Air Quality Annual Status report
2023

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

Contact details:

Pollution Control Team pollution.enquiry@newham.gov.uk

Tim Baker, Nick Marks, Steve Neville

---

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

WE ARE NEWHAM.

BUILDING A FAIRER NEWHAM

Contents

Tables

Figures

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]: 15 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

BUILDING A
FAIRER
NEWHAM

1. Air Quality Monitoring

1.1 Locations

Continuous monitoring of nitrogen dioxide (NO_2) and fine particles (PM_{10} and $PM_{2.5}$) is undertaken at five sites in the London Borough of Newham. There are three roadside sites at Cam Road (NM2), Hoola Tower (TL5) and Britannia Gate (TL6) and a background site at Wren Close (NM3).

A new continuous roadside monitoring site at East Ham Town Hall (NM4) has been operational since the beginning of 2023. The site has been chosen due to its location within a GLA designated Air Quality Focus Area (1 of 4 in Newham). It is within close proximity to the A214 (Barking Road).

As of April 2024 air pollution data for LB Newham's continuous sites is collected by Air Quality England (Ricardo). The database has been retrospectively uploaded for 2023. Newham's data is available at: https://www.airqualityengland.co.uk.

Data from nitrogen dioxide diffusion tubes at 99 schools in Newham (NHM-S 1–NM-S 99) has continued for the 5th year. These sites are biased towards more urban background locations as more schools are located on residential streets. 16 long-term sites (NM1-NM21) have continued throughout 2023. These sites are bias towards more kerbside and roadside locations on main roads.

There are three air quality sensor networks operating in Newham containing 33 sensors monitoring for NO_2, $PM_{2.5}$. The sensors are provided by Breathe London (Clarity Movement Co), EarthSense and a local company, Aadra Systems.

This report now includes data for five Breathe London sites in Newham which have been operating in the borough since 2022. These locations have been selected based on community engagement projects. All other sensors do not report annual trend data for this report, as their deployment location changes from year to year, depending on various highways improvement works.

Monitoring in and around London City Airport is carried out at two automatic monitoring stations. One is to the north of Royal Albert Dock, adjacent to the Newham Dockside building (LCA-ND) and the second is adjacent to King George V House (LCA-KGV). 16 nitrogen dioxide diffusion tubes (LCA01-LCA021) supplement these automatic sites. The data is not included in this Annual Status Report, but the 2023 LCY report is available at the London City Airport web site https://lcy.aqconsultants.co.uk/.

Table B. Details of Automatic Monitoring Sites for 2023

Site ID	Site Name	X (m)	Y (m)	Site Type	AQMA	Distance to Relevant Exposure (m)	Distance to Kerb of Nearest Road (N/A if not applicable) (m)	Inlet height (m)	Pollutants monitored	Monitoring technique
NM2	Cam Rd	538661	183969	Roadside	Y	25	9	3.0	NO_2, $PM_{2.5}$, PM_{10}	T200 Chemi-luminescent, BAM x2
NM3	Wren Close	539889	181469	Urban Background	Y	14	N/A	3.0	NO_2, $PM_{2.5}$, PM_{10}	T200 Chemi-luminescent, BAM x2
TL5	Hoola Tower	539934	180810	Roadside	Y	15	3	1.5	NO_2	Chemiluminescence
TL6	Britannia Gate	540324	180253	Roadside	Y	13	7	1.4	$PM_{2.5}$	Chemiluminescence and BAM
NM4	East Ham Town Hall	542637	183573	Roadside	Y	25	5	1.5	NO_2, $PM_{2.5}$	T200 Chemi-luminescent, BAM
BLN1	Alma Street	538745	184982	Roadside	Y	0	6	2.5	NO_2, $PM_{2.5}$	Electro chemical and light scatter
BLN2	Ellen Wilkinson	542024	181692	Urban Background	Y	8	13	2.5	NO_2, $PM_{2.5}$	Electro chemical and light scatter
BLN3	Central Park	542168	183159	Roadside	Y	2	0.2	2	NO_2, $PM_{2.5}$	Electro chemical and light scatter
BLN4	Newham University	541202	182442	Roadside	Y	16	70	4	NO_2, $PM_{2.5}$	Electro chemical and light scatter
BLN5	Silvertown	539512	181359	Roadside	Y	18	0.2	3	NO_2, $PM_{2.5}$	Electro chemical and light scatter

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.

WE ARE NEWHAM.

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

Site ID	Site Name	X (m)	Y (m)	Site Type	AQMA	Distance to Relevant Exposure (m)	Distance to Kerb of Nearest Rd (N/A if not applicable) (m)	Inlet height (m)	Pollutants monitored	Tube co-located with an automatic monitor. (Y/N)
NHM-1	Temple Mill Lane	53828	18535	Urban Background	Newham AQMA no 2	60.0	0.3	2.3	NO_2	N
NHM-2	o/s Salisbury School, Romford Rd	539570	184659	Urban Background	Newham AQMA no 2	0.0	12.0	1.8	NO_2	N
NHM-3	Fire Station Romford Rd	54195	18543	Roadside	Newham AQMA no 2	1.0	5.0	2.6	NO_2	N
NHM-4	Wellington Rd/ Barking Rd Junct	542831	18361	Roadside	Newham AQMA no 2	0.0	5.0	2.3	NO_2	N
NHM-6	230B Grange Rd	539850	182655	Urban background	Newham AQMA no 2	0.0	30.0	1.5	NO_2	N
NHM-7	General Hospital, Glen Rd	541492	182332	Urban background	Newham AQMA no 2	17.0	4.0	1.5	NO_2	N
NHM-8	High St South East Ham Mortuary	542680	18320	Urban Background	Newham AQMA no 2	0.0	15.0	1.5	NO_2	N
NHM-10	Tant Avenue	539747	181477	Urban background	Newham AQMA no 2	0.0	32.0	1.5	NO_2	N
NHM-11	Brunel Hallsville Rd, traffic lights	542583	180201	Kerbside	Newham AQMA no 2	5	1	2.6	NO_2	N
NHM-12	Galleons Roundabout	543762	180784	Urban background	Newham AQMA no 2	0.0	12.0	2.8	NO_2	N

WE ARE NEWHAM.

BUILDING A
FAIRER
NEWHAM

Site ID	Site Name	X (m)	Y (m)	Site Type	AQMA	Distance to Relevant Exposure (m)	Distance to Kerb of Nearest Rd (N/A if not applicable) (m)	Inlet height (m)	Pollutants monitored	Tube co-located with an automatic monitor. (Y/N)
NHM-13	290-292 Green Street	541134	184098	Kerbside	Newham AQMA no 2	2.0	1.0	2	NO_2	N
NHM-16	Opposite 99 Leytonstone Rd	539164	185158	Kerbside	Newham AQMA no 2	2.0	0.5	2.5	NO_2	N
NHM-17	44 Browning Rd	542729	185047	Kerbside	Newham AQMA no 2	1.0	2.0	3.5	NO_2	N
NHM-19	Beckton Arms, Newham Way	539906	18170	Kerbside	Newham AQMA no 2	1.0	4.0	2.4	NO_2	N
NHM-20	Canning Town Roundabout	539456	181499	Roadside	Newham AQMA no 2	16.0	8.0	1.5	NO_2	N
NHM-21	Cam Rd	538657	183973	Roadside	Newham AQMA no 2	0.0	12.0	3	NO_2	Y
NHM-S 1	Salisbury Primary School	542089	185416	Roadside	Newham AQMA no 2	2.0	1.0	2.5	NO_2	N
NHM-S 2	Avenue Primary School	542319	185428	Urban background	Newham AQMA no 2	10.0	1.0	2.5	NO_2	N
NHM-S 3	Sir John Heron Primary School	542564	185642	Urban background	Newham AQMA no 2	0.0	11.0	2.5	NO_2	N
NHM-S 4	Sheringham Primary School	542922	185830	Urban Background	Newham AQMA no 2	3.0	1.0	2.5	NO_2	N
NHM-S 5	Susan Lawrence Nursery	543086	185713	Urban Background	Newham AQMA no 2	3.0	1.0	2.5	NO_2	N
NHM-S 6	Dersingham Primary School	543086	185713	Urban background	Newham AQMA no 2	2.0	1.0	2.5	NO_2	N

Site ID	Site Name	X (m)	Y (m)	Site Type	AQMA	Distance to Relevant Exposure (m)	Distance to Kerb of Nearest Rd (N/A if not applicable) (m)	Inlet height (m)	Pollutants monitored	Tube co-located with an automatic monitor. (Y/N)
NHM-S 7	St Winefride's RC Primary School	542880	185321	Kerbside	Newham AQMA no 2	2.0	1.0	2.5	NO_2	N
NHM-S 8	Little Ilford School	542734	185179	Kerbside	Newham AQMA no 2	2.0	1.0	2.5	NO_2	N
NHM-S 9	Essex Primary School	542549	185070	Urban background	Newham AQMA no 2	2.0	1.0	2.5	NO_2	N
NHM-S 10	Kensington Primary School	542701	184632	Urban Background	Newham AQMA no 2	2.0	1.0	2.5	NO_2	N
NHM-S 11	Plashet School	542277	184357	Kerbside	Newham AQMA no 2	4.0	1.0	2.5	NO_2	N
NHM-S 12	William Davies Primary School	541681	184582	Urban background	Newham AQMA no 2	2.0	1.0	2.5	NO_2	N
NHM-S 13	Monega Primary School	541797	184904	Urban Background	Newham AQMA no 2	3.0	1.0	2.5	NO_2	N
NHM-S 14	Shrewsbury Nursery	541562	185194	Urban background	Newham AQMA no 2	1.0	3.0	2.5	NO_2	N
NHM-S 15	Sandringham Primary School	541172	185041	Urban Background	Newham AQMA no 2	2.0	1.0	2.5	NO_2	N
NHM-S 16	Shaftesbury Primary School	541368	184294	Urban Background	Newham AQMA no 2	2.0	1.0	2.5	NO_2	N
NHM-S 17	St Stephen's Nursery School	541543	184112	Urban background	Newham AQMA no 2	2.0	1.0	2.5	NO_2	N
NHM-S 18	Cleves Primary School	541828	183772	Urban background	Newham AQMA no 2	2.0	1.0	2.5	NO_2	N

Site ID	Site Name	X (m)	Y (m)	Site Type	AQMA	Distance to Relevant Exposure (m)	Distance to Kerb of Nearest Rd (N/A if not applicable) (m)	Inlet height (m)	Pollutants monitored	Tube co-located with an automatic monitor. (Y/N)
NHM-S 19	Hartley Primary School	542253	183708	Urban Background	Newham AQMA no 2	2.0	1.0	2.5	NO_2	N
NHM-S 20	Lathom Junior School	542492	184111	Urban background	Newham AQMA no 2	2.0	1.0	2.5	NO_2	N
NHM-S 21	Altmore Infant School	542831	183954	Urban background	Newham AQMA no 2	2.0	1.0	2.5	NO_2	N
NHM-S 22	Langdon Academy	543501	183538	Urban background	Newham AQMA no 2	0.0	5.0	2.5	NO_2	N
NHM-S 23	Nelson Primary School	543143	183468	Urban background	Newham AQMA no 2	1.0	2.5	2.5	NO_2	N
NHM-S 24	St Michael's Catholic Primary School	542827	183286	Urban Background	Newham AQMA no 2	2.0	1.0	2.5	NO_2	N
NHM-S 25	Oliver Thomas Children's Centre	543279	183097	Urban Background	Newham AQMA no 2	2.5	1.0	2.5	NO_2	N
NHM-S 26	Vicarage Primary School	542858	182778	Urban background	Newham AQMA no 2	2.0	1.0	2.5	NO_2	N
NHM-S 27	Roman Road Primary School	542858	182778	Urban background	Newham AQMA no 2	1.0	2.5	2.5	NO_2	N
NHM-S 28	Brampton Manor Academy	541628	182342	Urban Background	Newham AQMA no 2	6.0	1.0	2.5	NO_2	N
NHM-S 29	Central Park Primary School	541919	183099	Roadside	Newham AQMA no 2	2.0	1.0	2.5	NO_2	N
NHM-S 30	St Edward's Catholic Primary School	541384	183505	Roadside	Newham AQMA no 2	3.0	1.0	2.5	NO_2	N

Site ID	Site Name	X (m)	Y (m)	Site Type	AQMA	Distance to Relevant Exposure (m)	Distance to Kerb of Nearest Rd (N/A if not applicable) (m)	Inlet height (m)	Pollutants monitored	Tube co-located with an automatic monitor. (Y/N)
NHM-S 31	Selwyn Primary School	540494	183908	Urban background	Newham AQMA no 2	-5.0	9.0	2.5	NO_2	N
NHM-S 32	Upton Cross Primary School	540915	183744	Urban Background	Newham AQMA no 2	2.0	1.0	2.5	NO_2	N
NHM-S 33	St Antony's Catholic Primary School	540502	184400	Urban Background	Newham AQMA no 2	0.0	2.0	2.5	NO_2	N
NHM-S 34	Stratford School Academy	540391	184416	Roadside	Newham AQMA no 2	1.0	2.5	2.5	NO_2	N
NHM-S 35	Elmhurst Primary School	540811	184261	Urban Background	Newham AQMA no 2	2.0	1.0	2.5	NO_2	N
NHM-S 36	St Bonaventure's RC School	540592	184162	Urban background	Newham AQMA no 2	2.0	1.0	2.5	NO_2	N
NHM-S 37	St Angela's Ursuline School	540665	184510	Urban background	Newham AQMA no 2	2.0	1.0	2.5	NO_2	N
NHM-S 38	Park Primary School	539849	184421	Urban Background	Newham AQMA no 2	2.0	1.0	2.5	NO_2	N
NHM-S 39	Earlham Primary School	540001	185106	Urban Background	Newham AQMA no 2	2.0	1.0	2.5	NO_2	N
NHM-S 40	Kay Rowe Nursery School	540595	185247	Urban background	Newham AQMA no 2	2.0	1.0	2.5	NO_2	N
NHM-S 41	Woodgrange Infant School	540764	185503	Urban background	Newham AQMA no 2	2.0	1.0	2.5	NO_2	N
NHM-S 42	Godwin Junior School	540838	185646	Urban background	Newham AQMA no 2	2.0	1.0	2.5	NO_2	N

WE ARE NEWHAM.

Site ID	Site Name	X (m)	Y (m)	Site Type	AQMA	Distance to Relevant Exposure (m)	Distance to Kerb of Nearest Rd (N/A if not applicable) (m)	Inlet height (m)	Pollutants monitored	Tube co-located with an automatic monitor. (Y/N)
NHM-S 43	Forest Gate Community School	540359	185338	Urban background	Newham AQMA no 2	3.0	1.0	2.5	NO_2	N
NHM-S 44	Odessa Infant School	540099	185343	Urban background	Newham AQMA no 2	1.0	2.5	2.5	NO_2	N
NHM-S 45	St James' C of E Junior School	540011	185274	Urban Background	Newham AQMA no 2	2.0	1.0	2.5	NO_2	N
NHM-S 46	Maryland Primary School	539326	185305	Urban Background	Newham AQMA no 2	2.0	1.0	2.5	NO_2	N
NHM-S 47	Colegrave Primary School	538857	185210	Urban background	Newham AQMA no 2	1.0	2.5	2.5	NO_2	N
NHM-S 48	Education Links	538856	185408	Urban background	Newham AQMA no 2	55.0	2.0	2.5	NO_2	N
NHM-S 49	Ronald Openshaw Nursery School	538715	185203	Urban Background	Newham AQMA no 2	2.0	1.0	2.5	NO_2	N
NHM-S 50	Chobham Academy	538263	185253	Urban background	Newham AQMA no 2	0.0	32.0	2.5	NO_2	N
NHM-S 51	Bobby Moore Academy (primary school)	537439	184122	Urban background	Newham AQMA no 2	5.0	2.0	2.5	NO_2	N
NHM-S 52	Bobby Moore Academy (secondary school)	537836	183828	Urban background	Newham AQMA no 2	1.0	1.0	2.5	NO_2	N
NHM-S 53	John F Kennedy Special School	538984	184024	Urban background	Newham AQMA no 2	6.0	1.0	2.5	NO_2	N
NHM-S 54	School 21	538964	184062	Urban Background	Newham AQMA no 2	2.0	1.0	2.5	NO_2	N

Site ID	Site Name	X (m)	Y (m)	Site Type	AQMA	Distance to Relevant Exposure (m)	Distance to Kerb of Nearest Rd (N/A if not applicable) (m)	Inlet height (m)	Pollutants monitored	Tube co-located with an automatic monitor. (Y/N)
NHM-S 55	Sarah Bonnell School	539379	184683	Urban background	Newham AQMA no 2	1.0	2.5	2.5	NO_2	N
NHM-S 56	West Ham Church Primary School	539469	183937	Kerbside	Newham AQMA no 2	2.0	1.0	2.5	NO_2	N
NHM-S 57	Portway Primary School	539955	183624	Urban Background	Newham AQMA no 2	4.0	1.0	2.5	NO_2	N
NHM-S 58	Ranelagh Primary School	539444	183264	Urban Background	Newham AQMA no 2	2.5	1.0	2.5	NO_2	N
NHM-S 59	Manor Primary School	539265	183375	Urban Background	Newham AQMA no 2	2.5	1.0	2.5	NO_2	N
NHM-S 60	East London Science School	538336	182808	Urban background	Newham AQMA no 2	2.5	112.0	2.5	NO_2	N
NHM-S 61	Abbey Lane Children's Centre	538373	183461	Roadside	Newham AQMA no 2	4.5	1.0	2.5	NO_2	N
NHM-S 62	Carpenters Primary School	538455	183877	Roadside	Newham AQMA no 2	3.0	5.0	2.5	NO_2	N
NHM-S 63	Curwen Primary School	540193	183176	Urban Background	Newham AQMA no 2	5.0	1.0	2.5	NO_2	N
NHM-S 64	Eleanor Smith School	540581	183217	Urban background	Newham AQMA no 2	2.0	1.0	2.5	NO_2	N
NHM-S 65	Lister Community School	540793	183493	Urban background	Newham AQMA no 2	2.0	1.0	2.5	NO_2	N
NHM-S 66	Plaistow Primary School	540813	183333	Urban background	Newham AQMA no 2	0.0	8.0	2.5	NO_2	N

WE ARE NEWHAM.

BUILDING A FAIRER NEWHAM

Site ID	Site Name	X (m)	Y (m)	Site Type	AQMA	Distance to Relevant Exposure (m)	Distance to Kerb of Nearest Rd (N/A if not applicable) (m)	Inlet height (m)	Pollutants monitored	Tube co-located with an automatic monitor. (Y/N)
NHM-S 67	Southern Road Primary School	540944	183245	Urban Background	Newham AQMA no 2	1.0	3.0	2.5	NO_2	N
NHM-S 68	Tollgate Primary School	541216	182059	Urban background	Newham AQMA no 2	1.0	2.0	2.5	NO_2	N
NHM-S 69	The Cumberland School	541272	182349	Urban Background	Newham AQMA no 2	2.0	1.0	2.5	NO_2	N
NHM-S 70	Brampton Primary School	541989	182568	Urban background	Newham AQMA no 2	1.0	2.5	2.5	NO_2	N
NHM-S 71	New City Primary School	541501	182588	Urban background	Newham AQMA no 2	2.0	1.0	2.5	NO_2	N
NHM-S 72	Tunmarsh School	541094	182694	Urban background	Newham AQMA no 2	3.0	1.0	2.5	NO_2	N
NHM-S 73	Gainsborough Primary School	539258	182560	Urban Background	Newham AQMA no 2	2.5	1.0	2.5	NO_2	N
NHM-S 74	Star Primary School	539315	182104	Urban background	Newham AQMA no 2	2.0	1.0	2.5	NO_2	N
NHM-S 75	Eastlea Community School	539561	182374	Urban background	Newham AQMA no 2	5.0	3.0	2.5	NO_2	N
NHM-S 76	Grange Primary School	539983	182470	Urban background	Newham AQMA no 2	2.0	1.0	2.5	NO_2	N
NHM-S 77	St Helen's Catholic Primary School	540108	182314	Urban Background	Newham AQMA no 2	1.5	1.0	2.5	NO_2	N
NHM-S 78	Kaizen Primary School	540701	182157	Urban Background	Newham AQMA no 2	7.0	2.5	2.5	NO_2	N

Site ID	Site Name	X (m)	Y (m)	Site Type	AQMA	Distance to Relevant Exposure (m)	Distance to Kerb of Nearest Rd (N/A if not applicable) (m)	Inlet height (m)	Pollutants monitored	Tube co-located with an automatic monitor. (Y/N)
NHM-S 79	Ravenscroft Primary School	540443	182132	Urban Background	Newham AQMA no 2	2.5	1.0	2.5	NO$_2$	N
NHM-S 80	Rokeby School	539893	181888	Roadside	Newham AQMA no 2	0.0	8.0	2.5	NO$_2$	N
NHM-S 81	St Luke's Primary School	539842	181328	Urban background	Newham AQMA no 2	0.0	2.5	2.5	NO$_2$	N
NHM-S 82	Hallsville Primary School	540113	181170	Urban Background	Newham AQMA no 2	1.0	2.0	2.5	NO$_2$	N
NHM-S 83	Keir Hardie Primary School	540275	181638	Urban background	Newham AQMA no 2	3.0	1.0	2.5	NO$_2$	N
NHM-S 84	Rosetta Primary School	540855	181595	Urban background	Newham AQMA no 2	0.0	115.0	2.5	NO$_2$	N
NHM-S 85	Edith Kerrison Nursery School	540742	181507	Urban Background	Newham AQMA no 2	1.0	2.0	2.5	NO$_2$	N
NHM-S 86	St Joachim's Catholic Primary School	540961	181074	Urban background	Newham AQMA no 2	0.0	3.0	2.5	NO$_2$	N
NHM-S 87	Britannia Village Primary	540676	180279	Urban background	Newham AQMA no 2	1.0	3.0	2.5	NO$_2$	N
NHM-S 88	New Directions	543536	180065	Urban Background	Newham AQMA no 2	2.5	1.0	2.5	NO$_2$	N
NHM-S 89	Oasis Academy Silvertown	543202	180069	Urban background	Newham AQMA no 2	2.0	1.0	2.5	NO$_2$	N
NHM-S 90	Drew Primary School	542197	180233	Urban background	Newham AQMA no 2	0.0	2.5	2.5	NO$_2$	N

WE ARE NEWHAM.

BUILDING A FAIRER NEWHAM

Site ID	Site Name	X (m)	Y (m)	Site Type	AQMA	Distance to Relevant Exposure (m)	Distance to Kerb of Nearest Rd (N/A if not applicable) (m)	Inlet height (m)	Pollutants monitored	Tube co-located with an automatic monitor. (Y/N)
NHM-S 91	Royal Docks Academy	541233	181069	Urban background	Newham AQMA no 2	5.0	0.5	2.5	NO_2	N
NHM-S 92	Calverton Primary School	541712	181187	Urban Background	Newham AQMA no 2	1.0	1.0	2.5	NO_2	N
NHM-S 93	Scott Wilkie Primary School	541504	181370	Urban Background	Newham AQMA no 2	0.0	60.0	2.5	NO_2	N
NHM-S 94	Ellen Wilkinson Primary School	542061	181645	Urban background	Newham AQMA no 2	3.0	2.0	2.5	NO_2	N
NHM-S 95	Beckton and Royal Docks Children's Centre	541928	181706	Urban background	Newham AQMA no 2	2.0	1.0	2.5	NO_2	N
NHM-S 96	Kingsford Community School	542603	181523	Urban Background	Newham AQMA no 2	0.0	20.0	2.5	NO_2	N
NHM-S 97	North Beckton Primary School	542805	181812	Urban background	Newham AQMA no 2	3.5	1.0	2.5	NO_2	N
NHM-S 98	Gallions Primary School	543635	181422	Urban background	Newham AQMA no 2	30.0	2.0	2.5	NO_2	N
NHM-S 99	Winsor Primary School	543208	181147	Urban background	Newham AQMA no 2	5.5	1.0	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.

For the school study (NHM-S): The default distance to the nearest relevant exposure i.e. the school property is 10 metres. Diffusion tube heights are at approximately 3 metres. When this is significantly different, the deviated measurement is presented.

WE ARE NEWHAM.

1.2 Comparison of Monitoring Results with AQOs

Table D. Annual Mean NO_2 Monitoring Results: Automatic Monitoring ($\mu g/m^3$)

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Valid data capture 2023 %[b]	Site Type	2017	2018	2019	2020	2021	2022	2023
NM2	538661	183969	99	Roadside	38	29	29	24	23	24	21
NM3	539889	181469	98	Urban Background	30	28	28	20	21	22	20
TL5	539934	180810	90	Roadside					22	23	21
TL6	540324	180253	90	Roadside					26	25	22
NM4	542637	183573	99	Roadside							33
BLN1	538745	184982	100	Roadside							17
BLN2	542024	181692	88	Urban Background							23
BLN3	542168	183159	76	Roadside							35
BLN4	541202	182442	100	Roadside							20
BLN5	539512	181359	100	Roadside							24

Notes: The annual mean concentrations are presented as $\mu g/m^3$. Exceedances of the NO_2 annual mean AQO of $40\mu g/m^3$ are shown in **bold**. NO_2 annual means in excess of $60\mu g/m^3$, 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%).

Table D Trend Analysis

There has been a significant NO_2 reduction in the years 2016 to 2020. The years 2021-2022 reported a flat-lining in concentrations with another significant reduction in NO_2 at all sites in the year 2023.

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

Site ID	X OS Grid Ref Easting	Y OS Grid Ref Northing	Site Type	Valid Data Capture in Monitoring Period % [1]	Valid Data Capture 2023 % [2]	2017	2018	2019	2020	2021	2022	2023
NHM-1	53828	18535	Urban Background	100.0	100.0	**40**	**43**	33.4	27.3	25.2	27.4	25.7
NHM-2	539570	184659	Urban Background	100.0	100.0	35	34	32.1	24.9	22.4	22.2	20.8
NHM-3	54195	18543	Roadside	92.3	92.3	36	35	34.6	27.4	23.0	22.4	21.8
NHM-4	542831	18361	Roadside	82.8	82.8	38	33	31.6	34.7	28.8	26.2	26.9
NHM-6	539850	182655	Urban background	100.0	100.0	27	25	22.7	18.1	16.7	16.6	14.7
NHM-7	541492	182332	Urban background	92.3	92.3	36	34	30.0	35.8	22.5	23.8	23.0
NHM-8	542680	18320	Urban Background	74.6	74.6	33	27	26.5	22.7	22.0	19.8	16.9
NHM-10	539747	181477	Urban background	82.8	82.8	30	27	24.4	20.4	16.1	20.1	17.5
NHM-11	542583	180201	Kerbside	92.3	92.3	38	31	30.7	24.9	33.6	29.6	29.6
NHM-12	543762	180784	Urban background	100.0	100.0	38	33	30.8	24.2	24.2	21.1	19.8
NHM-13	541134	184098	Kerbside	92.3	92.3	**41**	35	36.6	**42.5**	38.4	37.7	34.2
NHM-16	539164	185158	Kerbside	100.0	100.0	<u>**60**</u>	**51**	36.6	36.8	31.7	29.5	27.7
NHM-17	542729	185047	Kerbside	92.3	92.3	**42**	38	**42.3**	32.8	27.1	28.6	22.2
NHM-19	539906	18170	Kerbside	100.0	100.0	**59**	**47**	35.5	**46.3**	39.7	36.6	32.7
NHM-20	539456	181499	Roadside	91.8	91.8	**56**	**58**	35.3	32.7	28.8	33.4	27.2
NHM-21	538657	183973	Roadside	100.0	100.0	39	34	29.8	24.5	23.2	22.8	20.0
NHM-S 1	542089	185416	Roadside	82.8	82.8			29.0	24.3	26.7	23.8	28.0
NHM-S 2	542319	185428	Urban background	91.8	91.8			24.0	19.5	19.1	17.7	18.2
NHM-S 3	542564	185642	Urban background	100.0	100.0			27.0	20.5	19.5	18.1	19.6
NHM-S 4	542922	185830	Urban Background	65.0	65.0			29.0	21.6	21.1	20.0	20.4
NHM-S 5	543086	185713	Urban Background	100.0	100.0			28.0	21.2	21.1	18.0	20.1
NHM-S 6	543086	185713	Urban background	100.0	100.0			32.0	26.3	28.3	24.6	24.8
NHM-S 7	542880	185321	Kerbside	100.0	100.0			**42.0**	32.7	32.2	30.3	32.1
NHM-S 8	542734	185179	Kerbside	100.0	100.0			33.0	25.5	24.5	24.8	25.9
NHM-S 9	542549	185070	Urban background	84.7	84.7			26.0	20.6	19.3	18.6	18.8
NHM-S 10	542701	184632	Urban Background	100.0	100.0			27.0	22.0	24.7	20.1	21.1
NHM-S 11	542277	184357	Kerbside	92.3	92.3			35.0	28.5	38.4	**53.2**	**53.8**
NHM-S 12	541681	184582	Urban background	91.8	91.8			26.0	19.5	17.2	17.5	17.9
NHM-S 13	541797	184904	Urban Background	77.0	77.0			29.0	21.9	19.8	18.9	20.1
NHM-S 14	541562	185194	Urban background	100.0	100.0			28.0	24.3	23.4	21.5	23.7
NHM-S 15	541172	185041	Urban Background	100.0	100.0			27.0	22.5	20.7	20.4	20.9

Site ID	X OS Grid Ref Easting	Y OS Grid Ref Northing	Site Type	Valid Data Capture in Monitoring Period % [1]	Valid Data Capture 2023 % [2]	2017	2018	2019	2020	2021	2022	2023
NHM-S 16	541368	184294	Urban Background	100.0	100.0			28.0	23.5	20.9	20.5	23.5
NHM-S 17	541543	184112	Urban background	82.8	82.8			25.0	18.7	17.9	17.8	20.1
NHM-S 18	541828	183772	Urban background	90.4	90.4			25.0	19.3	18.9	18.6	20.0
NHM-S 19	542253	183708	Urban Background	82.2	82.2			28.0	22.5	22.6	21.0	20.1
NHM-S 20	542492	184111	Urban background	100.0	100.0			32.0	25.6	23.2	23.6	25.1
NHM-S 21	542831	183954	Urban background	82.8	82.8			31.0	23.2	20.7	21.0	24.9
NHM-S 22	543501	183538	Urban background	100.0	100.0			28.0	21.7	20.7	20.4	21.6
NHM-S 23	543143	183468	Urban background	100.0	100.0			26.0	21.3	18.3	18.2	18.3
NHM-S 24	542827	183286	Urban Background	92.3	92.3			26.0	21.6	20.7	19.0	20.6
NHM-S 25	543279	183097	Urban Background	92.3	92.3			25.0	19.2	19.7	17.7	19.3
NHM-S 26	542858	182778	Urban background	92.3	92.3			33.0	24.9	23.5	20.5	20.7
NHM-S 27	542858	182778	Urban background	100.0	100.0			31.0	22.4	21.6	19.9	20.0
NHM-S 28	541628	182342	Urban Background	100.0	100.0			23.0	21.1	20.2	21.0	22.6
NHM-S 29	541919	183099	Roadside	82.2	82.2			31.0	22.5	20.5	18.7	21.8
NHM-S 30	541384	183505	Roadside	90.4	90.4			36.0	30.1	28.3	29.6	32.2
NHM-S 31	540494	183908	Urban background	90.4	90.4			29.0	24.1	24.4	24.3	23.9
NHM-S 32	540915	183744	Urban Background	77.0	77.0			23.0	18.6	18.2	17.1	17.6
NHM-S 33	540502	184400	Urban Background	100.0	100.0			26.0	17.8	18.8	17.8	17.8
NHM-S 34	540391	184416	Roadside	100.0	100.0			30.0	24.1	22.1	19.9	22.1
NHM-S 35	540811	184261	Urban Background	67.5	67.5			28.0	20.3	20.6	19.9	21.9
NHM-S 36	540592	184162	Urban background	90.4	90.4			29.0	19.2	18.6	18.7	19.0
NHM-S 37	540665	184510	Urban background	84.2	84.2			28.0	23.6	19.9	21.0	21.5
NHM-S 38	539849	184421	Urban Background	100.0	100.0			26.0	20.9	20.2	17.3	17.4
NHM-S 39	540001	185106	Urban Background	100.0	100.0			25.0	20.2	19.1	18.0	18.9
NHM-S 40	540595	185247	Urban background	100.0	100.0			28.0	23.3	20.6	19.5	19.8
NHM-S 41	540764	185503	Urban background	100.0	100.0			30.0	21.7	18.5	17.9	19.7
NHM-S 42	540838	185646	Urban background	100.0	100.0			21.0	18.5	16.2	20.6	19.2
NHM-S 43	540359	185338	Urban background	92.3	92.3			32.0	24.0	23.9	23.8	25.2
NHM-S 44	540099	185343	Urban background	84.7	84.7			25.0	19.5	17.7	18.4	17.0
NHM-S 45	540011	185274	Urban Background	65.6	65.6			23.0	19.9	17.7	19.1	20.6
NHM-S 46	539326	185305	Urban Background	100.0	100.0			26.0	20.1	19.9	18.9	19.1
NHM-S 47	538857	185210	Urban background	82.8	82.8			28.0	20.4	20.3	20.5	21.0
NHM-S 48	538856	185408	Urban background	90.4	90.4			27.0	19.9	18.5	20.6	20.4

Site ID	X OS Grid Ref Easting	Y OS Grid Ref Northing	Site Type	Valid Data Capture in Monitoring Period % [1]	Valid Data Capture 2023 % [2]	2017	2018	2019	2020	2021	2022	2023
NHM-S 49	538715	185203	Urban Background	90.4	90.4			28.0	23.1	19.8	20.7	21.4
NHM-S 50	538263	185253	Urban background	73.2	73.2			28.0	22.9	21.9	20.3	22.1
NHM-S 51	537439	184122	Urban background	67.5	67.5			33.0	21.8	21.1	18.1	20.9
NHM-S 52	537836	183828	Urban background	100.0	100.0			27.0	20.0	19.2	19.8	19.9
NHM-S 53	538984	184024	Urban background	100.0	100.0			27.0	21.8	20.6	18.0	20.1
NHM-S 54	538964	184062	Urban Background	92.3	92.3			29.0	20.6	19.7	19.1	20.2
NHM-S 55	539379	184683	Urban background	91.8	91.8			31.0	26.0	25.4	24.8	21.7
NHM-S 56	539469	183937	Kerbside	92.3	92.3			34.0	30.4	30.6	36.1	28.2
NHM-S 57	539955	183624	Urban Background	100.0	100.0			27.0	19.4	19.6	18.4	20.5
NHM-S 58	539444	183264	Urban Background	74.6	74.6			27.0	19.6	18.3	17.0	17.4
NHM-S 59	539265	183375	Urban Background	100.0	100.0			27.0	20.3	20.6	19.5	18.5
NHM-S 60	538336	182808	Urban background	74.6	74.6			29.0	23.9	23.1	20.0	19.7
NHM-S 61	538373	183461	Roadside	82.2	82.2			31.0	24.3	20.4	19.9	21.2
NHM-S 62	538455	183877	Roadside	100.0	100.0			31.0	24.0	24.6	24.0	24.9
NHM-S 63	540193	183176	Urban Background	75.1	75.1			29.0	20.1	19.9	19.0	20.1
NHM-S 64	540581	183217	Urban background	100.0	100.0			25.0	19.1	18.7	17.6	18.9
NHM-S 65	540793	183493	Urban background	84.7	84.7			28.0	22.6	19.4	18.2	19.4
NHM-S 66	540813	183333	Urban background	84.7	84.7			27.0	21.9	21.8	18.3	20.0
NHM-S 67	540944	183245	Urban Background	100.0	100.0			31.0	19.4	18.6	17.7	18.0
NHM-S 68	541216	182059	Urban background	65.6	65.6			31.0	25.2	23.3	22.7	21.0
NHM-S 69	541272	182349	Urban Background	57.9	57.9			32.0	24.7	24.6	21.9	25.8
NHM-S 70	541989	182568	Urban background	100.0	100.0			28.0	21.0	20.6	19.7	19.7
NHM-S 71	541501	182588	Urban background	92.3	92.3			31.0	25.4	22.4	20.6	21.8
NHM-S 72	541094	182694	Urban background	92.3	92.3			22.0	23.3	23.2	21.0	22.6
NHM-S 73	539258	182560	Urban Background	100.0	100.0			28.0	22.4	22.6	21.0	21.1
NHM-S 74	539315	182104	Urban background	100.0	100.0			30.0	24.3	25.4	24.2	23.8
NHM-S 75	539561	182374	Urban background	91.8	91.8			31.0	19.0	20.9	20.1	18.4
NHM-S 76	539983	182470	Urban background	92.3	92.3			24.0	21.3	18.3	18.3	16.3
NHM-S 77	540108	182314	Urban Background	91.8	91.8			32.0	25.0	22.2	20.9	18.7
NHM-S 78	540701	182157	Urban Background	75.1	75.1			30.0	22.7	23.0	23.6	25.1
NHM-S 79	540443	182132	Urban Background	100.0	100.0			29.0	22.1	21.1	21.2	20.7
NHM-S 80	539893	181888	Roadside	100.0	100.0			36.0	32.6	27.1	27.0	26.7
NHM-S 81	539842	181328	Urban background	76.5	76.5			30.0	24.4	22.9	20.4	20.8

Site ID	X OS Grid Ref Easting	Y OS Grid Ref Northing	Site Type	Valid Data Capture in Monitoring Period % [1]	Valid Data Capture 2023 % [2]	2017	2018	2019	2020	2021	2022	2023
NHM-S 82	540113	181170	Urban Background	100.0	100.0			28.0	23.7	21.3	24.6	24.8
NHM-S 83	540275	181638	Urban background	100.0	100.0			26.0	22.0	21.0	21.3	22.1
NHM-S 84	540855	181595	Urban background	82.8	82.8			26.0	21.1	20.5	19.0	18.9
NHM-S 85	540742	181507	Urban Background	84.7	84.7			27.0	20.2	19.2	19.0	17.6
NHM-S 86	540961	181074	Urban background	100.0	100.0			26.0	19.7	18.6	19.3	20.6
NHM-S 87	540676	180279	Urban background	92.3	92.3			24.0	20.4	19.8	20.2	21.1
NHM-S 88	543536	180065	Urban Background	90.4	90.4			27.0	20.3	18.7	19.7	22.3
NHM-S 89	543202	180069	Urban background	82.8	82.8			30.0	24.5	20.2	20.1	23.7
NHM-S 90	542197	180233	Urban background	100.0	100.0			29.0	21.7	19.5	21.1	22.0
NHM-S 91	541233	181069	Urban background	90.4	90.4			38.0	27.0	27.2	32.1	27.6
NHM-S 92	541712	181187	Urban Background	100.0	100.0			24.0	19.2	17.9	18.5	18.6
NHM-S 93	541504	181370	Urban Background	84.7	84.7			24.0	21.8	18.4	17.1	17.4
NHM-S 94	542061	181645	Urban background	90.4	90.4			24.0	23.1	19.9	18.7	17.7
NHM-S 95	541928	181706	Urban background	82.8	82.8			38.0	23.0	22.2	23.4	24.3
NHM-S 96	542603	181523	Urban Background	75.1	75.1			25.0	19.1	16.7	17.3	18.4
NHM-S 97	542805	181812	Urban background	67.5	67.5			21.0	19.7	18.6	17.1	19.5
NHM-S 98	543635	181422	Urban background	91.8	91.8			29.0	22.6	20.7	20.2	19.5
NHM-S 99	543208	181147	Urban background	75.1	75.1			27.0	22.2	20.2	19.5	16.0

Notes

☒ **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.**

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%.

WE ARE NEWHAM.

BUILDING A
FAIRER
NEWHAM

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%).

Table E Trend Analysis

As illustrated in Figure A, in the majority of wards there has been a significant reduction in NO_2 concentrations outside schools from 2019 over the subsequent 4 years. The reduction is not so significant for the years 2020 to 2023. Concentrations have risen slightly this year in the wards Little Ilford, Boleyn, Stratford & New Town, Wall End, Plaistow South, Royal Docks, Manor Park, East Ham South and Green Street East. All wards on average meet the legal air quality objective of 40µg/m3.

**Figure A Five Year NO_2 Air Quality Trend by Ward (incorporating all 99 Schools in Newham)**
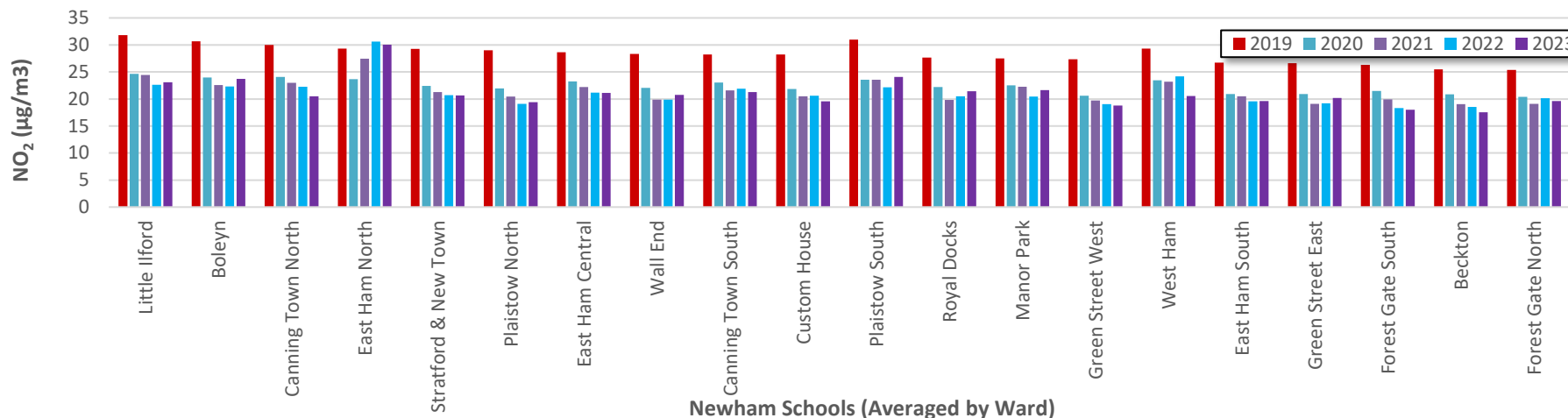
Table E Trend Analysis... cont.

The box plot (Figure B), illustrates in detail the annual trend in nitrogen dioxide concentrations at Newham's 99 schools (which are bias towards urban background sites).

Evident in the plot is the significant reductions in average concentrations during the Covid-19 pandemic (2019-2020), with these reductions levelling off into 2023.

However, there are some outlying schools which present a significant increase in concentrations over the last two years. The highest concentrations are reported at Plashet School and this has been investigated further in Section A.3.

Figure B: **Five Year NO$_2$ Air Quality Trend at all 99 Schools (Annual NO$_2$ Concentrations)**
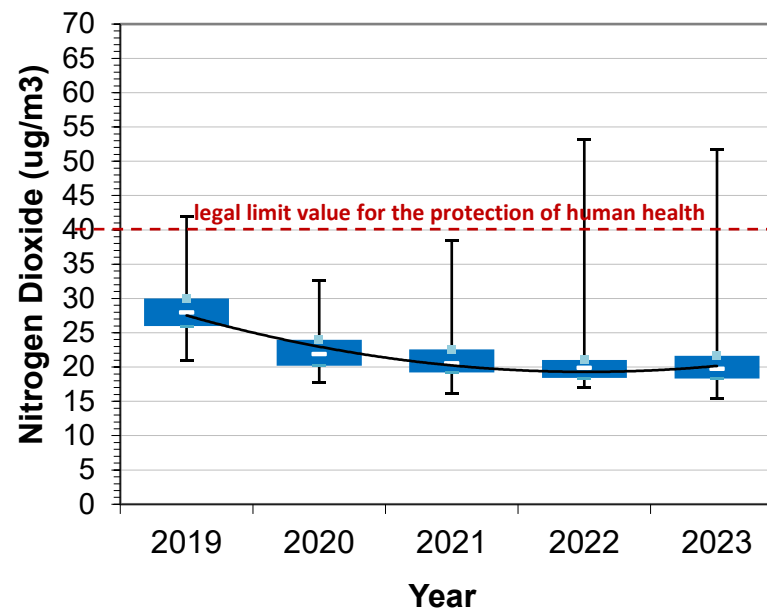
Table E Trend Analysis... cont.

The box plot (Figure C), illustrates the annual trend in nitrogen dioxide concentrations at all of the long term diffusion tube sites in Newham (NHM-1 to NHM-21). These are bias towards more roadside and kerbside sites.

Evident in the plot is a consistent year-on-year reduction in average concentrations (illustrated by the black trend line) from 2017 until 2023. Unlike the school sites, there has been a significant reduction in concentrations in 2023.

The maximum concentration sites have historically been on Newham's busiest roads, namely the A106 and A13, which also report a consistent reduction since 2017.

Since 2021 the sites with the maximum concentrations have now fallen below the legal limit value of 40µg/m3 in 2023.

Historically, the lowest concentration sites have been recorded inside East London Crematorium and Cemetery and close to the automatic background monitor at Wren Close. These sites have seen a levelling off of reductions, which correlates with the results reported at the school sites.

Figure C: Nine Year NO$_2$ Air Quality Trend at all 16 DEFRA reported sites (Annual NO$_2$ Concentrations)
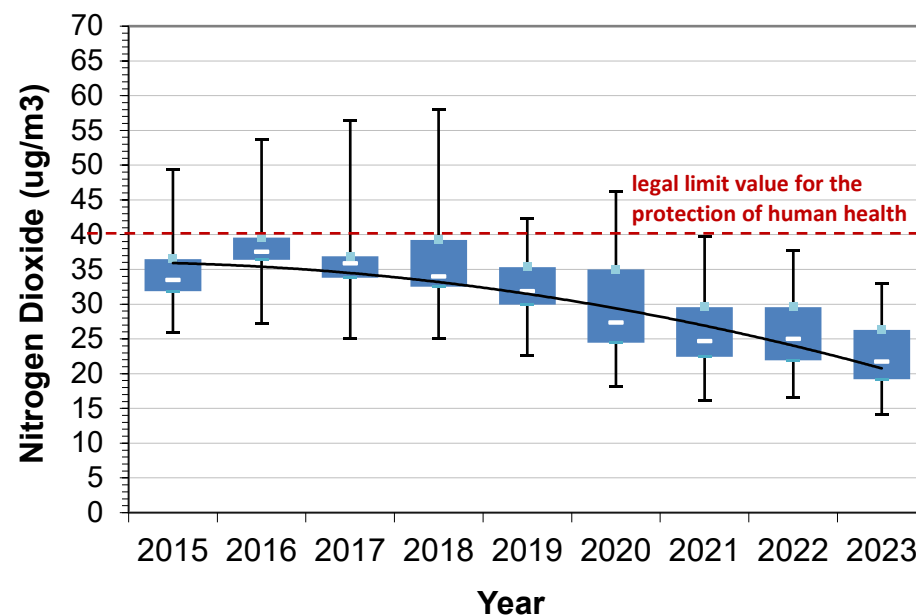
Table F. NO$_2$ Automatic Monitoring Results: Comparison with 1-hour Mean Objective, Number of 1-Hour Means >200µg/m^3

Site ID	Valid data capture for monitoring period %[a]	Valid data capture 2023 %[b]	2017	2018	2019	2020	2021	2022	2023
NM2	99	99	0	0	0	0	0	0	0
NM3	98	98	13	0	0	0	0	0	0
TL5	90	90					0	0	0
TL6	90	90					0	0	0
NM4	99	99							0

Notes

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

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

If the period of valid data is less than 85%, the 99.8[th] 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%)

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
NM2	99	99	17*	18	18	18	17	16	14
NM3	98	98	16*	19	18	20	18	18	15

Notes

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

Exceedances of the PM$_{10}$ annual mean AQO of 40µg/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%).

Table G Trend Analysis

The annual mean concentrations of PM$_{10}$ have slightly decreased at Wren Close (Background) and Cam Road (Roadside). All sites are below the legal limit value for the protection of human health.

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

Site ID	Valid data capture for monitoring period %[a]	Valid data capture 2023 %[b]	2017	2018	2019	2020	2021	2022	2023
NM2	99	99	0	1	3	6	0	4	0
NM3	98	98	0	2	4	6	2	4	0

Notes

Exceedances of the PM$_{10}$ 24-hour mean objective (50µg/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 90.4[th] 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%).

Table H Trend Analysis

The number of high particulate episodes has decreased over the last year. The number of high particulate episodes are within the legally permitted level.

WE ARE NEWHAM.

BUILDING A
FAIRER
NEWHAM

Table I. Annual Mean $PM_{2.5}$ Automatic Monitoring Results ($\mu g/m^3$)

Site ID	Valid data capture for monitoring period %[a]	Valid data capture 2023 %[b]	2020	2021	2022	2023
NM2	98	98	11	13	10	7
NM3	99	99	12	14	11	9
TL6	98	98		14	12	9
NM4	82	41				11
BLN1	100	100				9
BLN2	88	88				7
BLN3	76	76				8
BLN4	100	100				8
BLN5	100	100				9

Notes

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

Exceedances of the $PM_{2.5}$ annual mean AQO of $20\mu g/m^3$ 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%).

Table I Trend Analysis

Table I reports that the concentrations of fine particulates have declined at all three existing sites. All sites are within the legal limit value however, East Ham Town Hall is just above the WHO recommended mean concentration of $10\mu g/m^3$.

WE ARE NEWHAM.

BUILDING A
FAIRER
NEWHAM

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

This table is intentionally missing. Newham has not declared an AQMA for SO$_2$; monitoring was discontinued after objectives were met for many years and were well below objective values.

Table K. Other Pollutants

This table is intentionally missing. Authorities in England are not required to report on other pollutants such as Benzene, 1,3-Butadiene, Carbon Monoxide and Lead, unless there is a local issue that needs to be addressed.

2. Action to Improve Air Quality

2.1 Air Quality Management Areas

Air Quality Management Areas (AQMAs) are declared when there is an exceedance or likely exceedance of an air quality objective. After declaration, the authority should prepare an Air Quality Action Plan (AQAP) within 12 months. The AQAP should specify how air quality targets will be achieved and maintained, and provide dates by which measures will be carried out.

The London Borough of Newham first declared an Air Quality Management Area in 2002 which focused on a smaller selection of 'A' and 'B' roads. A new borough wide AQMA was declared in 2019. Table L presents a description of the currently designated AQMA. Appendix C provides maps of the air quality monitoring locations inside the borough wide AQMA.

The air quality objectives pertinent to the current AQMA designation(s) are as follows: **NO$_2$** 40µg/m^3 annual mean, 200µg/m^3 1-hour mean (18 exceedances permitted). **PM$_{10}$** 40µg/m^3 annual mean, 50µg/m^3 24-hour mean (35 exceedances permitted).

Table L. Declared Air Quality Management Areas

AQMA Name	Date of Declaration	Pollutants & 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 & Date of AQAP Publication	Web Link to AQAP
Newham AQMA no 2	5/12/2019	NO$_2$ Annual Mean	Whole of Newham	NO	57	43	Uncompliant	AQAP for AQMA 2, November 2019	[Ar Quality Action Plan 2019 - 2024 (newham.gov.uk)](#)
		PM$_{10}$ 24-Hour Mean			49*	43†	Uncompliant		

*LAEI 2019, †LAEI 2025 forecast

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

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

WE ARE NEWHAM.

2.2 Air Quality Action Plan Progress

Table M provides a brief summary of The London Borough of Newham's progress against the Air Quality Action Plan, showing progress made this year. New projects which commenced in 2023 are shown at the bottom of the table.

Table M. Delivery of Air Quality Action Plan Measures

Measure	LLAQM Action Matrix Theme	Action	Progress (Emissions/Concentration data, Benefits, Negative impacts/Complaints)
1	Monitoring and other core statutory duties	Maintain & expand an appropriate AQ monitoring network (currently 115 diffusion tube sites (NO_2), 5 automatic monitoring sites (PM_{10}, $PM_{2.5}$ & NO_x), 1 NO_2 diffusion tube co-location study & 34 small sensors)) so that AQ impacts within the Borough can be properly understood.	33 small sensor monitors have been deployed by a selection of suppliers operating on different networks. Some are being used to support the Council's Low Traffic Neighbourhoods and School streets. This data has already been used in justifying traffic reduction schemes, such as the Browning Bridge Closure and Heathy School Streets Phases 1-3. There are currently 5 Breathe London monitors, 7 Aadra monitors and 21 EarthSense monitors deployed in Newham. As part of a planning agreement with London City Airport, three real-time monitors (2 NO_2 & 1 PM_{10} & $PM_{2.5}$), together with 17 NO_2 diffusion tubes are deployed around the airport. Data is available from London City Airport https://www.londoncityairport.com/corporate/corporate-info/reports-and-publications In December 2022 a new real time monitoring station measuring $PM_{2.5}$ & NO_2 was installed at East Ham Town Hall. 99 of our NO_2 diffusion tubes have been deployed outside the borough's schools. TfL have set up two real time monitors to assess the impact of the Silvertown Tunnel (currently under construction). Real time data is available at London Air Quality Network :: Welcome to the London Air Quality Network » Statistics Maps
2	Emissions from developments and buildings	Ensuring emissions from construction are minimised.	Environmental Control review all major applications for air quality related issues.
3	Emissions from developments and buildings	Ensuring enforcement of non-road mobile machinery (NRMM) AQ policies.	Planning officers work closely with Environmental Health colleagues to encourage the use of low emission Non-Road Mobile Machinery (NRMM) and generators. The emerging Local Plan encourages the use of battery and zero carbon alternatives for NRMM. Minor planning applications where NRMM is likely to be used have a condition requiring compliance with GLA SPG. Newham contribute to the pan-London Non-Road Mobile Machinery scheme. Inspections are carried out by a dedicated team based at L B Merton.

Measure	LLAQM Action Matrix Theme	Action	Progress (Emissions/Concentration data, Benefits, Negative impacts/Complaints)
4	Emissions from developments and buildings	Reducing emissions from combined heat & power (CHP).	No new applications for CHP plants received in 2023
5	Emissions from developments and buildings	Air Quality Neutral development – as per London Plan & Local Plan, all new development should be at least AQ neutral (as per GLA definition). Additionally, seek to implement the AQ positive provisions of the new London Plan (applying to all EIA-applicable development).	Newham's current Local Plan (2018) specifies compliance with air quality neutral. All relevant applications are required to be air quality neutral. Guidance to applicants published on the Council web site newham-par-february-2024, specifies the Council's requirements. Local Plan Policy SC5 discourages on-site electricity generation and requires a high standard of emission controls if unavoidable. In light of London Plan requirements, many applications are now using air source heat pumps rather than gas boilers or CHP. Efforts to reduce car parking and encourage active travel in planning applications continues. We encourage electric hook-ups at residential moorings. Prohibiting gas boilers in new development.
6	Emissions from developments and buildings	Maximising the AQ benefits of Green Infrastructure (GI) in new development.	Will continue to be delivered through implementation of the emerging Local Plan, in line with the new London Plan 2020. **Just Transition Plan:** In December the Council published its 'Just Transition Plan' What is our Just Transition Plan? – Our Just Transition Plan – Newham Council The plan applies a strategic framework for climate action in our borough. It is a blueprint to address the unequal impacts of climate change on society and build a fairer borough that has lower emissions, is more equitable and future-ready. **Trees for Cities:** Two schools, St Luke's Primary and West Ham Church Primary, received full funding of around £50k each. Trees for Cities is developing a second round of projects. Plashet School, which has high levels of nitrogen dioxide on the road outside the school will participate. **Breathe Easy Project:** Balfour Beatty planted tree hedges around Ellen Wilkinson Primary School and Ellen Wilkinson Children's Centre, to reduce air pollution in playgrounds. **SUGi Forest Schools Planting:** So far, we have planted one park and four schools as part of a £1m scheme from the Council's carbon offset budget. Greening for Newham's Next Generation	SUGi (sugiproject.com)

Measure	LLAQM Action Matrix Theme	Action	Progress (Emissions/Concentration data, Benefits, Negative impacts/Complaints)
7	Monitoring and other core statutory duties	Declaring Smoke Control Areas & ensuring they are fully promoted & enforced.	In 2022 the Council took the decision to replace multiple SCAs with a single borough-wide SCA. The formal legal process of consultation leading to declaration is ongoing.
8	Emissions from developments and buildings	Promoting & delivering energy efficiency & energy supply retrofit projects in workplaces & homes through EFL retrofit programmes such as RE:FIT, RE:NEW & through Borough carbon offset funds.	The Private Sector Housing Service have carried out licensing compliance inspections to 5,000 private rented properties since April 2023-March 2024. Each property is checked for energy efficiency measures during the inspection. Minimum Energy Efficiency Standards enforcement has been concluded, with owners of all identified non-compliant EPC F&G rented properties written to. Up to the end of March 24 there have been 177 Energy Efficiency Investigations for F and G Rated Properties and 149 MEES Compliance Notices served. Of the properties where penalty notices were served only 1 of these is still substandard. This property has been sent a second penalty notice and passed onto the Enforcement Team. Properties that were identified through this workstream, but were not suitable for action under the Minimum Energy Efficiency Standards have also been passed to the Enforcement Team. These will be dealt with using the Housing Health & Safety Rating System under the Housing Act 2004. As part of this workstream, there is ongoing training for enforcement officers, to help them assess and determine next actions for cases with poor energy efficiency, including training on heat pumps and low-carbon technologies. We are working with the community energy group, 'Repowering London' to promote and run the Great British Insulation Scheme/ ECO4. This partnership with Repowering London will enable us to expand the reach of the scheme and allow more local installers to participate in the works generated through the scheme, benefitting the local green economy. We continue to consult with the Department for Energy Security and Net Zero on the development of new grant funding. Energy advice and support is available to all Newham residents through the Stay Warm in Newham scheme. The support through the scheme included Groundwork, Green Doctors home visits, telephone consultations and drop-in sessions.

Home Energy Advice
Providing information on home energy and insulation on the Council's web site Free Energy Advice – Energy and sustainability – Newham Council

Community Energy Newham

Community Energy Newham (CEN) has completed its first solar installations, which will begin to provide clean, low-carbon and lower-cost energy in the borough. Solar panels have been installed on two sites: East Ham Library and Beckton Globe Library. The group is set to add another solar array at Stratford Library in the coming months. CEN is already investigating additional sites in the borough at which it hopes to install further solar arrays, focusing on schools and leisure centres. Taken together, the group's planned installations have the potential to generate 2MW of solar energy capacity – enough to power about 620 London homes. Community Energy Newham | Repowering London.

The Community Energy Newham Project Lead was shortlisted for the Green Energy Awards 2024 Net Zero Energy Pioneer. This award recognises the achievements of inspiring individuals making a real difference in the development of a net zero energy system. Green Energy Award Shortlisted - Regen

Canal and Waterways Working Group
Received grant from MAQF to address lack of air quality awareness, wood burning on canal boats. Research co-benefits of e-charging infrastructure along canals and waterways, carbon emissions from canal boats and net-zero commitments, SCA, Gaps and issues re to data collection and evidence.

Green Schools Project
Home page - Green Schools Project
We have 11 schools participating in the programme this academic year and will be looking to fund it through the internal Carbon Offset Fund in the next academic year. The schools participating in the programme are Essex Primary, Park Primary, West Ham Church Primary, Stratford Manor Primary, Central Park Primary, Keir Hardie Primary, Ellen Wilkinson Primary, Star Primary, St Luke's Primary, St Joachim's Primary, and Upton Cross Primary.

Measure	LLAQM Action Matrix Theme	Action	Progress (Emissions/Concentration data, Benefits, Negative impacts/Complaints)
9	Cleaner Transport	Healthy Streets	**Healthy School Streets** This involves filtered road closures outside school entrances in the morning, when children arrive at school and in the afternoon when children leave school. There are currently 20 schools with Healthy School Streets. See Welcome – Healthy School Streets – Newham Council Monitoring has shown a significant reduction in air pollution during the hours when the street is closed. Phase 4 HSS pilots were introduced at 3 schools at the end of 2023. Healthy School Streets are not planned for schools with entrances on a major road.
10	Public health and awareness raising	Public Health department taking shared responsibility for Borough AQ issues & implementation of Air Quality Action Plans	**Air Quality in 50 Steps for a Healthy Newham**. Monthly meetings with all stakeholders (Highways, Planning, Public Health, Pollution Team) to discuss delivery for air quality actions in programme. New 2024-5 document to be released in 2024. See 50 Steps to a Healthier Newham: Newham Health and Wellbeing Strategy 2024-2027 – Newham Council **DEFRA Air Quality Awareness 22-24** Funding from DEFRA 21/22 Air Quality Grant 2-year project (2022-2024) Partnership between LB Hackney, LB Newham, LB Tower Hamlets & City of London Funding to raise awareness of air pollution, but particularly to provide information to people on how they can reduce their exposure to air pollution 3 work streams: 1. Co-designing a web-based information tool Air Aware. 2. Healthcare practitioner training 3. Air quality Champion Programme Each library in Newham received a tablet pre-loaded with AirAware where people can check air quality data, information and access advice, plus three tablets in community centres, one tablet at Tollgate GP Practice, and five handheld tablets for the Well Newham Advisors/Clean Air Champions. Air Aware, Transforming Air Quality Awareness – Air quality in Newham – Newham Council **Running Out of Time** The relay team were invited to Newham to raise awareness of the climate emergency. A number of activities were organised, primarily in QEOP to raise awareness surrounding air pollution, littering and recycling, green spaces and infrastructure. The relay team will return to Newham in 2024, Running Out of Time (running-out-of-time.com).

London Healthy Schools Programme.
The Newham Healthy Schools team have developed a range of toolkits, including one for '*Active Travel & Air Quality'*. This provides activity ideas, supporting information and resources for Newham schools who are completing their Silver plan, with active travel and air quality as a priority area.

Launched the Newham Better Points Initiative
Betterpoints - Campaign name here. The programme is aimed to promote physical activity via an app. This rewards Newham residents each time they use active travel to get about in the borough. The project is due for launch in 2024

Breaking Ground
Funding to launch a community led programme, to create safer and more accessible spaces for play and exercise and tackle broader issues related to social and environmental inequalities. The primary purpose and criteria are to help the people from lower incomes and from Black, Asian and minority ethnic groups, who are disproportionately affected by issues such as poor air quality, lack of access to green spaces, overheating and flash flooding. The Harberson Road community have received an £18k grant to fund local coordinators, incentives, initial engagement and events. Park Village Oasis E15 (@parkvillageoasis_e15) • Instagram photos and videos

Measure	LLAQM Action Matrix Theme	Action	Progress (Emissions/Concentration data, Benefits, Negative impacts/Complaints)
11	Public health and awareness raising	Engagement with business	Newham supported the #EnginesOff pledge. Idling Action offers drivers free training and a toolkit of resources to businesses whose operations involved vehicle fleets, professional drivers, or employees who travel by car to work.
12	Public health and awareness raising	Supporting a direct alert service such as airTEXT & promotion & sharing of high pollution alert services.	Our communications team signed up to GLA Air Quality Alerts (to which Newham contribute an annual subscription fee) and re-tweet where relevant to Newham residents. See also the Air Aware project Air Aware, Transforming Air Quality Awareness – Air quality in Newham – Newham Council
13	Public health and awareness raising	Encourage Schools to Join 'TfL Travel for Life' Programmes to reduce congestion, improve road safety & improve health & wellbeing of our schoolchildren	Participation in the TfL Travel for Life scheme to encourage active travel to school School travel plans – Newham Council with a new dedicated member of staff in place to engage with schools on their sustainable travel initiatives. Healthy Route Maps for some schools showing how to get to school whilst avoiding the most polluted areas **Clean Air Day** To celebrate Clean Air Day, we partnered with the design team behind Pollution Gate and colleagues from Public Health and Active Newham. On Thursday, 15 June, we invited students from schools within the locality of the Pollution Gate for a guided Little Ilford Park walk. Low-Intensity Therapists led the walk, focusing on the mind and the benefits of green spaces and nature. The students were introduced to the concept of mindfulness, calm, reflection and simple things that make them happy - which can be found everywhere around us. Following the walk, the students and teachers were invited to walk to the Pollution Gate, where they were met by the design team behind the new installation, who talked to the children about the science and the reason behind it.
14	Public health and awareness raising	Air quality in & around schools & extend the school audits GLA framework to all polluted schools.	All Newham schools were offered audits, but none accepted. In 2019 NO_2 diffusion tubes were installed outside all the borough's schools. See data in monitoring above. Additional monitoring is planned around Plashet School to identify reasons for persistently high NO_2 levels.

Measure	LLAQM Action Matrix Theme	Action	Progress (Emissions/Concentration data, Benefits, Negative impacts / Complaints)
15	Localised solutions	Update of Procurement policies to reduce pollution from logistics & servicing.	No progress made
16	Cleaner transport	Reducing emissions from deliveries to local businesses & residents.	**Food Alliance and Renewal Programme** Newham provided a cargo bike to deliver food bank parcels to residents. The Renewal Programme have bought three cargo bikes, making four overall. We are looking into the possibility of delivering all our food supplies from food banks on cargo bikes. Newham recognised for efforts to make food sustainable to all – Newham Council
17	Borough fleet Reducing emissions from council fleets, including a switch to zero emission vehicles	Borough fleet - reducing emissions from council fleets, including a switch to zero emission vehicles	Plan to either electrify our vehicle fleet or move away from diesel as a fuel by 2030. This remains the plan, however significant investment in the infrastructure of electric charging points within Central Depot is required. This includes a new substation for additional power. This is currently on hold until 2025 due to funding not being available. The Council's Fleet now consists of 62 fully electric vehicles; an increase of 9 from 2022. All new vehicles procured are the cleanest diesels available to Euro 6 standards utilising GTL fuel instead of normal diesel to reduce emissions and noise. Replaced our existing van fleet with 137 mild hybrid vehicles & operate all our vehicle fleet on gas-to-liquid fuel (not conventional diesel). Existing refuse fleet vehicles are fitted with electric bin lifting equipment. 7 EV charging points fitted and a further 8 awaiting an increase in power supply to the depot. Our Green Fleet Management aims to identify and rectify driver behaviour. Areas such as carbon footprints, idling and speeding will be monitored for all council vehicles. All new owned council vehicles are equipped with full telematics on board for monitoring of MPG, Emissions and driver behaviour. Fleet services are working to Truck Excellence Accreditation. https://thefreightportal.org/supportscheme/logistics-uk-truck-excellence/

Measure	LLAQM Action Matrix Theme	Action	Progress (Emissions/Concentration data, Benefits, Negative impacts / Complaints)
18	Localised solutions Green infrastructure delivery (GI). Beyond the promotion and protection of GI through the planning regime	Localised solutions Green infrastructure delivery (GI). Beyond the promotion and protection of GI through the planning regime (identified in action 6 above), LBN can seek to deliver GI through its other responsibilities.	Green infrastructure is being incorporated into scope of almost all highways schemes, and is a part of Highways emerging design guide. Newham Council, in partnership with the Royal Docks Team (a joint initiative from the Mayor of London and the Mayor of Newham), is improving the road layout and street environment along the Royal Docks Corridor, which includes Silvertown Way and the section of North Woolwich Road, up to Connaught Bridge. Improvements include wider footpaths with greenery, trees and planting. Phase 1A was completed in 2023 with Phases 2-4 commencing in 2023. https://www.newham.gov.uk/transport-streets/royal-docks-corridor
19	Cleaner transport Low Emission Neighbourhoods (LENs) including low traffic schemes.	Cleaner transport Low Emission Neighbour hoods (LENs) including low traffic schemes.	Low Traffic Neighbourhoods (LTN). These eliminate through-traffic from neighbourhoods in the borough and enable and encourage more walking and cycling. 30 out of 65 eligible areas are LTNs in Newham (or around 44% coverage of all eligible streets). Monitoring has shown a reduction in air pollution where LTNs have been set up. Low Traffic Neighbourhoods – Newham Council In 2023/24 Newham initiated a public consultation on a new LTN at Woodgrange & Capel area and cabinet approved the implementation of LTN Area 8 'West Ham Park', under an Experimental Traffic Management Order (ETMO).
20	Cleaner transport.	Ensuring that Transport & Air Quality policies & projects are integrated.	The Pollution Control Team work closely with Highways to ensure that highways interventions have a positive effect on air quality. Monitoring surveys are carried out before and after highways works, to check the effect on air quality.
21	Cleaner transport	Discouraging vehicle idling	Anti-idling signs have been placed outside school entrances on the highway alongside the schools diffusion tube-monitoring network.
22	Cleaner transport	Regular temporary Car Free Days & pedestrianisation schemes.	Newham supports https://londonplaystreets.org.uk/. Several workshops took place to allow Air Quality Champions to shape the content of assembly packs for schools, which includes anti-idling materials which can be used at future events to engage with communities. https://www.newham.gov.uk/downloads/file/7165/air-pollution-assembly-air-aware
23	Cleaner transport	Using parking policy to reduce pollution emissions.	**Emission based parking charges** Introduced from 6th January 2021, with charges based on individual vehicle CO_2 emissions. Emissions based charging – Newham Council. In 2023 this was supplemented further with the introduction of emissions-based pay-by-phone charges for kerbside visitor parking across the borough.

Measure	LLAQM Action Matrix Theme	Action	Progress (Emissions/Concentration data, Benefits, Negative impacts / Complaints)
24	Cleaner transport	Installation of Ultra-Low Emission Vehicle (ULEV) infrastructure (electric vehicle charging points, rapid electric vehicle charging point & hydrogen refuelling stations).	Electric Vehicle Charging points Electric vehicle charging points – Newham Council Delivered: 80 free-standing pillar charging units available on street for residents; Future: We are now progressing with the next phase of electric vehicle charging points, working together with our partners Siemens Ubitricity, to introduce lamp column chargers. These chargers can be installed by modifying existing lamp columns and therefore can be implemented in almost any street. 400 double-charging units provided via Uber funding to be delivered by summer 2024 20 LEVI fully accessible charging funded units (subject to bid approval) Part of an accessible charging point trial to ensure adoption of EV's by residents with a disability; ORCS bid for a further 120 residential chargers for submission to ORCS by April 2023 (funding not yet confirmed) Work is ongoing on early/soft market engagement on a cost neutral procurement exercise in Autumn 2023, to obtain a CPO partner to invest capital and operate further residential chargers by means of a longer concession contract. Council property partners are also engaging with rapid charge point providers to identify Council land adjacent to highways where small charging hubs can be implemented by means of a long-term land lease to the operator.
25	Cleaner transport	Provision of infrastructure to support walking & cycling.	Following approval at Cabinet in September 2023, implementation of the borough-wide 20mph speed limit is expected by the end of 2025. Cycle Network Development to enable modal shift: Works are underway on a number of strategic cycleway schemes, including the Royal Docks Corridor (Silvertown Way and North Woolwich Road), Romford Road, the Newham Greenway and Mitchell Walk. Design work progressing on a large number of other routes, including Westfield Avenue, Leyton Road, Leytonstone Road, Honour Lea Avenue, Celebration Avenue, Penny Brookes Street, Liberty Bridge Road, Pool Street, Woolwich Manor Way and Barking Road. https://www.newham.gov.uk/transport-streets/delivering-policies

3. Planning Update and Other New Sources of Emissions

Table N. Planning requirements met by planning applications in 2023

Condition	Number
Number of planning applications where an air quality impact assessment was reviewed for air quality impacts	22
Number of planning applications required to monitor for construction dust	17
Number of CHPs/Biomass boilers refused on air quality grounds	0
Number of CHPs/Biomass boilers subject to GLA emissions limits and/or other restrictions to reduce emissions	0
Number of developments required to install Ultra-Low NO$_X$ boilers	90
Number of developments where an AQ Neutral building and/or transport assessments undertaken	16
Number of developments where the AQ Neutral building and/or transport assessments not meeting the benchmark and so required to include additional mitigation	12
Number of planning applications with S106 agreements including other requirements to improve air quality	0
Number of planning applications with CIL payments that include a contribution to improve air quality	0
NRMM: Central Activity Zone, Canary Wharf and Opportunity Areas	
Number of conditions related to NRMM included.	37
Number of developments registered and compliant in 2023	2 registered and compliant
Number of audits for financial year 2022-3	2
% of sites unregistered prior to audit	0
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.	The information above has been collated from the GLA NRMM web site and the Non-Road Mobile Machinery report 2023-4 produced as part of the GLA NRMM scheme
NRMM: Greater London (excluding Central Activity Zone, Canary Wharf and Opportunity Areas)	
Number of conditions related to NRMM included.	135
Number of developments registered and compliant.	24 developments registered on NRMM web site in 2023
Number of audits	14 registered. 2 uncompliant and being chased.
% of sites unregistered prior to audit	0
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.	The information above has been collated from the GLA NRMM web site and the Non-Road Mobile Machinery report 2023-4 produced as part of the GLA NRMM scheme

BUILDING A
FAIRER
NEWHAM

Table N Notes

These conditions are applied when Development Control consult the Pollution Team on construction related planning applications.

Please note that Newham is *not* the local planning authority for the whole of its administrative area. E20 and some parts of E15 fall within the responsibility of the London Legacy Development Corporation (LLDC), that is the local planning authority for that area. Full information for the missing areas can be obtained from the LLDC. Newham is a statutory consultee for applications within the LLDC area.

Recommendations relating to planning applications are provided to both Newham's Development Control Team and to the LLDC as appropriate. Conditions on air quality and NRMM are discharged after submission of sufficient information from the applicant.

Newham relies on inspections via the NRMM Enforcement Project for compliance of NRMM conditions.

3.1   New or significantly changed industrial or other sources

Silvertown Tunnel. This TfL sponsored project is currently under construction. It is due to open in 2025. It is anticipated that there will be a significant increase in traffic generally and HGVs in particular, as HGVs are currently unable to use the Blackwall Tunnel because of height restrictions.

GPark Data Centre. This application on North Woolwich Road, Silvertown is currently going through the planning process. Should the application be successful it will incorporate 102 back-up diesel generators, with the capacity to deliver 30MW of electricity.

Bidder St Data Centre. This is currently going through the planning process. Should the application be successful it will incorporate 79 back-up diesel generators.

4.   Additional Activities to Improve Air Quality

4.1   London Borough of Newham Fleet

62 vehicles are fully electric (zero emissions) which represents 9.9% of the fleet.

Going more green via electric vehicles is held back due to infrastructure for charging not available within Central Depot. There is a depot re-development plan being worked through corporately, but until this is put in place with more charging points we cannot move forward any more than we have with electric vehicles.

4.2   NRMM Enforcement Project

The London Borough of Newham will continue to fund the NRMM Enforcement Project in 2024/5.

Standard NRMM Planning Condition (Large Sites):

Construction / Demolition Environmental Management Plan
The development hereby permitted shall not commence unless and until a Construction Management Plan has been submitted to and approved in writing by the Local Planning Authority. The Construction Management Plan shall include details of:

- *air pollution control measures complaint with the GLA SPG on 'The Control of Dust and Emissions During Construction and Demolition'. Specifically:*
  - o *an air quality and dust risk assessment*
  - o *an 'air quality and dust management plan'*
  - o *monitoring proposals*
  - o *Non-road mobile machinery emissions including registration of the site at the GLA web site: https://www.london.gov.uk/what-we-do/environment/pollution-and-air-quality/nrmm*

- *An assessment of all matters as are likely to cause nuisance to adjoining occupiers (including but not limited to; noise, vibration, dust, smoke, odour control) accompanied by mitigation measures addressing all matters relevant to the site.*
- *No burning shall be carried out on site.*
- *For the control of noise and vibration, reference shall be had to BS 5228 'Code of practice for noise and vibration control on construction and open sites'*
- *Hours of work on the site shall be 08:00-18:00 Monday to Friday; 08:00-13:00 Saturday and at no time on Sundays or Public Holidays.*
- *Community liaison to give clear information to residents and others in advance in writing about potential disturbances/disruptions from i.e. noise, dust, or disruption of traffic, incidents, etc*
- *Any other bespoke requirement [insert if required]*

The development shall be undertaken at all times in accordance with the approved Construction Management Plan.

Standard Condition NRMM (Small Sites)

Control of Dust, Emissions and Noise from Construction and Demolition

The demolition and construction approved by this planning consent shall be undertaken in accordance with the Greater London Authority 'Control of Dust and Emissions from Construction and Demolition' SPG.
Before work commences on site, the site must be registered under the NRMM Regulations which are explained in the SPG.
https://www.london.gov.uk/what-we-do/environment/pollution-and-air-quality/nrmm
Hours of work on the site shall be 08:00-18:00 Monday to Friday; 08:00-13:00 Saturday and at no time on Sundays or Public Holidays.
Best practice, as defined in BS 5228 'Code of practice for noise and vibration control on construction and open sites' shall be used for the control of noise.
No burning shall be carried out on site.

Application of NRMM Conditions

These conditions are applied when Development Control consult the Pollution Team on construction related planning applications. Please note that Newham is **not** the local planning authority for the whole of its administrative area. E20 and some parts of E15 fall within the responsibility of the London Legacy Development Corporation, which is the local planning authority for that area.

4.3   Air Quality Alerts

The borough supports *air*TEXT (https://www.airtext.info/) and our communications team is signed up to and relays Air Quality Alerts where relevant to Newham residents on various online platforms.

Newham also support a new community engagement air quality information service *Air Aware* (https://www.air-aware.co.uk/) along with the London boroughs of Hackney, Tower Hamlets and City of London.

Appendix A   Details of Monitoring Site Quality QA/QC

A.1   Automatic Monitoring Sites

The FIVE (now includes East Ham Town Hall) sites in Newham are representative of relevant exposure in the borough. The sites were connected to the London Air Quality Network (operated by the Environmental Research Group Imperial College) in 2023 and therefore the standards of QA/QC are similar to those of the government's AURN sites. The same data are also stored in the Air Quality England database and are available on the Ricardo website. Monthly calibrations are carried out by a Council Air Quality Officer, while independent audits were undertaken through a data management and QA/QC contract with Environmental Research Group at King's College. TL5 and TL6 are operated by Transport for London.

PM_{10} Monitoring Adjustment

The TG16 guidance highlights that any PM_{10} monitoring undertaken must conform to criteria relating to the gravimetric European Reference Method or its approved equivalent. Newham deployed FDMS analysers at Wren Close and Cam Road until May 2018, which were found to be equivalent. The heated BAM 1020 analysers have been deployed at Wren Close and Cam Road since May 2018. East Ham Town Hall has one BAM measuring $PM_{2.5}$ which was installed in December 2022. The relevant correction factors are applied to BAM data by the data service provider ERG.

A.2   Diffusion Tubes

The diffusion tubes were supplied and analysed by Gradko International Ltd, with a preparation method using 50% TEA in acetone. Gradko is a UKAS accredited laboratory and participates in the new AIR-PT Scheme (a continuation of the Workplace Analysis Scheme for Proficiency (WASP)) for NO_2 tube analysis and the Annual Field Inter-Comparison Exercise.

Factor from Local Co-Location Studies

Diffusion tubes are known to exhibit bias when compared to results from automatic analysers. Therefore, diffusion tube results need to be adjusted to account for this bias. The council has triplicate tubes located at its Cam Road (NM2) automatic monitoring station. The bias adjustment factors below are derived from this co-location study and validated alongside the National Diffusion Tube Bias Adjustment studies, using the same analytical method and laboratory.

A bias adjustment factor for 2023 of **0.81** (0.80 in 2022) was derived from the local co-location study, with 'good overall precision' and 'good overall data capture' for the 2023 monitoring period. The national spreadsheet correction factor for this type of study was **0.83** for 2023. The difference in the two factors is 2.4%.

Discussion of Choice of Factor to Use

A comparison with the local bias adjustment factors calculated from previous years shows a close comparison and this year's local bias adjustment compares closely with the national adjustment of 0.83**.** As such, the adjustment factors listed in Table O have been considered appropriate to use.

Table O. Bias Adjustment Factor

Year	Local or National	If Local, Version of National Spreadsheet	Adjustment Factor
2023	Local	03/24	0.81
2022	Local	04/23	0.80
2021	Local	03/22	0.80
2020	Local	06/21	0.85
2019	National	-	0.86
2018	National	-	0.89

A.3   Adjustments to the Ratified Monitoring Data

Short-term to Long-term Data Adjustment

Where data capture is less than 75% and greater than 25% of a full calendar year (between 3 and 9 months), the mean should be "annualised" – i.e. adjusted using the methodology outlined in LLAQM.TG(19) before being compared to annual mean objectives.

Table P has been completed for NM4 (East Ham Town Hall) to annualise the $PM_{2.5}$ data which was not captured for the first half of 2023, due to teething issues with the new BAM analyser after commissioning the new site.

Distance Adjustment

If an exceedance is measured at a monitoring site which is not representative of public exposure, the procedure specified in LLAQM.TG(19) is used to estimate the concentration at the nearest receptor.

Table Q has been completed using the NO_2 fall off with distance tool for NHM-S 11 (Plashet Grove), which was exceeding the NO_2 legal limit value at the roadside.

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

Site ID	Annualisation Factor Tower Hamlets Jubilee Park	Annualisation Factor Newham Wren Close	Annualisation Factor Waltham Forest Leyton	Annualisation Factor Victoria Park	Average Annualisation Factor	Raw Data Annual Mean ($\mu g/m^3$)	Annualised Annual Mean ($\mu g/m^3$)	Comments
NM4	1.0726	1.0935	-	1.0753	1.016	10.6	11.4	$PM_{2.5}$
NHM-S 04	0.9659	0.9446	0.9573	0.9230	0.9477	26.6	25.2	NO_2
NHM-S 35	1.1161	1.1447	1.1106	1.1747	1.1365	23.8	27.0	NO_2
NHM-S 45	0.9654	0.9562	0.9539	0.9478	0.9558	26.5	25.4	NO_2
NHM-S 04	0.9659	0.9446	0.9573	0.9230	0.9477	26.6	25.2	NO_2
NHM-S 51	0.9059	0.9012	0.8901	0.8759	0.8933	28.9	25.8	NO_2
NHM-S 68	0.9620	0.9639	0.9645	0.9596	0.9625	27.0	26.0	NO_2
NHM-S 69	0.9592	0.9614	0.9359	0.9271	0.9459	33.7	31.9	NO_2
NHM-S 97	1.0369	1.0521	1.0020	1.0356	1.0317	23.4	24.1	NO_2

The sites MUST be background sites. There is only one background site in Newham and this has been included in the adjustment. The other three background sites have been selected based on their close proximity to Newham. The Waltham Forest Leyton site does not monitor for $PM_{2.5}$, so is omitted from the NM4 adjustment.

Table Q. NO₂ Fall-off with Distance Calculations

Site ID	Distance (m): Monitoring Site to Kerb	Distance (m): Receptor to Kerb	Monitored Concentration (Annualised and Bias Adjusted ($\mu g/m^3$)	Background Concentration ($\mu g/m^3$)	Concentration Predicted at Receptor ($\mu g/m^3$)	Comments
NHM-S 11	1	5	53.8	20.8	*43.1*	*Predicted concentration at Receptor above AQS objective.*

Table Q Commentary

NHM-S 11 (Plashet Grove) has persistently exceeded National Objective levels. The concentrations shown are higher than those modelled by the London Atmospheric Emissions Inventory (see Figure D). It is surmised that this is due to the particular location of the tube next to a bus stop and close to the junction with High Street North.

Despite the monitoring site being associated with the schools study, the nearest sensitive receptor is a residential building (shown on the map) and so this has been assessed as the first priority.

To understand the impact of the bus stop and the school exposure in more detail, two new diffusion tubes sites were installed in May 2024. One is located on Plashet Grove, away from the bus stop and closer to Plashet School north. The other is within the school grounds of Plashet School south, close to Plashet Grove.

Plashet School has been identified as a priority school in Newham where further investigation work is required before appropriate measures can be identified.

Figure D NO₂ Pollution contour Plashet Grove (LAEI 2019)
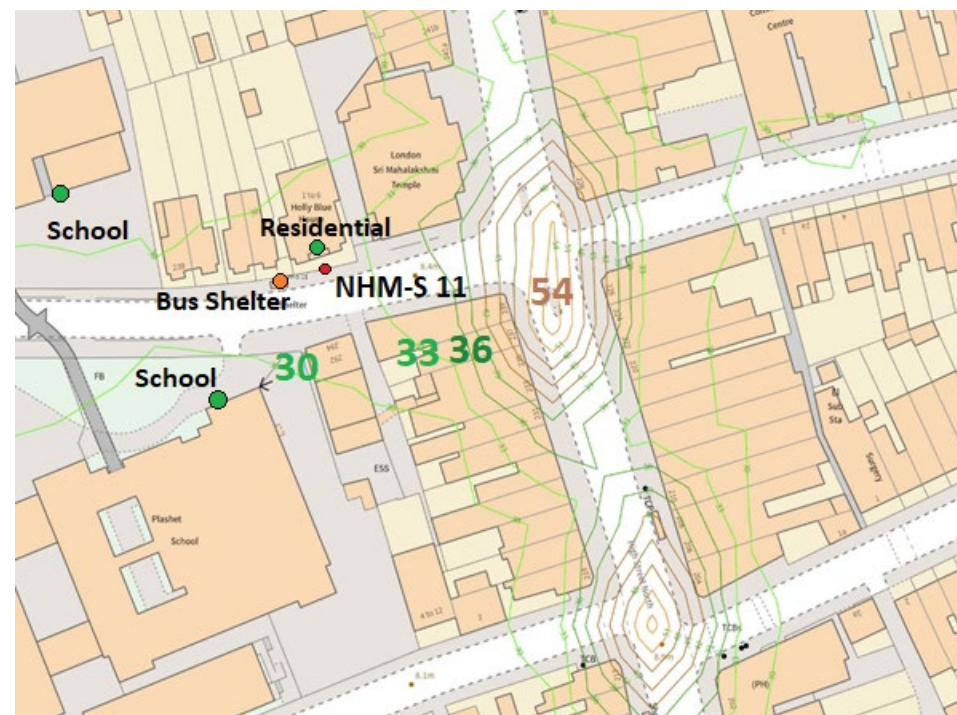
Appendix B Full Monthly Diffusion Tube Results for 2023

Table R. NO₂ 2023 Diffusion Tube Results (µg/m³)

Site ID	X OS Grid Ref Easting	Y OS Grid Ref Northing	Valid data capture 2023 %[b]	Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sept	Oct	Nov	Dec	Annual mean – raw data	Annual Mean: Annualised & Bias Adjusted	Annual Mean: Distance Corrected to Nearest Exposure
NHM-1	53828	18535	100	36.2	43.3	35	30.6	14.4	29.5	25.1	27.3	34.8	40.4	37.8	26.4	31.7	25.7	
NHM-2	539570	184659	100	28.7	39.2	25.8	24.5	9.6	23.3	20.4	21.9	29.2	31.6	30	23.5	25.6	20.8	
NHM-3	54195	18543	92	29.9	39.9	27.7		13.9	25.3	20	24.6	28	29.2	34.1	23.8	26.9	21.8	
NHM-4	542831	18361	83	38.9	41	28.4	27.7	10.2			34.6	37	36	38.8	39	33.1	26.9	
NHM-6	539850	182655	100	24.9	23.9	17.4	15.7	6.8	14	13.4	15.7	21.6	21.6	23.9	18.3	18.1	14.7	
NHM-7	541492	182332	92	38.6	40.1	27.1	26.2		24.8	24	24.7	30.4	32.4	14.2	29.4	28.4	23.0	
NHM-8	542680	18320	75	24.2	30		20.1	12.2	21.8		14.1	20.3	22.3	23.1		20.9	16.9	
NHM-10	539747	181477	83	27.6	29.7	19.7	16.8	9.3		15.9	17.6		27.6	27.7	23.8	21.6	17.5	
NHM-11	542583	180201	92	50.8	50.8	37	32.2	16.5	31.9	34.2	35.1		39.3	40.3	33.3	36.5	29.6	
NHM-12	543762	180784	100	32.6	38.7	23.5	23.2	10.9	19.8	18.8	21.4	27.4	30.2	26.4	20.8	24.5	19.8	
NHM-13	541134	184098	92	48.4	54.7	42.4		18.1	41	41.9	43.4	50.1	45.7	40.7	38.5	42.3	34.2	
NHM-16	539164	185158	100	45.1	45.4	35.4	29.5	15.4	32.2	30.5	30.3	38.9	38.8	35.7	33.2	34.2	27.7	
NHM-17	542729	185047	92	41.6	42.1	31.3		13.1	23.6	20	23	28.8	30	27.3	20	27.4	22.2	
NHM-19	539906	18170	100	46.7	48.8	32	32.5	16.7	41.8	35.4	36.6	48.7	47.8	45	52.1	40.3	32.7	
NHM-20	539456	181499	92	48.3	46	30.9	30.9	14.3	31.7	28.5	28.9	34.9	36.6	38.6		33.6	27.2	
NHM-21	538657	183973	100	34.1	39	27.2	22.2	13	22.4	18.6	20.9	27.2	15.4	32.3	23.9	24.7	20.0	

BUILDING A FAIRER NEWHAM

Site ID	X OS Grid Ref Easting	Y OS Grid Ref Northing	Valid data capture 2023 %[b]	Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sept	Oct	Nov	Dec	Annual mean – raw data	Annual Mean: Annualised & Bias Adjusted	Annual Mean: Distance Corrected to Nearest Exposure
NHM-S 1	542089	185416	83	44.8	39.6	21.8	28.7		25.1	25.1		36.7	41.6	35.7	46.7	34.6	28.0	
NHM-S 2	542319	185428	92	40.4	28.9	15.2	17.3	14.2	16.2	16.2	15.8	28.3	31.1	22.9		22.4	18.2	
NHM-S 3	542564	185642	100	38.1	32.2	17	18.1	15.3	15.9	15.9	16.9	26.6	28.9	24.1	41.1	24.2	19.6	
NHM-S 4	542922	185830	67	41.3	36.2	18.3	17.5	17.1			19.4	28	35.2			26.6	20.4	
NHM-S 5	543086	185713	100	39.8	34	18.1	19	15.2	17	17	17.7	28.6	31.9	23.5	35.5	24.8	20.1	
NHM-S 6	543086	185713	100	43.9	41.3	25	27.2	21.5	23.3	23.3	20.7	34.3	35.4	28.2	42.7	30.6	24.8	
NHM-S 7	542880	185321	100	55.9	51.7	30.2	36.4	35.9	35.7	35.7	30.1	45.5	44.8	28.2	45.7	39.7	32.1	
NHM-S 8	542734	185179	100	50.8	37.9	26.6	29	24.4	24.4	24.4	23.6	38.6	37.4	26.2	39.8	31.9	25.9	
NHM-S 9	542549	185070	83			18.8	21.5	17.3	17.4	17.4	18.9	28.2	32.1	24.6	36.1	23.2	18.8	
NHM-S 10	542701	184632	100	37.8	35.6	19.2	20.4	14.9	16.9	16.9	17.5	33.7	33.6	26.8	39.1	26.0	21.1	
NHM-S 11	542277	184357	92	60.1		51.1	69.8	67.9	66.4	66.4	59.8	76.2	68	46.4	97.9	66.4	**53.8**	**43.1**
NHM-S 12	541681	184582	92	36.9	29.7	15.9	18.2	14.6	15.2	15.2	15.3	26	30.6	25.5		22.1	17.9	
NHM-S 13	541797	184904	75		33.5	17.3	20.2		18.1	18.1	16.9		32.2	27.5	40	24.9	20.1	
NHM-S 14	541562	185194	100	47.4	35	21.5	22.3	21.9	21.6	21.6	20	32.8	36.4	28.2	41.8	29.2	23.7	
NHM-S 15	541172	185041	100	39.3	32.3	16.3	21.9	19.8	16.3	16.3	18.7	29.7	34.2	25.9	39.2	25.8	20.9	
NHM-S 16	541368	184294	100	47.5	33.8	21.1	22.4	18.8	21.4	21.4	21.3	33.6	34.8	29.7	42.4	29.0	23.5	
NHM-S 17	541543	184112	83	39.2	29.8	16	18.4	14.1			19.3	26.5	29.1	24.4	31	24.8	20.1	
NHM-S 18	541828	183772	92	38.3	30.6	16.8	19.5	15.3		28.9	15.5	20.2	31.2	20.9	34.1	24.7	20.0	
NHM-S 19	542253	183708	83	42.6	31.4	17.5	19.9	16.8	21.3	21.3	17.8	29	31			24.9	20.1	

Site ID	X OS Grid Ref Easting	Y OS Grid Ref Northing	Valid data capture 2023 %[b]	Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sept	Oct	Nov	Dec	Annual mean – raw data	Annual Mean: Annualised & Bias Adjusted	Annual Mean: Distance Corrected to Nearest Exposure
NHM-S 20	542492	184111	100	47	36.7	24.7	25.5	20.1	23.5	23.5	24.9	36.2	36	30.3	43.3	31.0	25.1	
NHM-S 21	542831	183954	83	46.1	36.6	20.3	22.3	17.6			20.6	33.7	38.7	30.9	40.8	30.8	24.9	
NHM-S 22	543501	183538	100	45.7	30.2	19	23.4	14.8	19.1	19.1	20.3	25.8	34	29	38.9	26.6	21.6	
NHM-S 23	543143	183468	100	39	30.1	15.7	19.2	15.3	15.1	15.1	16.4	24.5	27.9	21.5	30.9	22.6	18.3	
NHM-S 24	542827	183286	92	42.2	32	18.4	23.2	15.1	18	18	19.4		29.8	26.8	36.2	25.4	20.6	
NHM-S 25	543279	183097	92		30.1	16.2	20.2	16.6	16.1	16.1	18	26.5	51.7	22.1	28.5	23.8	19.3	
NHM-S 26	542858	182778	92		31.3	18	24.2	15.7	20.4	20.4	21.3	32.6	34.6	26.3	35.7	25.5	20.7	
NHM-S 27	542858	182778	100	36.1	32.2	16.8	21.4	18	15.1	15.1	19.3	31.4	28.1	24.4	38.6	24.7	20.0	
NHM-S 28	541628	182342	100	46.7	29.9	17.3	25.6	16.1	21	21	19.4	30.9	35.8	19.7	51.5	27.9	22.6	
NHM-S 29	541919	183099	83	40.1	31.6	16.2	23.3	19.1	20.6	20.6		31.4	35.6	30.9		26.9	21.8	
NHM-S 30	541384	183505	92	45.9	46.2	27.8	35.5	33	34.9	34.9	25.4	38.2	42.9		72.1	39.7	32.2	
NHM-S 31	540494	183908	92	39.2	39.4	19.7	25.9	24.5	22.9	22.9	21.9	31.3	36.1		41.3	29.5	23.9	-
NHM-S 32	540915	183744	75	34.2	29.7	14.8	19.1		15	15	14.8			23.5	28.8	21.7	17.6	
NHM-S 33	540502	184400	100	36.4	29.4	15	18.5	16.2	14.5	14.5	15.9	23.8	28.2	21.6	29.8	22.0	17.8	
NHM-S 34	540391	184416	100	40.1	33.6	19.1	23.9	17.5	21.7	21.7	19.3	31.1	35.3	25.9	38.2	27.3	22.1	
NHM-S 35	540811	184261	67				19.8	19.3	17.5	17.5	18.4	28.8		32	36.7	23.8	21.9	
NHM-S 36	540592	184162	92	38.3	31.2	15.9	18.1	16.9	15.5	15.5	17.1	25.3	32.4		31.6	23.4	19.0	
NHM-S 37	540665	184510	83	40.7	36	18.6	23.1	17.4	21.3	21.3	20.3	31.6		35.2		26.5	21.5	
NHM-S 38	539849	184421	100	43.1	26.7	14.9	18.8	14.7	13	13	15.3	21.4	26.2	21.1	30.2	21.5	17.4	

Site ID	X OS Grid Ref Easting	Y OS Grid Ref Northing	Valid data capture 2023 %[b]	Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sept	Oct	Nov	Dec	Annual mean – raw data	Annual Mean: Annualised & Bias Adjusted	Annual Mean: Distance Corrected to Nearest Exposure
NHM-S 39	540001	185106	100	37.2	29.9	15.1	18.9	14.6	16.2	16.2	14.7	24.8	31.2	25.6	35.5	23.3	18.9	
NHM-S 40	540595	185247	100	34.8	28.5	17.1	20	15.8	18.9	18.9	17.3	28.9	31.9	24.9	36.1	24.4	19.8	
NHM-S 41	540764	185503	100	36	30	14.4	17.9	13.9	21	21	18.4	28.6	33	21.6	35.9	24.3	19.7	
NHM-S 42	540838	185646	100	41.3	25.3	18.4	18.6	13.2	15	15	14.6	23.1	33.2	30.2	36.6	23.7	19.2	
NHM-S 43	540359	185338	92	38.1	42.1	23.8	25.4	30.6	22.7	22.7	23.9	37.7		31.4	43.4	31.1	25.2	
NHM-S 44	540099	185343	83			18.6	18.2	13	14.9	14.9	18.6	24	28.5	22.4	37.1	21.0	17.0	
NHM-S 45	540011	185274	67	46		18.2	16.6	12.1				26.6	31.3	22.9	38.7	26.5	20.6	
NHM-S 46	539326	185305	100	41.1	28.8	16.5	16	10.3	18.1	18.1	18.5	28.1	29.1	19.8	38.5	23.6	19.1	
NHM-S 47	538857	185210	83	36.8	35.5		16.3	12.4	19.4	19.4	17.1		33.9	25.3	42.8	25.9	21.0	
NHM-S 48	538856	185408	92	43.7	32.3		19.5	12.6	18.3	18.3	17.7	25	31	22.1	37.1	25.2	20.4	
NHM-S 49	538715	185203	92	37.5	34.1		18.9	13.1	20.9	20.9	20.5	27.4	35	20	41.6	26.4	21.4	
NHM-S 50	538263	185253	75	39.5	34.6		16.6	13.9			20	27	33.9	23.4	36.7	27.3	22.1	
NHM-S 51	537439	184122	67	42.3	29.9	17.2					19	24.7	34.7	23.6	39.9	28.9	20.9	
NHM-S 52	537836	183828	100	39.3	29.5	20.6	19.7	14.9	17.9	17.9	17	26.2	32.3	23.8	35.3	24.5	19.9	
NHM-S 53	538984	184024	100	39.8	32.2	16.9	18.7	14.3	18.2	18.2	19.2	25.3	31.7	22.9	40.6	24.8	20.1	
NHM-S 54	538964	184062	92	40		19.6	20.7	16	17.9	17.9	20.1	25.3	31.9	23.9	41.6	25.0	20.2	
NHM-S 55	539379	184683	92	37	39.3	21.1	21.4	18	18.8	18.8	26.1	32.2	38.3	23.7		26.8	21.7	
NHM-S 56	539469	183937	92	38.8		26.6	26.6	23.4	33.1	33.1	36.5	42.9	40.6	27.1	54.2	34.8	28.2	
NHM-S 57	539955	183624	100	66.9	30.7	15.6	15.1	11.1	15.4	15.4	20.3	25.2	29.5	19.3	38.8	25.3	20.5	

BUILDING A FAIRER NEWHAM

Site ID	X OS Grid Ref Easting	Y OS Grid Ref Northing	Valid data capture 2023 %[b]	Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sept	Oct	Nov	Dec	Annual mean – raw data	Annual Mean: Annualised & Bias Adjusted	Annual Mean: Distance Corrected to Nearest Exposure
NHM-S 58	539444	183264	75	34.3	27.6	12.6	16.7	13.3			17.3	22.8	29.3	19		21.4	17.4	
NHM-S 59	539265	183375	100	31.2	29.4	15	17.9	14.7	14.2	14.2	19	24.5	30.3	20.6	42.6	22.8	18.5	
NHM-S 60	538336	182808	75	37.7	33.9	19.6	21	15.1	21.7	21.7	18.8	29.7				24.3	19.7	
NHM-S 61	538373	183461	83	41	33.1	17.3	22.1	17.2	20	20	18.5	31	41.9			26.2	21.2	
NHM-S 62	538455	183877	100	38.9	36.9	25.7	30.4	29.9	18.8	18.8	22.9	31.7	34.8	27.8	52.2	30.7	24.9	
NHM-S 63	540193	183176	75	41.9	29.8	16.2	23	17.6	17.5	17.5	17.8				42.1	24.8	20.1	
NHM-S 64	540581	183217	100	38	27.4	15.5	21.5	13.3	14.9	14.9	16.9	24.4	21.3	33.7	37.7	23.3	18.9	
NHM-S 65	540793	183493	83	31.5	25.2	15.1			16.1	16.1	16.4	25.2	22.8	34	36.9	23.9	19.4	
NHM-S 66	540813	183333	83			20.8	26.8	17.3	17.2	17.2	17.5	26.5	24.9	35.2	43.8	24.7	20.0	
NHM-S 67	540944	183245	100	36	25.1	15	20.9	14.4	15.7	15.7	16.4	23.9	20.7	30.2	33.4	22.3	18.0	
NHM-S 68	541216	182059	67	36.9	33.8			14.4	21.3	21.3			27	25.4	35.9	27.0	21.0	
NHM-S 69	541272	182349	58	41.1			25.8				32.7	26.6	35.4	32.7	41.6	33.7	25.8	
NHM-S 70	541989	182568	100	36.7	29.9	15.7	20.7	15.2	19	19	16.7	28.1	32.2	25.1	33.3	24.3	19.7	
NHM-S 71	541501	182588	92		33.6	18.6	26.1	21.3	19.8	19.8	20.5	30.6	37	24.1	44.3	26.9	21.8	
NHM-S 72	541094	182694	92		31.5	16.1	26.1	21.4	22.3	22.3	22.2	31.3	26.5	39	48.7	27.9	22.6	
NHM-S 73	539258	182560	100	38.6	30.5	20	22.8	13.1	11.8	11.8	32.3	29.1	27.7	28.7	46.5	26.1	21.1	
NHM-S 74	539315	182104	100	38.2	35.5	20.2	23.5	17.6	15.2	15.2	39.5	32.8	26.2	37.7	51.1	29.4	23.8	
NHM-S 75	539561	182374	92	43.5	32.4	18	18.9	14.1	9.3	9.3	26.7	24.3	23.1	30.6		22.7	18.4	
NHM-S 76	539983	182470	92		27	16.8	16.7	11.7	8.3	8.3	25.8	20.8	17.9	28.2	39.3	20.1	16.3	

Site ID	X OS Grid Ref Easting	Y OS Grid Ref Northing	Valid data capture 2023 %[b]	Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sept	Oct	Nov	Dec	Annual mean – raw data	Annual Mean: Annualised & Bias Adjusted	Annual Mean: Distance Corrected to Nearest Exposure
NHM-S 77	540108	182314	92	34.7	27.9	20.7	23.7	15.8	10.8	10.8	31	27	24.8	27.2		23.1	18.7	
NHM-S 78	540701	182157	75	41.2	33.7	20.2	25.9	17.2			36		25.4	32.5	46.6	31.0	25.1	
NHM-S 79	540443	182132	100	49.1	30.3	18.2	22.7	16.1	9.9	9.9	28.5	24.6	22.4	30.9	43.5	25.5	20.7	
NHM-S 80	539893	181888	100	42.2	46.4	23.8	31.8	23.2	16.1	16.1	36	36.3	28.1	38.3	56.9	32.9	26.7	
NHM-S 81	539842	181328	75		39.7	19.3	26.7		12.7	12.7	32.9	30.8	26	30.7		25.7	20.8	
NHM-S 82	540113	181170	100	46.4	44.3	21.6	30.7	20.5	12.6	12.6	37	41.1	22.3	28.4	50.2	30.6	24.8	
NHM-S 83	540275	181638	100	43.4	41	19.5	25.8	22.8	11.6	11.6	30.9	27.3	24.1	30.3	39.6	27.3	22.1	
NHM-S 84	540855	181595	83	40		17.2	21.8	17.8	9.3	9.3		22.9	21.6	28.9	44.3	23.3	18.9	
NHM-S 85	540742	181507	83		33.8	18.3	21.4	13.7	9.5	9.5	27.4		21.7	25.1	36.3	21.7	17.6	
NHM-S 86	540961	181074	100	34.1	39	16.7	23.4	15.6	10.4	10.4	27.9	28.2	22.8	31.8	45.5	25.5	20.6	
NHM-S 87	540676	180279	92	42.7		19.6	20.2	16.6	20.9	20.9	17.6	29.2	32.5	32	34.7	26.1	21.1	
NHM-S 88	543536	180065	92	38.6	35.9	17.3	20.7	19.2	19.2	19.2		29.5	31.6	33.4	38.6	27.6	22.3	
NHM-S 89	543202	180069	83	45.9	36	15.9	19.8	20.1			19	28.7	36.1	34.1	37	29.3	23.7	
NHM-S 90	542197	180233	100	45.5	34.1	18.3	23.3	22	18.3	18.3	21.2	31.1	34	22.7	37.1	27.2	22.0	
NHM-S 91	541233	181069	92	37.4	51.9	28.8	32.4	27.3	18.5	18.5		38.6	28.8	36.8	55.6	34.0	27.6	
NHM-S 92	541712	181187	100	48.9	31.7	15.9	16	10.2	8.5	8.5	25.5	23.3	19.5	26.2	40.8	22.9	18.6	
NHM-S 93	541504	181370	83	34.9	32.8	15.7	16.4	11.7	8.4	8.4	24.1			26.1	36.3	21.5	17.4	
NHM-S 94	542061	181645	92	32.9	30.3	15.6	18.5	15.2	9.2	9.2	24.8	30.9	18.3		35.5	21.8	17.7	
NHM-S 95	541928	181706	83	41.6	42.3	24	34.3	27.9	15.9	15.9		18		31.8	47.8	30.0	24.3	

BUILDING A FAIRER NEWHAM

Site ID	X OS Grid Ref Easting	Y OS Grid Ref Northing	Valid data capture 2023 %[b]	Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sept	Oct	Nov	Dec	Annual mean – raw data	Annual Mean: Annualised & Bias Adjusted	Annual Mean: Distance Corrected to Nearest Exposure
NHM-S 96	542603	181523	75	32.4	30	17.8	18.3	14.3		7.6	19.5			23.1	41.3	22.7	18.4	
NHM-S 97	542805	181812	67	32.2					8.9	8.9	32.5	23.4	19.2	29.4	32.6	23.4	19.5	
NHM-S 98	543635	181422	92	33.5	37.8	18.3	20.2	16.5	11.5	11.5	30.5	29.7	20.8	34.9		24.1	19.5	
NHM-S 99	543208	181147	75	38.1				18	14.6	14.6	18.8	21.5	27.1	0.8	24.4	19.8	16.0	

☒ **All erroneous data has been removed from the NO₂ diffusion tube dataset presented in Table R**

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

☒ **Local bias adjustment factor used**

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

☒ **The London Borough of Newham confirm that all 2023 diffusion tube data has been uploaded to the Diffusion Tube Data Entry System**
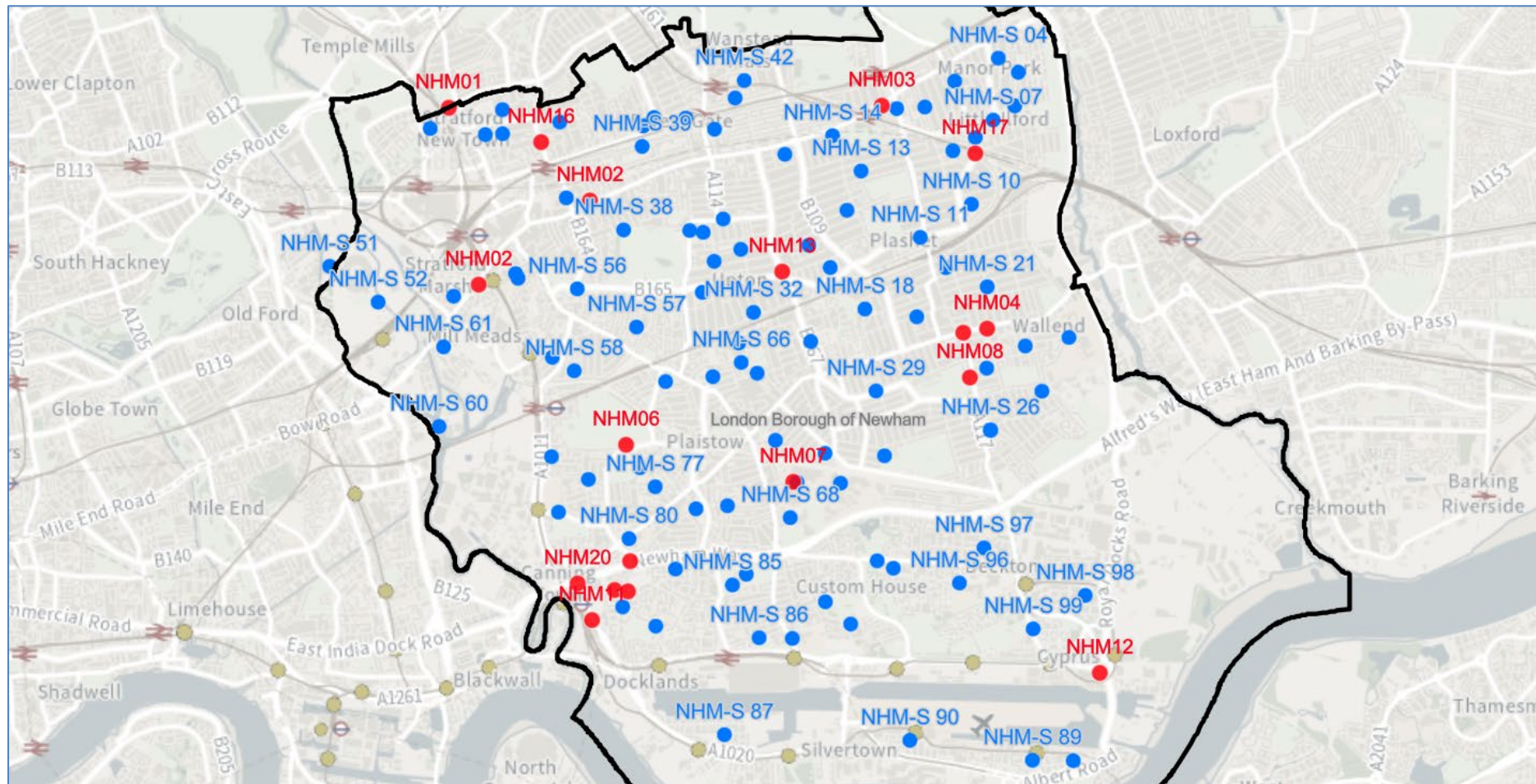
Notes:

Exceedances of the NO₂ annual mean objective of 40µg/m^3 are shown in **bold**.

NO₂ annual means exceeding 60µg/m^3, indicating a potential exceedance of the NO₂ 1-hour mean objective are shown in **bold and underlined**.

See Appendix C for details on bias adjustment and annualisation.

Figure E. Map of Non-Automatic Monitoring Sites

Key: ● Long Term Non-Automatic Monitoring Sites (Founded 1997)   ● Non-Automatic Monitoring Sites at schools (Founded 2019)

Figure F. Map of Automatic Monitoring Sites