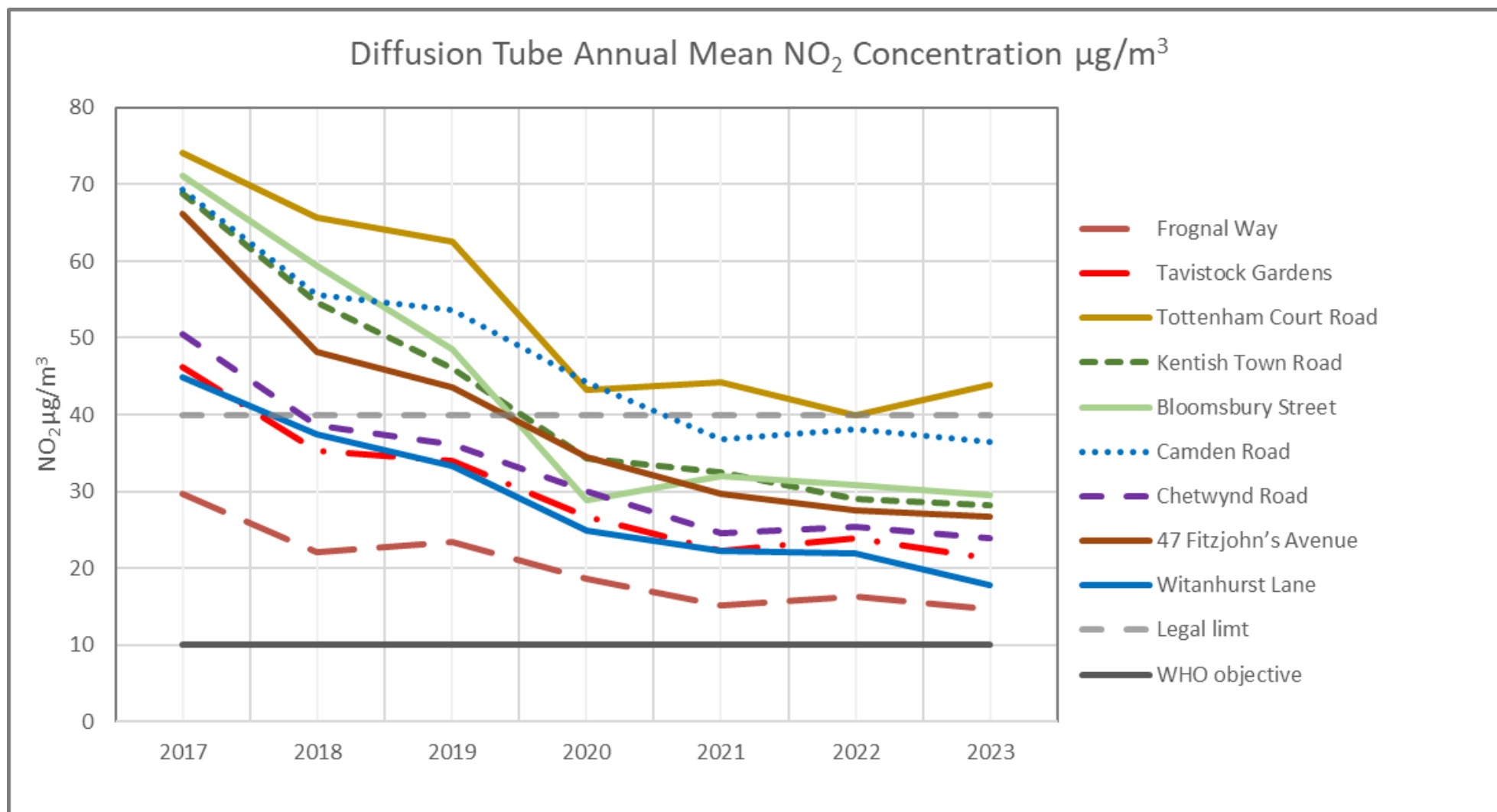**Figure 2. Non-automatic Monitoring Annual Mean NO₂ Concentration**

Table F. NO$_2$ Automatic Monitoring Results: Comparison with 1-hour Mean Objective, Number of 1-Hour Means > 200 µg/m^3

Site ID	Valid data capture for monitoring period %(a)	Valid data capture 2023 %(b)	2017	2018	2019	2020	2021	2022	2023
BL0	-	99.06	0	0	0	0	0	0	0
CD1	-	99.46	1	2	1	0	2	0	0
CD9	-	99.34	**25**	18	7	0	1	2	0
CD010	-	97.89	-	-	-	-	0	0	0

Notes

Results are presented as the number of 1-hour periods where concentrations greater than 200 µg m^{-3} have been recorded.

Exceedance of the NO$_2$ short term AQO of 200 µg m^{-3} over the permitted 18 hours per year are shown in **bold**.

If the period of valid data is less than 85%, the 99.8th percentile of 1-hour means is provided in brackets.

(a) Data capture for the monitoring period, in cases where monitoring was only carried out for part of the year

(b) Data capture for the full calendar year (e.g. if monitoring was carried out for six months the maximum data capture for the full calendar year would be 50%)

Commentary on 1-hour mean NO$_2$ data from automatic monitoring

In 2023, there were no exceedances of the one-hour mean level recorded across Camden's automatic monitoring network, improving on the previous years' performance, which recorded two exceedances at the Euston Road site (CD9). See table F above for more information.

Table G. Annual Mean PM$_{10}$ Automatic Monitoring Results (µg/m^3)

Site ID	Valid data capture for monitoring period %([a])	Valid data capture 2023 %([b])	2017	2018	2019	2020	2021	2022	2023
BL0	-	97.12	19	17	18	16	16	17	13
CD1	-	78.55	20	21	19	16	16	21	18
CD9	-	92.07	20	21	22	18	19	21	18
KGX	-	91.91	-	15	15	13	13	15	14

Notes

The annual mean concentrations are presented as µg m^{-3}.

Exceedances of the PM$_{10}$ annual mean AQO of 40 µg m^{-3} are shown in **bold**.

All means have been "annualised" in accordance with LLAQM Technical Guidance, if valid data capture is less than 75% and more than 25%.

(a) Data capture for the monitoring period, in cases where monitoring was only carried out for part of the year.

(b) Data capture for the full calendar year (e.g. if monitoring was carried out for six months the maximum data capture for the full calendar year would be 50%).

Commentary on annual mean PM$_{10}$ data from automatic monitoring

Camden's automatic PM$_{10}$ monitoring data exhibits an overall downward trend since 2017, with an average reduction of 3.3 µg/m^3 (17% during) this time across the London Bloomsbury, Swiss Cottage, and Euston Road sites. The 2023 annual mean concentration for PM$_{10}$ at the Coopers Lane urban background monitoring site has improved slightly on pre-COVID pandemic concentrations.

PM$_{10}$ annual mean concentrations have reduced at all automatic monitoring locations in 2023 from the previous year with an average 2.8 µg/m^3 (15%) reduction. Each site has recorded below the legal limit of 40 µg/m^3 however, only the London Bloomsbury and Coopers Lane urban background monitoring sites are within the 2021 updated WHO objective of 15 µg/m^3 annual mean for PM$_{10}$.

Figure 3 illustrates annual mean PM$_{10}$ concentration as measured at four automatic monitoring sites in Camden, illustrating the reduction in PM$_{10}$ concentrations in 2023 compared to previous years.
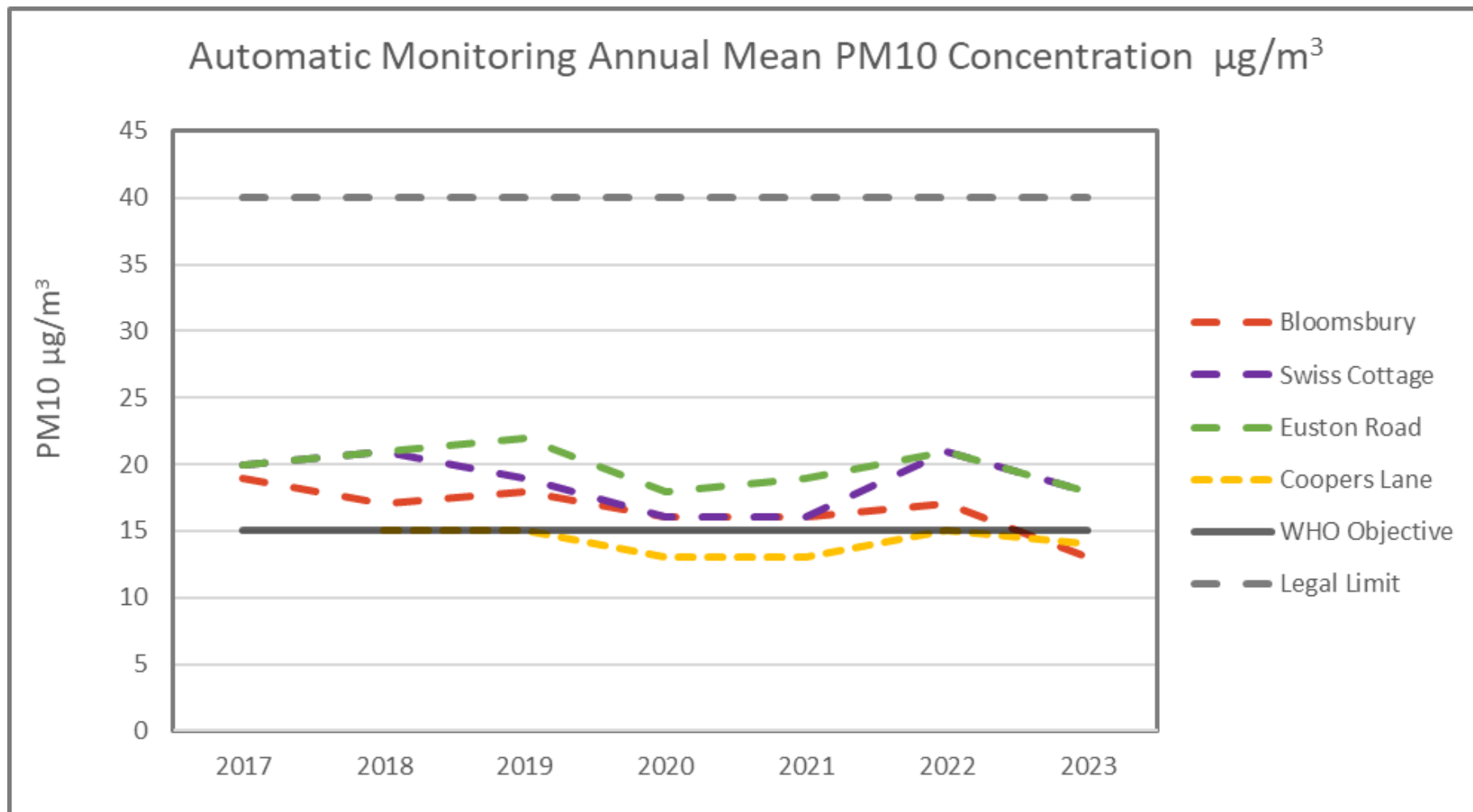
Figure 3. Automatic Monitoring Annual Mean PM$_{10}$ Concentration

Automatic Monitoring Annual Mean PM10 Concentration µg/m^3

Table H. PM$_{10}$ Automatic Monitoring Results: Comparison with 24-Hour Mean Objective, Number of PM$_{10}$ 24-Hour Means > 50 µg/m^3

Site ID	Valid data capture for monitoring period %[a]	Valid data capture 2023 %[b]	2017	2018	2019	2020	2021	2022	2023
BL0	-	97.12	6	1	9	4	0	5	0
CD1	-	78.55	8	4	8	3	0	0	2
CD9	-	92.07	3	2	8	2	2	6	4
KGX	-	91.91	-	1	5	1	0	5	1

Notes

Exceedances of the PM$_{10}$ 24-hour mean objective (50 µg/m^3 over the permitted 35 days per year) are shown in **bold.**

Where the period of valid data is less than 85% of a full year, the 90.4th percentile is provided in brackets.

(a) data capture for the monitoring period, in cases where monitoring was only carried out for part of the year

(b) data capture for the full calendar year (e.g. if monitoring was carried out for six months the maximum data capture for the full calendar year would be 50%).

Commentary on 24-hour mean PM$_{10}$ data from automatic monitoring

Exceedances of the short-term (24-hour) objective decreased overall across Camden's PM$_{10}$ automatic monitoring network, with a total of seven exceedances in 2023, compared to the 16 recorded during 2022. Of the four monitoring sites, only Swiss Cottage (CD1) recording more exceedances of the short-term objective in 2023 than the previous year. During 2023, data capture at Swiss Cottage was 78%, and from comparison against PM$_{10}$ data from Euston Road (CD9) it is considered likely that one additional exceedance of the 24-hour mean objective would have occurred at the Swiss Cottage site during September 2023 if data coverage had not been affected during that month.

Table I. Annual Mean PM$_{2.5}$ Automatic Monitoring Results (μg/m^3)

Site ID	Valid data capture for monitoring period %[a]	Valid data capture 2023 %[b]	2017	2018	2019	2020	2021	2022	2023
BL0	-	97.12	13	10	11	9	9	9	8
CD1	-	95.56	16	11	11	10	9	12	10
CD9	-	92.17	14	15	14	11	11	12	9
KGX	-	92.72	-	-	-	-	-	10	8

Notes

The annual mean concentrations are presented as μg/m^3.

Exceedances of the PM$_{2.5}$ annual mean AQO of 20 μg/m^3 are shown in **bold**.

All means have been "annualised" in accordance with LLAQM Technical Guidance if valid data capture is less than 75% and more than 25%.

(a) Data capture for the monitoring period, in cases where monitoring was only carried out for part of the year.

(b) Data capture for the full calendar year (e.g. if monitoring was carried out for six months the maximum data capture for the full calendar year would be 50%).

Commentary on annual mean PM$_{2.5}$ data from automatic monitoring

Camden's automatic PM$_{2.5}$ monitoring network for 2023 has recorded reduced concentrations of fine particulate matter at all four monitoring sites when compared to the previous year, with an average reduction of 2 μg/m^3 (18%). The Euston Road (CD9) monitoring site has recorded the largest reduction, with a 25% improvement (3 μg/m^3) from 2022's result.

On a longer timeline, annual mean PM$_{2.5}$ concentrations have reduced on average by 5.3 µg/m^3 (37%) across Camden's automatic monitoring network since 2017. 2022 was the first year Camden Council monitored for PM$_{2.5}$ at the Coopers Lane site, meaning that historical data analysis is not yet possible for this site. However, this site has recorded a 2 µg/m^3 (20%) reduction in concentrations during this time.

All automatic PM$_{2.5}$ monitoring sites have been compliant with the legal limit of 25 µg/m^3 for several years and as of 2023 have achieved the 2030 London Mayoral Objective of 10 µg/m^3. Despite this, all four monitoring sites are in exceedance of the WHO's updated 2021 PM$_{2.5}$ guideline of 5 µg/m^3. The World Health Organization considers there to be no safe threshold of exposure to PM$_{2.5}$; therefore, Camden Council will strive to improve air quality throughout the borough to better protect the health of all who live, work and study in Camden.

Figure 4 illustrates the annual mean PM$_{2.5}$ concentrations measured at the four automatic monitoring sites in Camden.

Figure 4. Automatic Monitoring Annual Mean PM$_{2.5}$ Concentration
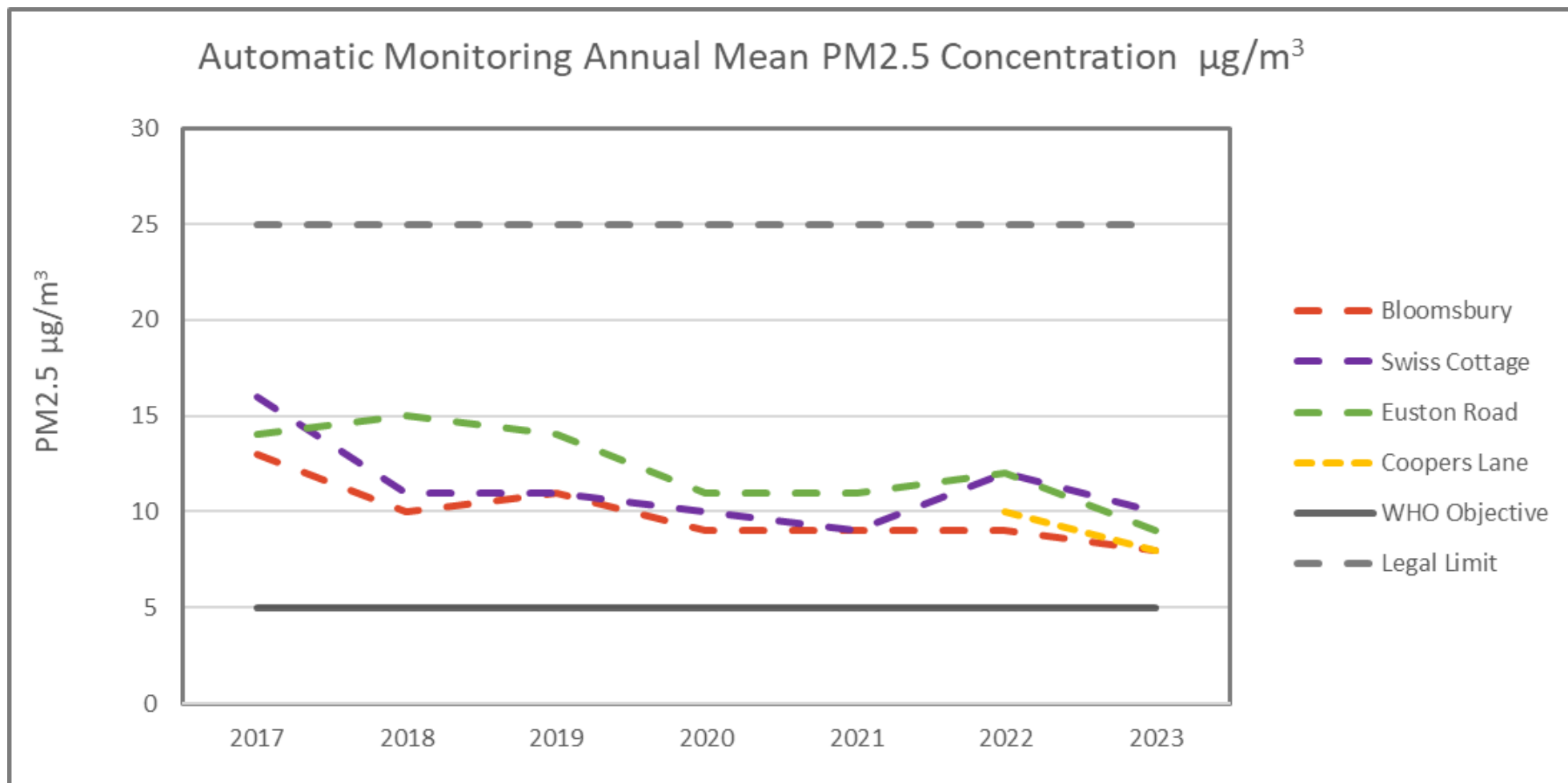

Automatic Monitoring Annual Mean PM2.5 Concentration µg/m³

Table J. 2023 SO$_2$ Automatic Monitoring Results: Comparison with Objectives

Site ID	Valid data capture for monitoring period %[a]	Valid data capture 2023 %[b]	Number of 15-minute means > 266 µg/m^3	Number of 1-hour mean > 350 µg/m^3	Number 24-hour mean > 125 µg/m^3
BL0	-	91.52	0	0	0

Notes

Results are presented as the number of instances where monitored concentrations are greater than the objective concentration.

Exceedances of the SO$_2$ objectives are shown in **bold** (15-min mean = 35 allowed a year, 1-hour mean = 24 allowed a year, 24-hour mean = 3 allowed a year).

If the period of valid data is less than 85%, the relevant percentiles are provided in brackets.

(a) Data capture for the monitoring period, in cases where monitoring was only carried out for part of the year.

(b) Data capture for the full calendar year (e.g. if monitoring was carried out for six months the maximum data capture for the full calendar year would be 50%).

Commentary on SO$_2$ data from automatic monitoring

Automatic SO$_2$ monitoring at Bloomsbury (BL0) again shows no exceedances of the 15-minute, one-hour or 24-hour mean objectives during 2023, with 92% data capture.

Table K. Annual Mean O_3 Automatic Monitoring Results ($\mu g/m^3$)

Site ID	Valid data capture for monitoring period %[a]	Valid data capture 2023 %[b]	Annual mean 2023
BL0	-	90.66	54

Notes

The annual mean concentrations are presented as $\mu g/m^3$.

All means have been "annualised" in accordance with LLAQM Technical Guidance if valid data capture is less than 75% and more than 25%.

(a) Data capture for the monitoring period, in cases where monitoring was only carried out for part of the year.

(b) Data capture for the full calendar year (e.g. if monitoring was carried out for six months the maximum data capture for the full calendar year would be 50%).

Commentary on O_3 data from automatic monitoring

Automatic O_3 monitoring at Bloomsbury (BL0) measured an annual mean of 54 $\mu g/m^3$, with 90% data capture. During 2023 there were 157 exceedances of the 100 $\mu g/m3$ eight-hour mean objective (measured as a rolling eight-hour mean), and all exceedances occurred during June and September.

2. Action to Improve Air Quality

2.1 Air Quality Management Areas

A summary of AQMAs declared by London Borough of Camden can be found in Table L. The table presents a description of the AQMA that is currently designated within Camden. Appendix C provides maps of AQMA and the air quality monitoring locations in relation to the AQMA. The air quality objectives pertinent to the current AQMA designation are as follows:

- NO_2 annual mean.
- PM_{10} 24-hour mean.

Table L. Declared Air Quality Management Areas

AQMA Name	Date of Declaration	Pollutants and Air Quality Objectives	One Line Description	Is air quality in the AQMA influenced by roads controlled by Highways England?	Level of Exceedance: Declaration	Level of Exceedance: Current Year	Number of Years Compliant with Air Quality Objective	Name and Date of AQAP Publication	Web Link to AQAP
Camden AQMA	20/09/2002	•NO_2 annual mean •PM_{10} 24-hour mean	This AQMA encompasses the entire borough of Camden	NO	•NO_2 annual mean: recorded at CD9 (2001): 66 µg/m^3 •PM_{10} 24-hour mean recorded at BL0 (2001): 15 µg/m^3 and CD1 (2001): 25 µg/m^3	•NO_2 annual mean: 0 exceedances •PM_{10} 24-hour mean: 7 exceedances	NO_2 annual mean compliance has not yet been achieved across Camden's monitoring network. PM_{10} 24-hour mean compliance has been achieved for several years.	Camden Clean Air Action Plan 2023-26, published 1st January 2023	[Camden Air Quality Action Plan 2023-26](#)

☒ **London Borough of Camden confirm the information on UK-Air regarding their AQMA(s) is up to date.**

☒ **London Borough of Camden confirm that all current AQAPs have been submitted to GLA.**

2.2 Air Quality Action Plan Progress

Table M provides a summary of London Borough of Camden progress against the Air Quality Action Plan, showing progress made this year.

Table M. Delivery of Air Quality Action Plan Measures

LLAQM Action Matrix Theme	Measure	Action	Progress
Construction and development: Reducing the impact of air pollution from construction and development on public health.	1	Reduced emissions from non-road mobile machinery (NRMM)	• Camden Council continues to participate in the LB Merton-led Cleaner Construction for London NRMM enforcement project. • Camden's Construction Management Plan (CMP) pro-forma has been altered to reflect updated NRMM requirements.
	2	Reduced emissions from construction generators	• In 2023, there were audits of 20 construction sites to assess NRMM (including generator) standard compliance. 100% of these sites were found to be compliant.
	3	Reduced emissions from construction and demolition processes	• During 2023, Camden's Air Quality Team reviewed 145 CMPs and 37 Air Quality Assessments. • A new officer was hired into Camden Council's Planning Enforcement department to provide greater Council presence when assessing construction compliance.
	4	Reduced emissions from road vehicles servicing construction sites	• Every CMP received is reviewed to ensure the minimum number of construction site delivery vehicles are used to service the development.
	5	Reduced impacts of HS2 and other major development or infrastructure projects	• Camden's Air Quality officers attend monthly environmental meetings with HS2 where upcoming works, site updates, and complaints received are discussed and resolved. • During 2023, Camden negotiated the installation of an additional PM_{10} monitor into Ampthill Square Estate, north of

			Euston Station. The data collected from this sensor is regularly reviewed by the Council.
Buildings: Reducing the impact of air pollution from building operation and use (heating, power, and commercial and industrial processes) on public health.	6	Reduced emissions from building heating systems	• In accordance with Camden's Climate Action Plan, the Camden Climate Fund (CCF) was launched to provide up to 50% of costs to reduce carbon produced by homes, businesses, and community spaces. In particular, the CCF is aimed at reducing heating demand from gas powered boilers, therefore reducing their associative pollutant emissions. • The Camden Climate Alliance (CCA) has recruited 46 businesses to be a part of the Mayor of London's Business Climate Challenge (2022-23) which provides support to reduce operational energy costs and carbon emissions. • Camden's Air Quality and Sustainability Planning teams regularly review planning applications to ensure Air Quality Neutral is achieved (where required). • In 2023, Camden launched an air quality e-newsletter, which is published every two months. This has been utilised to inform relevant stakeholders of grant funding opportunities, including those aimed at replacing or retrofitting building heating systems.
	7	Reduced emissions from backup diesel generators	• During 2023, Camden officers held internal discussions as to how new or amended policy could be utilised to reduce and monitor emissions from backup diesel generators.
	8	Reduced emissions from commercial cooking	• In 2023, Camden applied for Defra Air Quality Grant Scheme funding for a project to work with businesses to identify and reduce emissions from kitchens and food preparation through behaviour change interventions. • Camden also joined a consortium bid for Defra Air Quality Grant Funding to undertake a research project to assess the impact of commercial cooking on ambient air quality and occupational exposure. • Work has also commenced to create a best practice guidance document for reducing the impact of commercial cooking on local air quality.

	9	Reduced emissions from wood burning	• In Spring 2023, the Project Lead position for the London Wood Burning Project (LWBP) was filled.
			• Through the LWBP, Camden has been able evaluate the public health impact and the economic, and healthcare costs of wood burning on society. More information can be found on the LWBP website.
			• In 2023, the air quality data collection aspect of the LWBP was completed, the findings of which can be viewed here.
			• The awareness raising aspect of the LWBP was deployed in autumn 2023. This included:
			  o 15.5m impacts from radio, 9.5m of which (61%) was from the ABC1 target group
			  o 20 billboard sites
			  o 161 bus rears advertisements
			  o 700k impressions on Meta platforms
			  o 26.5m impressions via Google Ads

Transport: Reducing the impact of air pollution from transport on public health	10	Reduced emissions from Camden's vehicle fleet	• As of the end of 2023, 99% of Camden Council's vehicle fleet was ULEZ compliant, representing a six percent increase from the previous year. Ten percent of the fleet is electrically powered.
	11	Reduced emissions from road vehicles	• Camden's Sustainability, Air Quality & Energy Management Team and Transport Strategy Service work collaboratively across a range of policy and project areas covered by Camden's Clean Air Action Plan 2023-26, Climate Action Plan 2020-2025, and Transport Strategy 2019-2041 . All plans have overlapping and mutually supportive policies.
	12	Reduced emissions from vehicle engine idling	• In 2023, Camden utilised the knowledge gained from the Mayor of London-funded 'Idling Action London' project to produce information and educational engagement materials for members of the public. • A new Senior Education and Enforcement Officer was hired in 2023, with anti-idling enforcement during site visits one the responsibilities required of the position.

	13	Reduced emissions from deliveries, servicing, and freight	• Camden Council's consolidation centre has been operational throughout 2023 and continues to use e-cargo bikes for final deliveries within the borough. • As of the end of 2023, Camden's Transport Strategy Service is in the process of writing an updated Freight and Servicing Action Plan.
	14	Reduced emissions from rail	• In 2023, members of Camden's Air Quality Team held a meeting with the Rail Safety and Standards Board (RSSB) to raise the profile of rail's impact on air quality, particularly at the Euston, King's Cross, and St. Pancras stations in the borough.
Communities and schools: Supporting and empowering communities and schools to reduce and avoid exposure to air pollution	15	Interventions are targeted to tackle the inequitable impact of air pollution on vulnerable communities and those disproportionately impacted by air pollution	• In 2023, Camden's Air Quality Team ran or supported multiple community-based events and workshops, and hosted events for members of the public on Clean Air Day and for the launch of the Council's new Clean Air Action Plan 2023-2026. • Camden's Air Quality Team has continued to support the Mayor of London-funded Somers Town Future Neighbourhoods 2030 project by promoting home energy and indoor air quality advice visits, whilst also offering the Somers Town community free air quality sensor loans for indoor and personal exposure monitoring. 35 sensor loans took place in 2023 as a part of the Somers Town Future Neighbourhoods 2030 project.
	16	Communities are empowered to take action locally	• Following the successful application for Defra Air Quality Grant funding for the 'Clean Air for Schools' project in early 2023, Camden's Air Quality Team commenced preparations for the project, including an extensive recruitment process to hire a Project Lead officer. The project will launch in early 2024. • Officers from Camden's Air Quality Team hosted engagement events for local vulnerable communities to raise awareness of air quality as a public health issue, and to increase knowledge of how exposure to air pollution can be reduced. • The Air Quality Team continued to support the Somers Town Future Neighbourhoods 2030 project by promoting home energy and indoor air quality advice visits, whilst also

			providing the area with the opportunity for air quality sensor loans to residents and businesses. Five month-long loans took place in 2023.

	17	Reduced exposure outside schools and support schools in protecting child health whilst at school	• In 2023, three additional Healthy School Streets (HSS) were made permanent. These are:
			    ○ Redhill Street – Christchurch Primary School
			    ○ Elsworthy Road – St Paul's Primary School
			    ○ Holmes Road – St Patrick's Primary School
			• As of the end of 2023, there are 22 permanent HSS schemes covering 26 schools, and eight temporary schemes in Camden.
			• Following the successful application for Defra Air Quality Grant funding for the 'Clean Air for Schools' project in early 2023, Camden's Air Quality Team commenced preparations for the project, including an extensive recruitment process to hire a project lead officer. The project will launch in early 2024.

	18	Reduced exposure outside hospitals and health centres	• Following participation in the successful Idling Action London project, Camden has extended its legacy alongside other London local authorities by participating in the Idling Action Legacy Working Group. • After the announcement of the fourth round of the Mayor's Air Quality Fund (MAQF), Camden assembled a consortium of 20 London boroughs with the intention of submitting a funding application to further tackle emissions resulting from vehicle engine idling. The outcome of this bid will be published in 2024.
	19	Reduced emissions from events and filming	• In 2023, Camden Council, in partnership with The Generator Project, organised an industry event to discuss the impact filming and events has on urban air quality and how this can be reduced. Attendees included local authority officers, film production companies, and alternative power suppliers. • Camden officers commenced work on a bid for Mayor's Air Quality Funding to undertake a research and engagement project to assess the impact of film productions on air quality

			and local communities in the borough. The outcome of this bid will be published in 2024.
	20	Reduced emissions from ice cream vans	• During 2023, as part of a Defra Air Quality Grant funded project to reduce idling vehicle emissions and population exposure to air pollution, Camden installed four electricity connection points for ice cream vendors at popular trading locations across the borough. This project is ongoing, with future installations planned for 2024.
	21	Reduced emissions from street food vending	• In autumn 2023, Camden's Air Quality Team submitted a bid for Defra Air Quality Grant Funding to tackle emissions from Camden's street-food markets through the installation of electrical connection points, eliminating the need for fossil fuel power in these locations. The outcome of this bid will be published in 2024.
	22	Reduced emissions from canal boats, and support the boating community to protect boater health and the health of canal-side neighbours	• In June 2023, Camden installed a $PM_{2.5}$ analyser at Primrose Hill Primary School area to measure the impact of canal boats on local air quality. • In 2023, London boaters continued to make use of the Mayor of London-funded 'Camden Electric Moorings' eco-moorings charge points installed along Regent's Canal between King's Cross and Camden Town. • In 2023, Camden Council officers engaged with neighbouring local authorities as part of a 'Sustainable Waterways Partnership', with a view to submitting a joint funding application in the future.
	23	Reduced emissions from leaf blowers and grounds maintenance	• It is standard practice for Camden Council to review all procurement exercises for opportunities to reduce its impact on the local environment.
	24	Reduced emissions from other sources of outdoor air pollution	• Camden's Air Quality Team routinely reviews new research and information regarding air quality. When appropriate, this knowledge and/or evidence is shared with members of the public and other relevant stakeholders.

Indirect emissions and lobbying: Leading by example, working with others, and advocating for greater action on air quality and health	25	Camden councillors, staff and senior management understand the importance of air quality for public health	• In 2023, Camden's Sustainability department hosted several staff environmental awareness days with the aim of raising awareness of the environmental issues facing the borough, whilst improving knowledge of the work being done by the Council to counteract these. These sessions were well attended by officers, directors, and ward councillors. • An environment and sustainability focused E-learning module was launched for internal staff in 2023 to provide greater environmental knowledge for decision making within the Council.
	26	Reduced indirect emissions through procurement	• An environment and sustainability focused E-learning module was launched for internal staff in 2023 to provide greater environmental knowledge for decision making within the Council, including during the production of procurement documentation. • In 2023, it has become standard practice for the 'Green Vehicle Fleet Standard for Contractors' to be issued to all prospective suppliers during tendering exercises.
	27	We use our platform to encourage other local authorities, public and private sector stakeholders to take action on air pollution	• In 2023, Camden's Air Quality Team launched a bimonthly air quality newsletter, which is issued to local communities, businesses, and other stakeholders to provide information on relevant news and upcoming events. • Camden continued to build partnerships with other local authorities, academic institutions, campaigning organisations, the NHS, and other stakeholders engaged in air quality related policy creation and advocacy. • Camden's Air Quality Team regularly meets with other local authorities to share knowledge and discuss opportunities for improving London's air quality. • In 2023, Camden submitted consortium bids with other local authorities to fund projects aimed at reducing emissions from solid fuel burning, commercial cooking, indoor air quality, and vehicle engine idling.

	28	We work with other local authorities, external stakeholders, and other levels of government in the UK and internationally on air quality policy and projects	• See above.
	29	We actively lobby for action on air quality and health	• Camden provided responses to Defra's April 2023 consultation on the draft revised Air Quality Strategy, and other central government consultations in 2023.
Public health and awareness: Helping everyone to be aware of the importance of clean air and the roles we all have in protecting health	30	Increased public awareness about health impacts associated with air pollution	• Camden's Air Quality Team continues to routinely issue public communications and updates. This includes the Air Quality Newsletter, airTEXT alerts, air pollution alerts, and general communications. • The Air Quality Team organised and attended various events throughout 2023, including for Clean Air Day as well as community engagement events and outreach activities. • In support of the Future Neighbourhoods 2030 project, Camden has offered residents and businesses of the Somers Town ward the opportunity to borrow a small air quality sensor for one month. It is hoped that this will help raise awareness of air pollution as a public health risk, whilst also providing the public with the knowledge to reduce exposure where possible. 35 sensor loans took place in 2023 as a part of the Somers Town Future Neighbourhoods 2030 project.
	31	Increased air quality monitoring coverage and public access and ownership of data	• In 2023, ten new diffusion tube monitoring locations were established in Camden. There are currently 262 active diffusion tube locations within Camden. • In June 2023, Camden installed a $PM_{2.5}$ analyser at Primrose Hill Primary School to measure the impact of canal boats on local air quality. • Camden Council promoted the Breathe London 'Community Sensor' opportunity to local community groups within the borough.

	32	Camden's air quality programme is directly related to the core objective of protecting and improving public health and the We Make Camden vision	• Camden's Air Quality Team assesses both public health and air quality data when decision making. This includes when providing policy recommendations for colleagues and councillors, designing future projects, assessing development proposals, and responding to public enquiries. • Through the [London Wood Burning Project](), Camden has been able evaluate the public health impact and the economic and healthcare costs wood burning has on society.
	33	Camden and external partners in healthcare and social care work collaboratively to tackle the impact of AQ on health	• Camden's Air Quality officers regularly meet with hospitals and healthcare practitioners to establish links with primary care providers and raise awareness within the medical community of air pollution as a public health risk. • In 2023, Camden commenced a project to provide convenient and relatable air quality training materials for healthcare professionals. This will be finalised in 2024.
[Indoor air pollution and occupational exposure](): Raising awareness about the causes and impact of poor indoor air quality and workplace air pollution exposure	34	Reduced indoor pollution exposure in homes in Camden	• The Camden Household Air Monitoring Project (CHAMP), delivered in collaboration with London School of Economics (LSE), involves residents hosting indoor air quality monitors for several weeks to research how having access to air quality information may change behaviours. There were 80 additional households involved with the CHAMP in 2023. • In 2023, Camden supported the development of a Defra Air Quality Grant funded bid to upscale the CHAMP project into the 'London Household Air Monitoring Project' together with several other London boroughs. • In support of the Future Neighbourhoods 2030 project, Camden has offered residents and businesses of the Somers Town ward the opportunity to borrow a small air quality sensor for one month. It is hoped that this will help raise awareness of air pollution as a public health risk, whilst also providing the public with the knowledge to reduce exposure where possible. 35 sensor loans took place in 2023 as a part of the Somers Town Future Neighbourhoods 2030 project.
	35	Reduced indoor pollution exposure in schools in Camden	• Following the successful application for Defra Air Quality Grant funding for the 'Clean Air for Schools' project in early

			2023, Camden's Air Quality Team commenced preparations for the project, including an extensive recruitment process to hire a project lead officer. The project will launch in early 2024.
	36	Reduced occupational exposure to air pollution in Camden	• In 2023, Camden's Air Quality Team hosted and attended multiple public events to raise awareness of indoor air quality and to provide information and advice about how Camden residents can help to reduce indoor air pollution exposure at home. • In 2023, Camden applied for Defra Air Quality Grant Scheme funding for a project to work with businesses to identify and reduce emissions from kitchens and food preparation through behaviour change interventions. • Independently, Camden has also commenced a project to provide businesses within the borough with clean air kitchen guides. This will be issued in 2024. • In 2023, Camden joined a consortium bid for Defra Air Quality Grant Funding to undertake a research project into the impact of commercial catering on ambient air quality and occupational exposure.

3. Planning Update and Other New Sources of Emissions

Table N. Planning Requirements Met by Planning Applications in Camden in 2023

Condition	Number
Number of planning applications where an air quality impact assessment was reviewed for air quality impacts	37
Number of planning applications required to monitor for construction dust	35
Number of CHPs/Biomass boilers refused on air quality grounds	N/A – no applications were directly refused on this basis. Does not include proposals requested to remove CHP prior to decision following consultation, as per Camden practice
Number of CHPs/Biomass boilers subject to GLA emissions limits and/or other restrictions to reduce emissions	N/A – does not account for proposals requested to change CHP details to meet restrictions prior to planning decision following AQ consultation (as per typical Camden practice)
Number of developments required to install Ultra-Low NO_X boilers	This is required through policy compliance 4.15 from Camden's Planning Guidance: Air Quality
Number of developments where an AQ Neutral building and/or transport assessments undertaken	57
Number of developments where the AQ Neutral building and/or transport assessments not meeting the benchmark and so required to include additional mitigation	N/A
Number of planning applications with S106 agreements including other requirements to improve air quality	Not current practice at Camden
Number of planning applications with CIL payments that include a contribution to improve air quality	Not current practice at Camden
NRMM: Central Activity Zone, Canary Wharf and Opportunity Areas Number of conditions related to NRMM included. Number of developments registered and compliant. Number of audits % of sites unregistered prior to audit Please include confirmation that you have checked that the development has been registered with the GLA through the relevant NRMM website and that all NRMM used on-site is compliant with Stage IV of the Directive and/or exemptions to the policy.	12 sites inside the CAZ newly registered on Non-Road Mobile Machinery (NRMM) | London City Hall in 2023. Nine sites inside the CAZ area were audited during 2023 through the NRMM compliance project (Cleaner Construction for London). All sites were compliant after being audited. Camden's CMP pro forma contains a requirement for sites to ensure NRMM is compliant and registered. Conditions relating to NRMM

Condition	Number
	compliance are included in decision notices for many applications, however the total number of conditions for planning permissions granted in 2023 is not currently retrievable.

Camden's Sustainability team is working with the Council's Planning service to ensure NRMM conditions are applied routinely, with up-to-date wording as provided by LB Merton's Cleaner Construction for London project coordinator. |
| **NRMM: Greater London (excluding Central Activity Zone, Canary Wharf and Opportunity Areas)**

Number of conditions related to NRMM included.

Number of developments registered and compliant.

Number of audits

% of sites unregistered prior to audit

Please include confirmation that you have checked that the development has been registered at www.nrmm.london and that all NRMM used on-site is compliant with Stage IIIB of the Directive and/or exemptions to the policy. | 11 sites inside the CAZ newly registered on [Non-Road Mobile Machinery (NRMM) | London City Hall](#) in 2023.

11 sites outside the CAZ area were audited during 2023 through the NRMM compliance project (Cleaner Construction for London). Ten of these sites were found to be self-compliant, and one site was compliant following auditing.

Camden's CMP pro forma contains a requirement for sites to ensure NRMM is compliant and registered. Conditions relating to NRMM compliance are included in decision notices for many applications, however the total number of conditions for planning permissions granted in 2023 is not currently retrievable.

Camden's Sustainability team is working with the Council's Planning service to ensure NRMM conditions are applied routinely, with up-to-date wording as provided by LB Merton's Cleaner Construction for London project coordinator. |

3.1 Camden Council's process for reviewing air quality through the planning system

Pre-planning and planning application stage

Camden's Sustainability Planning Team is a statutory consultee, with officers required to review planning applications from an air quality, energy/carbon, and flood risk/LLFA perspective, and work closely with the Air Quality Programme Manager, the Air Quality Planning Officer, and the Planning service to ensure that all relevant planning applications are reviewed, and conditions are applied and enforced. It is nevertheless viewed that there is continual opportunity for process improvement, both in terms of tightening controls and data collection, so that Camden can ensure future development is more sustainable and is undertaken in a way that offers greater protections to air quality, public health, and amenity.

During 2023, the 'Air Quality (Planning) Officer' position in the Sustainability department of Camden Council was extended by a further 12 months and will run until October 2024 at a minimum. This role was created to aid and improve the process of reviewing planning applications and Section 106 legal agreement performance from developments in the borough.

Post-approval and ongoing compliance

Camden's air quality officers work closely with the Planning service (Planning Obligations and Planning Enforcement officers, in particular) as well as Environmental Health, Transport, Highways and Parking to ensure all applicable approved developments provide a Demolition Management Plan (DMP) and/or a Construction Management Plan (CMP). This is mandated through Section 106 (S106) Legal Agreements. CMPs and DMPs are aligned with a pro forma template which covers several issues including air quality and dust management during on-site activities for any new development or refurbishment.

Officers review and provide feedback on DMPs/CMPs and any unsatisfactory consideration of air quality and dust impacts on the part of the contractor or developer will lead to rejection and the need to submit a revised plan. The CMP/DMP covers the following air quality considerations:

- Preventative and reactive dust mitigation including prevention of resuspension of particulates from dust and debris tracked onto the public highway.

- Real-time dust monitoring and reporting, based upon the dust risk classification from an Air Quality Dust Risk Assessment (AQDRA). In line with the Mayor of London's ['Control of dust and emissions during construction and demolition' SPG](), any medium or high-risk sites are required to use real-time MCERTS-indicative dust monitors and to produce monthly reports for Camden Council to review. Camden has made it policy for all dust reports and data to be publicly accessible for all applicable sites.

- Adherence to the GLA dust mitigation checklist.

- Adherence to NRMM conditions and registration of the site on the London NRMM Register.

- Avoidance of vehicle engine idling.

Through Camden's participation in the MAQF-funded NRMM compliance project led by LB Merton, all major construction sites in Camden are eligible for NRMM compliance audits. Camden's Air Quality Team coordinates with LB Merton's Project Coordinator to ensure an up-to-date list of major sites is provided.

Where sites in Camden are found to be non-compliant in terms of NRMM standards, real-time dust (PM_{10}) monitoring or reporting, or management of air quality impacts in general, the first step is to engage directly with the site to convey the importance of compliance and improved performance. Failing this, the case will be passed to Camden's Planning Enforcement team (through liaison with the Construction Management Forum comprising officers from various Council departments) for further action. This usually involves an enforcement case being opened and a formal warning being issued. Continued failure to meet conditions or comply with CMP or S106 requirements would lead to an injunction being sought, though this stage was not required for any site during 2023.

3.2 New or significantly changed industrial or other sources
No new or significantly changed sources identified.

4. Additional Activities to Improve Air Quality

4.1 London Borough of Camden Fleet

Table M outlines the breakdown of Camden Council's fleet into five fuel type categories. The number of electric vehicles within Camden's fleet has risen by 288% (from eight) since the end of 2018, reflecting the impact of Camden's recent Clean Air Action Plans. As of the end of 2023, electric cars and vans comprise 10% of Camden's fleet with 31 vehicles, whilst hybrids account for 3% with nine vehicles. More than 99% of Camden's diesel, petrol and CNG vehicles are ULEZ-compliant.

Table O. London Borough of Camden vehicle fleet composition

Fleet Type	CNG	Diesel	Electric	Hybrid	Petrol	Total
Car			8	9		17
HGV	3					3
PCV	12	16				28
Van	17	203	21		23	264
Van - Roof Rack			1			1
Van - Tipper			1			1
Total	**32**	**219**	**31**	**9**	**23**	**314**
% of Fleet	10%	70%	10%	3%	7%	100%

4.2 NRMM Enforcement Project

London Borough of Camden participated in the LB Merton-led Cleaner Construction for London NRMM enforcement project during 2023 and will continue to do so in 2024.

Camden Council enforces NRMM compliance through the Construction Management Plan (CMP) process. All applicants who have submitted a CMP are required to answer the following questions regarding NRMM for their proposed development:

Figure 5. Camden's CMP NRMM questions

If you will be using non-road mobile machinery (NRMM) on site with net power between 37kW and 560kW it will be required to meet the standards set out below. The standards are applicable to both variable and constant speed engines and apply for both PM and NOx emissions. See the Mayor of London webpage 'Non-Road Mobile Machinery (NRMM)' for more information, a map of the Central Activity Zone, and for links to the NRMM Register and

the NRMM Practical guide (V4):

https://www.london.gov.uk/what-we-do/environment/pollution-and-air-quality/nrmm

Direct link to NRMM Practical Guide (V4):

https://www.london.gov.uk/sites/default/files/nrmm_practical_guide_april_2022_web.pdf

From 1st September 2015

(i) Major Development Sites – NRMM used on the site of any major development will be required to meet Stage IIIA of EU Directive 97/68/EC

(ii) Any development site within the Central Activity Zone - NRMM used on any site within the Central Activity Zone will be required to meet Stage IIIB of EU Directive 97/68/EC

From 1st September 2020

(iii) Any development site - NRMM used on any site within Greater London will be required
to meet Stage IIIB of EU Directive 97/68/EC

(iv) Any development site within the Central Activity Zone - NRMM used on any site within the Central Activity Zone will be required to meet Stage IV of EU Directive 97/68/EC Please provide evidence demonstrating the above requirements will be met by answering the

following questions:

a) Construction time period (mm/yy - mm/yy):
b) Is the development within the CAZ? (Y/N):
c) Will the NRMM with net power between 37kW and 560kW meet the standards outlined above? (Y/N):
d) Please confirm that all relevant machinery will be registered on the NRMM Register, including the site name under which it has been registered:
e) Please confirm that an inventory of all NRMM will be kept on site and that all machinery will be regularly serviced and service logs kept on site for inspection:
f) Please confirm that records will be kept on site which details proof of emission limits,

4.3   Air Quality Alerts

Camden Council supports airTEXT and by the end of 2023 there were 713 active subscribers receiving alerts for Camden, which is an increase of 38 from the previous year. Most subscribers receive alerts via SMS text, with email, voicemail, and social media notifications also utilised. During 2023, there were 33 alert days in Camden, with 11,862 alert messages issued.

Camden Council is actively working to secure the routine and consistent cascading of pollution alerts to members of the public.

Appendix A   Details of Monitoring Site Quality QA/QC

A.1   Automatic Monitoring Sites

Routine calibrations are carried out on a fortnightly basis by Ricardo Energy & Environment. Operatives are trained to AURN standards.

In Camden, the London Bloomsbury and Camden Kerbside/Swiss Cottage monitoring sites are part of the AURN and as such, are audited to the AURN standard by providers selected by the Environment Agency.

Non-AURN monitoring sites are audited by Ricardo Energy & Environment, who are UKAS accredited. Ricardo are also UKAS accredited for the recertification of onsite cylinders.

All sites are audited every six months and comply with the validation procedures which conform to the requirements of the AURN and exceed the requirements of the LLAQM TG (22). The data ratification procedures also exceed the requirements of TG (22). In 2023, all automatic air quality monitoring in Camden recorded above 75% data capture, meaning that data annualisation was not required.

PM_{10} Monitoring Adjustment

PM_{10} and $PM_{2.5}$ is measured with TEOM-FDMS analysers at three automatic monitoring sites in Camden. These are the London Bloomsbury, Coopers Lane, and Euston Road sites. These instruments are certified to MCERTS reference equivalent standard therefore, the VCM is not required. The Camden Kerbside/ Swiss Cottage automatic monitoring site utilises a BAM analyser to monitor PM_{10} and $PM_{2.5}$.

A.2   Diffusion Tubes

Camden's diffusion tubes are supplied by Socotec UK, with 50% TEA in acetone the chosen preparation method. This is the first year that Camden Council has used Socoteck UK for diffusion tube monitoring, having previously worked with Gradko International.

Socotec follows the procedures set out in the Practical Guidance. Socotec's 50% TEA/acetone preparation method were rated as having 'good' precision from 28 colocation studies in 2023, according to the Summary of Precision Results for Nitrogen Dioxide Diffusion Tube Collocation Studies, by Laboratory', published in April 2023 by Defra, which can be viewed here:

Socotec has scored highly in laboratory performance assessments for the Summary of Laboratory Performance in AIR NO_2 Proficiency Testing Scheme (September 2021 – October 2023), published in October 2023 by the LAQM Helpdesk (covering AIR PT rounds 46-59, from September 2021 to October 2023). Socotec were found to have 100% of results determined to be 'satisfactory'. No results have been reported for following AIR PT rounds. The 'Summary of Laboratory Performance in AIR NO_2 Proficiency Testing Scheme (September 2021 – October 2023)' report published by Defra can be viewed here:

Camden has used the 2023 national bias adjustment factor for Socotec UK diffusion tubes with 50% TEA/acetone method (0.77) to adjust the Council's raw diffusion tube annual mean concentrations for bias. This factor was published in the 'National Bias Adjustment Factors' spreadsheet produced by Defra and published in March 2023. This can be viewed here:

Camden has compared the diffusion tube data at our colocation sites to reference equivalent NO_2 analysers. However, due to data continuity issues the Council was unable to participate in the diffusion tube colocation study for 2023.

The only diffusion tube bias adjustment factor applied to the data presented in this report is the national bias adjustment factor for Socotec UK diffusion tubes prepared with the 50% TEA/acetone method, which was 0.77.

Previous years' diffusion tube-measured annual mean NO_2 concentrations have been re-calculated where necessary with updated national bias adjustment factors as published by Defra (all for Gradko International diffusion tubes prepared with the 50% TEA/acetone method). Consequently, the diffusion tube annual mean values for 2022 and preceding years which have been presented in this Annual Status Report supersede the annual means presented in previous reports.

Factor from Local Co-location Studies

Camden did not participate in the colocation study in 2023 as the Council had experienced continued data continuity issues with the Swiss Cottage (CD1) and Euston Road (CD9) triplicate colocation sites during the year.

Discussion of Choice of Factor to Use

Camden has historically tried to undertake diffusion tube colocation at the CD1 and CD9 automatic monitoring sites. However, due to theft and/or tampering there has not yet been sufficient diffusion tube data capture to participate.

In the absence of local adjustment factors or other conditions suggesting that an alternative factor should be used, the national bias adjustment factor for 2023 has been used.

Table P. Bias Adjustment Factor

Year	Local or National	If Local, Version of National Spreadsheet	Adjustment Factor
2023	National	03/24	0.77 (Socotec UK)
2022	National	03/23	0.82 (Gradko Int)
2021	National	04/21	0.83 (Gradko Int)
2020	National	03/21	0.82 (Gradko Int)
2019	National	09/20	0.89 (Gradko Int)
2018	National	09/19	0.89 (Gradko Int)
2017	National	09/18	0.96 (Gradko Int)
2016	National	09/17	1.01 (Gradko Int)
2015	National	09/16	0.96 (Gradko Int)

A.3 Adjustments to the Ratified Monitoring Data

Short-term to Long-term Data Adjustment

Diffusion tube data has been annualised where there were at least three but fewer than nine months of data. Camden Council's internal air quality monitoring database was utilised for the 2023 adjustments, in accordance with the LLAQM TG methodology.

Table Q displays the annualisation factors which were applied to adjust the raw diffusion tube data based upon NO_2 concentrations measured at the BL0, IS6, and WM5 urban background automatic monitoring sites, which achieved sufficient data capture for use in the diffusion tube annualisation adjustments.

Distance Adjustment

No distance adjustment calculations were used on Camden's air quality monitoring data, in line with previous years' annual status reporting methodology. Distance adjustment calculations are not deemed necessary for the 17 monitoring locations which have recorded an NO_2 annual mean of higher than the legal limit of 40 µg/m^3 in 2023. These sites are heavily trafficked by pedestrians and so are viewed as representative of nearby receptors, including bus stops or pavement seating, and so members of the public are likely to have been exposed to similar pollutant concentrations to those measured at each site.

Table Q. Short-Term to Long-Term Monitoring Data Adjustment

Site ID	Annualisation Factor: BL0	Annualisation Factor: IS6	Annualisation Factor: WM5	Annualisation Factor	Average Annualisation Factor	Raw Data Annual Mean (µg m^{-3})	Annualised Annual Mean (µg m^{-3})	Comments
CAM9	1.130532	1.125625	1.127773	N/A	1.127977	18.14	15.75	Diffusion Tube
CAM15	1.002321	1.036204	0.997977	N/A	1.012167	34.04	26.53	Diffusion Tube
CAM19	0.906221	0.910163	0.931567	N/A	0.915983	32.30	22.78	Diffusion Tube
CAM28	1.088039	1.07156	1.062186	N/A	1.073928	29.95	24.77	Diffusion Tube
CAM42	1.124974	1.058082	1.082809	N/A	1.088622	31.99	26.82	Diffusion Tube
CAM47	1.081279	1.100418	1.073121	N/A	1.084939	43.55	36.39	Diffusion Tube
CAM54	0.913385	0.922131	0.931595	N/A	0.92237	35.26	25.04	Diffusion Tube
CAM79	0.897896	0.876603	0.900719	N/A	0.891739	31.02	21.30	Diffusion Tube
CAM81	1.155905	1.129603	1.163094	N/A	1.149534	49.56	43.87	Diffusion Tube
CAM90	0.979558	0.986209	0.985528	N/A	0.983765	29.59	22.41	Diffusion Tube
CAM105	1.101541	1.06848	1.064665	N/A	1.078229	36.83	30.58	Diffusion Tube
CAM126	0.899329	0.930203	0.943904	N/A	0.924479	31.08	22.12	Diffusion Tube
CAM128	0.989351	0.967042	0.991215	N/A	0.982536	33.73	25.52	Diffusion Tube
CAM144	1.062729	1.062478	1.056567	N/A	1.060591	39.22	32.03	Diffusion Tube
CAM161	0.971457	0.973543	0.974333	N/A	0.973111	30.99	23.22	Diffusion Tube
CAM174	1.04909	1.025822	1.050188	N/A	1.0417	35.50	28.47	Diffusion Tube
CAM242	0.964915	0.953561	0.933767	N/A	0.950748	36.09	26.42	Diffusion Tube
CAM248	1.036118	1.006686	1.013168	N/A	1.018658	64.90	50.91	Diffusion Tube
CAM249	1.256809	1.282331	1.22227	N/A	1.253803	33.08	31.93	Diffusion Tube
CAM250	1.006176	0.953933	0.970267	N/A	0.976792	39.94	30.04	Diffusion Tube
CAM251	0.893965	0.900543	0.90475	N/A	0.899753	42.28	29.29	Diffusion Tube
CAM253	0.96044	0.991128	0.961661	N/A	0.971076	22.86	17.09	Diffusion Tube
CAM265	0.87194	0.818179	0.847088	N/A	0.845736	57.14	37.21	Diffusion Tube
CAM268	0.893807	0.858662	0.912226	N/A	0.888232	46.45	31.77	Diffusion Tube
CAM271	0.993789	0.9992	1.003223	N/A	0.998737	49.53	38.09	Diffusion Tube
CAM328	1.011681	0.99493	0.996156	N/A	1.000922	45.48	35.05	Diffusion Tube

Appendix B   Full Monthly Diffusion Tube Results for 2023

Table R. NO$_2$ 2023 Diffusion Tube Results (µg/m^3)

DT ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Annual Mean: Raw Data	Annual Mean: Annualised and Bias Adjusted	Annual Mean: Distance Corrected to Nearest Exposure	Comment
CAM1	529030	185687	33.40	37.10	26.40	22.90	16.90	18.40	15.20	18.40	25.60	28.10	29.60	22.50	24.54	18.90	N/A	
CAM2	526518	185938	32.13	37.73	18.63	16.17	22.93	18.13	18.10	19.20	26.30	41.20	31.05	26.37	25.66	19.76	N/A	
CAM3	526518	185989	34.40	41.20	21.20	17.37	27.70	19.90	20.80	15.67	28.73	42.87	34.23	27.20	27.61	21.26	N/A	
CAM4	528159	185641	31.13	32.20	21.53	18.13	14.17	16.55	19.30	23.37		38.13	32.13	30.40	25.19	19.39	N/A	
CAM5	528098	185597	28.23	31.73	23.80	22.40	19.90	24.67	23.70	23.80	29.20	44.23	30.00	31.07	27.73	21.35	N/A	
CAM6	526345	184876	41.40	42.37	24.27	19.60	28.80	15.20	30.00	17.15	38.57	49.80	44.10	38.60	32.49	25.02	N/A	
CAM7	526479	185411	43.03	47.40	25.90	21.60	23.47	27.65	25.70	19.50			38.70	34.95	30.79	23.71	N/A	
CAM8	526226	185337	37.83	39.90	22.40	20.13	25.90	22.07	23.20	13.37	32.53	48.10	35.25	26.37	28.92	22.27	N/A	
CAM9	526499	186122			17.15			16.73	15.47	13.60			26.30	19.57	18.14	15.75	N/A	
CAM10	528302	183932	39.40			20.63	32.53	15.30	16.10	28.27	32.03	46.27	37.15	25.47	29.32	22.57	N/A	
CAM11	524345	185133	40.60	47.50		32.13	15.65	25.83	25.90	18.73	32.80	47.50	34.00	28.27	31.72	24.42	N/A	
CAM12	529918	184786	37.37	43.47		34.83	20.17	17.53	18.90	24.53	28.80	45.37	33.10	31.40	30.50	23.48	N/A	
CAM13	529845	181595	26.25		24.23	29.97	27.30	21.50	27.55	28.10	39.90	54.17	39.37		31.83	24.51	N/A	
CAM14	529804	181519	45.23		29.67	33.47	46.10	28.80	30.60	36.70	48.70	64.37	48.00		41.16	31.70	N/A	
CAM15	529805	181703	38.27		25.23	30.80	38.63	26.70		29.90	37.95		44.85		34.04	26.53	N/A	
CAM16	530210	182748	41.77		23.70	38.53	29.00	19.73	26.40	30.07	28.17		49.43	47.10	33.39	25.71	N/A	
CAM17	529583	183051	38.00		21.30	36.80	23.33	14.87	23.60	29.25	24.70	58.10	34.65	41.13	31.43	24.20	N/A	
CAM18	529617	182935	42.43	48.33	24.07	39.73	26.27	15.87	25.70	30.05	28.00	55.40	44.47	43.03	35.28	27.16	N/A	
CAM19	529522	183089	37.00	45.07	19.70	37.87	21.50		24.13				40.80		32.30	22.78	N/A	
CAM20	526856	185301	34.33	36.80	19.10	30.00	14.87	20.90	19.77	15.47	27.43	48.53	31.33	26.47	27.08	20.85	N/A	
CAM21	526929	185226	34.47	37.43	18.23	29.17	16.20	22.10	19.00	15.80	25.90	45.97	35.25	24.90	27.03	20.82	N/A	
CAM22	527006	185160	35.57	37.70	22.00	30.00	15.20	20.10	20.37	14.53	30.10	45.43	36.10	28.03	27.93	21.50	N/A	
CAM23	527067	185152	39.50	38.33	21.90	31.47	17.00	22.93	22.50	15.83	30.33	45.27	37.67	31.13	29.49	22.71	N/A	
CAM24	525116	184772	43.03	44.25	20.60	30.03	18.40	21.40	24.13	18.70	32.55	45.65	34.40	28.40	30.13	23.20	N/A	
CAM25	525199	184709	42.80	46.17			18.37	26.70	22.50	19.43	33.10	47.10	36.30	26.87	31.93	24.59	N/A	
CAM26	525030	184701	45.37	42.60	22.10	31.90	19.80	24.87	26.23	19.57	33.93	48.10	34.20	28.00	31.39	24.17	N/A	
CAM27	529114	185052	35.07	34.67	25.43	25.00	18.50	21.90	18.35	26.60	26.73		39.55	43.50	28.66	22.07	N/A	
CAM28	529112	184960				19.90			17.13	24.00	26.23	44.87	38.55	39.00	29.95	24.77	N/A	
CAM29	529113	184869	33.50	31.47	24.37	23.77	16.00	20.50	18.13	25.17	25.13	43.57	36.23	35.07	27.74	21.36	N/A	
CAM30	531028	182092	48.60	59.60	46.23	32.30	39.10	30.10	42.33	45.30	57.67		38.45	24.30	42.18	32.48	N/A	
CAM31	528745	186598	30.07	38.73	15.63	30.43	14.40	19.00	20.40	16.10	23.70	46.93	32.20	26.57	26.18	20.16	N/A	
CAM32	528685	186614	33.70	38.35	20.97		19.77	26.93	27.83	20.03	33.50	52.75	39.23	26.00	30.82	23.73	N/A	

CAM33	528876	186421	31.73		16.87	26.87	22.00	18.30	18.53	15.00	23.97	46.35	31.60	26.20	25.22	19.42	N/A
CAM34	528835	182980	32.73	38.57	18.40	29.47	22.10	12.10	30.63	16.40	33.07	37.07	30.03	21.73	26.86	20.68	N/A
CAM35	528814	182873	35.37		22.67	33.80	25.70	13.50	24.07	15.57	36.50	36.63	33.43	26.63	27.62	21.27	N/A
CAM36	524928	185092	37.50	41.53	19.77	28.20	12.35	21.97	23.57	16.67	33.55	50.83	34.70	31.73	29.36	22.61	N/A
CAM37	525036	185121	34.63			27.43	31.40	20.47	23.23	16.47	29.73	44.20	35.43	28.73	29.17	22.46	N/A
CAM38	524860	185039	38.00	42.47	19.60	29.67	13.70	22.93	24.33	17.30	30.57	49.23	34.10	28.43	29.19	22.48	N/A
CAM39	526216	184457	38.17	44.05	20.47	20.67	42.13		21.20	16.80	26.47	43.37	37.00	30.27	30.96	23.84	N/A
CAM40	528903	185009	33.57	35.55	23.80	21.03	21.00	19.93	14.00	23.60	27.85	40.30	37.30		27.08	20.86	N/A
CAM41	528853	184975	30.95		21.73	19.60	19.85	18.73	16.37	24.20	27.57	43.77	35.10		25.79	19.86	N/A
CAM42	529409	184720	40.90				31.70	18.43	24.13		31.45	45.33			31.99	26.82	N/A
CAM43	526343	185755	34.03	35.67	20.10	20.07	30.60	14.90	17.65	29.73	32.47	36.75	36.70		28.06	21.61	N/A
CAM44	528338	184776	34.17	33.70	23.37	21.43	24.57	26.37	18.80	18.47	28.67	53.20	40.50	29.83	29.42	22.66	N/A
CAM45	528233	184430	41.53	41.83	28.77	24.30	22.00	20.83	22.10	23.13	29.33	46.67	31.55		30.19	23.24	N/A
CAM46	529113	182561	44.80		22.43	38.67	33.70	19.40	22.50	16.65	27.27	37.90	39.17	27.33	29.98	23.09	N/A
CAM47	530760	182782	50.03		31.70	50.90	41.90	35.63	53.27		41.45				43.55	36.39	N/A
CAM48	530705	182701	39.33	43.77	22.10	35.90	21.25	19.87	32.47		35.00	46.90			32.95	25.37	N/A
CAM49	530879	182342	38.73	45.83	40.97	46.83	26.90	27.27	30.57	33.73	38.70	59.57	44.13		39.38	30.33	N/A
CAM50	530822	182276	48.50	53.13	46.37	47.13	35.03		49.73	38.60	33.67	71.87	46.77		47.08	36.25	N/A
CAM51	531294	182146	36.27	41.97	31.85	37.67	23.80	22.50	26.87	30.77	34.23		54.55	17.63	32.55	25.07	N/A
CAM52	531239	182105	36.10	44.33	29.77	47.23	24.27	21.90	28.97	27.43	31.50		50.73	19.87	32.92	25.35	N/A
CAM53	530990	182574	43.70	53.90	25.30	33.77	19.63	16.27	35.40		39.75	60.50	34.55		36.28	27.93	N/A
CAM54	531147	182179	37.87	45.17		36.93	24.47	21.53			39.73		58.75	17.63	35.26	25.04	N/A
CAM55	530620	182633	45.47	61.43	27.37	47.30	34.33	29.90	45.10		47.10	54.57	38.30		43.09	33.18	N/A
CAM56	530775	182346	42.95	45.50	35.47	40.57	23.77	22.30	29.60	31.77	37.60	55.63	39.73		36.81	28.34	N/A
CAM57	531056	181822	40.60	43.10	43.17	31.80	43.37	26.27		20.57	36.83		62.90		38.73	29.82	N/A
CAM58	530915	182046	40.57	40.30	38.97	44.07	24.73	26.67	29.93	31.80	40.40		47.87	19.27	34.96	26.92	N/A
CAM59	530823	182079	43.80	48.47	42.67	41.63	34.37	24.93	31.93	33.67	40.37		59.83	19.97	38.33	29.51	N/A
CAM60	530884	182124	53.55	52.87	41.70	40.53	38.70	29.33	31.43	35.27	45.20		65.65	22.13	41.49	31.95	N/A
CAM61	530965	182112	40.53	45.47	36.25	41.35	21.87	28.10	32.87	35.20	43.30		62.67	21.40	37.18	28.63	N/A
CAM62	528305	184657	49.17	40.90	38.20	29.63	28.43	35.50	38.70	37.67			55.27		39.27	30.24	N/A
CAM63	528179	184606	39.10	32.47	25.63	25.27	27.97	25.47	21.43	28.57	30.33	46.75	40.50		31.23	24.04	N/A
CAM64	527990	184602	39.77	30.07	27.63	27.13	26.87	25.93	21.67	29.50	32.00				28.95	22.29	N/A
CAM65	528244	184587	38.37	32.20	26.83	25.77	20.77	25.13	21.70	30.47	29.67	56.25	39.00		31.47	24.23	N/A
CAM66	528377	184599	44.67	38.75	32.63	29.63	27.33	28.07	24.50	32.07	32.67	59.23	38.60		35.29	27.17	N/A
CAM67	528380	184636	49.50	45.15	34.63	34.27	45.50	34.80	30.60	35.25	38.25	60.20	46.60		41.34	31.83	N/A
CAM68	528537	184626	36.03	35.33	25.27	23.47	19.85	24.97	21.67	27.17	29.33	48.17	36.53		29.80	22.94	N/A
CAM69	528736	184719	41.73	39.53	30.90	28.03	25.50	30.70	25.10		31.67		45.05		33.14	25.51	N/A
CAM70	530093	182792	61.20	76.40	66.30	72.80	64.30	69.10	52.50		78.00	68.00	67.40	60.70	66.97	**51.57**	N/A
CAM71	529907	182670	59.37	65.90	65.20	67.07	56.93	56.17	55.93	49.60	77.60	69.90	62.00	54.90	61.71	**47.52**	N/A
CAM73	530512	182511	29.20	35.70	26.20	21.20	14.80	14.10	15.90	17.70	23.60	24.40	28.20	25.50	23.04	17.74	N/A
CAM74	529013	185102	38.30	44.20	36.60	36.90	33.40	35.80	26.80	30.40	39.40	44.20	40.10	32.40	36.54	28.14	N/A

CAM75	526213	185519	24.50	29.80	20.40		11.60	11.20	12.40	12.60	19.40	23.10	26.20		19.12	14.72	N/A	
CAM76	526547	185125	44.50	46.80	33.50	33.40	27.20		25.20	29.50	37.60	37.30		31.10	34.61	26.65	N/A	
CAM77	526633	184392	51.47	58.47	46.97	49.93	45.60	42.47	31.70	38.53	48.80	47.67	37.13	36.85	44.63	34.37	N/A	
CAM78	529904	183138	42.40		42.50	41.80	41.40	35.30	31.70	30.80	49.60	56.60	67.80	61.30	45.56	35.08	N/A	
CAM79	529880	182334	32.70	41.60	33.50			19.20		20.80			38.30		31.02	21.30	N/A	
CAM80	529689	182470	38.20	56.00			30.00	31.40	28.40	21.30	42.70		41.20	34.60	35.98	27.70	N/A	
CAM81	529568	181728	61.40				43.10	34.40	47.70	48.60	58.90			52.80	49.56	**43.87**	N/A	
CAM82	525362	185255	44.30	52.90	36.50	34.90	30.00	35.00	25.70	29.90	42.90	42.20	44.40	33.70	37.70	29.03	N/A	
CAM83	528213	187203	23.70	36.70	19.70	22.30	17.70	20.20	11.30	19.60	31.40	31.70	28.30	13.80	23.03	17.74	N/A	
CAM84	529173	184129	43.60	55.30	45.40	48.80	41.80	41.90	34.70	45.40	65.10	60.10	52.30	34.20	47.38	36.49	N/A	
CAM85	528722	185950	44.60	47.40	32.50	27.60	21.80	19.40	21.50	22.40	33.90	38.30	32.60	31.40	31.12	23.96	N/A	
CAM86	529962	181620	43.50	57.50	40.40	38.10	35.10	30.80	24.30	29.20	41.10	42.20	44.40	33.00	38.30	29.49	N/A	
CAM87	529118	185913	47.30	44.70	35.40	33.20	24.00	23.90	20.80	21.70	34.60	34.20	32.80	25.00	31.47	24.23	N/A	
CAM88	529099	185881		36.20	26.90	27.50	19.90	18.00	14.70	18.40	28.00		30.30		24.43	18.81	N/A	
CAM89	529060	185848	35.20	39.30		22.90	17.50	18.00	13.30	17.60	26.50	31.30	34.90	25.30	25.62	19.73	N/A	
CAM90	529334	183868	37.40	42.70	30.80	42.60	17.20	22.20	21.40		22.40				29.59	22.41	N/A	
CAM91	529142	183738	42.35	35.90	37.65	44.20	16.20	24.60	30.40	33.95	33.30	59.25	40.25	43.45	36.79	28.33	N/A	
CAM92	529054	183772	57.20	52.50	45.30	44.60	25.20	31.90	45.10	52.40	55.30	84.80	56.30	63.70	51.19	39.42	N/A	
CAM93	529010	183795	43.73	44.20	37.10	48.80	30.10	29.37	32.97	36.17	37.20	63.90	45.00	43.80	41.03	31.59	N/A	
CAM94	528971	183636	54.40	69.90	36.20	59.60	30.80	51.00	37.90		34.80	58.60	42.00	40.50	46.88	36.10	N/A	
CAM95	528968	183551	44.40	44.10	31.30	31.80	16.80		24.20	23.70	21.60	55.30	32.90	39.60	33.25	25.60	N/A	
CAM96	528881	183697		39.40	28.00	46.80	17.20	24.30	28.30			57.80	36.40	43.00	35.69	27.48	N/A	
CAM97	528867	183547	39.90	41.10	28.20	26.40	16.30	20.20	26.20		24.60	51.90	39.40	39.60	32.16	24.77	N/A	
CAM98	528866	183590	48.23	54.15	35.63	51.03	31.00	36.60	32.93	45.53	38.37	70.53	45.80	43.55	44.45	34.22	N/A	
CAM99	528836	183625	39.60	37.90	22.30	24.60	16.20	21.90		22.50	25.20	47.50	34.30	37.60	29.96	23.07	N/A	
CAM100	528695	183596	45.00	47.20	34.53	48.85	31.90	30.90	26.80	36.33	32.63	52.57	41.67	41.53	39.16	30.15	N/A	
CAM101	528654	183570	54.80	53.20	42.60	52.10	24.50	39.60	34.70	47.60	46.60	61.30	38.20		45.02	34.66	N/A	
CAM102	528604	183457	40.05	40.25	35.40	51.25	29.30	33.60	27.35	35.20	40.00	58.15	37.40	44.50	39.37	30.32	N/A	
CAM103	528636	183577	52.37	51.37	42.17	48.40	29.23	33.53	33.80	41.43	39.37	63.27	42.87		43.44	33.45	N/A	
CAM104	528560	183695	34.30	42.30	28.50	31.70		26.50	30.10	35.80	31.90	64.30		46.00	37.14	28.60	N/A	
CAM105	528724	183702	53.80			42.80		31.00	22.40	36.10	34.90				36.83	30.58	N/A	
CAM106	529548	184449	31.43	39.10	26.20	33.53	17.93	18.10	19.13	22.03	25.77	38.73	37.25		28.11	21.65	N/A	
CAM107	529677	184531	34.90	35.75	28.73	34.27	19.50	16.73	19.33	24.03	28.07	43.33	32.35	33.67	29.22	22.50	N/A	
CAM108	529725	184680	33.17	48.15	29.03	31.70	21.90	17.00	18.17	25.17	27.37	41.43	30.37	28.57	29.33	22.59	N/A	
CAM109	529767	184734	43.47		44.27	41.57	24.40	18.53	19.17	25.10	30.35	45.87	38.77	36.85	33.48	25.78	N/A	
CAM110	529754	184457	38.10	39.70	35.77	36.00	20.05	19.65	22.13	25.70	33.47	48.20		29.70	31.68	24.39	N/A	
CAM121	528081	184490	37.00	42.50	27.10	27.70	23.10	21.20	16.60	22.10	26.30	32.80	34.70	19.30	27.53	21.20	N/A	
CAM122	528558	184331	30.60	37.40	25.60	23.00	16.50	16.70	14.60	16.30	23.70	26.20	32.20	24.00	23.90	18.40	N/A	
CAM123	528619	184315	35.10	37.60	24.40	24.90	17.20	16.50	15.50	19.10	27.70	29.00	36.20	22.80	25.50	19.64	N/A	
CAM124	528881	184287	48.00	48.10	35.20	34.50	24.90	26.00	28.70	36.20	40.40	43.70	41.10	35.70	36.88	28.39	N/A	
CAM125	528935	184053	35.00	47.30	32.20	36.30	26.70	24.20	23.80	27.40	45.30	38.30	37.10	33.10	33.89	26.10	N/A	

CAM126	528898	184094	36.40	42.80	31.20	31.30	23.40			23.20			27.00	33.30	31.08	22.12	N/A	
CAM127	528704	184011	30.60	42.60				21.20	16.70	19.00	29.70	30.00	35.20	21.10	27.34	21.06	N/A	
CAM128	528722	184127	37.70	46.10	32.80		31.60		23.40	28.10	36.40				33.73	25.52	N/A	
CAM129	528845	183970	39.00	46.80	37.20	35.80	26.40	24.90	22.40	26.40		39.50	42.00	33.70	34.01	26.19	N/A	
CAM130	528884	183901	46.10	51.00	36.60	41.10	30.90		30.40	34.70	45.00	44.40	44.30	31.30	39.62	30.51	N/A	
CAM131	528915	183870	53.10	51.40	50.10	49.50			36.30	40.00	53.90	53.30	51.50	34.90	47.40	36.50	N/A	
CAM132	528770	183887	35.90	42.10	28.90	28.50	21.70	19.90	17.50	18.20	29.00	32.00	23.80	23.60	26.76	20.60	N/A	
CAM133	528715	184456	35.10	33.40	19.20	23.20	16.50		13.70	17.20	23.30	27.20		25.30	23.41	18.03	N/A	
CAM134	528119	184354	37.30	33.80	25.80	26.30	20.35	25.90	20.80	27.27	30.40	51.40	33.97		30.30	23.33	N/A	
CAM135	528335	184338	46.07	42.73	29.50	37.23	49.10	32.77		35.43	36.80	58.73	46.93		41.53	31.98	N/A	
CAM136	528456	184345	44.95	47.05	34.70	33.87	34.15		29.30	39.10	40.47	56.90	42.83		40.33	31.06	N/A	
CAM137	528582	184265	39.73	38.40	29.83	25.33	22.37	25.27	24.60	31.00	33.47	40.60	52.95		33.05	25.45	N/A	
CAM138	527278	185153	51.33	47.00	34.27	43.27	22.47	40.80	32.70	40.00	46.25	65.30	52.70	34.27	42.53	32.75	N/A	
CAM139	527184	185274	61.37	55.97	26.37		38.00	43.77	34.17	43.95	48.00	62.03	51.57	44.17	46.30	35.65	N/A	
CAM140	527299	185071	39.17	45.20	21.20	35.03	21.13	23.13	20.33	27.83	29.07	48.10	38.73	29.03	31.50	24.25	N/A	
CAM141	527500	184974	41.43	31.00	22.95	41.73	25.63	29.53	24.85	30.17	34.17	56.00	43.27	28.13	34.07	26.24	N/A	
CAM142	529606	183589	42.97	55.63	26.00	41.07	31.33	17.83	33.57	34.00		69.05	48.35	61.50	41.94	32.29	N/A	
CAM143	529443	183941	38.70	44.43	34.27	39.30	25.50	23.03	27.93	30.67	29.93	65.00	37.27	47.73	36.98	28.48	N/A	
CAM144	529405	184139					25.57			35.25	41.20	55.70	37.85	39.75	39.22	32.03	N/A	
CAM145	529233	184325	41.00	50.95	34.50	45.47	36.20	17.73	37.00	19.30	37.20	52.70	41.90	37.50	37.62	28.97	N/A	
CAM146	529289	183697	40.20	42.55	30.47	36.47	23.63	21.33	26.20	30.40	27.83	54.90	33.95	40.93	34.07	26.24	N/A	
CAM147	530004	184626	45.53	55.70	35.87	44.00	27.70	32.30	30.63	36.80	44.95	61.50	46.70	42.27	42.00	32.34	N/A	
CAM148	530067	184286	53.20	64.67	36.93	47.37	31.37	34.30	31.07	38.13	49.63	59.27	47.73	48.73	45.20	34.80	N/A	
CAM149	530320	183606	45.73	38.10	34.27	38.40	26.93	29.90	32.17	35.50		61.90	38.20	45.30	38.76	29.85	N/A	
CAM150	528259	185061		36.63	22.90	21.53	24.55		18.80	25.80	27.87	47.70	37.13		29.21	22.49	N/A	
CAM151	528191	185041	32.33	19.10	24.40	21.07	18.60	23.70	19.53	27.33	32.77	50.30	36.60		27.79	21.40	N/A	
CAM152	528248	185360	35.83	36.07	25.27	23.80	20.70	25.57	20.20	26.90	28.77	45.50	39.63	31.90	30.01	23.11	N/A	
CAM153	528404	185130	34.60	31.50	24.30	19.83	20.95	20.67	18.03	26.63	29.10	47.40	37.20		28.20	21.72	N/A	
CAM154	528516	185100	36.00	31.47	25.87	23.23	20.13	22.47	18.25	27.17	31.53	52.05	37.45		29.60	22.79	N/A	
CAM155	528874	185037	30.23	32.63	21.97	23.40	18.65	21.90	17.10	14.60	25.47	42.53	31.70		25.47	19.61	N/A	
CAM156	527865	185224	42.17	30.83	32.93	27.00	24.50	28.73	23.63	35.00	37.40	56.47	45.77	30.15	34.55	26.60	N/A	
CAM157	528251	184767	38.27	37.87	28.83	27.03	23.40	26.60	21.60	27.80	35.35	49.75	38.40		32.26	24.84	N/A	
CAM158	528334	184832	35.53	36.25	23.83	21.37	15.20	21.10	19.80	25.90	31.13	42.70	36.75		28.14	21.67	N/A	
CAM159	528309	185097	34.00	33.23	24.87	23.97	18.07	22.33	17.03	26.07	29.80	47.10	38.20		28.61	22.03	N/A	
CAM160	528430	184837	33.50	30.07	22.77	19.13	17.07	20.80	20.70	23.10	30.15	41.67	29.40		26.21	20.18	N/A	
CAM161	529595	185067	32.60	45.40	20.75	25.35	35.00	21.10	21.00			46.70			30.99	23.22	N/A	
CAM162	529842	184780	40.30	52.05	31.47	46.07	31.90	27.63	22.00	30.80	32.90	44.93		36.05	36.01	27.73	N/A	
CAM163	529317	184124		42.50	31.43	37.10	23.35	19.85	22.67	29.23	29.17		47.70		31.44	24.21	N/A	
CAM164	529264	184155	40.50	50.00	35.00	42.03	25.33	25.73	27.10	31.07	33.63	55.20	42.80	41.00	37.45	28.84	N/A	
CAM165	529310	183998	42.70		39.23	43.73	28.30	27.83	30.07	35.37	37.40	54.50	45.03	42.93	38.83	29.90	N/A	
CAM166	529279	183390	64.90	71.40	42.70	65.47	50.30	35.50	58.40		59.87	93.37	44.80	72.00	59.88	**46.11**	N/A	

CAM167	527440	184319			37.50	59.97	37.13	47.10	52.17	34.07	67.57	75.53	71.70	62.60	54.53	**41.99**	N/A	
CAM168	526852	184138	55.47	58.55	34.03	48.67	36.53	38.63	44.27		52.80	63.65	52.90	46.27	48.34	37.22	N/A	
CAM169	526885	183959	40.43	54.87	25.17	36.80	32.00	30.93	32.23	32.43	40.27		48.30	38.45	37.44	28.83	N/A	
CAM170	526924	183780	34.87	43.87	19.20	31.70	19.00	29.10	24.07	16.00	31.47	44.07	35.15	32.50	30.08	23.16	N/A	
CAM171	527018	183899	38.20	47.77	23.43	38.63	20.75	21.10	29.93	20.23	38.30	49.40	35.87	35.60	33.27	25.62	N/A	
CAM172	527372	184086	38.30	46.57	18.63	28.67	27.80	19.13	23.77	16.77	32.77	48.55	34.73	31.87	30.63	23.58	N/A	
CAM173	527517	184159	35.00	44.97	18.47	29.37	17.57	20.10	23.20	16.47	29.47	43.87	35.80	29.20	28.62	22.04	N/A	
CAM174	526930	184135		39.95	27.23			35.47	37.43	21.75	45.17		39.05	37.95	35.50	28.47	N/A	
CAM175	527213	184163		43.57	19.33	30.77	16.60	21.47	24.80	19.30	32.60	44.10	47.10	36.07	30.52	23.50	N/A	
CAM176	527496	184210		41.50	21.23	34.13	20.90	22.23	23.77	19.37	33.73	46.10	39.05	34.43	30.59	23.55	N/A	
CAM177	527595	184210		49.15	19.33	29.83	23.85	23.03	26.10		31.40	43.37	41.75	30.37	31.82	24.50	N/A	
CAM178	527582	184132	38.30	46.97	23.73	38.67	21.05	22.40	24.37	17.65	34.07	47.53	35.40	31.93	31.84	24.52	N/A	
CAM182	530386	182171	41.30	46.27	28.40	44.63	31.77	25.10	32.15	30.43	42.90	64.23	42.80		39.09	30.10	N/A	
CAM189	530104	182388	41.90	57.17	38.15	42.73		22.40	33.57	35.60	34.40	63.70	52.47		42.21	32.50	N/A	
CAM194	530343	182500	43.35	50.55	31.00	36.93	39.60	20.00	29.53	29.43	40.90	49.73	48.55	46.30	38.82	29.89	N/A	
CAM196	530193	182529	39.53		31.27	42.50	25.80	20.63	28.93	33.73	32.23	56.77	50.50	44.83	36.98	28.47	N/A	
CAM200	530044	182947	51.10		34.13	63.23		33.77	43.50	47.37	39.90	74.27	60.80	51.60	49.97	38.47	N/A	
CAM204	529860	182451	50.80		40.93	48.90	39.03	37.33	52.07	53.23	55.10	85.07	74.30		53.68	**41.33**	N/A	
CAM241	530042	181188	49.55	42.83	46.13	55.83		29.80	33.05	21.75		58.80	42.70		42.27	32.55	N/A	
CAM242	529978	181100	49.63		31.20					20.83	42.70				36.09	26.42	N/A	
CAM243	530073	181169	49.40	54.20	31.17	47.90		34.40		20.23	41.30	71.50	23.60		41.52	31.97	N/A	
CAM244	530059	181041	47.70	52.85	29.30	41.60	20.03	32.07	39.80	21.33	43.30	55.45	36.70		38.19	29.41	N/A	
CAM245	530036	181120	51.97	61.20	32.40	46.90	18.47	39.73	53.83	22.93	55.90	76.87	53.05		46.66	35.93	N/A	
CAM246	530086	181070	65.13	75.60	43.90	74.40	43.13	58.83	82.73	35.13	75.55	93.40	61.37		64.47	**49.64**	N/A	
CAM247	530131	181105	45.23	56.63	25.65	45.23	24.40	27.70	37.43	21.37	38.97	61.33			38.40	29.56	N/A	
CAM248	530018	181078	70.83			72.10	46.20	53.80	76.20		65.70	92.25	42.13		64.90	**50.91**	N/A	
CAM249	530009	181037				41.63	23.53	33.45	38.43	24.03	37.37				33.08	31.93	N/A	
CAM250	530100	181029	41.90	46.40		46.93		27.40	36.10	19.75	36.73	64.27			39.94	30.04	N/A	
CAM251	530114	181134	44.50	54.00	28.87	37.97				20.60	43.80		64.50	44.00	42.28	29.29	N/A	
CAM252	530139	181178	46.63	43.07	35.60	41.77	22.33	30.57	35.37	20.73	36.70		44.90		35.77	27.54	N/A	
CAM253	529497	183948	31.10	32.60	22.80	23.40	16.30	16.50		17.30	22.90				22.86	17.09	N/A	
CAM254	529660	183797	33.60	37.00	26.50	25.70	17.50	18.00		21.30	27.40	31.50	36.70	25.00	27.29	21.01	N/A	
CAM255	529698	183770	32.40	37.60	24.90	25.60	18.60	17.50	15.10	17.60	27.60	32.40		22.90	24.75	19.05	N/A	
CAM256	529748	183733	32.50	39.40	25.20	21.50	18.90	15.60	14.00		25.20	27.60	30.30	23.10	24.85	19.13	N/A	
CAM257	529988	183524	39.00	39.80	32.50	26.90	19.20	16.00	21.80	22.20	30.40	34.80	38.90	58.20	31.64	24.36	N/A	
CAM258	528021	185593	31.50	27.63	22.93	19.27	16.70	13.03	19.63	23.17	30.37	42.53	33.10	28.20	25.67	19.77	N/A	
CAM259	527926	185614	31.50	27.47	22.83	17.67	24.17	13.93	19.07	23.53	30.87	41.67	33.47	29.97	26.34	20.29	N/A	
CAM260	527865	185604	34.17	25.33	21.87	19.93	19.27	12.50	17.87	23.63	29.57	45.50	32.20	31.57	26.12	20.11	N/A	
CAM261	525668	183335	42.97	51.60	30.67	36.83		37.10	31.00	37.30	56.10	52.95	55.23	31.73	42.13	32.44	N/A	
CAM262	525557	183462	49.95	58.20	33.80	37.97	33.63	38.80	40.23	35.10	37.00	64.50	57.07	43.10	44.11	33.97	N/A	
CAM263	525439	183589	71.20		56.47	75.73	23.80	34.90			58.10	56.03	54.35	60.20	54.53	**41.99**	N/A	

CAM264	525381	183708	53.47	60.45	28.80	43.00	23.00		43.35	27.23	47.37	60.63		37.90	42.52	32.74	N/A	
CAM265	525258	183828	68.60	73.00						24.37	55.50	64.25	57.13		57.14	37.21	N/A	
CAM266	525156	183991	62.53	89.77	46.10	66.83		34.90		29.27	37.70	89.00	64.40	51.75	57.23	**44.06**	N/A	
CAM267	525077	184067	66.60	83.47		55.73	30.25		52.80	29.60	70.15	54.50	49.40	52.07	54.46	**41.93**	N/A	
CAM268	524998	184185	52.70	64.63	33.13				42.70			52.60	41.70	37.70	46.45	31.77	N/A	
CAM269	524904	184281	58.00	64.43	41.90	55.50			51.10	27.03	46.60	50.70	62.30	44.17	50.17	38.63	N/A	
CAM270	524747	184500	52.97	55.20	39.20	47.90	27.20			34.80	38.10	58.80	42.80	34.33	43.13	33.21	N/A	
CAM271	524631	184665	56.27			55.63	29.50	31.05			55.27	77.85	47.15	43.55	49.53	38.09	N/A	
CAM272	528437	187270	30.40	31.60	19.03	33.33	17.70	23.30	19.93	20.00	27.10	48.67	30.90	30.37	27.69	21.32	N/A	
CAM273	528324	186396	35.50	41.30		33.30	21.60	23.80	24.03		26.20	41.60	29.53	24.53	30.14	23.21	N/A	
CAM274	528918	186959	34.00	43.67	19.70	31.37	22.45	20.43	22.83	15.30	26.90	43.70	34.70	35.60	29.22	22.50	N/A	
CAM275	528967	186654	40.33		21.27	39.07	19.83	26.47	28.95	18.77	30.83	57.43	39.50	37.53	32.73	25.20	N/A	
CAM276	529025	186145	42.50	48.67	24.80	40.13	27.97	29.70	21.67	34.53	33.97	53.93	41.40	30.77	35.84	27.59	N/A	
CAM277	528364	186173	39.47	46.30	28.07	50.40	33.43	42.40	43.67	28.20	44.40	65.43	42.67	46.50	42.58	32.78	N/A	
CAM278	528763	185546	43.57	47.20	26.67	44.57	25.87	31.83	23.33	36.90	35.83	53.60	42.35	38.27	37.50	28.87	N/A	
CAM279	528523	185778	43.67	56.27	24.40	39.80	31.65	34.50	28.07	39.73	39.90	64.97	41.80	49.77	41.21	31.73	N/A	
CAM280	528939	185366	37.97	49.40	31.53	37.40	21.15	33.95	25.33	31.95	36.15	59.20	52.45	40.90	38.12	29.35	N/A	
CAM281	528788	186048	34.87	37.70	21.70	32.70	17.10	21.50	21.70	14.63	34.40	49.10	32.90	34.93	29.44	22.67	N/A	
CAM282	528924	186085		47.13	26.20	37.30	20.33	27.90	28.60	24.90	26.73	56.63	40.95	37.90	34.05	26.22	N/A	
CAM283	529119	186219	36.10	46.20	21.35	32.55	19.80	24.87	21.13	25.17	27.37	53.53	31.67	36.20	31.33	24.12	N/A	
CAM284	529179	186011	41.03	45.50	30.13	41.47	26.23		26.80	36.90	36.25	60.03	39.27	40.77	38.58	29.71	N/A	
CAM285	529016	185533	40.43	44.27	26.17	40.23	24.60	29.43	20.47	33.20	34.97	54.63	47.20	38.43	36.17	27.85	N/A	
CAM286	529885	183280	51.50	46.50	50.70	53.37	50.17	51.67	46.20	43.63	68.90	64.93	57.10	44.85	52.46	**40.39**	N/A	
CAM287	529813	183349	39.20	45.40	30.40	32.17	26.30	22.63	20.27	21.40	33.30	35.47	31.03	28.20	30.48	23.47	N/A	
CAM288	529750	183288	35.33	39.90	27.53	28.43	24.23	22.20	17.30	20.40	28.63	33.07	32.87	25.33	27.94	21.51	N/A	
CAM289	529797	183187	34.57	32.93	31.17	30.45	27.87	26.60	17.13	21.23	32.40	35.10	34.40	26.73	29.22	22.50	N/A	
CAM290	529641	183282	33.87	30.33	26.90	24.60	19.63	19.83	15.60	18.43	25.03	30.10	31.35	23.67	24.95	19.21	N/A	
CAM291	529611	183444	34.60	31.90	28.27	25.37	24.77	23.07	15.70	18.67	27.43	31.67	34.57	24.13	26.68	20.54	N/A	
CAM292	529424	183445	43.00	45.93	36.03	30.80	23.70	26.17	22.33	24.33	34.63	39.20	39.60	27.57	32.78	25.24	N/A	
CAM293	529224	183362	44.57	47.00	39.07	38.83	37.75	33.07	26.93	32.10	43.10	41.53			38.40	29.56	N/A	
CAM294	529229	183231	41.20	47.00	36.83	34.63	36.10	28.40	24.30	29.47	39.40		41.40	26.90	35.06	26.99	N/A	
CAM295	529321	183239	45.00	39.40	37.70	35.63	35.60	31.20	28.25	34.20	51.97	44.67	43.85	34.43	38.49	29.64	N/A	
CAM296	529527	183264	33.30	34.73	26.90	24.83	20.07	21.17	15.60	18.43		30.30	32.17	23.30	25.53	19.66	N/A	
CAM297	529601	183148	32.07	36.30	27.85	23.20	21.83	20.53		19.20	28.07	29.40		23.55	26.20	20.17	N/A	
CAM298	529555	182900	34.40	41.67	31.50	29.43	26.60	24.27	18.63	24.10	32.03	35.37	39.40	24.33	30.14	23.21	N/A	
CAM299	529717	182992	34.27	41.05	30.67	27.87	25.87	23.60	17.97	21.70	29.73	35.57	37.10	26.75	29.34	22.60	N/A	
CAM300	529815	182830	37.20	40.60	32.07	28.83	26.30	21.50	16.70	21.43	30.47	33.80	35.30	25.95	29.18	22.47	N/A	
CAM301	529802	182703	42.47	45.33	39.50	34.93	27.93	27.07	27.20	27.63	37.57	39.87	37.30	36.57	35.28	27.17	N/A	
CAM302	529949	182798	43.07	42.25	38.07	33.90	28.30	28.37	22.40	22.77	32.00	37.90	41.35	36.23	33.88	26.09	N/A	
CAM303	529887	182813	40.70	37.33	34.27	28.97	24.97	21.03	19.70	21.87	29.33	31.33	35.57	27.80	29.41	22.64	N/A	
CAM304	529786	183038	38.93	42.83	35.97	34.77	35.00	30.03	20.17	25.00	34.43	37.83	42.43	29.97	33.95	26.14	N/A	

Site ID	X	Y														Annual Mean	Adjusted		
CAM305	529987	183060	48.20	47.30	40.87	48.03	47.30	37.20	30.00	37.87	43.30	48.87	50.23	40.00	43.26	33.31	N/A	
CAM306	530231	183453	45.77	46.05	37.53	34.53	26.50	29.00	30.50		38.55	28.90	44.87	46.30	37.14	28.60	N/A	
CAM307	529874	184379	44.13	58.80	33.63	42.17	29.47	30.17	26.60	33.63	37.30	54.07	40.50	42.27	39.39	30.33	N/A	
CAM308	529515	184274	38.75	48.23	34.70	42.60	23.30	25.80		32.73	35.50	51.40	38.57	32.83	36.77	28.31	N/A	
CAM309	528687	185016	38.97	39.37	28.33	27.80	24.13	24.37	21.90	31.20	32.97	52.07	40.77		32.90	25.33	N/A	
CAM310	530149	181611	46.27	51.40	54.13	52.47	45.77	45.60	45.60	46.95			34.35	24.53	44.71	34.42	N/A	
CAM311	530250	181473	40.83	48.33	42.60	43.60	30.63	29.85	35.33	36.00	42.57		37.40	19.63	36.98	28.47	N/A	
CAM312	530414	181645	50.30	62.13	57.67	64.47	54.65	56.93	39.97	49.47	56.03		66.10	20.37	52.55	**40.47**	N/A	
CAM313	530429	181459	45.43	47.43	39.60	40.90	33.73	28.05	30.87	37.30	31.27		64.77	19.57	38.08	29.32	N/A	
CAM314	530608	181291	43.40	65.35	58.27	60.97	44.20	45.97	50.57	57.13	46.63		72.85	25.67	51.91	39.97	N/A	
CAM315	530755	181566	48.93	57.40	55.23	59.50	46.47	55.83	61.17	59.10	74.63		76.20	35.03	57.23	**44.07**	N/A	
CAM316	530573	181653	43.23	49.00	45.07	48.93	37.03	37.40	43.77	44.93	52.53		69.20	26.87	45.27	34.86	N/A	
CAM317	530743	181719	37.50	44.90	39.57	34.33	26.40		30.63	30.33	36.27		42.33	19.33	34.16	26.30	N/A	
CAM318	530845	181904	54.97	61.65	56.77	57.55	41.65	43.17	43.17	52.43	60.37		74.67	28.83	52.29	**40.27**	N/A	
CAM319	530529	182013	42.30	66.50	27.93	36.95	30.35		32.00	30.60	40.50	57.60	44.30		40.90	31.50	N/A	
CAM320	531321	182050	50.40	48.60	46.13	56.20	34.57	31.03	34.20	38.70	45.53		64.27	21.93	42.87	33.01	N/A	
CAM321	531223	182034	51.30	54.30	46.60	53.90	32.10	32.10	37.60		49.73		70.50	24.60	45.27	34.86	N/A	
CAM322	531160	182039	46.13	56.40	45.17	44.65	27.40	27.07	32.50	37.00	45.93		61.20	22.27	40.52	31.20	N/A	
CAM323	531012	181982	58.70	64.87	54.83	61.77	58.37	28.37	47.70	55.83	61.50		71.90	24.23	53.46	**41.16**	N/A	
CAM324	531092	182097	53.00	61.65	51.80	52.07	37.93	39.77	50.17	52.37	61.60		72.55	27.47	50.94	39.23	N/A	
CAM325	531123	182188	47.13	50.55	44.43	45.67	35.13	33.73	34.67	37.97	49.23		59.33	18.63	41.50	31.95	N/A	
CAM326	529042	183678		60.50	46.83	65.25	38.90	43.50	43.37	55.50	49.33	87.47	56.90	59.13	55.15	**42.47**	N/A	
CAM327	529011	184402		52.83	21.67	37.97	23.67	16.73	25.97	32.33	32.73	48.53	40.40	35.13	33.45	25.76	N/A	
CAM328	528379	183669		55.00		45.90	43.75		24.00	40.05	50.10	62.80	42.20		45.48	35.05	N/A	
CAM329	529231	183805		45.80	31.23	38.70	24.27	24.03		30.20	29.90	54.90	37.60	38.40	35.50	27.34	N/A	

☒ **All erroneous data has been removed from the NO₂ diffusion tube dataset presented in** Error! Reference source not found.**.**

☒ **Annualisation has been conducted where data capture is <75% and >25% in line with LAQM.TG22.**

☐ **Local bias adjustment factor used.**

☒ **National bias adjustment factor used.**

☐ **Where applicable, data has been distance corrected for relevant exposure in the final column.**

☐ **Camden confirm that all 2023 diffusion tube data has been uploaded to the Diffusion Tube Data Entry System.**

Notes:

Exceedances of the NO₂ annual mean objective of 40µg/m³ are shown in **bold**.

NO₂ annual means exceeding 60µg/m³, indicating a potential exceedance of the NO₂ 1-hour mean objective are shown in **bold and underlined**.

See Appendix A for details on bias adjustment and annualisation.

Appendix C   Maps of Monitoring Locations and AQMAs

More information on Camden's air quality monitoring network can be viewed on the Council's Open data website.
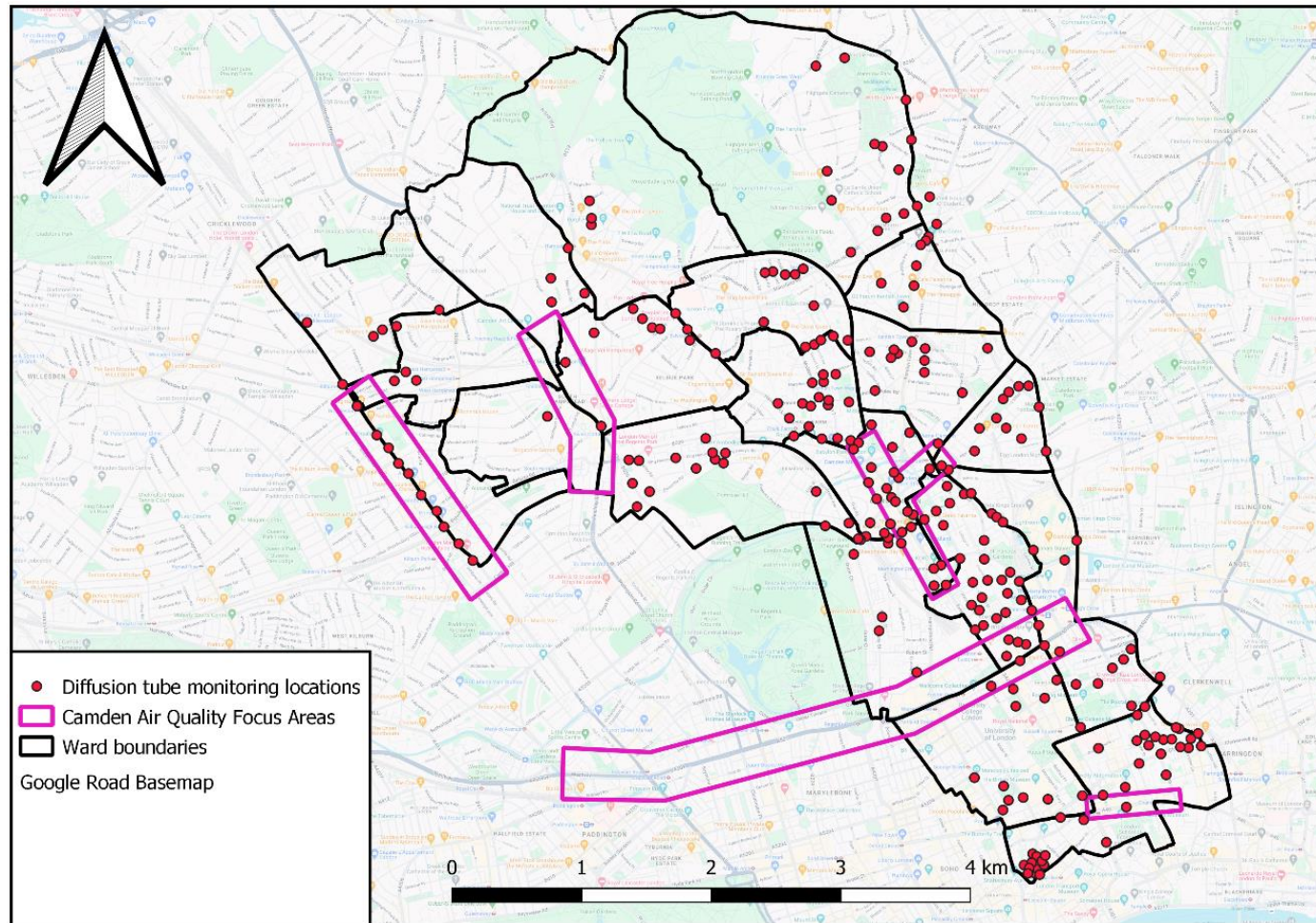
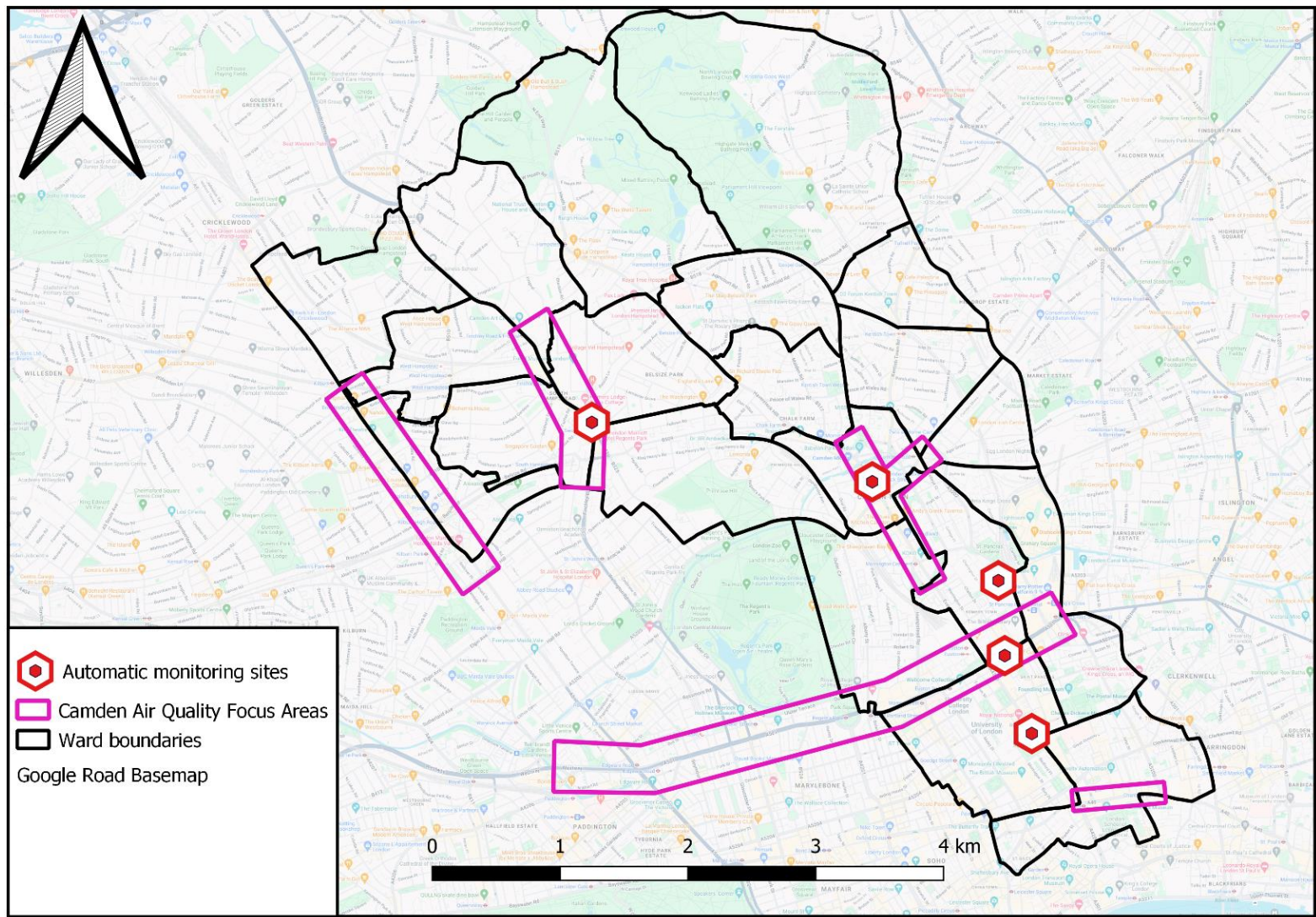**Figure 6. Map of Non-Automatic Monitoring Sites**

Figure 7. Map of Automatic Monitoring Sites

Figure 8. Map of the Camden AQMA