

The London Borough of Hillingdon



Air Quality Annual Status Report, 2019

London Borough of Hillingdon Air Quality Annual Status Report for 2019

Date of publication: May 2020

This report provides a detailed overview of air quality in the London Borough of Hillingdon during 2019. It has been produced to meet the requirements of the London Local Air Quality Management statutory process¹. It also updates on the Council's Air Quality Action Plan since its adoption in May 2019 to the end of March 2020, and indications of the effects of the response to the Coronavirus epidemic on air quality in the Borough.

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¹ LLAQM Policy and Technical Guidance 2019 (LLAQM.TG(19)). <https://www.london.gov.uk/what-we-do/environment/pollution-and-air-quality/working-boroughs>

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Abbreviations

AQ	Air quality
AQAP	Air Quality Action Plan
AQFA	Air Quality Focus Area
AQMA	Air Quality Management Area
AQN	Air Quality Neutral
AQO	Air Quality Objective
AQSPG	Air Quality Supplementary Planning Guidance
ASR	Annual Status Report
AURN	Automatic Urban and Rural Network
BAM	Beta attenuation monitoring
CHP	Combined Heat and Power
CO	Carbon monoxide
DCO	Development Consent Order
EV	Electric Vehicle
FDMS	Filter Dynamics Measurement System
FIDAS	Fine Dust Analysis System
FORS	Fleet Operator Recognition System
GLA	Greater London Authority
HE	Highways England
HS2	High Speed 2 (rail line from London to Birmingham)
LEZ	Low Emission Zone
LIP	Local Implementation Plan (for Borough transport)
LLAQM	London Local Air Quality Management
MAQF	Mayor's Air Quality Fund
NO _x	Oxides of nitrogen (NO ₂ + NO)
NO ₂	Nitrogen dioxide
NPPF	National Planning Policy Framework
NRMM	Non-Road Mobile Machinery
O ₃	Ozone
PM ₁	Particulate matter less than 1 micron in diameter
PM ₁₀	Particulate matter less than 10 microns in diameter
PM _{2.5}	Particulate matter less than 2.5 microns in diameter
QA/QC	Quality Assurance / Quality Control
SO ₂	Sulphur dioxide
SPG	Sustainable Planning Guidance
STARS	TfL Community Project to reduce car usage
TEOM	Tapered Element Oscillating Microbalance (for PM measurement)
TfL	Transport for London
TSP	Total Suspended Particulate Matter
ULEZ	Ultra-Low Emission Zone
VCM	Volatile Correction Model
WHO	World Health Organization

Summary

This report provides information on:

- Air quality in the London Borough of Hillingdon in 2019;
- Progress with the Borough's Air Quality Action Plan (AQAP) from March 2019 to March 2020; and
- Planning applications that are relevant to air quality in the Borough.

The management of local air quality in the UK is driven by a series of limit values covering different pollutants. Of these, nitrogen dioxide (NO₂) and fine particulate matter (expressed as either PM_{2.5} or PM₁₀ reflecting different size fractions) are particularly important in Hillingdon. The Borough's Air Quality Management Area (AQMA) was declared because of non-compliance with the annual limit value for NO₂ in parts of the Borough.

When all monitoring sites are considered together, a mild trend to improvement of annual mean concentrations of NO₂, PM₁₀ and PM_{2.5} is now observed covering the last 10 years. This reflects reductions in emissions linked to action taken by Hillingdon through its AQAP, actions by the GLA, and legislation at UK and European levels. The finding of a gradual improvement in concentrations is subject to three important considerations:

1. Exceedances of the annual mean limit value for NO₂ are still present at some locations. Some of these are substantial. The limit values for PM₁₀ and PM_{2.5} are complied with throughout the Borough.
2. Pollutant concentrations are affected significantly by variability in weather conditions from year to year. Compliance at a site in one year does not guarantee compliance in the next year, even against a background of declining emissions.
3. The limit values are not "no-effect thresholds" for pollutant exposure: there is growing evidence of health impacts of pollution down to very low concentrations. Further reductions in concentration are thus desirable even when limit values are met.

Hillingdon published an updated AQAP in 2019², drawing on new information and the progress with measures contained in the earlier plan that had been used since 2004. Details of progress on the new plan are provided in Chapter 3. Highlights for the reporting year include action against the following measures from the AQAP:

- **Measure 3: Non-Road Mobile Machinery (GLA priority measure).** 34 construction sites were audited, with a rate of 81% compliance, instructions given to non-compliant operators as to how to become compliant.
- **Measure 5: Enforcement of Air Quality Neutral Policy.** Air quality neutral assessments are requested on all relevant developments; this requirement has been reinforced by the adoption of Hillingdon's Local Plan Part 2. In 2019/2020, 39

² http://www.hillingdon-air.info/pdf/Hillingdon_AQAP_2019_2024_finalversion.pdf

planning applications of relevance to air quality were identified and improvements to the schemes sought in regard to minimising emissions.

- **Measure 7: Promoting and enforcing smoke control zones (GLA priority measure).** The Council has continued to raise awareness of the rules applied when living or working in a smoke control zone. Enforcement of smoke (and fume and odour) complaints is carried out throughout the Borough with 255 such incidents attended by Council Officers in April 2019-March 2020.
- **Measure 8: Emissions from developments and buildings, promoting energy efficiency (GLA priority measure).** The council has replaced 210 individual boilers and 14 communal boilers in 2019/2020 as part of the ongoing boiler replacement programme.
- **Measure 17: Reducing emissions from council fleets.** In 2019/2020 77 new fleet vehicles were purchased, all purchases of Council fleet vehicles are required to meet the standards of the ULEZ, new purchases of Council pool cars will include electric and hybrid vehicles.
- **Measure 12: airTEXT (GLA priority measure).** The airTEXT service is a pollution alert warning system. In the reporting year the system has been further promoted in the Borough leading to an increase in membership.
- **Measure 14: Air quality in and around schools (GLA priority measure, incorporates Measures 13, 21, 22).** Numerous actions have been implemented in and around schools, including erection of green pollution barriers at a further 5 schools, provision of funding for rolling out of an air quality awareness education package across primary schools, continued promotion of active travel, expansion of 'no-idling' activities at schools (including 2 no idling awareness events and the placement of no idling signs at every school) and the introduction of a School Street pilot scheme.
- **Measure 18: Greening the Borough / Green infrastructure** More than 10,000 additional trees have been planted across the Borough in 2019/2020.
- **Measures 19, 20, 25: Creating healthy streets and neighbourhoods.** Schemes have been developed for improvements in two Air Quality Focus Areas (Hayes and A40/Long Lane). Additional improvements have been undertaken on the Uxbridge Road at Hayes and in Uxbridge and Eastcote town centres. The Eastcote scheme has won an award in the ICE London Civil Engineering Awards for multi-functional benefits for a Town Centre. Further schemes include improved access to Cranford Park and the Grand Union Canal Quietway scheme.
- **Measures 26 to 30: Working in partnership.** The Borough has continued to work with stakeholders including TfL, Highways England, Heathrow Airport and HS2, recognising that many sources of pollution in Hillingdon are not under the direct influence of the Council and require actions from others.

Hillingdon is thus taking various actions under the new AQAP to address problems across the Borough:

- To understand the pollution problems of the Borough;
- To reduce emissions where it has direct influence, for example on Council-controlled roads and from the Council fleet;
- To work with others such as TfL, Highways England, [HS2](#) and Heathrow to control emissions where Hillingdon does not have direct influence;
- To ensure that new developments do not introduce significant new sources of emission to the Borough.

The Borough continues to consider challenges and opportunities that will arise through activities that are not directly linked to air quality management. The construction of HS2 and the opening of the M4 Smart Motorway both have the potential to lead to local increases in pollution levels. The Council will continue to work with HS2 and Highways England to seek appropriate mitigation where it is needed. Whilst Heathrow expansion via the Third Runway is currently postponed, the Council will remain vigilant to resist any further attempts to resurrect the proposal and also to ensure the current limits, such as aircraft movements and car parking caps imposed on the two runway airport by the T5 Inquiry, remain in place.

On the positive side, the development of a Climate Change Strategy for Hillingdon has the potential to lock in actions which reduce carbon emissions and also improve air quality. Useful lessons can be learned from the effects of the lockdown made in response to the Coronavirus pandemic. Not surprisingly, air quality levels at the Borough's monitoring stations indicate distinct improvements especially for NO₂, with concentrations falling by an estimated 36% to 55%. This provides opportunity to consider how benefits can be locked in as the country returns to "normal", post-lockdown.

1 Introduction

1.1 The purpose of this report

This report provides a detailed overview of air quality in the London Borough of Hillingdon during 2019. It has been produced to meet the requirements of the London Local Air Quality Management statutory process³. National Air Quality Standards and Objectives are given in Table A.

Table A. Summary of National Air Quality Standards and Objectives.

Pollutant	Objective (UK)	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
	40 µg m ⁻³	Annual mean	31 Dec 2005
Particles - PM ₁₀	50 µg m ⁻³ not to be exceeded more than 35 times a year	24-hour mean	31 Dec 2004
	40 µg m ⁻³	Annual mean	31 Dec 2004
Particles - PM _{2.5}	25 µg m ⁻³	Annual mean	2020
	Target of 15% reduction in concentration at urban background locations	3 year mean	Between 2010 and 2020
Sulphur Dioxide (SO ₂)	266 µg m ⁻³ not to be exceeded more than 35 times a year	15 minute mean	31 Dec 2005
	350 µg m ⁻³ not to be exceeded more than 24 times a year	1 hour mean	31 Dec 2004
	125 µg m ⁻³ not to be exceeded more than 3 times a year	24 hour mean	31 Dec 2004

Note: ¹ by which to be achieved by and maintained thereafter

1.2 Description of the Local Authority Area

Hillingdon is, geographically, the second largest local authority in London and has approximately 250,000 residents. Parts of the Borough to the north of the A40 are semi-rural, with Ruislip as the district centre. The south of the Borough is more densely populated, urban in character, and contains the metropolitan centre of Uxbridge and the towns of Hayes and West Drayton. It also contains numerous important transport links. As well as being home to Heathrow Airport the Borough is crossed by the M4 and the A40 and bordered to the west by the M25 and to the east by the A312, attracting traffic into the

³ LLAQM Policy and Technical Guidance 2016 (LLAQM.TG(16)). <https://www.london.gov.uk/what-we-do/environment/pollution-and-air-quality/working-boroughs>

Borough and encouraging traffic to pass through it. These roads generate a significant air pollution burden for the Borough.

1.3 Hillingdon's Air Quality Management Area (AQMA)

An AQMA was declared in Hillingdon against exceedance of objectives for NO₂ in 2003. Air quality problems in the Borough continue to be most severe around Heathrow Airport and the major road network that goes through the Borough, reflecting the largest sources of nitrogen oxide (NO_x) emissions within the AQMA which covers the southern half of the Borough (Figure 1). The possible inclusion of areas in the north of the Borough has been kept under review.



Figure 1. Hillingdon's AQMA.

An Action Plan, showing how Hillingdon Borough Council intended to tackle these problems, was issued in 2004. A revised plan for 2019-2024 was finalised in June 2019. In addition to information on air quality in the Borough in 2019, this report also provides a brief review of the achievements made under the original air quality action plan. Preliminary observations are also provided on the effect of measures introduced in response to the Coronavirus pandemic from March 2020.

2 Air Quality Monitoring in Hillingdon

2.1 Automatic monitoring sites

There were 11 operational automatic continuous monitoring sites in the London Borough of Hillingdon in 2019 (Table B). Hillingdon 1 (South Ruislip), Hillingdon 3 (Oxford Avenue), London Sipson, London Harmondsworth, Hillingdon Hayes, and London Harmondsworth Osiris (HIL4) are all part of the Borough monitoring network. London Hillingdon is part of the Defra - owned Automatic Urban and Rural Network (AURN). London Heathrow (LHR2), Heathrow Oaks Road, Heathrow Green Gates, and London Harlington are all part of the Heathrow Airport monitoring network. A map showing the location of the automatic stations is shown in Figure 2. A new site has been incorporated into the Heathrow Airport monitoring network at the Bath Road close to the airport. This was installed in November 2019 and will monitor for nitrogen dioxide and particulates (PM₁, PM_{2.5}, PM₁₀ and TSP). Results from this station will be incorporated into the next ASR.

The method used by the Osiris monitoring system at HIL4 (Hillingdon Harmondsworth) has been validated for the UK monitoring network and results for the site are included in this report.

2.2 Non-automatic monitoring sites

With the development of the new AQAP and the concept of AQFAs the Council took the opportunity to review its passive diffusion tube monitoring of NO₂. Using the available pollution maps, results from a smaller survey of the north of the Borough and taking into account the presence of the AQFAs the monitoring programme has now been refined.

Passive diffusion tube monitoring of NO₂ is carried out at several locations across the Borough, supplementing the information generated by the more expensive automatic network (Figure 3 and Figure 4). During 2019, NO₂ monitoring was undertaken using diffusion tubes at 55 sites. One of these sites (that has triplicate tubes) is co-located with the London Hillingdon automatic monitoring site. Following a review of the London Borough of Hillingdon non automatic network undertaken in 2018/2019, further 15 non-automatic sites were operated in 2019 at new locations, offering a better coverage of Focus Areas (Figure 3). Of these additional sites, 7 are in the north of the Borough outside the AQMA. Additional details are presented in Table C1. Diffusion tubes set up by a local residents' group located in Northwood are also reported here as they complement the London Borough of Hillingdon non automatic network outside the AQMA. These are referred to as Sites A and B and details are provided in Table C2.

A bias adjustment factor of 0.89 was extracted from the latest version of the national database of co-location studies⁴ conducted for tubes prepared (50% TEA in acetone) and analysed by Gradko has been used to adjust the diffusion tube results. The factor was calculated using only roadside and urban background sites as these are the types of the

⁴ <http://laqm.defra.gov.uk/bias-adjustment-factors/bias-adjustment.html>

London Borough of Hillingdon non automatic network. All tubes used in the derivation of the bias adjustment factor presented precision classified as “Good”⁵.

Full details of the diffusion tube QA/QC including justification for the choice of bias adjustment factors are presented in Appendix A. Monthly NO₂ diffusion tube data are provided in Appendix B.

⁵Tube precision is determined as follows: G = Good precision - coefficient of variation (CV) of diffusion tube replicates is considered G when the CV of eight or more periods is less than 20%, and the average CV of all monitoring periods is less than 10%

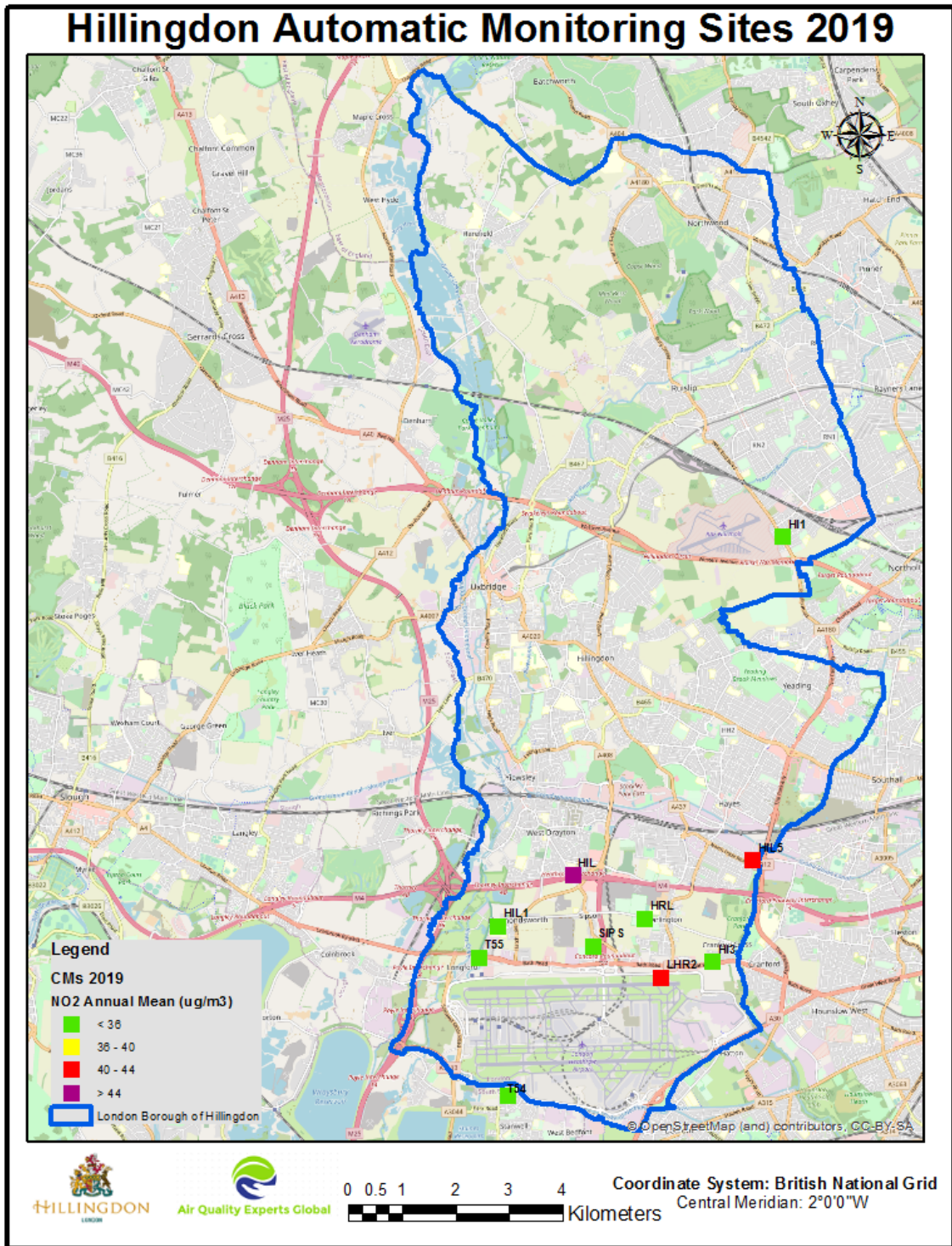


Figure 2. Location of the automatic monitoring sites in Hillingdon, nitrogen dioxide annual mean concentrations (ug/m³) 2019.

Hillingdon Non-Automatic Monitoring Sites 2019

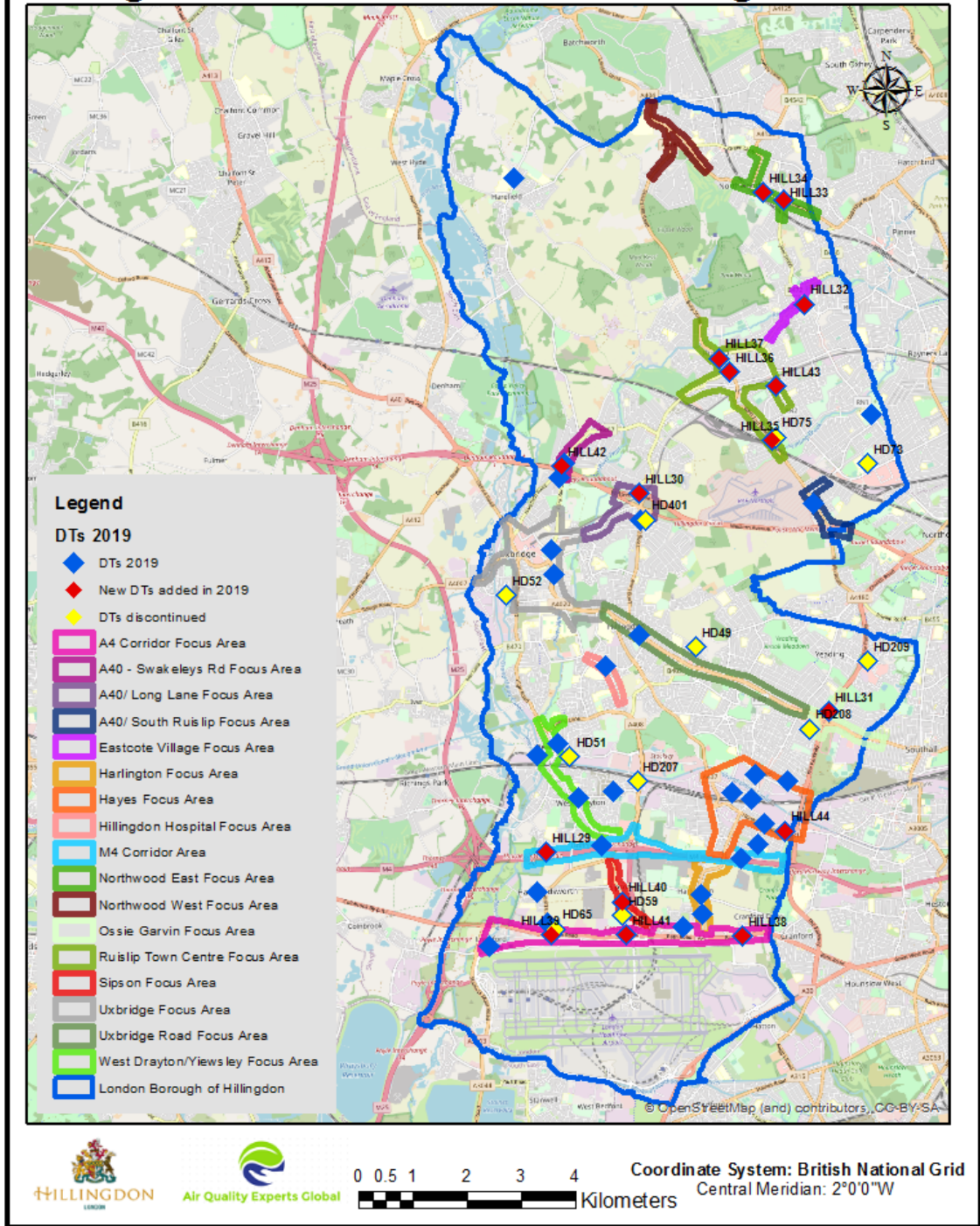


Figure 3. Location of non-automatic monitoring sites in Hillingdon, including the new sites added in 2019, per Focus Area. The figure also shows the sites that have been discontinued in 2019. Detailed views are presented in Appendix D.

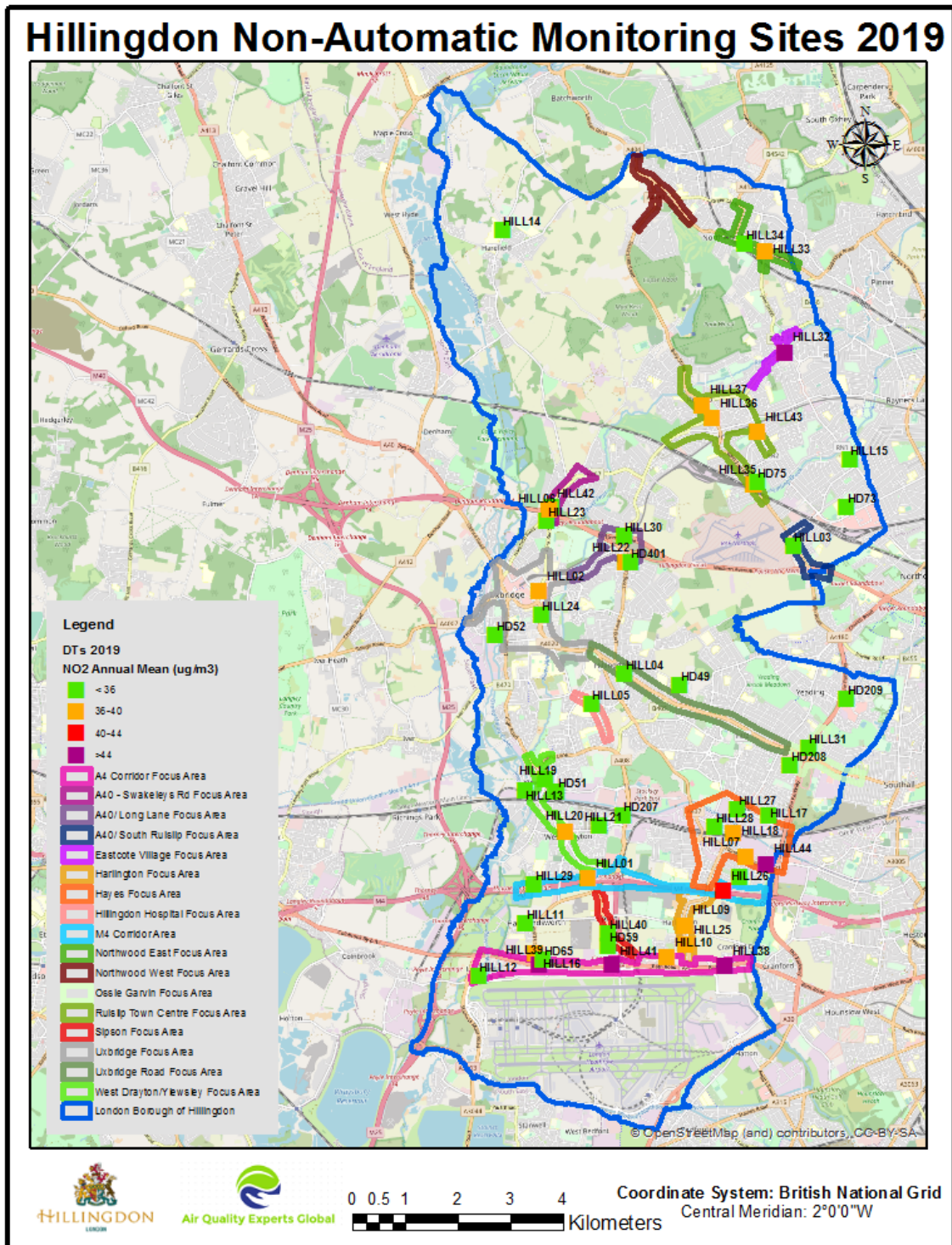


Figure 4. Non-automatic monitoring sites NO₂ annual mean concentrations (ug/m³) in Hillingdon, 2019. The figure also shows the Focus Areas that are being used for Local Air Quality Management

Table B. Details of Automatic Monitoring Sites for 2019.

Site ID	Site Name	X (m)	Y (m)	Site Type	In AQMA? (Y/N)	Distance from monitoring site to relevant exposure (m)	Distance to kerb of nearest road (N/A if not applicable) (m)	Inlet height (m)	Pollutants monitored	Monitoring technique
LHR2	London Heathrow	508600	176700	Airport	Y	N/A	N/A (inside airport)	1.5	NO ₂ , PM ₁₀ , PM _{2.5}	Chemiluminescence FIDAS
HIL	London Hillingdon	506951	178605	Urban background	Y	16m	2.5m (30m to M4)	1.5	NO ₂ , O ₃	Chemiluminescence
H11	Hillingdon 1 - South Ruislip	510857	184917	Roadside	Y	11m	2.5m	1.5	NO ₂ , PM ₁₀	Chemiluminescence TEOM
H13	Hillingdon 3 - Oxford Avenue	509557	176994	Roadside	Y	8m and 17m	33m to A4 Bath Road (2m to Oxford Avenue)	1.5	NO ₂ , PM ₁₀	Chemiluminescence TEOM
HRL	London Harlington	508295	177800	Airport	Y	N/A	3m	1.5	CO, NO ₂ , O ₃ , PM ₁₀ , PM _{2.5}	Chemiluminescence TEOM FDMS
SIPS	Hillingdon Sipson	507325	177282	Urban background	Y	9m	2.5m	1.5	NO ₂	Chemiluminescence
HIL1	London Harmondsworth	505561	177661	Roadside	Y	20m	1m	1.5	NO ₂ , PM ₁₀	Chemiluminescence BAM
HIL4	London Harmondsworth Osiris	505671	177605	Urban background	Y	1m	13m	1.5	TSP, PM ₁₀ , PM _{2.5} , PM ₁	Optical
T55	Heathrow Green Gates	505207	177072	Airport	Y	32m	N/A (background for the airport) (62m to airport boundary)	1.5	NO ₂ , PM ₁₀ , PM _{2.5}	Chemiluminescence FIDAS
T54	Heathrow Oaks	505729	174496	Airport	Y	N/A	5m	1.5	NO ₂ , PM ₁₀ , PM _{2.5}	Chemiluminescence FIDAS
HIL5	Hillingdon Hayes	510303	178882	Roadside	Y	15m	1m	1.5	NO ₂ , PM ₁₀	Chemiluminescence BAM

Table C1. Details of Non-Automatic Monitoring Sites for 2019.

Site ID 2018	Site ID 2019	Site Name	X (m)	Y (m)	Site Type	In AQMA? (Y/N)	Distance from monitoring site to relevant exposure (m)	Distance to kerb of nearest road (N/A if not applicable) (m)	Inlet height (m)	Pollutants monitored	Tube co-located with an automatic monitor? (Y/N)
HD31	HILL01	AURN Site, Keats Way, West Drayton	506926	178614	Roadside	Y	0	30m from M4	1.5	NO ₂	Y
HD43	HILL02	Uxbridge Day Nursery Park Road Uxbridge (on wire Fence)	505996	184058	Roadside	Y	0	4	1.5	NO ₂	N
HD46	HILL03	South Ruislip Monitoring Station West End Road	510821	184923	Roadside	Y	14	2.5	1.5	NO ₂	Y
HD47	HILL04	Hillingdon Primary School Uxbridge Road Hillingdon (on wire fence)	507617	182506	Roadside	Y	0	5	1.5	NO ₂	N
HD50	HILL05	Hillingdon Hospital Monitoring Station Colham Road (Near John Rich House on former junction to Pield Heath Road)	506989	181920	Roadside	Y	7	2	1.5	NO ₂	N
HD53	HILL06	Warren Road Ickenham Uxbridge (1st lamp post on left)	506243	185653	Roadside	Y	1	23	1.5	NO ₂	N
HD55	HILL07	Harold Avenue (first lamp post on left)	509918	179015	Roadside	Y	4	30	1.5	NO ₂	N
HD56	HILL08	15 Phelps Way Hayes (lamp post outside of)	509798	178654	Roadside	Y	7	1.5	1.5	NO ₂	N
HD57	HILL09	25 Cranford Lane Harlington (lamp post on the left after car park)	508758	177718	Roadside	Y	7	1	1.5	NO ₂	N
HD58	HILL10	Brendan Close Harlington (1st lamp post on the left)	508414	177125	Roadside	Y	0	1	1.5	NO ₂	N
HD60	HILL11	Harmondsworth Green Harmondsworth (lamp post outside nursery)	505736	177752	Roadside	Y	0	1	1.5	NO ₂	N
HD61	HILL12	Heathrow Close Longford (1st lamp post on the right)	504851	176770	Roadside	Y	0	2	1.5	NO ₂	N
HD67	HILL13	31 Tavistock Road (on lamp-post outside house)	505731	180288	Roadside	Y	3	1	1.5	NO ₂	N
HD70	HILL14	Harefield Hospital Hill End Road (lamp-post outside entrance)	505299	190923	Background	N	0	5	1.5	NO ₂	N

Site ID 2018	Site ID 2019	Site Name	X (m)	Y (m)	Site Type	In AQMA? (Y/N)	Distance from monitoring site to relevant exposure (m)	Distance to kerb of nearest road (N/A if not applicable) (m)	Inlet height (m)	Pollutants monitored	Tube co-located with an automatic monitor? (Y/N)
HD74	HILL15	Field End Road/Field End School S.Ruislip 3rd Lamp-post south of school entrance (outside AQMA)	511889	186563	Roadside	N	8	1	1.5	NO ₂	N
HD200	HILL16	49 Zealand Avenue Lamp Post	505920	177188	Roadside	Y	8	13	1.5	NO ₂	N
HD202	HILL17	49 Silverdale Gardens, Hayes Lamp Post (8)	510361	179820	Background	Y	9	14	1.5	NO ₂	N
HD203	HILL18	Blyth Road, Hayes Lamp Post (4)	509683	179486	Roadside	Y	6	2	1.5	NO ₂	N
HD204	HILL19	Side of 104 Yiewsley High Street (front of 1A Fairfield Road) Lamp Post (2)	506108	180493	Background	Y	9	37	1.5	NO ₂	N
HD205	HILL20	1 Porters Way (corner with Kingston Lane) Lamp Post (1)	506503	179510	Background	Y	12	9	1.5	NO ₂	N
HD206	HILL21	5-7 Mulberry Crescent, West Drayton Lamp Post (18)	507141	179628	Background	Y	10	2	1.5	NO ₂	N
HD210	HILL22	340 Long Lane, Uxbridge Lamp Post (71)	507649	184611	Roadside	Y	18	2	1.5	NO ₂	N
HD211	HILL23	198 Harefield Road, Uxbridge Lamp Post (2)	506143	185395	Background	Y	9	33	1.5	NO ₂	N
HD212	HILL24	59 Hillingdon Road, Uxbridge Lamp Post (56)	506035	183611	Roadside	Y	12	1.5	1.5	NO ₂	N
HD213	HILL25	10 West End Lane, Harlington Lamp Post (2)	508773	177352	Background	Y	11	33	1.5	NO ₂	N
HD214	HILL26	R/O 130 Cleave Avenue, Hayes Lamp Post (33)	509499	178370	Roadside	Y	18	27	1.5	NO ₂	N
HD302	HILL27	Botwell House RC Primary School (Side-fence)	509755	179934	Roadside	Y	5	12	1.5	NO ₂	N
HD402	HILL28	Blyth Road 2nd Tube, Hayes Lamp Post (17) (western most lamp post in front of 133 Enterprise House)	509328	179603	Roadside	Y	5	2	1.5	NO ₂	N
New	HILL29	Little Benty, Road name sign corner of The Brambles and Little Benty. UB7 7UJ	505906	178497	Background	Y	5	1.5	1.9	NO ₂	N
New	HILL30	Lamp-post down alley next to No 60a The Chase, Ickenham. Red	507612	185118	Background	Y	4	25	2.5	NO ₂	N

London Borough of Hillingdon

Site ID 2018	Site ID 2019	Site Name	X (m)	Y (m)	Site Type	In AQMA? (Y/N)	Distance from monitoring site to relevant exposure (m)	Distance to kerb of nearest road (N/A if not applicable) (m)	Inlet height (m)	Pollutants monitored	Tube co-located with an automatic monitor? (Y/N)
		<i>garage door, set back from road. UB10 8ST</i>									
New	HILL31	<i>On white lamp-post at end of Dorchester Way that runs parallel with A312, side of houses</i>	511103	181097	Background	Y	18	10	2.2	NO ₂	N
New	HILL32	<i>Roadside lamp-post, outside Georgian Lodge flats, Field End Road, Eastcote. HA52QL.</i>	510664	188599	Background	N	8.9	0.6	2.0	NO ₂	N
New	HILL33	<i>Kerbside lamppost outside Roundabout House, 34 Pinner Road. HA6 1BZ</i>	510284	190524	Roadside	N	7.0	0.5	2.2	NO ₂	N
New	HILL34	<i>Roadside lamp-post, pavement outside 177/179 Pinner Road. HA6 1DB.</i>	509900	190648	Roadside	N	4	2	2.2	NO ₂	N
New	HILL35	<i>Grey Lamp-post, West End Road, to the south of Sidmouth Drive, outside Aroma House Chinese. HA4 6LR</i>	510055	186080	Roadside	N	7	0.4	2.3	NO ₂	N
New	HILL36	<i>Lamp-post outside Vodafone, 69 High Street Ruislip. HA4 8JB</i>	509275	187340	Roadside	N	4	3	2.4	NO ₂	N
New	HILL37	<i>2/6 High St. Ruislip Lamp-post with Parking and church sign. HA4 7AW</i>	509097	187597	Roadside	N	3	1	2.0	NO ₂	N
New	HILL38	<i>Blue street light neat speed camera markings to west of Oxford Ave, Near AQMS. UB3 5HU</i>	509525	176949	Roadside	Y	6	1.2	2.2	NO ₂	N
New	HILL39	<i>Pinglestone Close/Bath Road A4. On cycle lane sign post. Park up Pinglestone close. UB7 0DJ.</i>	506000	176969	Roadside	Y	10	1.5	2.2	NO ₂	N
New	HILL40	<i>On zone sign at corner of Sipson Close/Sipson Rd. UB7 0JX.</i>	507316	177576	Roadside	Y	4	1.8	1.9	NO ₂	N
New	HILL41	<i>On the north side of the A4 near the houses by the junction with Sipson Way</i>	507369	176966	Roadside	Y	6	0.7	2.0	NO ₂	N

Site ID 2018	Site ID 2019	Site Name	X (m)	Y (m)	Site Type	In AQMA? (Y/N)	Distance from monitoring site to relevant exposure (m)	Distance to kerb of nearest road (N/A if not applicable) (m)	Inlet height (m)	Pollutants monitored	Tube co-located with an automatic monitor? (Y/N)
New	HILL42	Telegraph pole next to big house/field on South corner of The Drive. UB10 8DA	506192	185614	Roadside	Y	5	4.5	2.3	NO ₂	N
New	HILL43	Lamp-post outside tattoo and Five star nail parlours, No 60, Victoria Road. HA4 0AH.	510134	187086	Roadside	Y	3.5	1.5	2.4	NO ₂	N
HD49	Disc.	83 Hayes End Drive Hayes End Middlesex (on drainpipe)	508651	182274	Roadside	Y	7	7	1.5	NO ₂	N
HD51	Disc.	Top of Colham Avenue (4) Yiewsley (lamp post at end of road)	506335	180263	Roadside	Y	0	4	1.5	NO ₂	N
HD52	Disc.	Lamp post near 101 Cowley Mill Road Uxbridge	505159	183232	Roadside	Y	95	1	1.5	NO ₂	N
HD59	Disc.	Bomber Close (7) Sipson (1st lamp post on left)	507296	177323	Roadside	Y	8	1	1.5	NO ₂	N
HD65	Disc.	28 Pinglestone Close Sipson Middlesex (on drainpipe)	506079	177081	Roadside	Y	0	4	1.5	NO ₂	N
HD73	Disc.	Queensmead School South Ruislip (lamp-post opposite Jubilee Drive) (outside AQMA)	511825	185655	Roadside	N	0	1	1.5	NO ₂	N
HD75	Disc.	Sidmouth Drive South Ruislip (2nd lamppost from West End Road outside Nursery) (outside AQMA)	510125	186144	Roadside	N	4	2	1.5	NO ₂	N
HD207	Disc.	35 Emden Close, West Drayton Lamp Post (14)	507580	179812	Background	Y	7	60	1.5	NO ₂	N
HD208	Disc.	Side of 50 St. Christopher's Drive Lamp Post (13)	510761	180766	Background	Y	5	180	1.5	NO ₂	N
HD209	Disc.	29 Pendula Drive, Hayes Lamp Post (2)	511828	182023	Background	Y	10	79	1.5	NO ₂	N
HD401	Disc.	15 Victoria Avenue, Hillingdon Lamp Post (2)	507730	184623	Background	Y	5.6	2.7	1.5	NO ₂	N

Note: Disc. = means discontinued site. Only data for January, February and March 2019 were captured by these sites which were discontinued afterwards. Nevertheless, data were annualised and are reported.

Table C2. Details of Non-Automatic Monitoring Sites for 2019 - Green Lane – Northwood’s Voice Local Group.

Site ID	Site Name	X (m)	Y (m)	Site Type	In AQMA? (Y/N)	Distance from monitoring site to relevant exposure (m)	Distance to kerb of nearest road (N/A if not applicable) (m)	Inlet height (m)	Pollutants monitored	Tube co-located with an automatic monitor? (Y/N)
A	Hard 8 Bar & Kitchen, 1 Eastbury Road, Northwood HA6 3BG	509236.0	191478.0	Kerbside	N	2.7	1.0	1.8	NO ₂	N
B	Steve’s Hairdressers, 60 Green Lane, Northwood HA6 2XW	509279.8	191450.1	Roadside	N	0	3.6	1.8	NO ₂	N

2.3 Comparison of Monitoring Results with Air Quality Objectives

Trends in the monitored pollution data for the Borough are presented in the following summary Figures:

- Figure 5. Annual mean NO₂ concentrations measured at the automatic monitoring stations, 2009-2019, showing data for each site in the Borough. Units: $\mu\text{g.m}^{-3}$.
- Figure 6. Annual mean NO₂ concentrations measured at the automatic monitoring stations, 2009-2019, showing a mild downward trend in concentrations (average across all sites in the Borough). Units: $\mu\text{g.m}^{-3}$.
- Figure 7. Annual mean NO₂ monitoring data for 2010 – 2019 showing a mild downward trend in concentrations, at diffusion tube locations (average across all sites in the Borough). Units: $\mu\text{g.m}^{-3}$.
- Figure 8. Annual mean PM₁₀ concentrations measured at the automatic monitoring stations, 2010-2019 (average across all sites in the Borough). No sites exceed the annual mean objective. Units: $\mu\text{g.m}^{-3}$.
- Figure 9. Annual mean PM_{2.5} concentrations measured at the automatic monitoring stations, 2011-2019 (average across all sites in the Borough). No sites exceed the annual mean objective. Units: $\mu\text{g.m}^{-3}$.

The results presented are after adjustments for “annualisation” and for distance to a location of relevant public exposure. Details of adjustments are provided in Appendix A.

The only pollutant for which exceedance of limit values is observed in the Borough is NO₂, for the annual mean objective. Figure 5 shows data from each automatic monitoring site for the period 2009 to 2019. Results for 3 of the 10 sites still exceed the limit value of 40 $\mu\text{g m}^{-3}$ though the number of non-compliant sites has reduced over time. Whilst the figure appears to show a general trend to a reduction in concentrations, increases in concentration at some sites is observed for some years. This is usually attributable to variability in weather conditions.

For Figures 6 to 9 the data for all sites have been processed in order to describe trends more clearly: to illustrate the effect of this processing, note that Figure 6 is based on the data shown in Figure 5. In these figures, trend analysis for monitoring data across Hillingdon was calculated using the Theil–Sen statistical processing procedures. Theil–Sen method estimates are non-parametric statistics for robustly fitting a line to sample points in the plane (simple linear regression) by choosing the median of the slopes of all lines through pairs of points. The best estimate of the trend is labelled the “Sen’s estimate” in the figures. This estimator can be computed efficiently, and is insensitive to outliers. It can be significantly more accurate than simple linear regression for skewed and heteroskedastic data, and competes well against least squares, even for normally distributed data, in terms of statistical power. It is a widely preferred nonparametric technique for estimating a linear trend. Confidence intervals (95% and 99%) are shown where 10 or more years of data are available. The information presented in all figures demonstrates a trend over the last decade towards improved air quality, reflecting the actions that have so been taken. As noted already, when considering trends, it is important to bear in mind that annual differences in meteorology have a large influence on concentrations and short-term trends may not persist.

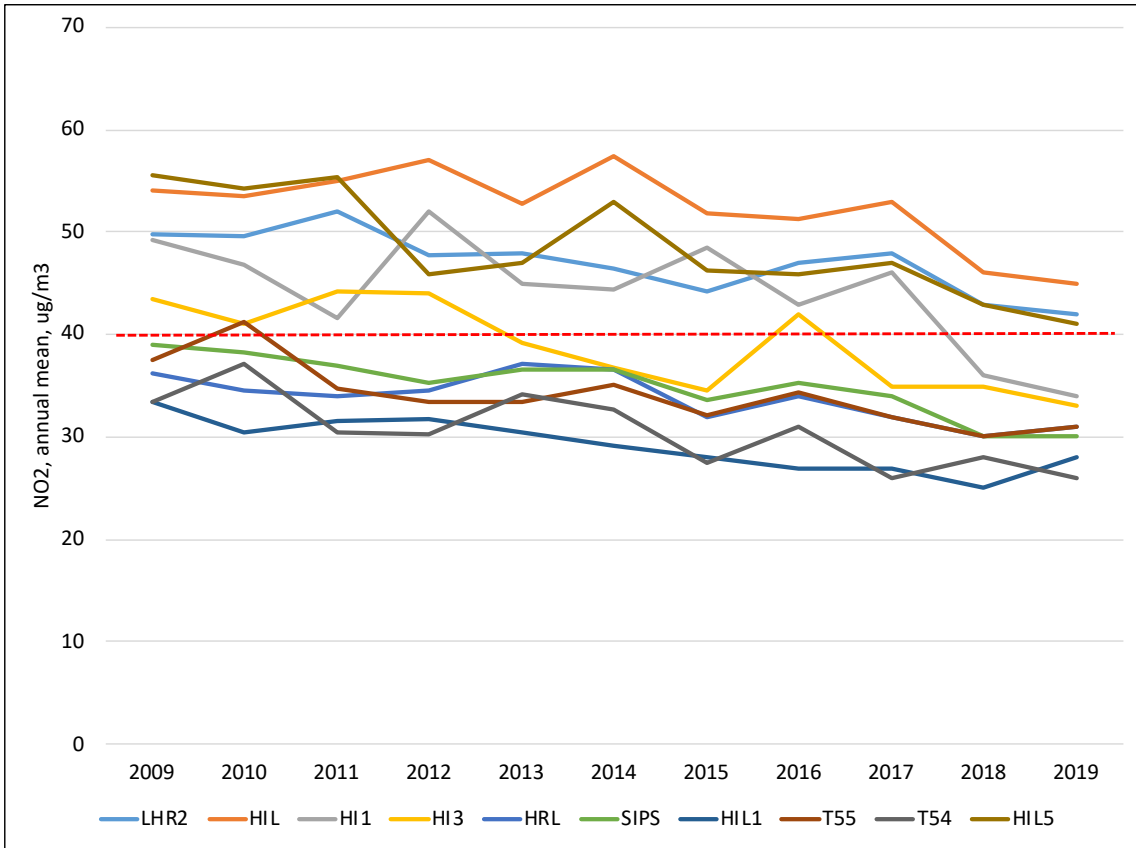


Figure 5. Annual mean NO₂ concentrations measured at the automatic monitoring stations, 2009-2019, showing data for each site in the Borough. Units: µg.m⁻³.

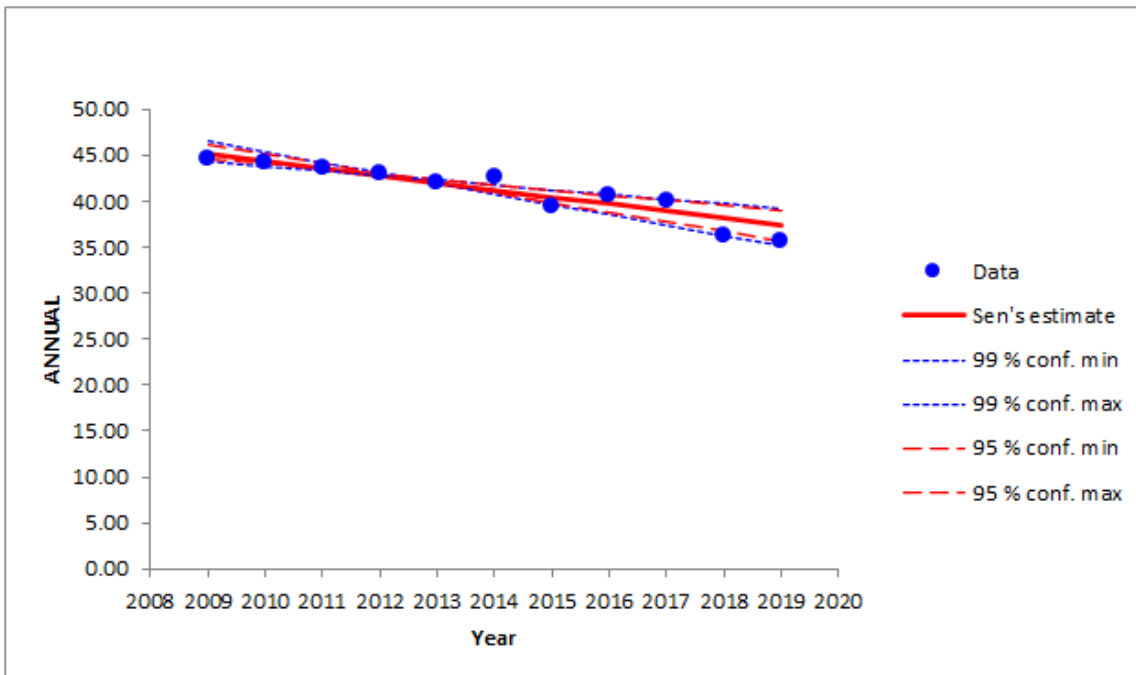


Figure 6. Annual mean NO₂ concentrations measured at the automatic monitoring stations, 2009-2019, showing a mild downward trend in concentrations (average across all sites in the Borough). Units: µg.m⁻³. Input data before calculation of the trend line are as shown in Figure 5.

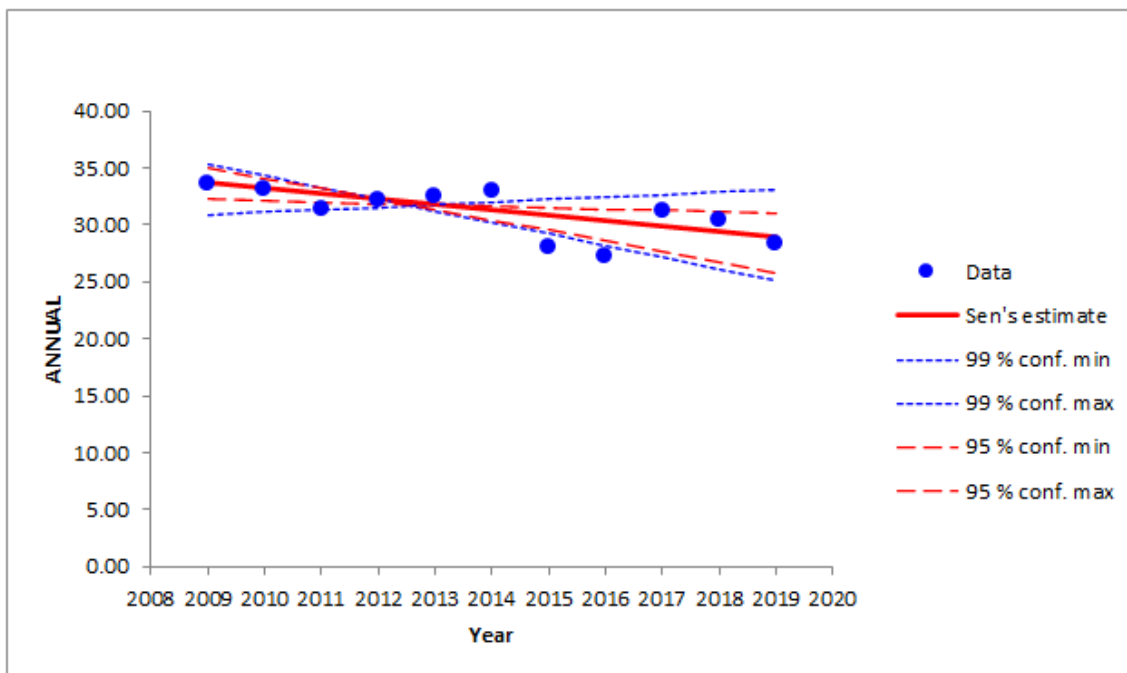


Figure 7. Annual mean NO₂ monitoring data for 2010 – 2019 showing a mild downward trend in concentrations, at diffusion tube locations (average across all sites in the Borough). Units: µg.m⁻³.

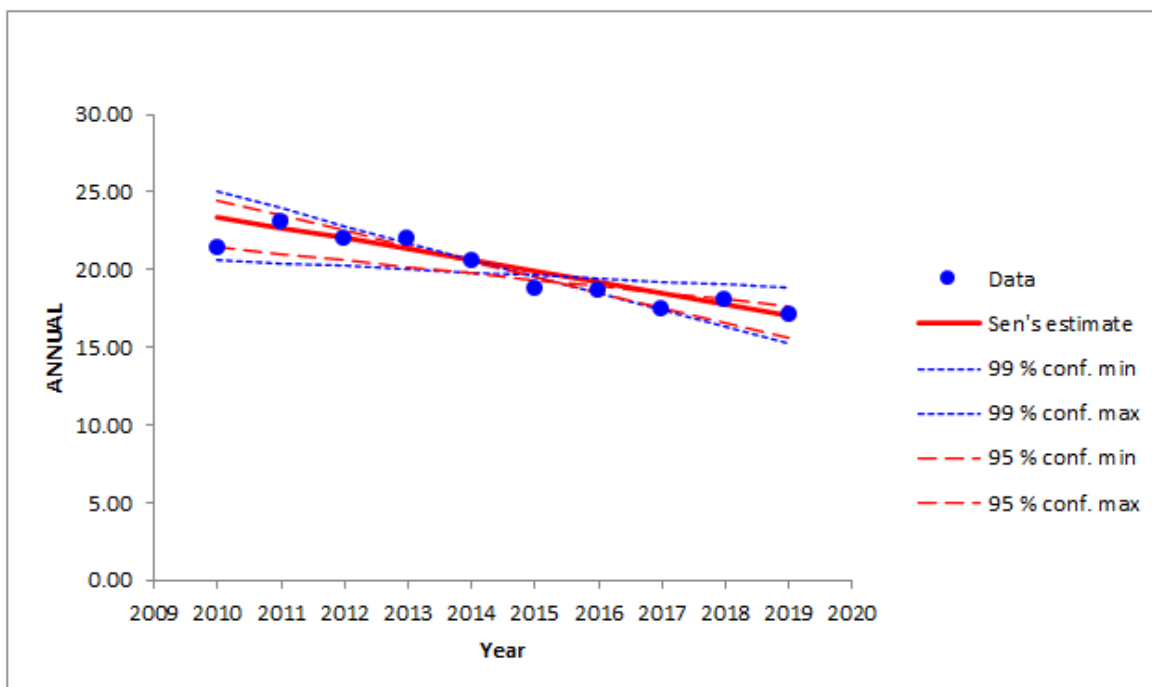


Figure 8. Annual mean PM₁₀ concentrations measured at the automatic monitoring stations, 2010-2019 (average across all sites in the Borough). No sites exceed the annual mean objective. Units: µg.m⁻³.

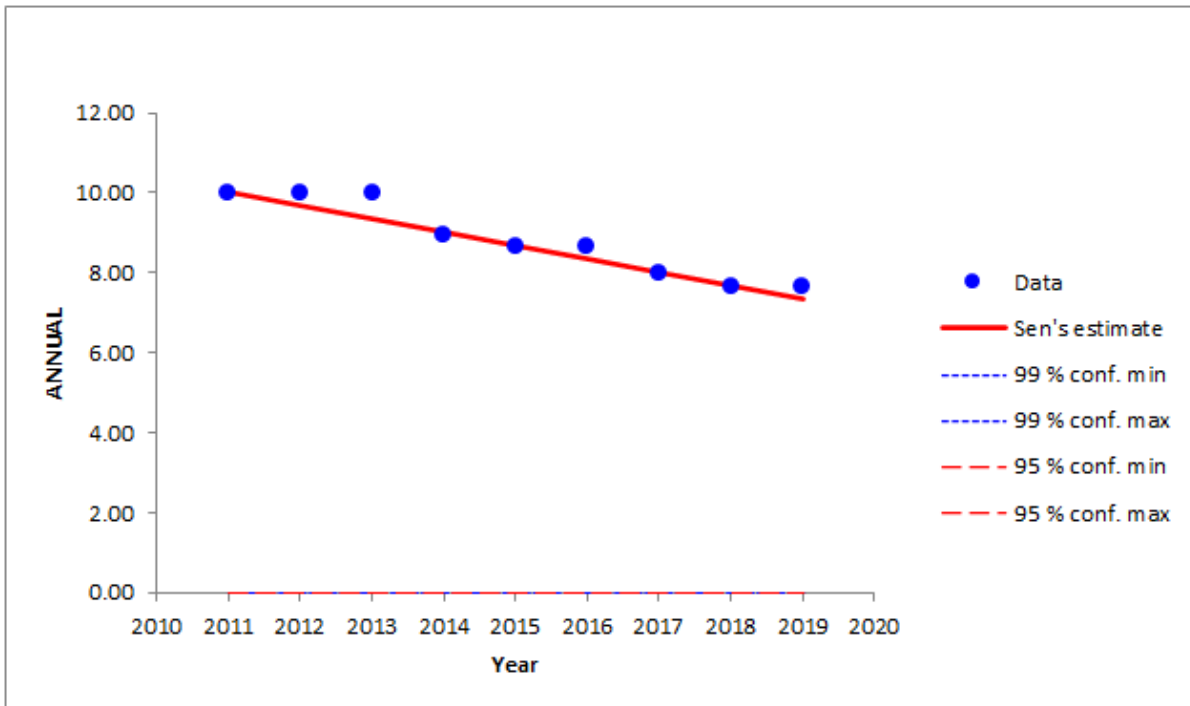


Figure 9. Annual mean PM_{2.5} concentrations measured at the automatic monitoring stations, 2011-2019 (average across all sites in the Borough). No sites exceed the annual mean objective. Units: µg.m⁻³.

The observation from Figure 5 that problems persist at some locations but not all, provides support for the AQAP being developed with particular consideration to a number of 'Focus Areas' within the Borough, whilst recognising that reductions in pollution are desirable across the Borough.

The following tables provide the data for each monitoring site:

- Tables D1-D3. Information on annual mean NO₂ concentrations (µg.m⁻³).
- Table E. NO₂ Automatic Monitor Results: Comparison with 1-hour Mean Objective.
- Table F. Annual Mean PM₁₀ Automatic Monitoring Results (µg.m⁻³).
- Table G. PM₁₀ Automatic Monitor Results: Comparison with 24-Hour Mean Objective.
- Table H. Annual Mean PM_{2.5} Automatic Monitoring Results (µg.m⁻³).

Tables D1-3 identify a number of locations in the Borough where the annual mean limit value for NO₂ is exceeded. Tables E to H find no exceedance of either the 1 hour mean NO₂ objective or the objectives for PM concentrations.

Table D1. Annual mean NO₂ ratified monitoring results (µg m⁻³) for 2019 for the automatic monitoring sites.

Site ID	Site type	Valid data capture for monitoring period % ^a	Valid data capture, 2019, % ^b	Annual Mean Concentration (µg.m ⁻³) ^c						
				2013 ^c	2014 ^c	2015 ^c	2016 ^c	2017 ^c	2018 ^c	2019 ^c
LHR2	Automatic	95.54	95.54	47.9	46.4	44.2	47.0	48	43	42
HIL	Automatic	91.10	91.10	52.8	57.5	51.9	51.2	53	46	45
HI1	Automatic	96.79	96.79	45.0	44.4	48.4	42.9	46	36*	34*
HI3	Automatic	99.41	99.41	39.2	36.7	34.5	41.9	35	35	33
HRL	Automatic	99.02	99.02	37.1	36.5	32.0	34.0	32	30	31
SIPS	Automatic	97.43	97.43	36.5	36.6	33.7	35.2	34	30	30
HIL1	Automatic	96.56	96.56	30.4	29.2	28.0	27.0	27	25	28
T55	Automatic	98.82	98.80	33.5	35.1	32.2	34.4	32	30	31
T54	Automatic	83.79	83.79	34.2	32.6	27.4	31.0	26	28	26
HIL5	Automatic	99.65	99.65	47.0	52.9	46.2	45.9	47	43	41 (37.5)

Notes: Exceedance of the NO₂ annual mean AQO of 40 µg m⁻³ are shown in **bold**

NO₂ annual means in excess of 60 µg m⁻³, indicating a potential exceedance of the NO₂ hourly mean AQS objective are shown in **bold** and underlined (no such cases are present)

^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%)

^c Means were “annualised” in accordance with LLAQM Technical Guidance, when valid data capture is less than 75%

^d This is a triplicate measurement. Two of the monitors had a data capture of 66.7% and were annualised – see Appendix A3 for further details

Brackets indicate concentration at relevant exposure

* Relocation of station to provide room for a foot path. This meant a slight shift away from the road and more representative of public exposure

Table D2. Annual mean NO₂ ratified and bias-adjusted monitoring results ($\mu\text{g m}^{-3}$) for 2019 for the diffusion tubes.

Site ID	Site type	Valid data capture for monitoring period % ^a	Valid data capture, 2019, % ^b	Annual Mean Concentration ($\mu\text{g.m}^{-3}$) ^c						
				2013 ^c	2014 ^c	2015 ^c	2016 ^c	2017 ^c	2018 ^c	2019 ^c
HILL01	Diffusion Tube	75.0	75.0	43.4	47.3	41.1	34.3	45.3	42	38.6
HILL02	Diffusion Tube	75.0	75.0	47.6	46.3	42.8	42.8	40.1	40.7	36.9
HILL03	Diffusion Tube	66.7	66.7	45.8	46.7	43.2	40.2	46.7	43.4	35.5
HILL04	Diffusion Tube	75.0	75.0	33.2	32.4	28.9	26.8	28.2	28.5	27.8
HILL05	Diffusion Tube	75.0	75.0	39.8	42.6	40.6	32.3	36.1	33.4	34.1
HILL06	Diffusion Tube	66.7	66.7	40.7	46.8	42.3	39	45.6	37.6	35.0
HILL07	Diffusion Tube	75.0	75.0	38.9	40	35.7	34.7	43.3	37.7	36.9
HILL08	Diffusion Tube	75.0	75.0	35.5	35.4	31.4	32.1	33.4	33.9	33.9
HILL09	Diffusion Tube	75.0	75.0	37.9	39.9	35.6	35.5	39.4	37.2	36.4
HILL10	Diffusion Tube	75.0	75.0	38.4	42.1	37.2	34.2	47.5	39.6	39.7
HILL11	Diffusion Tube	58.3	58.3	31.1	31.9	26.8	24.2	27.8	28.5	25.3
HILL12	Diffusion Tube	75.0	75.0	37.5	37.3	34.4	31.9	34	36	33.0
HILL13	Diffusion Tube	75.0	75.0	29.8	30.7	28.7	25.8	26.9	29.5	27.9
HILL14	Diffusion Tube	75.0	75.0	24	23.8	19.8	19.1	22.1	20.5	22.4
HILL15	Diffusion Tube	75.0	75.0	28.6	29.4	24.6	24	24.4	26.9	27.2
HILL16	Diffusion Tube	75.0	75.0	41.7	40.8	35.2	29.4	42.7	38.6	37.7
HILL17	Diffusion Tube	75.0	75.0	35.9	35.5	26.7	26.1	32.7	31	31.6
HILL18	Diffusion Tube	75.0	75.0	43.4	46.8	41.9	40.9	49	38.5	37.4
HILL19	Diffusion Tube	75.0	75.0	38.3	39.7	40.9	32	37	35	34.6
HILL20	Diffusion Tube	75.0	75.0	40	42	41.1	35.9	37.9	36.6	36.6
HILL21	Diffusion Tube	75.0	75.0	29.2	35	30	29.6	34.7	34.9	32.3
HILL22	Diffusion Tube	75.0	75.0	48.3	51	43.3	42.5	45.5	42.4	38.3
HILL23	Diffusion Tube	75.0	75.0	35.9	38.8	34	34.8	34.2	35.1	29.3
HILL24	Diffusion Tube	75.0	75.0	42.3	45.4	38.5	35.5	40	36.9	34.7
HILL25	Diffusion Tube	75.0	75.0	40.5	39.8	37	37.4	45.6	39.3	38.7
HILL26	Diffusion Tube	75.0	75.0	44.5	50.5	43.7	42.1	51.5	42	40.0 (42.2)
HILL27	Diffusion Tube	75.0	75.0	-	38.9	30.7	30.8	33.8	32.5	33.2
HILL28	Diffusion Tube	75.0	75.0	-	-	32.1	32.3	35.7	31.7	31.7
HILL29	Diffusion Tube	100.0	50.0	-	-	-	-	-	-	32.6
HILL30	Diffusion Tube	100.0	50.0	-	-	-	-	-	-	25.3
HILL31	Diffusion Tube	100.0	50.0	-	-	-	-	-	-	32.5

HILL32	Diffusion Tube	100.0	50.0	-	-	-	-	-	-	44.4 (31.6)
HILL33	Diffusion Tube	100.0	50.0	-	-	-	-	-	-	39.5
HILL34	Diffusion Tube	100.0	50.0	-	-	-	-	-	-	35.9
HILL35	Diffusion Tube	100.0	50.0	-	-	-	-	-	-	36.9
HILL36	Diffusion Tube	100.0	50.0	-	-	-	-	-	-	38.5
HILL37	Diffusion Tube	100.0	50.0	-	-	-	-	-	-	39.9
HILL38	Diffusion Tube	100.0	50.0	-	-	-	-	-	-	44.0 (41.8)
HILL39	Diffusion Tube	100.0	50.0	-	-	-	-	-	-	45.7 (41.4)
HILL40	Diffusion Tube	100.0	50.0	-	-	-	-	-	-	35.5
HILL41	Diffusion Tube	100.0	50.0	-	-	-	-	-	-	48.7 (45.3)
HILL42	Diffusion Tube	100.0	50.0	-	-	-	-	-	-	39.6
HILL43	Diffusion Tube	100.0	50.0	-	-	-	-	-	-	39.4
HD49	Diffusion Tube	66.8	25.0	25.4	26.5	22.1	20.9	26.5	23.6	21.7
HD51	Diffusion Tube	100.0	25.0	34.3	36.7	33.3	29.3	32.9	30.6	26.4
HD52	Diffusion Tube	100.0	25.0	38.5	37.6	32.3	30	34	35.3	26.5
HD59	Diffusion Tube	100.0	25.0	35.5	33.6	29.1	30.3	32.6	32.9	27.7
HD65	Diffusion Tube	100.0	25.0	31.5	34.1	29.9	26.7	30	30.9	25.1
HD73	Diffusion Tube	100.0	25.0	27.1	28.1	21.7	32.8	27.7	25.4	20.4
HD75	Diffusion Tube	66.8	25.0	28.5	28.7	23.7	22.8	26.9	25.8	22.5
HD207	Diffusion Tube	100.0	25.0	35.2	38.1	31.2	24.9	33.3	37.1	28.4
HD208	Diffusion Tube	100.0	25.0	29.6	30.5	27.3	28.9	27.3	30.8	26.5
HD209	Diffusion Tube	100.0	25.0	32	33.7	30.5	30.9	32.1	29	24.1
HD401	Diffusion Tube	100.0	25.0	-	-	30	27.6	29.4	28.6	24.7

Notes: Exceedance of the NO₂ annual mean AQO of 40 µg m⁻³ are shown in **bold**

NO₂ annual means in excess of 60 µg m⁻³, indicating a potential exceedance of the NO₂ hourly mean AQS objective are shown in **bold** and underlined (no such cases are present)

^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%)

^c Means were "annualised" in accordance with LLAQM Technical Guidance, when valid data capture is less than 75%

^d This is a triplicate measurement. Two of the monitors had a data capture of 66.7% and were annualised – see Appendix A3 for further details

Brackets indicate concentration at relevant exposure

Table D3. Annual Mean NO₂ Ratified and Bias-adjusted Monitoring Results (µg m⁻³). Northwood's Voice Local Group.

Site ID	Site type	Valid data capture for monitoring period % ^a	Valid data capture, 2019, % ^b	Annual Mean Concentration (µg.m ⁻³) ^c			
				2016 ^c	2017 ^c	2018 ^c	2019 ^{cd}
A	Diffusion Tube	100	100	40.6	37.1	41.8	34.4
B	Diffusion Tube	100	100	35.7	31.6	35.4	31.5

Notes: Exceedance of the NO₂ annual mean AQO of 40 µg m⁻³ are shown in **bold** NO₂ annual means in excess of 60 µg m⁻³, indicating a potential exceedance of the NO₂ hourly mean AQS objective are shown in **bold** and underlined (no such cases are present)

^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%)

^c Means were "annualised" in accordance with LLAQM Technical Guidance, when valid data capture is less than 75% (does not apply to either site).

Brackets indicate concentration at relevant exposure

^d Bias adjustment used the average national value of 0.87

Table E. NO₂ Automatic Monitor Results: Comparison with 1-hour Mean Objective.

Site ID	Valid data capture for monitoring period % ^a	Valid data capture 2019 % ^b	Number of Hourly Means > 200 µg.m ⁻³						
			2013 ^c	2014 ^c	2015 ^c	2016 ^c	2017 ^c	2018 ^c	2019 ^c
LHR2	95.54	95.54	3	0	2	8	12	0	1
HIL	91.10	91.10	0	0	1	2	0	0	0
HI1	96.79	96.79	0	0	0	2	2	0	0
HI3	99.41	99.41	1	0	2	0	1	0	0
HRL	99.02	99.02	5	0	0	0	0	0	0
SIPS	97.43	97.43	0	0	3	0	0	0	0
HIL1	96.56	96.56	0	0	1	0	0	0	0
T55	98.82	98.80	0	0	0	0	0	0	0
T54	83.79	83.79	0	0	0	0	0	0	0
HIL5	99.65	99.65	4	2	2	1	12	0	0

Notes: Exceedance of the NO₂ short term AQO of 200 µg m⁻³ over the permitted 18 days per year or where the 99.8th percentile exceeds 200 µg m⁻³ are shown in **bold**. Where the period of valid data is less than 85% of a full year, the 99.8th percentile is shown in brackets after the number of exceedances.

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%)

c) Means are “annualised” in accordance with LLAQM Technical Guidance, if valid data capture is less than 75% (does not apply to any of the sites).

Table F. Annual Mean PM₁₀ Automatic Monitoring Results (µg.m⁻³).

Site ID	Site name	Valid data capture for monitoring period % ^a	Valid data capture 2019 % ^b	Annual Mean Concentration (µgm ⁻³)						
				2013 ^c	2014 ^c	2015 ^c	2016 ^c	2017 ^c	2018 ^c	2019 ^c
LHR2	Heathrow	99.85	99.85	24.6	18.6	13	15	15	14	13
HI1	South Ruislip	96.45	96.45	22.6	23.2	24	22	17	17	17
HI3	Oxford Avenue	95.02	95.02	21	21.5	21	20	19	24	24
HRL	London Harlington	97.15	97.15	20	19.6	16	15	15	15	15
HIL1	Hillingdon Harmondsworth	97.35	97.35	21.9	21	22	23	23	18	15
HIL4	London Harmondsworth Osiris	98.89	98.89	17.4	12.1	17	16	14	16	14
T55	Heathrow Green Gates	98.26	98.26	20.4	17	14	14	13	14	13
T54	Heathrow Oaks Road	80.59	80.59	21	18.2	14	15	14	15	15
HIL5	Hillingdon Hayes	97.61	97.61	29.4	34.5	28	28	27	30	28

Notes: Exceedance of the PM₁₀ annual mean AQO of 40 µg m⁻³ are shown in **bold**.

^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%)

^c Means should be “annualised” in accordance with LLAQM Technical Guidance, if valid data capture is less than 75%

Table G. PM₁₀ Automatic Monitor Results: Comparison with 24-Hour Mean Objective.

Site ID	Site name	Valid data capture for monitoring period % ^a	Valid data capture 2019 % ^b	Number of Daily Means > 50 µgm ⁻³						
				2013 ^c	2014 ^c	2015 ^c	2016 ^c	2017 ^c	2018 ^c	2019 ^c
LHR2	Heathrow	99.85	99.85	12	6	3	3	7	1	6
HI1	South Ruislip	96.45	96.45	10	18	3	9	6	1	3
HI3	Oxford Avenue	95.02	95.02	6 (34)	6	3	11	4	2	4
HRL	London Harlington	97.15	97.15	9	6 (36)	3	5	3	1	6
HIL1	Hillingdon Harmondsworth	97.35	97.35	7	7	4	4	6	1	0
HIL4	London Harmondsworth Osiris	98.89	98.89	2 (34)	0	17	0	1	0	1
T55	Heathrow Green Gates	98.26	98.26	8	2	3	3	3	1	4
T54	Heathrow Oaks Road	80.59	80.59	8	2	5	2	4	1	4
HIL5	Hillingdon Hayes	97.61	97.61	17 (46)	45 (60)	14	32	26	22	25

Notes: Exceedance of the PM₁₀ short term AQO of 50 µg m⁻³ over the permitted 35 days per year or where the 90.4th percentile exceeds 50 µg m⁻³ are shown in **bold**.

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

^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%)

^c Means should be "annualised" in accordance with LLAQM Technical Guidance, if valid data capture is less than 75%

Table H. Annual Mean PM_{2.5} Automatic Monitoring Results (µg.m⁻³).

Site ID	Valid data capture for monitoring period % ^a	Valid data capture 2019 % ^b	Annual Mean Concentration (µgm ⁻³)						
			2013 ^c	2014 ^c	2015 ^c	2016 ^c	2017 ^c	2018 ^c	2019 ^c
LHR2	99.85	99.85	11.0	9.9	9.0	10	9	8	9
HRL	97.15	97.15	14.0	14.0	10.0	10	9	9	10
HIL4	98.85	98.85	-	6.9	7.0	6	7	6	5
T55	98.26	98.26	10.0	10.0	9.0	10	8	7	8
T54	80.59	80.59	10.0	10.0	10.0	10	9	10	10

Notes: Exceedance of the PM_{2.5} annual mean AQO of 25 µgm⁻³ are shown in **bold**.

^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%)

^c Means should be “annualised” in accordance with LLAQM Technical Guidance, if valid data capture is less than 75%

3 Action to Improve Air Quality

3.1 Background

This is the first annual report to incorporate the new diffusion tube monitoring network and the measures undertaken in the new Air Quality Action Plan (adopted in May 2019 and referred to below as the AQAP). Actions being implemented locally such as;

- local neighbourhood improvements,
- cleaner building projects,
- enforcement of no idling zones and
- the implementation of the first new north-south bus route,

will enhance measures taken regionally such as;

- the introduction of tighter London Low Emission Zone standards,
- the implementation of the Ultra Low Emission Zone,
- the introduction of Low Emission Bus routes and
- direct interventions on the use of diesel fuelled vehicles in London.

The new Air Quality Action Plan has been developed taking account of GLA guidance. It has been further developed to ensure that it reflects specific issues affecting the Borough, in particular the role of external stakeholders such as Heathrow Airport and Highways England that have a significant effect on air quality within the Borough. Within the Council, the development of the plan was influenced particularly by:

- Residents' Environmental Services Policy and Overview Committee (RESPOC)
- Air Quality Action Plan Steering Group, overseen by Residents Services Senior Management Team (SMT)
- Air Quality Action Plan Officer Group

It was also informed by a full consultation with stakeholders.

Specific objectives for the AQAP were defined as:

- a) improve the areas of poorer air quality as soon as possible;
- b) to continue to improve air quality across the Borough and reduce public exposure to air pollution, especially for vulnerable groups within our communities such as the young, the old and those already suffering with associated respiratory illnesses.

The Council defined the priorities for the new action plan as:

- *Lead by example*
- *Prioritise reducing public exposure and improving air quality around schools*
- *Prioritise the implementation of improvement strategies in the Air Quality Focus Areas*
- *Ensure the integration of the Healthy Streets approach in relevant council work programmes*

- *Ensure the planning system supports the achievement of air quality improvements in relation to new developments*
- *Raise awareness via targeted campaigns*
- *Promote the use of greener walking and cycling routes to help the delivery of the Council's transport objective of an increased mode share for walking and cycling*
- *Work with external stakeholders*

3.2 AQAP Highlights 2019

This section discusses a number of actions where good progress has been made since adoption of the new AQAP. Measure numbering relates to that used in the AQAP, measures are marked 'GLA selected priority measure' to identify those considered most significant by the GLA.

Measure 3: Non-Road Mobile Machinery (GLA priority measure)

Non-Road Mobile Machinery (NRMM) on construction sites accounts for around 7% of NO_x and 8% of PM₁₀ emissions in London. To tackle the issue the Mayor of London has imposed a NRMM Low Emission Zone across London with minimum standards set for the equipment used on the major construction sites. This is enforced via the planning regime where a planning condition requiring compliance is put on all relevant developments.

In 2019 the Council was awarded MAQF funds to work in partnership with other local authorities to fund Cleaner Construction for London to carry out audit compliance checks for NRMM across each participating borough. A selection of the major construction sites in each participating authority were audited throughout the year. For sites where non-compliance issues were found the officers worked with the construction site managers to work towards compliance as soon as possible. The final year report for the project over all participating boroughs estimated early emission savings equivalent to taking 250,000 cars off the road.

From a total of 34 sites audited in Hillingdon the compliance rate was 81%. From a 71% compliance of the sites inspected in the time period July-September, this increased to 87% compliance in the period October to December. Most non-compliance issues found on the initial site visits were due to non-registration on the NRMM website as opposed to having non-compliant equipment on-site. In the vast majority of cases this was easily rectified and the sites were judged compliant. In two cases non-compliant equipment was found and this was voluntarily removed and replaced within an agreed timescale. A total of 6 sites remained non-compliant, 4 due to a failure to register on the NRMM website in the agreed timescale and 2 due to a failure to remove non-compliant equipment from site within an agreed timescale.

Measure 5: Enforcement of Air Quality Neutral Policy

Following the Examination in Public, the Hillingdon Local Plan Part 2 was formally adopted in January 2020. The relevant Air Quality policy is set out below:

Policy DMEI 14: Air Quality:

- A. Development proposals should demonstrate appropriate reductions in emissions to sustain compliance with and contribute towards meeting EU limit values and national air quality objectives for pollutants.
- B. Development proposals should, as a minimum:
 - i. be at least “air quality neutral”;
 - ii. include sufficient mitigation to ensure there is no unacceptable risk from air pollution to sensitive receptors, both existing and new; and
 - iii. actively contribute towards the improvement of air quality, especially within the Air Quality Management Area.

Air quality neutral assessments are requested on all relevant developments. Where emissions are above benchmarks the developer is requested to provide appropriate mitigation to reduce this. However, the benchmarks still allow for a certain degree of "pollution". Therefore, in particularly sensitive areas, such as AQ Focus Areas, where the pollution levels are already too high, mitigation is sought to address the total uplift in emissions. Where these cannot be addressed by the developer, an S106 obligation is sought, based upon the pollution damage cost of the uplift in emissions, post mitigation. These costs are used to meet the requirements of section B iii) of the policy above. Examples are given in Appendix E.

Measure 7: Promoting and enforcing smoke control zones (GLA priority measure)

In declared smoke control areas the burning of fuel is only permitted if both the fuel itself and the appliance in which it is burned are on the DEFRA exempt lists. In London the increased popularity of wood burning stoves in domestic premises has been linked with increasing emissions in PM_{2.5}, estimated as contributing to between 23 and 31% of emissions of this finer fraction of particulate matter across London. With exposure to particulate matter, and especially the finer PM_{2.5}, identified as contributing to a number of serious health effects, reducing the emissions and hence public exposure is expected to bring about benefits in health. The Government's Clean Air Strategy has set out a path by which the sales of bagged traditional house coal and wet wood (in units under 2m³) will be phased out by February 2021, as will the sale of loose coal direct to customers via approved coal merchants by February 2023, allowing the public time to switch to cleaner alternatives.

Research suggests that many Londoners are unaware they live in a Smoke Control Zone and are therefore unaware of the restrictions this brings in terms of what can be burned and in which appliances. Local Authorities can raise awareness of the issue in order to help address this problem. Information available on Hillingdon's website has been enhanced (October 2019) by specific information in the Hillingdon People magazine. This included information on what it means to live in a smoke control zone, the smoke control area regulations and signposting to information on compliant fuels and appliances. The magazine has a circulation of 113,000 individual households with an additional 4,000 for distribution via libraries, leisure centres and other Council establishments.

In regards to reducing other forms of potential smoke the Council offers every resident a free garden waste collection service, aiming to reduce the need for garden bonfires. In

2019, 825 tonnes of garden and kitchen waste were collected. In terms of the enforcement of domestic dust and smoke issues, officers attended 255 incidents in April 2019-March 2020.

The advice on the need to reduce emissions to air from these sources has been repeated regularly since the Covid 19 lockdown using the Council's social media updates. This highlights the need to avoid using wood burning stoves or lighting bonfires especially in these current times.

Measure 8: Emissions from developments and buildings, promoting energy efficiency (GLA priority measure)

In 2019/2020 the council replaced 210 individual boilers plus an additional 14 boilers serving communal areas. The new boilers all meet the standards as set in the GLA Sustainable Design and Construction SPG. In terms of enhancing energy efficiency in the buildings, 706 fire doors were also replaced. For new developments, this is enforced by the planning regime where all relevant approved developments are conditioned to ensure the installation of ultra-low NOx boilers. The implementation of the Hillingdon Climate Strategy will help direct the continued reduction of emissions from this source.

Measure 17: Reducing emissions from council fleets

In 2019/2020 a total of 77 fleet vehicles were replaced. This included a number of specialist vehicles such as road sweepers, refuse collection vehicles and cage tippers. All new vehicles are Euro VI and therefore meet the standards of the ULEZ.

The introduction of 8 new staff pool cars is currently under consideration, these will include fully electric vehicles and hybrid vehicles. The appropriate EV charging infrastructure will be installed into the Council staff car park

Measure 12: airTEXT (GLA priority measure)

London-wide episodes of high pollution happen a few times each year. It is vital that people are kept fully informed and can respond accordingly. Timely air pollution data gives vulnerable people a chance to act to protect themselves, for example by reducing their exposure or simply by carrying their medication. The service airTEXT is a pollution alert warning system. Advice is given on anticipated pollution events via phone, email and social media. The pollution alerts are sent out to signed up members as well as the alerts being sent automatically to schools, care homes and GP surgeries.

The Council has been part of the airTEXT partnership since its inception. The data recorded below is for the time period April 2019 - November 2019 so represents eight months of the reporting year. In Hillingdon this time period included 16 separate pollution events, of which there were 4 in April which coincided with a Sahara Dust event. A total of 3,551 alerts were sent out across the 176 members in Hillingdon, the majority of these via email and text.

Information is available on the Council website and in the Hillingdon People magazine. The magazine has a circulation of 113,000 individual households with an additional 4,000 for distribution via libraries, leisure centres and other Council establishments.

Measure 14: Air quality in and around schools (GLA priority measure, incorporates Measures 13, 21, 22)

Reducing public exposure and improving air quality around schools is a key priority of the AQAP. The following gives an update on the work carried out this year.

- Reducing public exposure

Following the successful implementation of green barriers at three educational establishments close to busy roads under the AQAP in previous years, support was given to continue this for all relevant schools in the Borough. The selection criteria included schools where there was no protective buffer between play areas and the nearby road, with priority given in terms of timescales to those within poorer air quality areas(identified by the Mayor of London pollution at schools list 2016) and where there was exposure to busy roads. In 2019/2020 five schools were identified for action. These were:

- Cherry Lane Primary School
- Minet Infant and Juniors School
- Yeading Infants School
- Newnham School
- Holy Trinity School



Figure 10. Tree planting at Cherry Lane primary school

Some schemes have been completed, others have been impacted by the Coronavirus lockdown and will be continued once this is lifted. A list of the remainder of schools in the Borough where the play areas are close to busy roads has been compiled. This will be implemented over the next 18months/2 years.

- Air quality awareness education package

An air quality education package has been trialled at a school located in one of the declared air quality focus areas in the south of the Borough. The package consisted of five lessons covering sources of pollution, health effects, an air quality monitoring exercise with the results mapped, the production of a school clean air walking route map and the production of a student-led news film based on the lessons. The importance of communicating the impacts of air pollution with parents, teachers and the local community was a common thread throughout the lessons as a means of changing behaviour, for example encouraging active travel. A further ten schools were identified for similar education packages in the current school year. Delivery has, however, been postponed until after lockdown is lifted and the schools are ready to be able to incorporate this work into their timetables.

- Engagement with schools on active travel

Active engagement with schools in Hillingdon has continued and there is now a total of 16 schools accredited on STARS, 10 as gold, 3 silver and 3 bronze. The parent parking pledge initiative which includes encouraging active travel as well as pledges to not idle vehicles around schools, is now set up in 24 schools. The cycling and pedestrian training programme has delivered pedestrian training and cycle training to 14,420 and 1,213 people respectively. There is additional support for family cycle training.

Given the situation with the Coronavirus lockdown, schools are not able to focus on issues such as School Travel Plans or on applying for accreditation under the STARS scheme. Recognising this issue TfL have automatically extended accreditation for a year.

- No idling (measure 21)

The Council has a successful enforcement regime in place in regard to idling vehicles. In 2019/2020 1,029 fines were issued, the vast majority of these still in the wards around Heathrow with high levels of complaints from residents impacted by minicabs waiting for fares from the airport.

Building on this success the Council sought funding via the MAQF to take part in a London-wide project to raise awareness of the impact of idling vehicles. The Council has prioritised the first events in this year as raising awareness around schools.

Two no idling events have been held in Hillingdon, one at Whiteheath Primary School and the other at the Guru Nanak Sikh Academy. The events included air quality workshops followed by group activity outside the schools. Participating children approached drivers in the area at school pick up times, advising them of the impacts of idling vehicles on health and asking idling drivers to switch their engines off.



Figure 11. No idling event at Whiteheath Primary School.

Both events were well run and there was very positive engagement from the schools. The two events engaged with 600 pupils in terms of the air quality workshops designed to raise their awareness of air pollution, the impacts on their health and how simple things like switching off engines and coming to school by walking, cycling or scooting instead of driving can help improve the pollution levels around their schools.

The action events outside the schools involved the pupils engaging with around 73 drivers. Whilst most drivers were supportive and either not idling while waiting or switching off their engines when asked, there was a more pronounced problem around Guru Nanak in terms of the number of idling vehicles. Another five schools have been identified for the next financial year, although arrangements are currently postponed until after lockdown restrictions are lifted.

To help reinforce the message the Council has now installed no idling signs around every school in the Borough along with other identified hotspot locations. This is in addition to the camera enforcement on the School Keep Clear zigzags. Between May 2019 and 31st January 2020 a total of 2,781 fines were issued for parking in the restricted areas close to the schools in the Borough. Whilst this demonstrates that action is being taken, it also highlights that a significant problem remains.

- Introduction of a School Street pilot scheme (measure 22)

A 'School Street' is a pedestrian and cycle only zone outside a school that is implemented at key periods around school pick-up and drop-off times. The creation of a 'School Street' can help in tackling congestion problems outside schools; reducing road safety risks and improving air quality at the school gates, whilst making it easier and safer to walk and cycle to school.

Highfield Primary School is located at the end of Charville Lane West, Hillingdon. The school is working proactively with the Council's School Travel and Road Safety Team (STARS) to increase their active travel but further concerns were raised by the Headmistress in regard

to potential safety issues during the school run when traffic drops off pupils in very close proximity to the school entrance, including parking in the 'School Keep Clear' section directly outside the school.

Following a public consultation with the school, parents and people in surrounding residential areas, a pilot School Street scheme was started in January 2020. The intention was for a 6-month trial with subsequent evaluation as to whether the restrictions should be made permanent. The scheme is currently suspended until lockdown restrictions are lifted.

Measure 18: Greening the Borough / Green infrastructure

In addition to the planting of trees and hedges at schools, the 2019/2020 period has seen a vast increase to the number of trees planted around the Borough. Our annual tree planting scheme has been enhanced with the tree scheme from the Mayor of London (77 trees) and Trees for Cities (5,000 trees), plus a Council-led 5,000 free trees for residents and community groups.

Amenity areas, such as well-used parks close to busy roads, are being investigated for the inclusion of hedging to act as a pollution barrier. The first project has been taken forward in Ruislip where a park used for recreation and Saturday markets is close to a busy roundabout.

Measures 19, 20, 25: Creating healthy streets and neighbourhoods

One of the priorities of the AQAP is to develop and implement improvement strategies in the Air Quality Focus Areas where the pollution levels are highest. In 2019/2020 the recommendations for two Focus Areas, namely Hayes and A40/Long Lane were reported. The studies were led by the need to secure local air quality improvements, incorporate the Healthy Streets approach and look to account for other council concerns such as flooding to develop a holistic and cost-efficient approach.

- North Hyde Road

The proposals for North Hyde road focus on reducing congestion and improving walking and cycling links from residential areas to Cranford Park, and to Hayes and Harlington Station. Further complementary measures are developed to both protect and shield against poor air quality and to encourage changes in behaviour to reduce the traffic in the area. The proposed new scheme would implement footway widening to enable extensive street tree planting and kerbside planting along the length of North Hyde Road, and develop an environment that is pedestrian and cyclist friendly whilst accommodating the needs of parking, servicing and safe vehicular movement. In order to achieve this the widened footways are proposed to be shared use for pedestrians and cyclists. An illustration of the proposed works is provided in Figure 12:

The full scheme is forecast to lead to a significant increase in scores for both Healthy Streets and Clean Air. The implementation of the project will be subject to Cabinet Member approval and to the availability of funding. The recommendation will be made to take forward the phase where the air pollution is the highest as a priority.



Figure 12. Architect’s vision for changes to a section of North Hyde Road (before and after).

- Long Lane

The Long Lane proposals focus on reducing congestion particularly on the approach to the A40/Western Avenue / Freezeland Way junction. Proposed measures include reducing rat-running through residential areas and improving walking and cycling links to encourage a modal shift from private car usage towards walking and cycling. Complementary measures to these traffic interventions will be included to both protect and shield against poor air quality (i.e. through greening) and to encourage changes in behaviour to reduce road traffic in the area.

The implementation of the project will be subject to Cabinet Member approval and to the availability of funding. The recommendation will be made to take forward the phase where the air pollution is the highest as a priority.

- Town Centre and Shopping Parades schemes

These focus on specific areas with improvements to the public realm and incorporation of the Healthy Streets indicators. The example below (Figure 13) focuses on a shopping parade in close proximity to the Uxbridge Road. The proposal includes widening of the pavements to enhance the separation of pedestrians from the Uxbridge Road along with the inclusion of cycle stands.

Additional improvements have been carried out in Uxbridge Town Centre with new trees, footway widening for pedestrian access and cycle stands. The Hayes Town Centre improvements have been concentrated around the arrival of Crossrail with the integration of an extended continuous cycle way and the introduction of a 20mph zone throughout.

Ruislip Town centre is an Air Quality Focus Area and is the subject of a Ruislip Healthy Neighbourhoods bid. The Council is currently waiting for the outcome of the evaluation and decision from TfL.



Figure 13. Proposed improvements to a shopping parade close to the Uxbridge Road.

- Eastcote town centre scheme

The Eastcote town centre scheme has now been implemented. This incorporates the concept of rain gardens at the susceptible parts of road system where flooding has occurred. This has provided an additional buffer area between pedestrians and emissions from the road. Further measures include the incorporation of new planter benches which have been installed at four locations with the dual benefit of providing seating with additional urban greening. The Eastcote scheme has won an award in the ICE London Civil Engineering Awards for multi-functional benefits for a Town Centre.



Figure 14. Rain garden and planted seating as part of the Eastcote town centre scheme.

- Access to Cranford Park

Cranford Park is a large green open space close to Hayes yet has relatively poor access for pedestrians and cyclists. It is hoped to maximise the attractiveness of Cranford Park by creating a welcoming and safe experience for pedestrians and cyclists along the route between the Hayes Housing Zone and the heart of Cranford Park when crossing the M4.

Measures are being developed to link the Grand Union Canal Quietway scheme with the M4 Subway via North Hyde Gardens and Watersplash Lane where improvements works have already been undertaken. This will complement the measures being undertaken in the Air Quality Focus Area study for North Hyde Road and provide further opportunities for active travel in this area.

Measures 26 to 30: Working in partnership

Many sources of pollution in Hillingdon are not under the direct influence of the Council. The information below summarises actions taken by our key partners:

- TfL

There have been successful joint operations with TfL on no idling, especially around the Heathrow Villages where idling minicabs, serving the airport, have been a persistent problem. The Council enforcement officers issue fines for no idling offences and TfL staff audit the paperwork to ensure minicabs identified in this process are properly licensed.

- Heathrow

An update has been requested from Heathrow but not received by the time of publication of this report.

- HE (Highways England)

Regular updates are provided from HE on the progress of the M4 Smart Motorway scheme. The Council has offered access to the data from air quality monitoring undertaken by the Council in close proximity to the M4. This will help the HE evaluate the Smart Motorway project's impacts on air quality.

- HS2

HS2 has engaged with the Council in regard to monitoring sites for dust to be placed around construction sites in the Borough. Progress and monitoring data updates will be included in the next ASR.

3.3 Air Quality Action Plan Progress

Table J summarises progress against each measure for the original action plan in the reporting year (2019). The column headed 'Progress' provides an indication of the status of each measure, as follows:

- **Complete:** Measures for which objectives have been met and further action is not required. Few measures will fall into this category during the life of the AQAP, as most will need monitoring and enhancement for some time to come.
- **Ongoing:** Measures which are fully in place but require continuing action. Examples include providing access to information on public transport, the implementation of school travel plans and annual reporting on progress with the action plan.
- **In progress:** A small number of measures that are not fully implemented but for which the council believes that additional resource or interest from external organisations would be of benefit.
- **Yet to start:** Measures for which resources have yet to be identified.
- **Stopped:** This would include measures that were concluded following the receipt of information after the development of the AQAP to not warrant implementation, with resource better spent elsewhere.

Specific progress in the reporting year is also documented in this column. The column headed 'Further information' provides additional details on the overall implementation of each measure.

It will be noted that many actions are 'ongoing'. For some of these the actions taken in the reporting year carry on from the earlier AQAP. Continued action in these areas will of course be dependent on continued funding.

Table J. Delivery of Air Quality Action Plan Measures.

	Action	Progress	Further information
1a	Maintaining and where possible expanding monitoring network	Ongoing. Current automatic network is maintained, additional automatic monitor brought into the network November 2019 by Heathrow Airport Ltd, located on the Bath Road, data will be available for 2020 reporting. Full review of diffusion tube monitoring network to ensure appropriate coverage across the Borough including in AQ Focus Areas. New monitoring network in place July 2019.	Output//target/KPI - 2019 review of monitoring complete
1b	Fulfilling other statutory duties including regulation of industrial sources	Ongoing, the regulation of industrial processes is undertaken by a contractor, any requirement for enforcement action is referred back to the Council. All inspections required in the reporting year were completed. Of the 49 industry permits in the Borough, 1 was revoked and 2 were surrendered. An additional 32 petrol stations were inspected on the Borough's behalf by the London Fire Brigade.	
2	Ensuring emissions from construction are minimised	Ongoing via planning, Policies in place. 100% of all planning applications in 2019/2020 included the construction dust condition.	Two complaints arising from commercial construction sites, resolved following site visits
3	Ensuring enforcement of Non-Road Mobile Machinery (NRMM) air quality policies (addresses emissions from e.g. building sites regarding cranes, generators, etc.)	Ongoing, via planning, Policies in place. 100% of all planning applications in 2019/2020 included the NRMM condition; Audits undertaken by Cleaner Construction for London on behalf of the Council (MAQF project). 34 site audits undertaken of which 10 were self-compliant, 15 worked towards and achieved compliance and 6 sites failed and were reported non-compliant. Of the 6 non-compliant the reason was failure to register on	

	Action	Progress	Further information
		the NRMM website, the remaining 2 did not adhere to the timescale for removal of non-compliant equipment.	
4	Reducing emissions from CHP	Ongoing, with policies in place. enforced by planning condition where applicable	No known CHP in Hillingdon, but it is covered in Planning Guidance (Mayor of London's Sustainable Planning SPG)
5	Enforce Air Quality Neutral (AQN) policy with more stringent application of mitigation required in the Hillingdon Focus Areas	Ongoing action via planning, Local Plan part 2 adopted January 2020, the air quality policy states developments must be "at least air quality neutral"; AQN assessments requested on 100% of all planning applications in 2019/2020; 39 planning apps required pollution damage cost calculations and s106 was sought and secured where relevant and ring-fenced to improve air quality in the Authority's area.	See Appendix E for planning apps for more detail
6	Ensuring adequate, appropriate, and well-located green space and infrastructure is included in new developments.	Ongoing. Via planning regime, specific green infrastructure barriers and green buffers are sought in areas where residential and amenity spaces are in proximity to busy roads, this is extended to footpaths and cycle pathways in association with the development in relevant cases. See examples from North Hyde Road and Eastcote town centre in main text.	Specific planning condition to be used seeking a green infrastructure scheme designed to protect public exposure. Where bespoke pollution green infrastructure schemes are presented consideration is given to a 5-10% reduction in the associated pollution damage cost.
7	Raise awareness that Hillingdon is a declared Smoke Control Zone along with Council enforcement powers for non-compliance through an article in Hillingdon People magazine and distribution of point of sale posters/leaflets to fuel suppliers	Ongoing. Awareness campaign enhanced by specific information in the Hillingdon People magazine (Sept/Oct 2019). This included information on what it means to live in a smoke control zone, the smoke control area regulations and signposting to information on compliant fuels and appliance. The magazine has a circulation of 113,000 individual households with an additional 4,000 for distribution via libraries, leisure centres and other Council establishments.	The advice has been flagged regularly since the Covid 19 lockdown using the Council's social media updates to ask residents to avoid using wood burning stoves or lighting bonfires especially in these current times. There were 255 investigations undertaken including smoke/odour/fumes and bonfire emissions, unfortunately the data capture does not allow for further breakdown. Over 77% of these have been resolved, the remainder are awaiting further details.

	Action	Progress	Further information
		The Council offers every resident a free garden waste collection service, this aims to reduce the need for garden bonfires. In 2019 825 tonnes of garden and kitchen waste were collected. Construction sites are regulated via the planning regime which ensures bonfires on sites are not permitted.	
8	Promoting and delivering energy efficiency and energy supply retrofitting projects in workplaces and homes through EFL retrofit programmes such as RE:NEW and RE:FIT and through Borough carbon offset funds.	Ongoing. A total of 210 boilers were replaced in 2019/20 financial year. An additional 14 boilers were replaced across 6 communal locations; 706 fire doors were replaced. All relevant developments are subject to a condition securing the installation of energy sources which are compliant with the Mayor's Sustainable Design and Construction SPG	All new boilers conform to the GLA requirements in terms of emissions. The implementation of the Climate Strategy will ensure continued reductions in emissions from these sources are prioritised.
9	Master planning and redevelopment areas aligned with Air Quality Positive and Healthy Streets approaches	Ongoing. Healthy Streets approaches are included in all relevant LIP projects; Relevant planning applications, especially in Air Quality Focus Areas, are requested to have an air quality positive approach	The early release of Air Quality Positive guidance from GLA would help local authorities enforce this more consistently.
10	Public Health department taking shared responsibility for Borough air quality issues and implementation of Air Quality Action Plans	Ongoing. Air quality and health have been incorporated into the Hillingdon Improvement Programme for regular updates on actions.	Hillingdon Asthma Friendly Schools update- given the current COVID 19 situation this will need to be reported next year
11a	Development of promotional tool for use at business engagement opportunities to raise awareness of initiatives to increase active travel and improve air quality	Yet to start. The MAQF bid for the west London Cluster group to develop a promotional tool for business engagement was unsuccessful;	
11b	If MAQF bid unsuccessful, seek funding for development of Hillingdon-specific promotional tool and business engagement action plan	In progress, The funding for a Hillingdon specific business engagement tool will be considered in 2020/2021; All council town centre redevelopment schemes include consultation with local businesses, this will be investigated as a	

	Action	Progress	Further information
		<p>means of promoting the use of low and zero emission technologies.</p> <p>The Council has introduced a Targeted Problem Solving Group working with partners including the Police, Fire Brigade, TfL, Housing associations and a range of Council departments. There is a rolling programme of events at community hubs utilising supermarkets and community halls to engage with residents and local businesses.</p> <p>Information on air quality such as no idling and airTEXT has been included in the programme for dissemination at these events. Going forward, the Programme will incorporate a 'health focus' by engaging with medical centres and PH teams.</p>	<p>The Targeted Problem Solving events engaged directly with 2258 people in the programme 2019/2020</p>
12	Supporting a direct alerts service such as AirText and promotion and dissemination of high pollution alert services	<p>Ongoing. Raising awareness of airTEXT was enhanced by a specific campaign in the Hillingdon People magazine. The magazine has a circulation of 113,000 individual households with an additional 4,000 for distribution via libraries, leisure centres and other Council establishments.</p> <p>The data below is for the 8 month period April 2019 - November 2019. There are currently 176 members signed up in Hillingdon a total of 3551 alerts were sent out, the majority of these via email and text.</p> <p>There has been an increase of 12 new subscribers in this eight month period, an increase of around 7%.</p>	<p>The Action Plan target is for a 10% increase in members there has been a 7% increase in an eight month period which would roughly equate to a 10% increase if pro-rated for a year.</p>
13	Encourage schools to join the TfL STARS accredited travel planning programme	<p>Ongoing. Active engagement with schools in Hillingdon has continued and there is now a total of 16 schools accredited on STARS, 10 as gold, 3 silver and 3 bronze.</p> <p>The parent parking pledge initiative which includes encouraging active travel as well as</p>	<p>Given the current situation with lockdown, schools are not able to focus on issues such as School travel plans or on applying for accreditation under the STARS scheme. Recognising this issue TfL have automatically extended accreditation for a year.</p>

	Action	Progress	Further information
		pledges to not idle vehicles around schools, is now set up in 24 schools. The cycling and pedestrian training programme has delivered pedestrian training and cycle training to 14,420 and 1,213 people respectively There is additional support for family cycle training.	
14	Air quality in and around schools - the introduction of a prioritised programme for schools in Focus Areas and/or close to busy roads for exposure reduction measures, active travel promotion and raising awareness education programmes	Ongoing. The target to identify a further five schools in 2019/2020 for pollution exposure reduction measures in terms of pollution barriers has been met; The remainder of schools in the Borough with playing areas close to busy roads have been identified and a programme of implementation of green barrier will be rolled out over the next 2 years; A trial has been undertaken of the delivery of an air quality and active travel education package. A further 10 schools were identified to receive this within this school year. However, delivery has been impacted by lockdown and school closures; Active travel at all schools is recorded under Action measure 13	Some of these have been completed, others have been impacted by lockdown and will be prioritised once lifted. The Mayor's green infrastructure to protect people guidance has been used in determining species choice and appropriate planting schemes.
15	Council procurement policies to promote use of cleaner vehicle technologies via contract tendering process	Ongoing. All council contracts stipulate FORS registered and a minimum of EuroV1/6. The specific inclusion of low/zero emissions technologies will be investigated in 2020/2021.	
16	Inclusion of opportunities in new developments and current town centre and transport improvement workstreams to reduce emissions from deliveries to local businesses and residents	Ongoing. See also 11b Planning conditions stipulate the requirement for Delivery and Servicing plans to be a minimum of FORS silver award. This includes the requirement to report on fuel usage and emissions of CO2, NOx and PM emissions plus a policy to actively reduce fuel consumption and minimise their environmental impact.	The requirement for delivery and servicing plans to aim for achievement of FORS gold award within a agreed timescale will be considered for developments in Air Quality Focus Areas.

	Action	Progress	Further information
17	Reducing emissions from council fleets	Ongoing. The council fleet replacement programme included the upgrade of 77 specialist vehicles to Euro V1. These all meet the ULEZ standard. Permission is currently being sought for the purchase of eight pool cars which will be low/zero emission technology. Electric equipment for the green spaces teams is being trialled, estimations of the fuel savings and emission benefits in terms of local air quality are being calculated for use in the business case for procurement if the equipment proves reliable.	
18	Green Infrastructure	Ongoing. The Council tree planting scheme has been enhanced with the tree scheme from the Mayor of London (77 trees) and Trees for Cities (5,000 trees), plus a Council-led 5,000 free trees for residents and community groups. Amenity areas such as parks, where they are well-used and close to busy roads, are being investigated for the inclusion of hedging to act as a pollution barrier. The first project has been taken forward in Ruislip.	
19	Implementation of actions to improve air quality in the Hillingdon Air Quality Focus Areas to identify short, medium, long term solutions for measures to implement to improve air quality	Ongoing. The first two Air Quality Focus Area (Hayes and Long Lane) studies have been completed. The recommendations are being considered for implementation in a phased approach starting in 2020/2021 providing funding is available.	Whilst the potential solutions have been identified, substantial funding will be required to see the projects through to full implementation. A phased approach will be taken starting with recommendations for the areas within the Focus Areas where the pollution levels are the highest.
20	Ensuring that Transport and Air Quality policies and projects are integrated via the implementation of the Healthy Streets in LIP projects	In progress. The Oak Farm residential area has been subject to a successful, residents-led Healthy Streets Transport Study. The outcome is a series of recommendations which would allow the Oak Farm area to be characterised by the ten Healthy Streets indicators. Implementation will be taken forward in phases via the LIP.	The Oak Farm area is in close proximity to the A40/Long Lane Air Quality Focus Area; The recommendations outlined for this Focus Area in action 19 will further enhance this residential area.

	Action	Progress	Further information
21	Discouraging unnecessary idling by taxis and other vehicles	Ongoing. <u>MAQF No idling project</u> Two events were successfully held in Hillingdon. They involved over 600 children and engaged with 77 drivers. <u>Hillingdon specific actions</u> No Idling signage is in place at every school in the Borough and in identified hotspots. Camera enforcement is in place on the School Keep Clear zigzag lines, 2,781 fines were issued from May 2019-31 st January 2020 across the schools in the Borough. The Council has continued with enforcement of idling vehicles across the Borough, the total number of fines issued was 1,029.	Five schools have been identified for the 2020/2021, arrangements are currently postponed until lockdown restrictions are lifted. This has been temporarily paused during lockdown with staff deployed to social distancing enforcement.
22	Regular temporary car free days	In progress. The council is trialling a school street scheme following concerns over road safety issues in a congested area near the school. This started in January 2020 but is temporarily postponed due to lockdown.	
23	Using parking policy to reduce pollution emissions	Yet to start. Investigation of this issue has been postponed until 2020/2021	
24a	Installation of Ultra-low Emissions Vehicle (ULEV) infrastructure (electric vehicle charging points, rapid electric charging points and hydrogen refuelling stations)	In progress. The Council is currently undergoing procurement processes for a new service provider for the EV network. When complete, all of the Council network will be audited. With the introduction of EV pool cars additional infrastructure will be considered for the staff council car parks.	Waiting for information on the rapid charger from Borough Transport.
25a	Provision of infrastructure to support walking and cycling	Ongoing. Taken forward by the LIP programmes including the Grand Union Canal Quietways link between Hayes and Cranford Park. This will give residents in Hayes a pedestrian/cycle route choice to access Cranford Park.	

	Action	Progress	Further information
25b	Air Quality Focus Area studies, Healthy Neighbourhoods schemes, Town Centre schemes will all include the identification of opportunities for increased walking and cycling	Ongoing. Four schemes in Hayes End, Uxbridge, Hayes and Springfield Road have been completed in 2019/2020. All schemes have prioritised the requirement for increased walking and cycling alongside improvements to public realm. The Ruislip Healthy Neighbourhood bid is currently being evaluated by TfL.	
26	Continue to work in partnership with TfL to prioritise actions required to improve local air quality in Hillingdon	Ongoing. There have been successful joint operations with TfL in regard to no idling, especially around Heathrow Villages. The Council enforcement officers issue fines for no idling offences and the TfL staff audit the paperwork to ensure the minicab is properly licensed. The Council will engage with TfL in regard to the implementation of recommendations of the Air Quality Focus Area studies as both are impacted by access to and the operation of TfL roads e.g. the Hayes Bypass for North Hyde Road and the A40 for Long Lane.	
27	Continue to work in partnership with Heathrow Airport Limited (HAL), seeking clear strategy and framework to: Reduce airport related traffic; Mitigate adverse air quality impacts associated with on-airport operations	In progress. Information awaited from Heathrow	
28	Continue to work in partnership with Highways England to ensure effective mitigation of arising air quality impacts on the local communities	Ongoing. Regular updates are provided about the progress of the M4 Smart Motorway scheme. The Council has offered access to the data from air quality monitoring undertaken by the Council in close proximity to the M4. This will help the HE evaluate the project in regard to the impacts on air quality.	
29	Continue to work in partnership with HS2 Ltd to ensure effective mitigation of any arising air quality impacts on the local communities relating to HS2 construction activities	Ongoing. Monitoring sites for dust around construction sites in Hillingdon are being installed. Progress and monitoring data will be updated via the ASR system.	

	Action	Progress	Further information
30	Continue to work in partnership with neighbouring authorities to ensure collaboration on air quality where it will benefit the local communities	In progress. The West London cluster group was unsuccessful in its bid to the MAQF in regard to the development of a business engagement tool. The group will continue to meet periodically to take forward joint actions and share best practice.	Meeting held via Skype 25 th March with the West London Cluster Group

4 Planning Update and Other New Sources of Emissions

4.1 Planning applications relevant to air quality

Planning applications that have relevance to air quality are routinely assessed by the Council. Table K provides information on the total numbers of applications assessed. Further information on these applications is provided in Appendix C.

Table K. Planning Requirements Met by Planning Applications in London Borough of Hillingdon in 2019.

Action	Number	Notes
a) Number of planning applications where an air quality impact assessment was performed	39	
b) Number of planning applications required to monitor for construction dust	0	
c) Number of CHPs/Biomass boilers refused on air quality grounds	0	
d) Number of CHPs/Biomass boilers subject to GLA emissions limits and/or other restrictions to reduce emissions	24	Relates to cases where the energy supply is not yet defined
e) Number of developments required to install Ultra-Low NO _x boilers	24	As above
f) Number of developments where an AQ Neutral building and/or transport assessments undertaken	39	32 by the applicant, 7 by Hillingdon
g) Number of developments where the AQ Neutral building and/or transport assessments not meeting the benchmark and so required to include additional mitigation	30	
h) Number of planning applications with S106 agreements including other requirements to improve air quality	34	
i) Number of conditions related to Non-Road Mobile Machinery included.	24	

4.2 New or significantly changed industrial or other sources

No new sources have been identified, but the potential further development of Heathrow is noted. The Council continues to monitor progress on this issue. For Part B industrial processes 1 permit has been revoked and 2 have been surrendered.

5 Discussion

5.1 A brief history

The position in 2004

- Pollution levels were observed to be particularly high around Heathrow Airport and the major road network. Through traffic was a major contributor to pollution as well as local traffic. Public transport provision was inadequate especially in the north-south axis of the Borough, and this was seen as an obstacle for modal shift;
- Designing local actions specifically on improving air quality that took specific account of the characteristics of pollution hotspots was relatively new. Actions taken under the UK's earlier Clean Air Acts had introduced measures like clean air zones across large areas, for example the whole of London.
- Local authorities were encouraged to look at all actions with the potential to improve air quality. This led to a large number of actions being included in the original AQAP;
- The development of action plans raised the profile of air quality and started to influence planning policy and transport policy;
- The scientific evidence started to build for a positive switch to cleaner technologies for energy and for road vehicles.
- Hillingdon published, and started to implement, its first AQAP.

The position now

Since 2004 a vast amount of new medical evidence has been published that has highlighted the urgency of improving air quality.

The original action plan was implemented with most actions taken through to completion. However, pollution levels remain high in the Heathrow Airport area and the major road network. Through traffic remains a major contributor as well as local traffic. Increased population and increased road traffic have outweighed some of the benefits of cleaner technologies. The anticipated benefits of the original AQAP were hampered particularly by the proliferation of diesel vehicles and a failure of motor manufacturers to market vehicles that met emission standards on the road, outside of test conditions. Whilst the information provided here regarding air pollutant concentrations shows a gradual improvement in conditions, progress has taken longer than originally thought. The new AQAP provides renewed focus on the areas of the Borough with the highest pollutant exposures, and it is hoped will enable faster progress to compliance with the current air quality limit values.

Consideration may need to be given to compliance with the World Health Organization's (WHO) Air Quality Guidelines. A revision of the guidelines is due for publication in the coming year.

5.2 Challenges and opportunities

Climate action provides a significant opportunity for the funding of cost-efficient measures that are good for air quality as well as climate. However, there are a number of possible challenges to the successful implementation of the AQAP, including the development of HS2

(in the short term) and in the longer term, the M4 Smart Motorway, Heathrow expansion and the economic consequences of the COVID pandemic on the availability of funding.

Climate Change

In January 2020 Hillingdon Council declared a climate change emergency and laid out its intentions for the Borough to meet ambitious targets via the development of a Climate Change Strategy with a target to become carbon neutral by 2030.

Active measures to improve air quality can also have corresponding impacts on reducing carbon emissions. For example: deterring unnecessary idling reduces fuel use and improves air quality in local pollution hotspots; the installation of green barriers using hedging and tree planting around school playfields for the protection of public exposure adds to the overall aim to increase the urban greening and planting of trees Borough-wide; actions to reduce road traffic such as school travel plans and workplace travel plans reduce fuel use as will actions through the planning regime for developments to be clean by design in terms of emissions. Relevant actions from the Climate Strategy will be reported in the ASR in future years.

Care is needed, however, to ensure that the potential for some measures taken to reduce greenhouse gas emissions to increase air pollution is avoided. Such measures include promotion of diesel fuel use and the burning of biomass, such as wood.

HS2

Following a costs review the Government has now given the go ahead for the High Speed 2 line to be constructed. There will be a number of construction sites in Hillingdon facilitating a tunnel portal, a vent shaft, re-location of the Hillingdon Outdoor Activity Centre, construction of a viaduct and a number of areas where spoil will be permanently dumped. The construction sites are located in the north of the Borough with the A40 providing the main access route to the sites. This has the potential for construction traffic to increase traffic volumes on sensitive parts of the congested road network such as around the Swakeleys junction with the A40 and residential areas around Ickenham and Ruislip.

M4 Smart Motorway

The development of the Smart Motorway is ongoing with 2020 set to include major weekend road closures. The project is due to be completed by 2022. The scheme will bring a continuous running lane closer to the residential areas of West Drayton in the west towards junction 4b and Hayes in the east towards junction 3. The Council raised its concerns over the potential air quality implications of this at the time of the Development Consent Order hearing. The Council has now increased its monitoring network to include a site closer to junction 4b, and has maintained the site closer to junction 3. The Defra-owned London Hillingdon AURN is close to junction 4 therefore the assessment of any potential impact can be identified and appropriate mitigation sought from HE.

Heathrow Expansion

In June 2019 the Council responded to Heathrow Airports' pre-DCO application consultation on Heathrow Expansion. Whilst the volume of the preliminary environmental impact report (PEIR) consultation was substantial, detailed information was lacking. In terms of air quality it was clear the construction and operation period would bring increased levels of pollution upon thousands of people over a prolonged period. The text below is the Council's conclusion in regard to the air quality assessment:

In the absence of any account taken of uncertainty throughout the modelling process the results, as they are presented, cannot be accepted as demonstrating accurate predictions. The study areas for both the air quality assessment and the traffic model have not been demonstrated to be sufficient in terms of capturing the likely significant effects. The mitigation measures are un-quantified in terms of their potential benefits on air quality; therefore, robust conclusions cannot be made in terms of their effectiveness.

The PEIR has not demonstrated compliance with air quality limits and is, in the Council's opinion, therefore unlawful. The assessments, as presented, have failed to give weight in terms of properly identifying the significance of the increases in pollution across substantial numbers of people. The PEIR has not demonstrated an improvement in air quality as planning policy dictates it should and the implementation of the DCO Project will have eroded the health benefits that, in its absence, could have accrued to a substantial number of people.

The Heathrow consultation ran alongside legal action taken on environmental grounds, with the Council one of the key local authorities involved. The action included the failure to demonstrate that Heathrow expansion could comply with legal obligations to meet legal standards alongside a failure to take climate change appropriately into account. Following action in March 2019 at the Divisional Court followed by the Appeal Court in October 2019, the judgement announced by the Appeal Court in February 2020 confirmed the Airports National Policy Statement, which supported Heathrow expansion, as unlawful in regard to its approach to climate change.

The DCO application was expected to be submitted in the latter part of 2020, the judgement has had the effect to put a further delay into this process. The impact of the coronavirus pandemic may push this delay still further.

Funding for 'ongoing' measures

Successful implementation of the AQAP requires continued funding of the plan, much of it from sources outside the control of the Borough Council. This could be put in doubt as a result of the economic consequences of the COVID-19 pandemic.

5.3 COVID-19

The response to the pandemic provides an opportunity to understand how air quality changes under drastic changes in traffic volumes and to a lesser extent for Hillingdon, industrial activity. The month of March saw the start of the Government intervention for restraining

the spread of COVID-19, starting with the recommendation for social distancing measures on 16th March through to full lockdown on the 23rd March. In this month significant drops in pollution levels were recorded across all sites in the Borough. Analysis by Ricardo⁶ for Hillingdon shows the extent to which NO₂ and NO_x concentrations fell between lockdown on March 23rd, through to May 12th, comparing measured data with a hypothetical business as usual (BAU) scenario representing concentrations that would have been observed in the absence of lockdown.

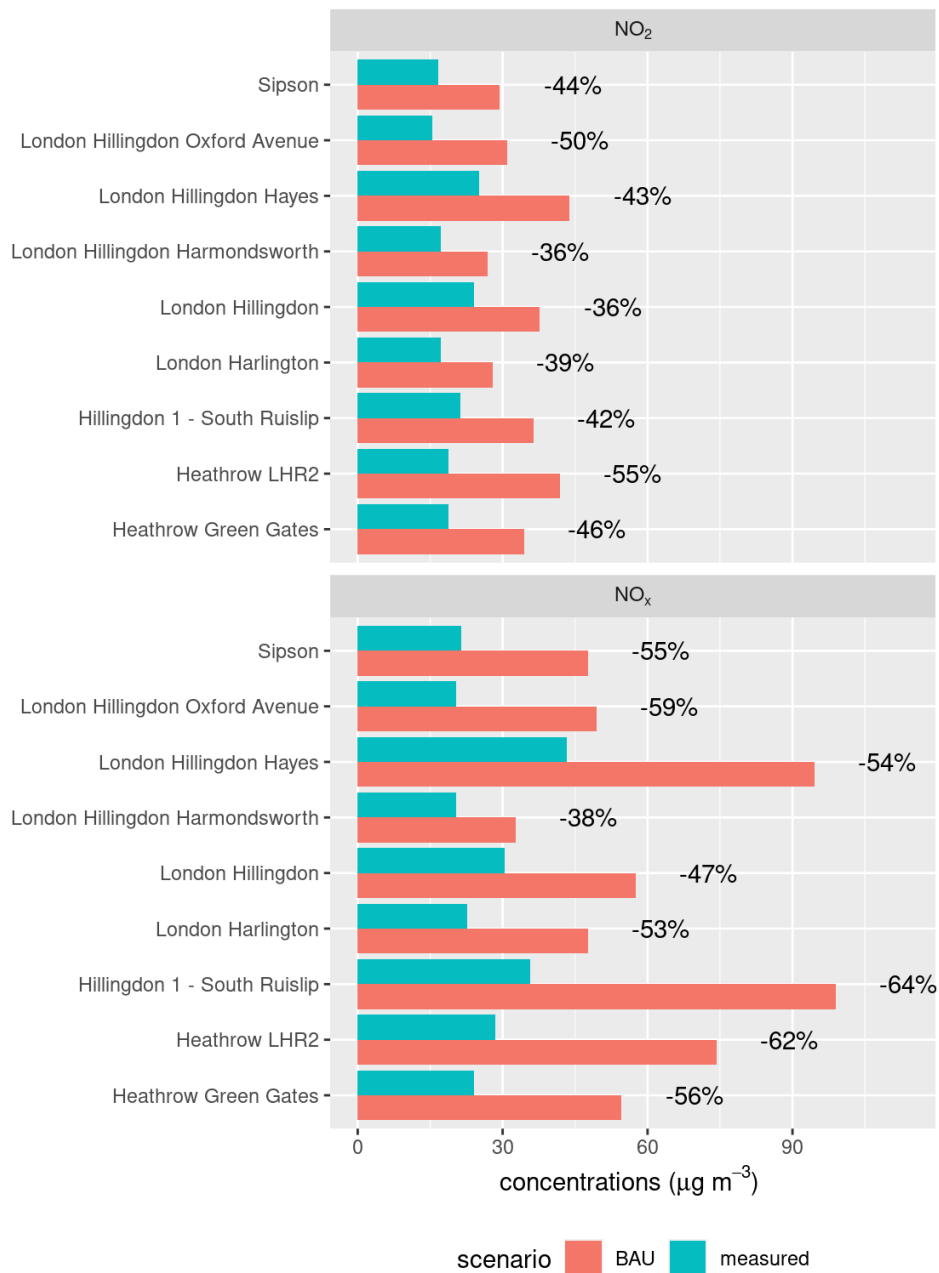


Figure 15. Estimated effect of lockdown on NO₂ and NO_x concentrations up to May 12th 2020.

⁶ https://www.airqualityengland.co.uk/assets/reports/199/Hillingdon_report_covid_analysis.html

Concentrations of NO_x combine nitrogen monoxide (NO) and nitrogen dioxide (NO₂) and are thus higher than NO₂ alone. The figure shows non-linearity in the percentage reductions of NO_x and NO₂, linked to atmospheric chemistry of the different molecules.

In the longer term, data can be compared with road and air traffic volumes to understand what drives these results and the extent of traffic reductions needed to achieve required pollution savings. Variability between sites also needs careful investigation given different influences at different times. It was noted in the early days of lockdown, that monitoring stations such as the site close to the Hayes Bypass/North Hyde Road showed rather small reductions. However, this site was subject to a high volume of HGV delivery traffic in response to consumer demand around the time of lockdown.

An important challenge will be to understand how the benefits observed for air quality can be locked in as the country returns to "normal", post-lockdown.

Appendix A Details of Monitoring Site QA/QC

A.1 Automatic Monitoring Sites

Automatic monitors within Hillingdon are operated as part of the Borough monitoring network, the Heathrow Airport monitoring network and Defra’s AURN. Data have been provided and ratified by Ricardo-AEA following the national procedure guidance and standards.

All TEOM data have been converted to gravimetric equivalent using the VCM method and BAM data have been corrected by applying a factor of 0.8333. All data are reported at ambient temperature and pressure.

A.2 Diffusion Tube Quality Assurance / Quality Control

Hillingdon uses Gradko International for their diffusion tube analysis. These are prepared using the 50% TEA in acetone method. The bias adjustment factor for Gradko in 2019 (as per March 2020 issue), obtained from the national bias adjustment spreadsheet (based on 8 studies) is 0.87. Using background and roadsides only (7 studies), the national bias adjustment is 0.89. Gradko International follows the procedures set out in the Practical Guidance.

Whilst co-location studies have been carried out within Hillingdon, it was not possible to calculate a local bias adjustment factor due to the poor data quality observed at the location used for this purpose during 2019. As such, the bias adjustment factor for 2019 derived from the national bias adjustment spreadsheet has been used. The use of a national bias adjustment factor is in line with the approach taken in recent progress reports published by Hillingdon, ensuring a consistency in reported results.

A.3 Adjustments to the Ratified Monitoring Data

Where data capture is less than 75% of a full calendar year (less than 9 months), the means have been “annualised” using the methodology outlined in LLAQM.TG(16) before being compared to annual mean objectives. Data adjustment factors are shown in the following tables for the periods January to March, and July to December (Table L).

Table L. Dates for Period Mean Short-Term to Long-Term Monitoring Data Adjustment.

Month	Start Date	End Date
Jan	11/01/2019	15/02/2019
Feb	15/02/2019	08/03/2019
Mar	08/03/2019	05/04/2019
Jul	03/07/2019	08/08/2019
Aug	07/08/2019	05/09/2019
Set	05/09/2019	03/10/2019
Oct	03/10/2019	06/11/2019
Nov	06/11/2019	04/12/2019
Dec	04/12/2019	31/12/2019

Regarding the annualisation procedure, given the reporting year's mixture of situations, and to secure some consistency across sites which were continued under different management, 3 generic adjustment factors were calculated and applied to three different situations:

- a) Jan - March - for diffusion tubes discontinued April onward
- b) July - December - for new diffusion tubes delayed by Ricardo for the last 6 months of the year
- c) Jan - March/July - December - for those diffusion tubes sampled by LBH for the first 3 months and continued later on by Ricardo from July till December.

Therefore, diffusion tubes were adjusted according to the category they would fall in, and not individually as if it was a single monitoring campaign consistent across 2019.

A.4 Distance Adjustment

Where an exceedance is measured at a monitoring site which is not representative of public exposure, it is recommended to use the procedure specified in LLAQM.TG(16) to estimate the concentration at the nearest receptor. This process was followed in this report and concentrations reported accordingly.

Appendix B Full Monthly Diffusion Tube Results for 2019

Table M1. NO₂ Diffusion Tube Results – London Borough of Hillingdon.

Site ID	Valid data capture for monitoring period % ^a	Valid data capture 2019 % ^b	Annual Mean NO ₂														Annual mean – raw data ^c	Annual mean – annualised and bias adjusted ^{cd}
			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec				
HILL01	75.0	75.0	49.5	54.4	25.8	missing	missing	missing	35.5	47.2	40.0	41.5	45.8	50.4	43.4	38.6		
HILL02	75.0	75.0	42.5	44.6	39.1	N/D	N/D	N/D	40.1	35.2	43.4	41.2	49.0	38.1	41.5	36.9		
HILL03	66.7	66.7	56.0	44.0	41.8	N/D	N/D	N/D	missing	36.5	40.4	41.2	48.5	37.9	43.3	37.1		
HILL03	66.7	66.7	57.0	45.7	40.5	N/D	N/D	N/D	missing	34.8	36.3	40.5	46.5	36.9	42.3	36.2		
HILL03	66.7	66.7	n/a	n/a	n/a	N/D	N/D	N/D	missing	30.9	38.9	40.3	47.5	36.4	38.8	33.2		
HILL04	75.0	75.0	37.0	34.3	27.5	N/D	N/D	N/D	25.8	22.9	31.4	30.4	44.0	27.5	31.2	27.8		
HILL05	75.0	75.0	47.4	43.7	34.9	N/D	N/D	N/D	31.7	37.4	34.9	39.3	41.7	33.8	38.3	34.1		
HILL06	66.7	66.7	56.8	25.4	missing	N/D	N/D	N/D	37.1	40.6	43.7	45.0	41.5	37.2	40.9	35.0		
HILL07	75.0	75.0	54.5	40.2	37.2	N/D	N/D	N/D	29.7	39.6	39.3	44.0	46.0	42.7	41.4	36.9		
HILL08	75.0	75.0	44.6	56.3	31.0	N/D	N/D	N/D	25.0	31.0	34.9	39.2	45.9	34.7	38.1	33.9		
HILL09	75.0	75.0	51.4	42.5	34.3	N/D	N/D	N/D	33.1	38.5	41.3	38.7	45.8	42.1	40.9	36.4		
HILL10	75.0	75.0	52.4	38.4	34.8	N/D	N/D	N/D	38.3	50.1	45.9	36.6	50.4	54.0	44.5	39.7		
HILL11	58.3	58.3	missing	missing	26.6	N/D	N/D	N/D	24.8	25.8	29.5	30.4	37.6	32.1	29.5	25.3		
HILL12	75.0	75.0	42.2	47.3	35.4	N/D	N/D	N/D	28.6	31.3	34.3	36.7	43.2	34.6	37.1	33.0		
HILL13	75.0	75.0	38.9	34.3	31.9	N/D	N/D	N/D	23.1	22.2	28.8	30.8	42.7	29.6	31.4	27.9		
HILL14	75.0	75.0	33.2	35.4	21.6	N/D	N/D	N/D	16.7	15.3	20.3	24.7	36.6	22.9	25.2	22.4		
HILL15	75.0	75.0	39.1	43.2	25.5	N/D	N/D	N/D	22.9	22.7	25.8	25.0	41.6	28.7	30.5	27.2		
HILL16	75.0	75.0	48.6	44.0	43.7	N/D	N/D	N/D	34.0	38.8	40.5	39.7	47.4	44.2	42.3	37.7		
HILL17	75.0	75.0	41.8	34.8	30.2	N/D	N/D	N/D	25.2	33.3	31.2	36.1	47.2	39.8	35.5	31.6		
HILL18	75.0	75.0	51.2	37.7	36.2	N/D	N/D	N/D	36.1	38.2	40.9	42.9	51.8	42.9	42.0	37.4		
HILL19	75.0	75.0	49.2	44.0	32.6	N/D	N/D	N/D	30.8	32.2	35.9	39.0	47.8	38.5	38.9	34.6		
HILL20	75.0	75.0	48.1	41.1	26.3	N/D	N/D	N/D	38.5	35.9	42.5	35.6	54.9	47.3	41.1	36.6		
HILL21	75.0	75.0	47.0	43.1	31.6	N/D	N/D	N/D	28.6	30.2	36.2	27.4	44.0	38.1	36.2	32.3		

Site ID	Valid data capture for monitoring period % ^a	Valid data capture 2019 % ^b	Annual Mean NO ₂													
			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual mean – raw data ^c	Annual mean – annualised and bias adjusted ^{cd}
HILL22	75.0	75.0	48.6	44.0	43.7	N/D	N/D	N/D	39.6	36.7	42.0	42.7	46.3	43.9	43.1	38.3
HILL23	75.0	75.0	31.1	37.7	32.7	N/D	N/D	N/D	26.6	25.4	32.1	34.1	46.1	30.4	32.9	29.3
HILL24	75.0	75.0	46.8	36.3	35.4	N/D	N/D	N/D	33.3	31.2	40.4	37.5	52.9	36.9	39.0	34.7
HILL25	75.0	75.0	53.0	54.6	37.3	N/D	N/D	N/D	35.1	38.6	40.0	39.3	42.4	50.7	43.4	38.7
HILL26	75.0	75.0	60.8	47.6	37.5	N/D	N/D	N/D	37.5	43.1	41.7	40.4	48.3	47.8	45.0	40.0
HILL27	75.0	75.0	46.6	51.0	32.6	N/D	N/D	N/D	25.9	27.8	35.7	36.0	43.0	36.9	37.3	33.2
HILL28	75.0	75.0	45.8	49.4	31.2	N/D	N/D	N/D	24.6	26.5	34.4	29.5	47.2	31.8	35.6	31.7
HILL29	100.0	50.0	N/A	N/A	N/A	N/A	N/A	N/A	26.7	29.5	28.6	33.9	44.3	39.0	33.7	32.6
HILL30	100.0	50.0	N/A	N/A	N/A	N/A	N/A	N/A	20.7	23.4	24.7	27.7	31.7	28.4	26.1	25.3
HILL31	100.0	50.0	N/A	N/A	N/A	N/A	N/A	N/A	24.0	30.0	31.7	33.0	41.2	41.5	33.6	32.5
HILL32	100.0	50.0	N/A	N/A	N/A	N/A	N/A	N/A	41.1	35.9	49.5	49.4	51.7	47.3	45.8	44.4
HILL33	100.0	50.0	N/A	N/A	N/A	N/A	N/A	N/A	35.6	34.9	37.4	39.8	52.8	44.0	40.7	39.5
HILL34	100.0	50.0	N/A	N/A	N/A	N/A	N/A	N/A	33.0	28.4	31.1	36.0	52.4	41.7	37.1	35.9
HILL35	100.0	50.0	N/A	N/A	N/A	N/A	N/A	N/A	30.3	30.4	37.7	36.4	52.2	41.5	38.1	36.9
HILL36	100.0	50.0	N/A	N/A	N/A	N/A	N/A	N/A	34.2	32.5	40.6	39.3	52.6	39.3	39.8	38.5
HILL37	100.0	50.0	N/A	N/A	N/A	N/A	N/A	N/A	39.6	38.5	42.8	38.8	51.4	36.2	41.2	39.9
HILL38	100.0	50.0	N/A	N/A	N/A	N/A	N/A	N/A	39.1	40.7	48.1	43.2	48.5	53.0	45.4	44.0
HILL39	100.0	50.0	N/A	N/A	N/A	N/A	N/A	N/A	40.8	44.0	39.7	47.1	59.5	51.7	47.1	45.7
HILL40	100.0	50.0	N/A	N/A	N/A	N/A	N/A	N/A	28.4	30.5	37.6	37.2	48.3	37.9	36.7	35.5
HILL41	100.0	50.0	N/A	N/A	N/A	N/A	N/A	N/A	44.1	45.2	47.5	46.1	62.3	56.4	50.3	48.7
HILL42	100.0	50.0	N/A	N/A	N/A	N/A	N/A	N/A	36.1	33.4	33.8	43.4	52.7	45.6	40.8	39.6
HILL43	100.0	50.0	N/A	N/A	N/A	N/A	N/A	N/A	36.1	35.8	38.6	37.4	50.7	45.6	40.7	39.4
HD49	100.0	25.0	39.5	33.8	21.3	D	D	D	D	D	D	D	D	D	31.5	21.7
HD51	100.0	25.0	45.0	39.2	30.7	D	D	D	D	D	D	D	D	D	38.3	26.4
HD52	100.0	25.0	42.0	42.1	31.0	D	D	D	D	D	D	D	D	D	38.4	26.5
HD59	100.0	25.0	49.3	38.5	32.7	D	D	D	D	D	D	D	D	D	40.2	27.7
HD65	100.0	25.0	40.9	40.6	27.7	D	D	D	D	D	D	D	D	D	36.4	25.1
HD73	66.8	25.0	missing	32.2	27.0	D	D	D	D	D	D	D	D	D	29.6	20.4
HD75	100.0	25.0	37.5	34.9	25.2	D	D	D	D	D	D	D	D	D	32.6	22.5
HD207	100.0	25.0	46.9	44.6	31.8	D	D	D	D	D	D	D	D	D	41.1	28.4

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Site ID	Valid data capture for monitoring period % ^a	Valid data capture 2019 % ^b	Annual Mean NO ₂													Annual mean – raw data ^c	Annual mean – annualised and bias adjusted ^{cd}
			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
HD208	100.0	25.0	43.4	43.0	28.8	D	D	D	D	D	D	D	D	D	D	38.4	26.5
HD209	100.0	25.0	45.3	32.2	27.3	D	D	D	D	D	D	D	D	D	D	34.9	24.1
HD401	75.0	75.0	43.9	36.3	27.3	D	D	D	D	D	D	D	D	D	D	35.8	24.7

N/A = means period outside the monitoring survey
 Missing = means diffusion tube deployed but missing = no data
 N/D = means diffusion tube not deployed
 D = means diffusion tube discontinued

Exceedance of the NO₂ annual mean AQO of 40 µg m⁻³ are shown in **bold**.

^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%)

^c Means should be “annualised” in accordance with LLAQM Technical Guidance, if valid data capture is less than 75%

^d National bias adjustment of 0.89 was applied to the data

Table M2. NO₂ Diffusion Tube Results – Green Lane – Northwood’s Voice Local Group

Site ID	Valid data capture for monitoring period % ^a	Valid data capture 2016 % ^b	Annual Mean NO ₂												Annual mean – raw data ^c	Annual mean bias adjusted ^{cd}
			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
A	100	100	42.78	49.52	39.43	41.02	40.56	34.89	34.8	33.27	37.12	38.02	43.22	40.25	39.6	34.4
B	100	100	39.04	50.15	36.28	33.93	33.04	32.71	33.82	31.28	31.35	34.41	41.49	38.13	36.3	31.6

Exceedance of the NO₂ annual mean AQO of 40 µg m⁻³ are shown in **bold**.

^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%)

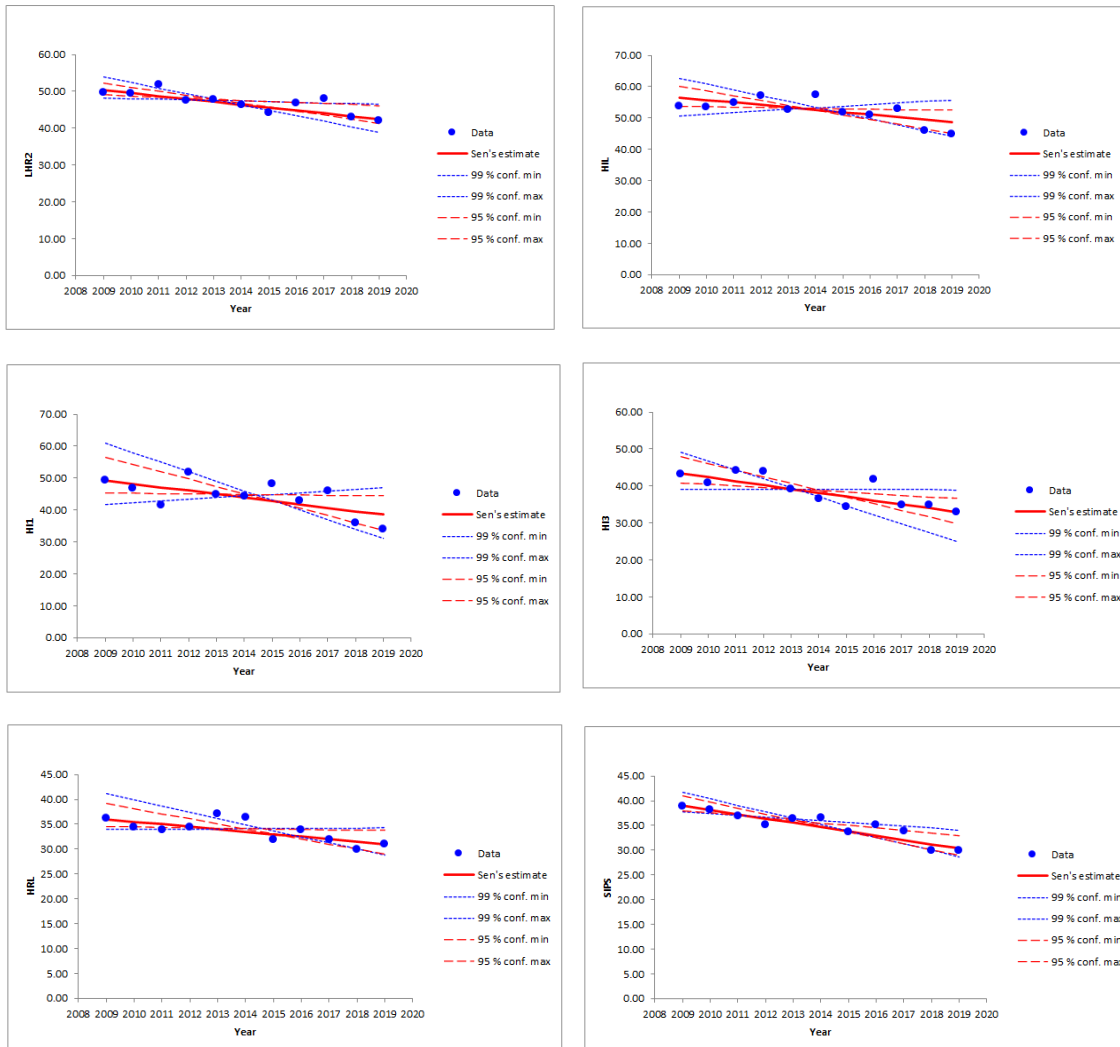
^c Means were “annualised” in accordance with LLAQM Technical Guidance, where valid data capture was less than 75%.

^d National bias adjustment of 0.87 was applied to the data

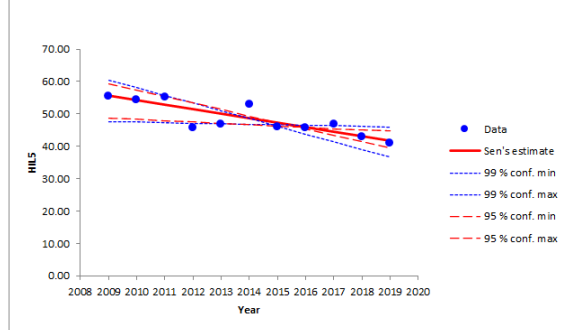
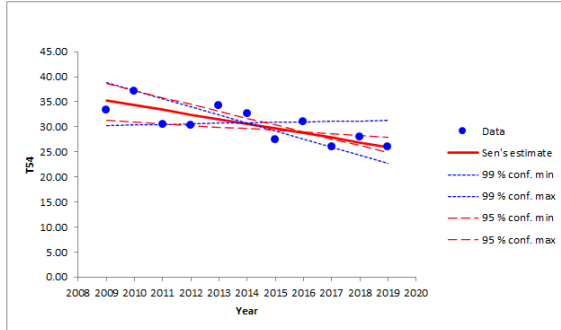
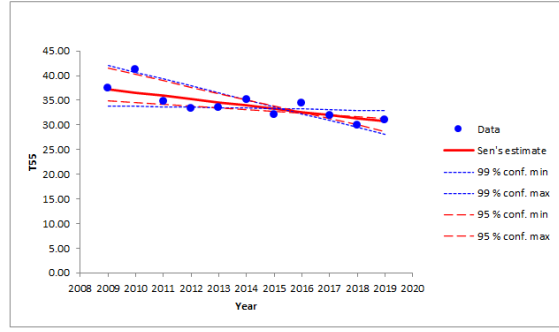
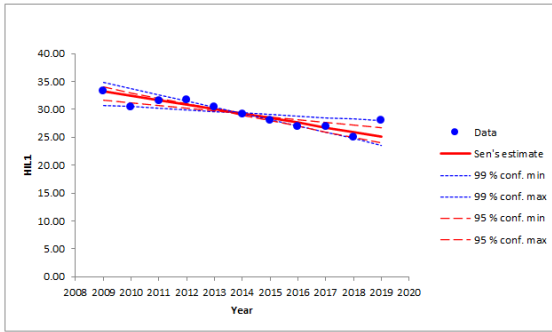
Appendix C Air Quality Pollution Trends in the Borough – Individual Sites

The graphs presented below show the temporal trends per monitoring site over the last ten years of data. Trend analysis for monitoring data across the Borough was calculated using Theil–Sen statistical processing procedures. Confidence intervals were only calculated for time series with 10 years of valid data. All measurements are in $\mu\text{g.m}^{-3}$.

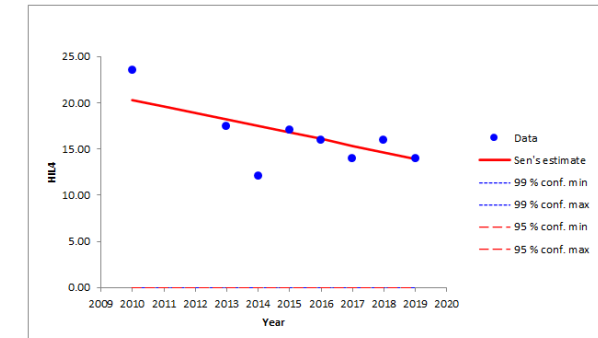
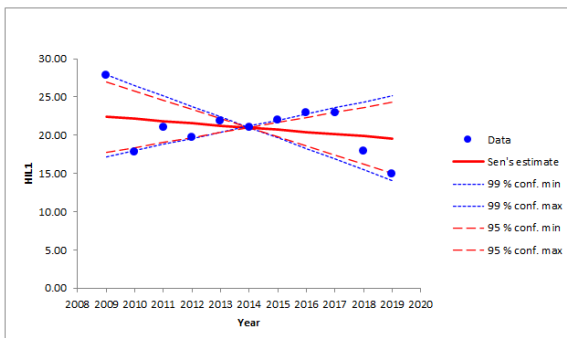
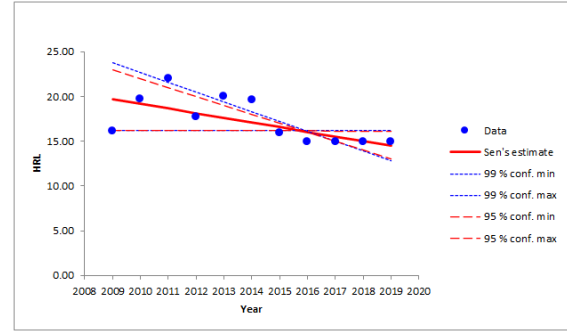
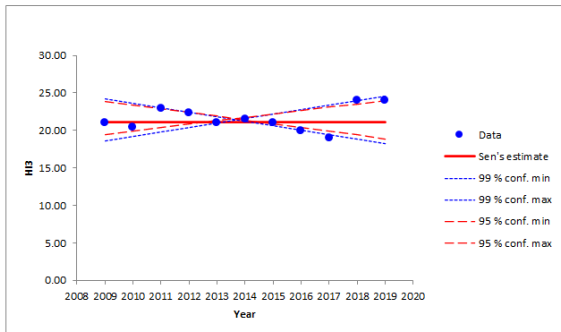
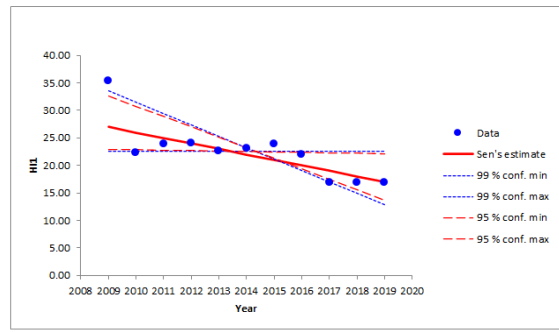
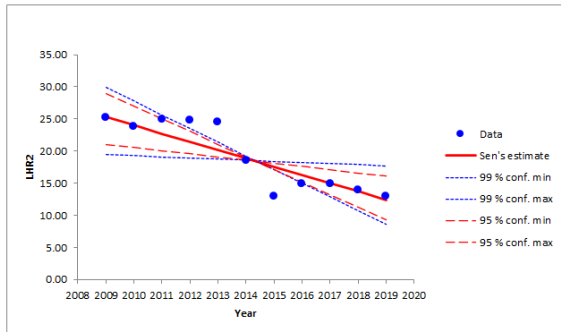
Continuous Monitoring Sites – NO₂

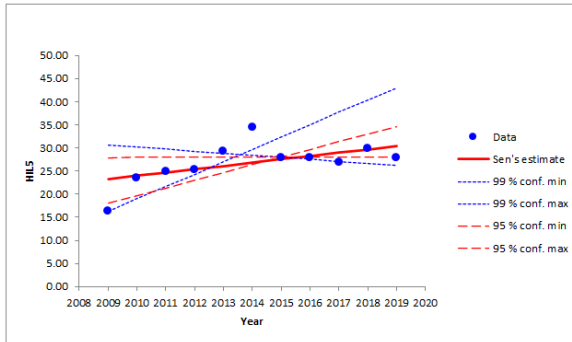
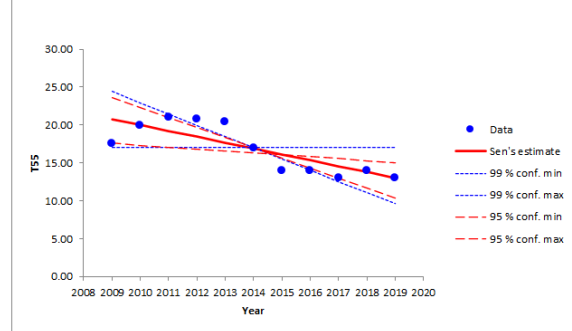
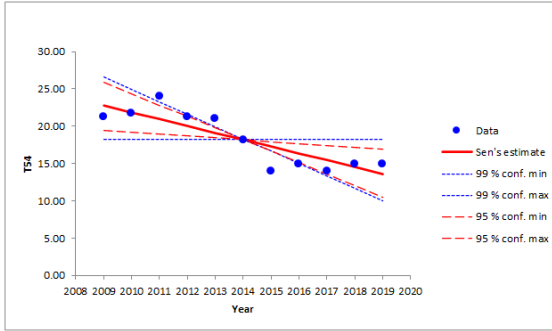


London Borough of Hillingdon

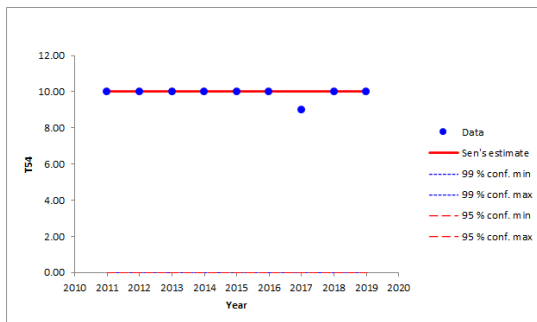
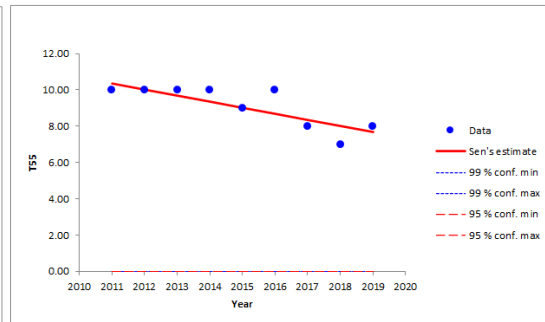
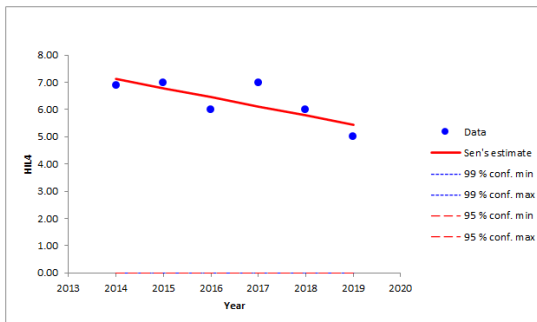
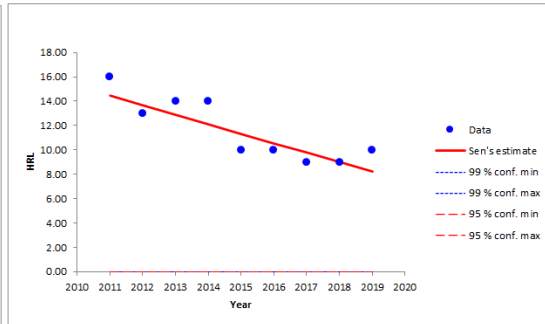
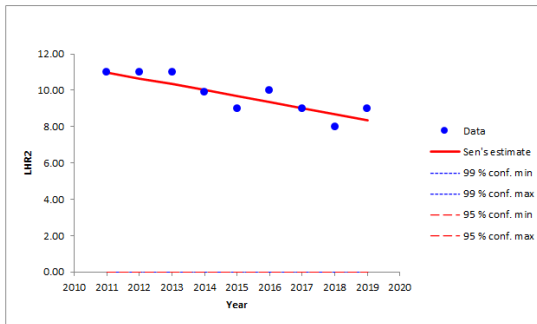


Continuous Monitoring Sites – PM₁₀



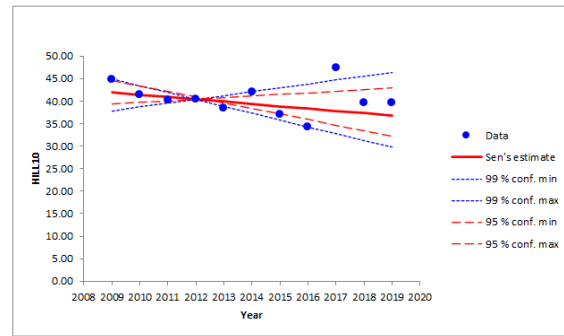
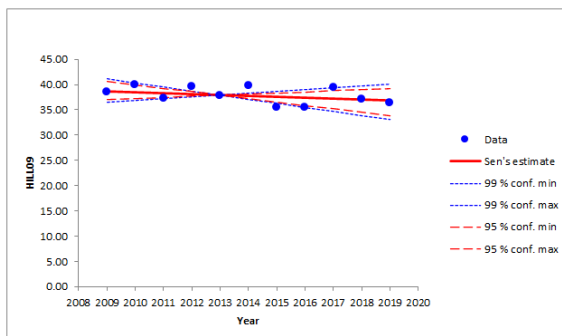
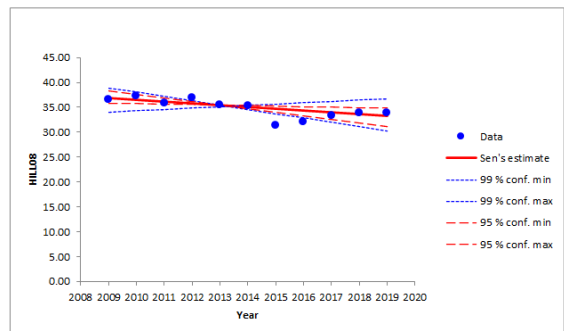
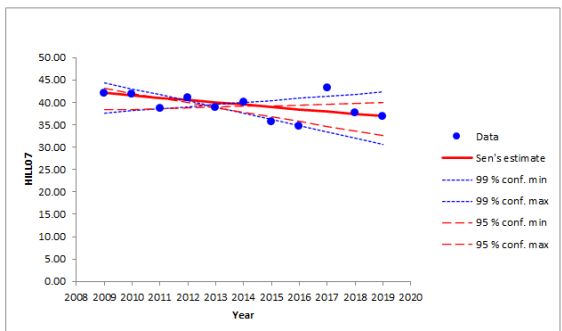
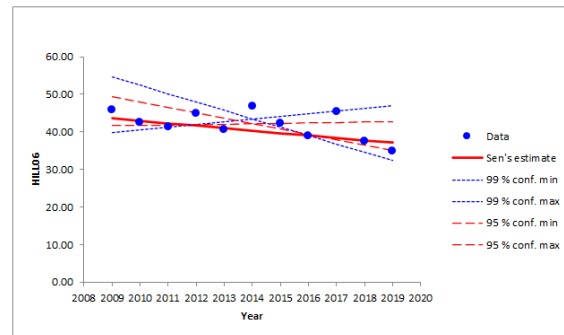
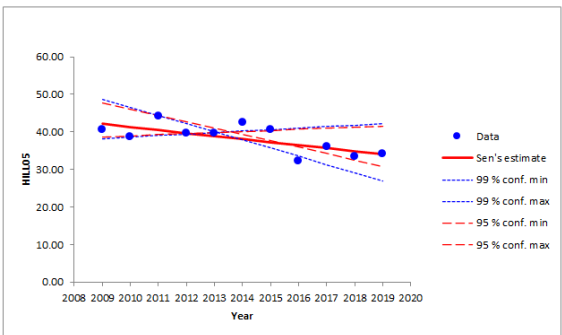
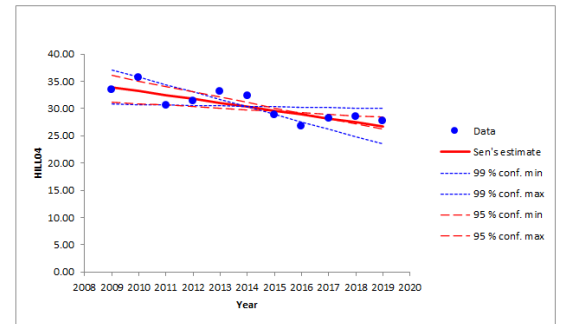
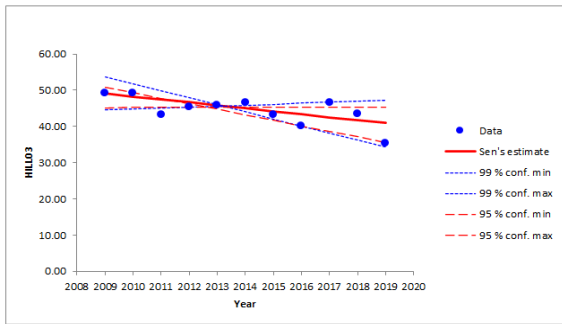
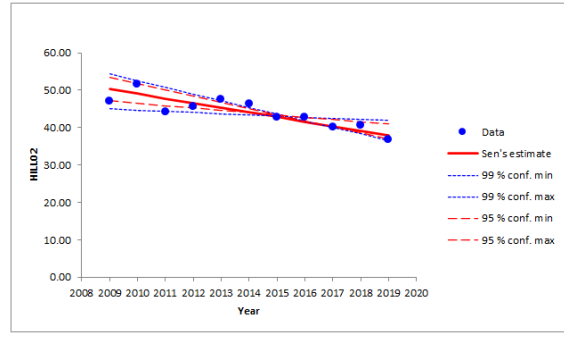
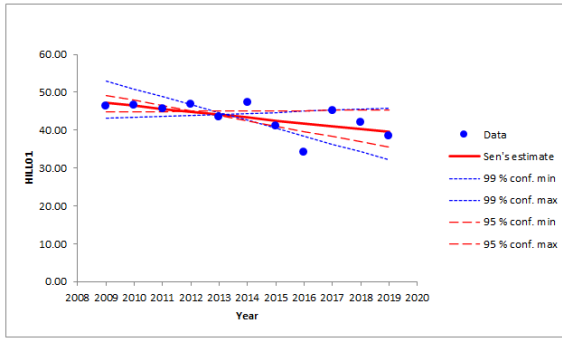


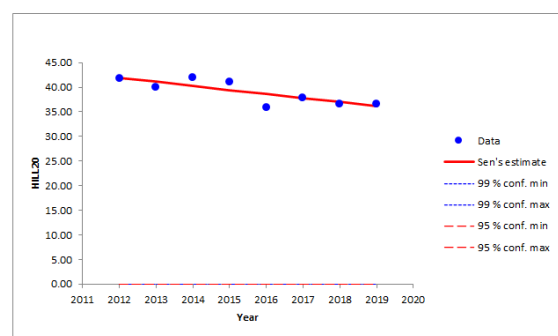
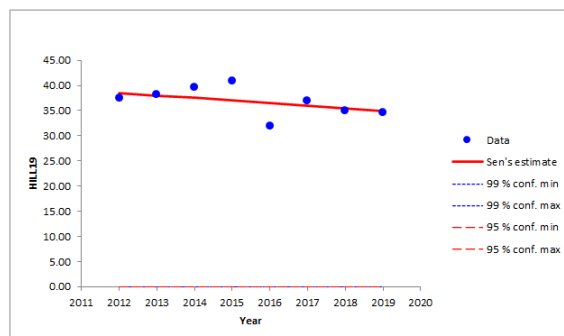
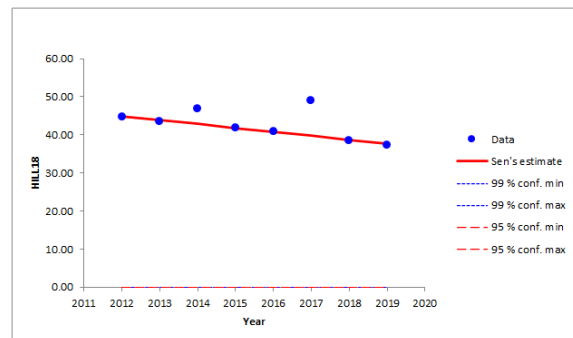
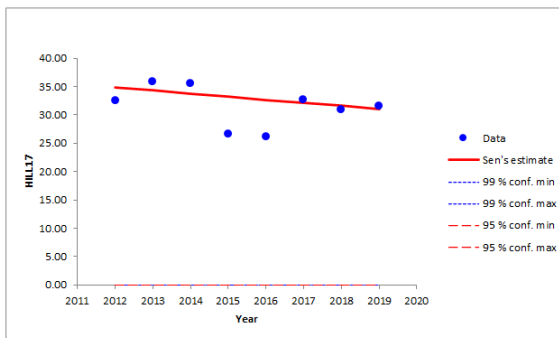
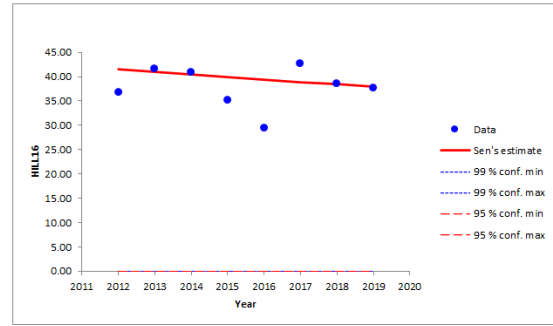
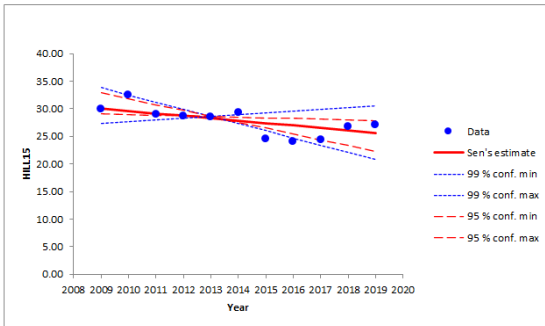
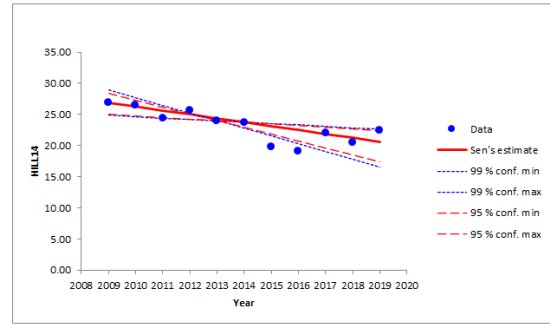
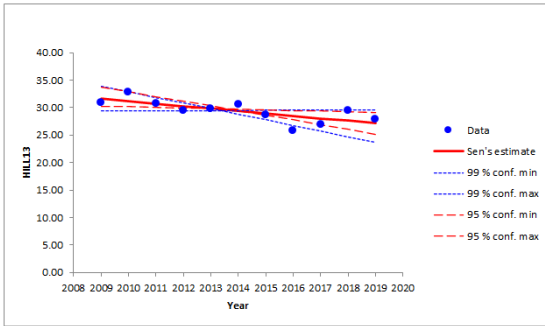
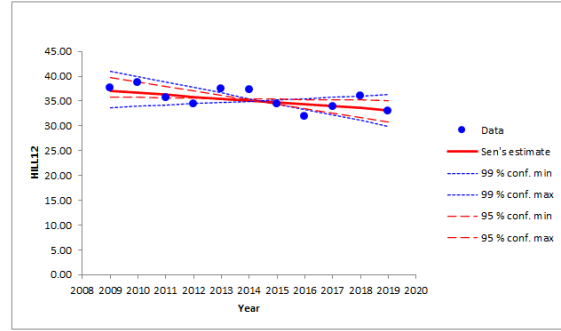
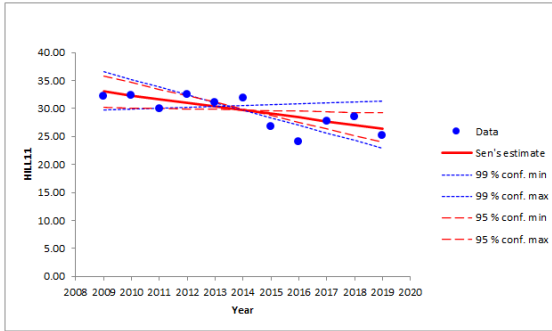
Continuous Monitoring Sites – PM_{2.5}



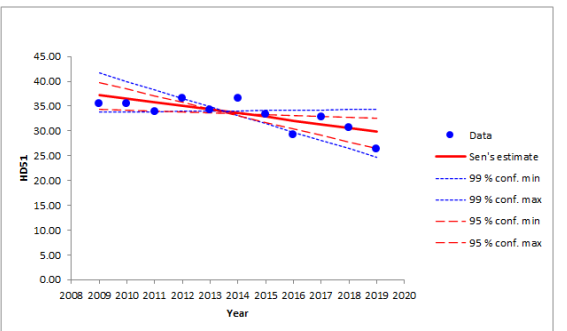
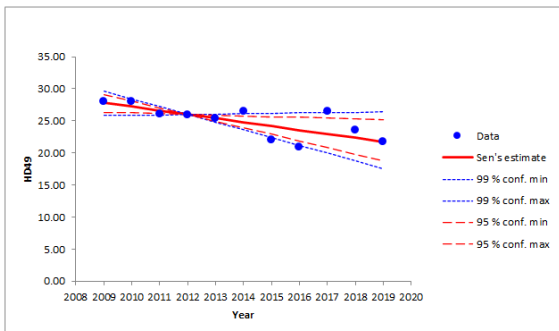
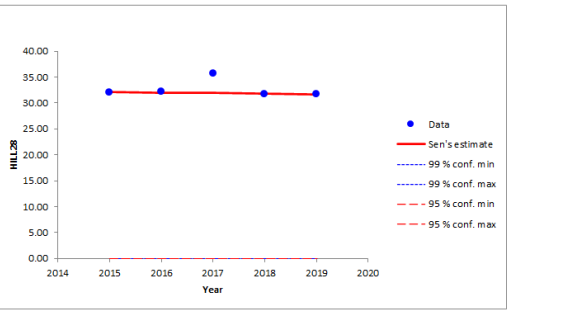
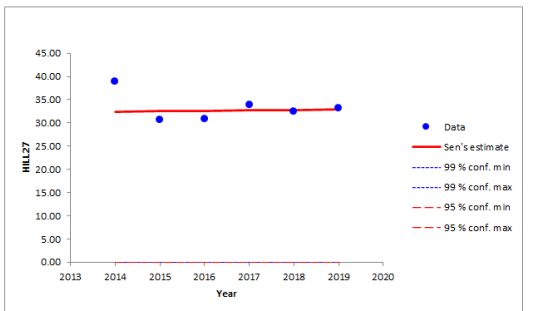
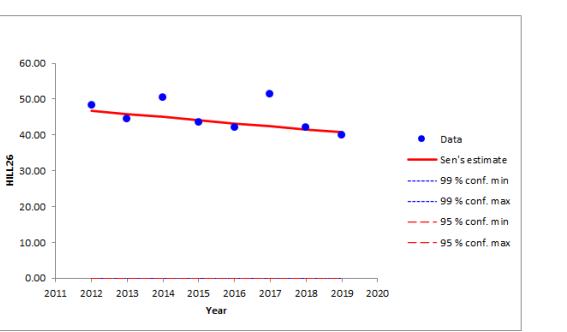
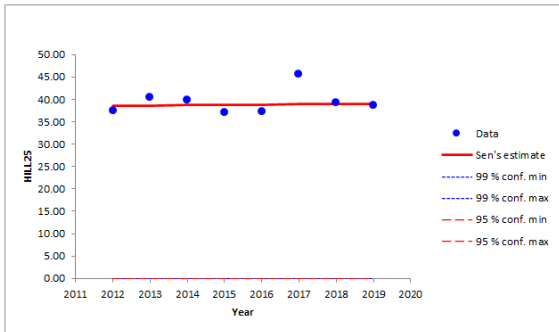
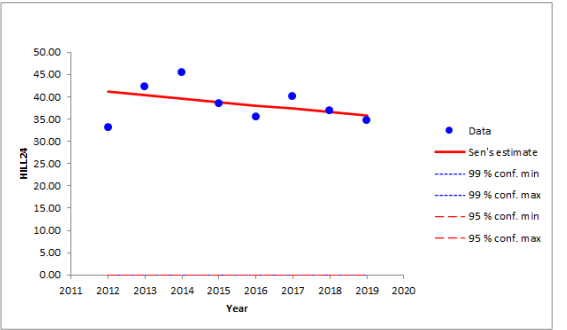
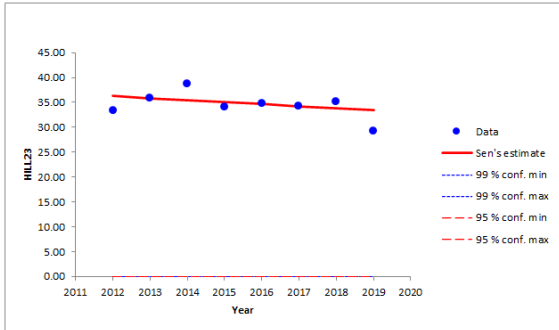
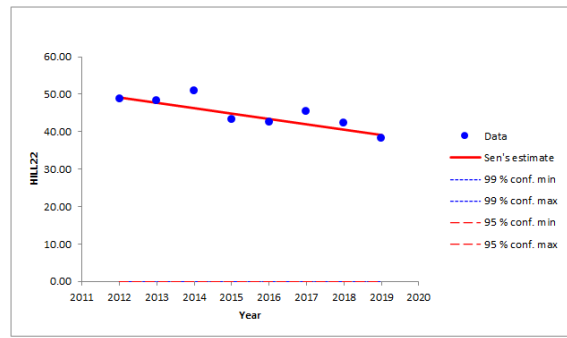
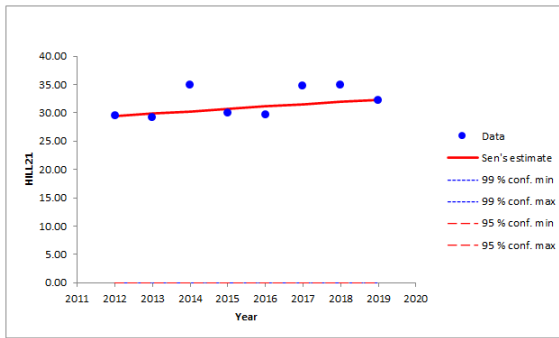
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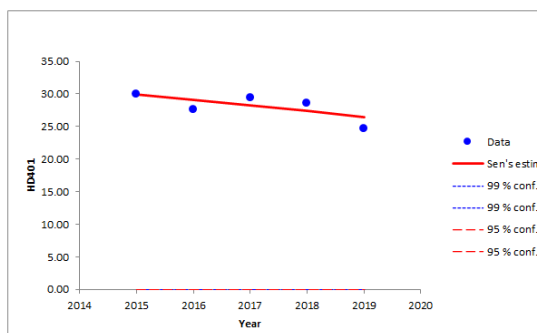
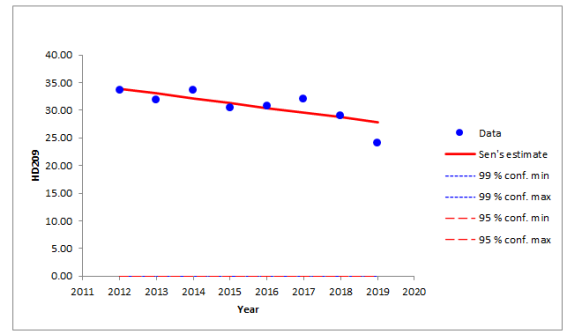
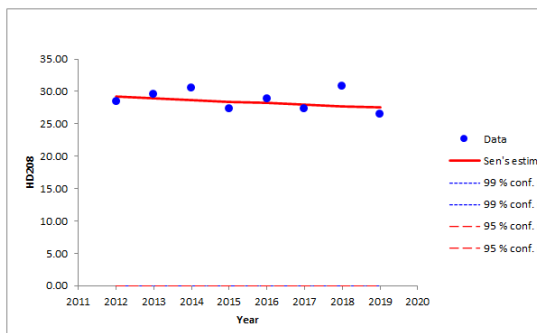
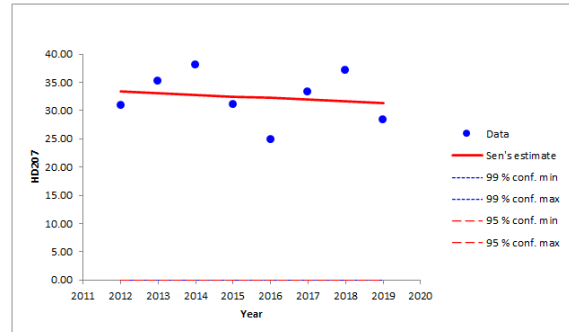
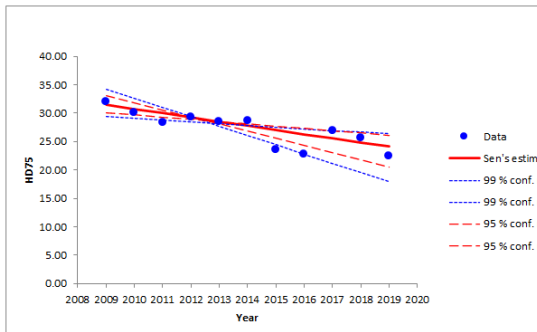
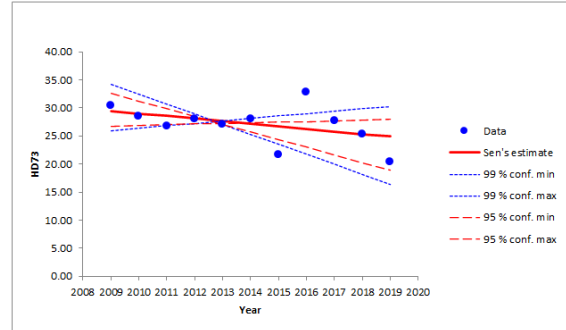
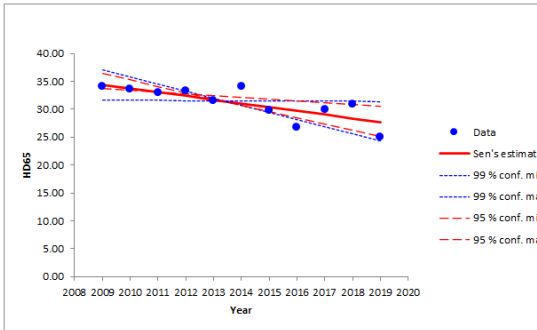
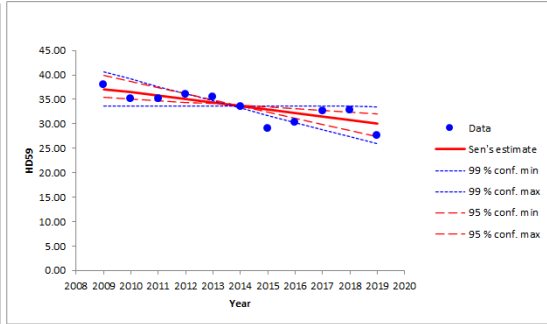
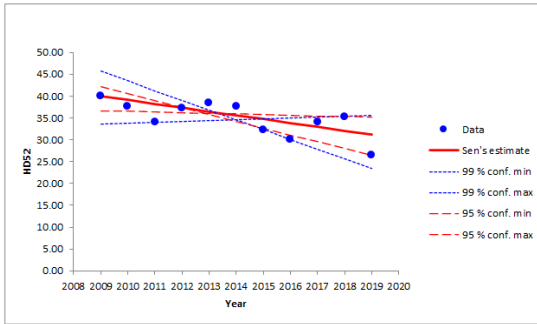
Diffusion Tube Sites – NO₂





London Borough of Hillingdon





Appendix D Details of New Diffusion Tube Locations per Focus Area

Figures below present in more geographical detail, the locations of the additional diffusion tubes deployed by the Borough in 2019 as part of the non-automatic monitoring network review undertaken in 2018/2019. The Focus Areas where new diffusion tubes were added are:

- Northwood East (Figure D1, HILL33 and HILL34)
- Eastcote Village (Figure D2, HILL32)
- Ruislip Town Centre (Figure D2, HILL35, HILL36, HILL37, HILL43)
- A40/Long Lane (Figure D3, HILL30)
- A40/ Swakeleys (Figure D4, HILL42)
- M4 Corridor (Figure D5, Hill29)
- Sipson (Figure D5, Hill40)
- A4 Corridor (Figure D5, Hill38, Hill39, Hill41).

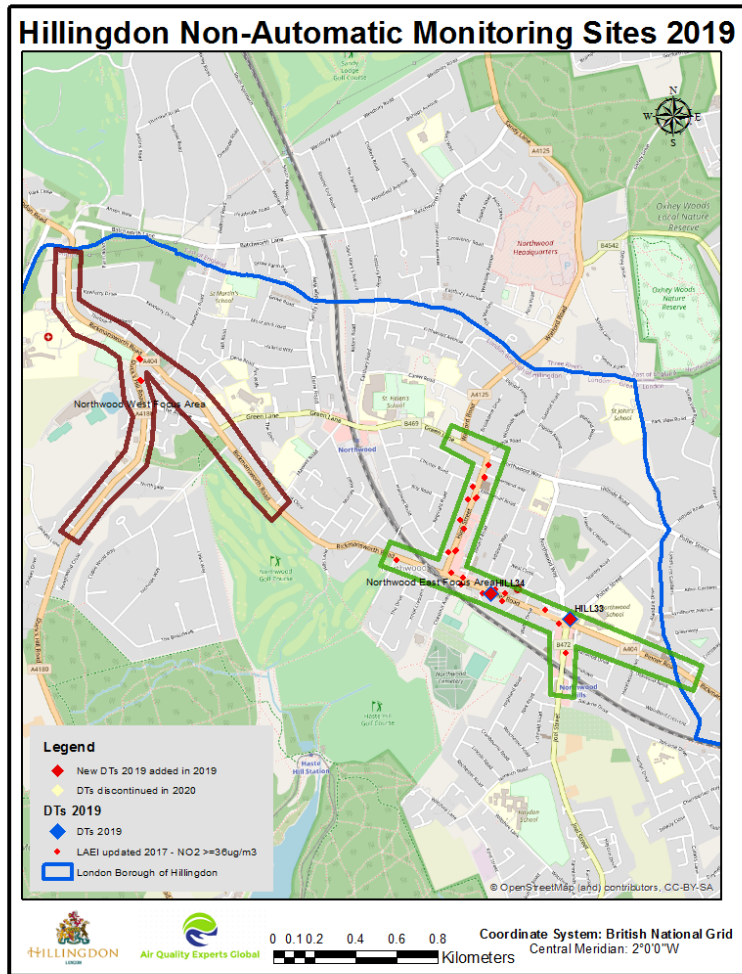


Figure D1 - HILL33 and HILL34

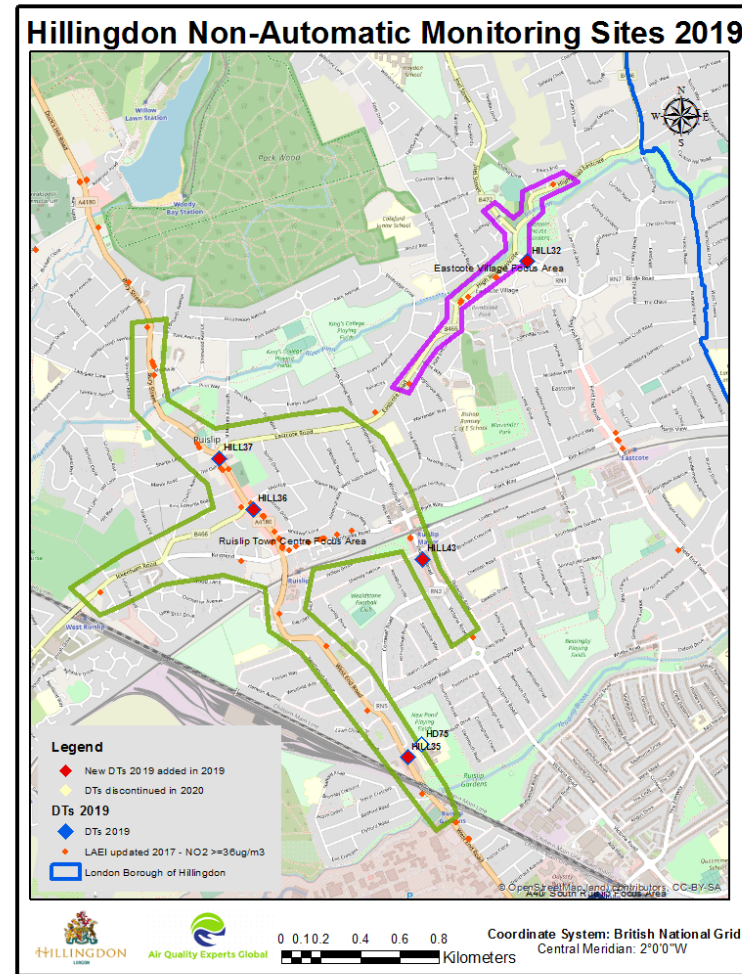


Figure D2 - HILL32, HILL35, HILL36, HIL37, HILL43

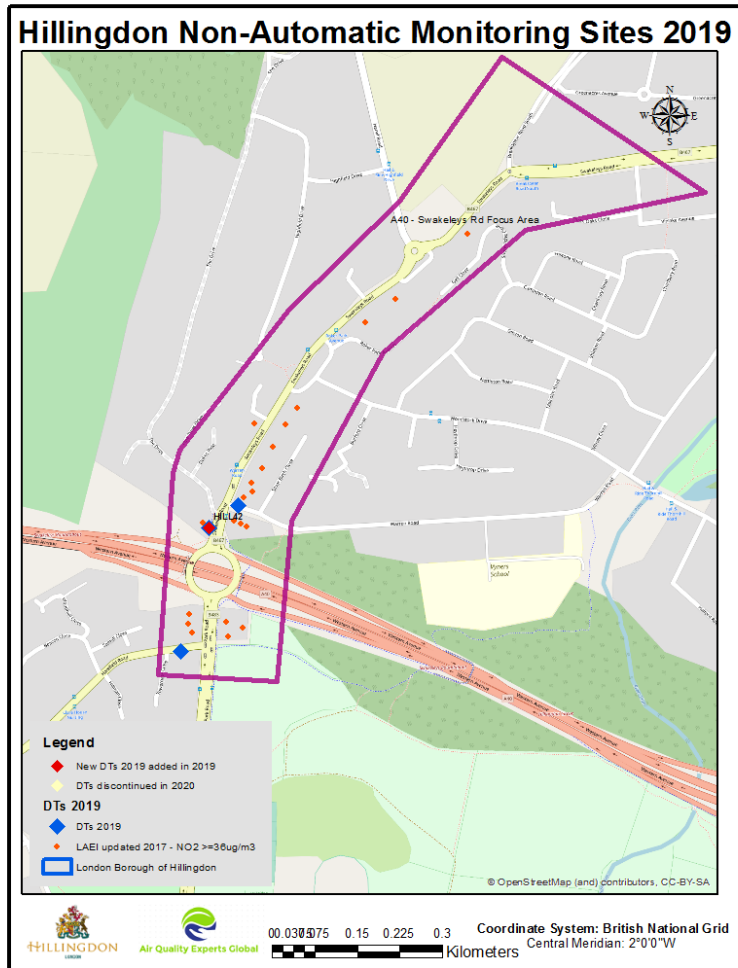


Figure D3 – HILL42

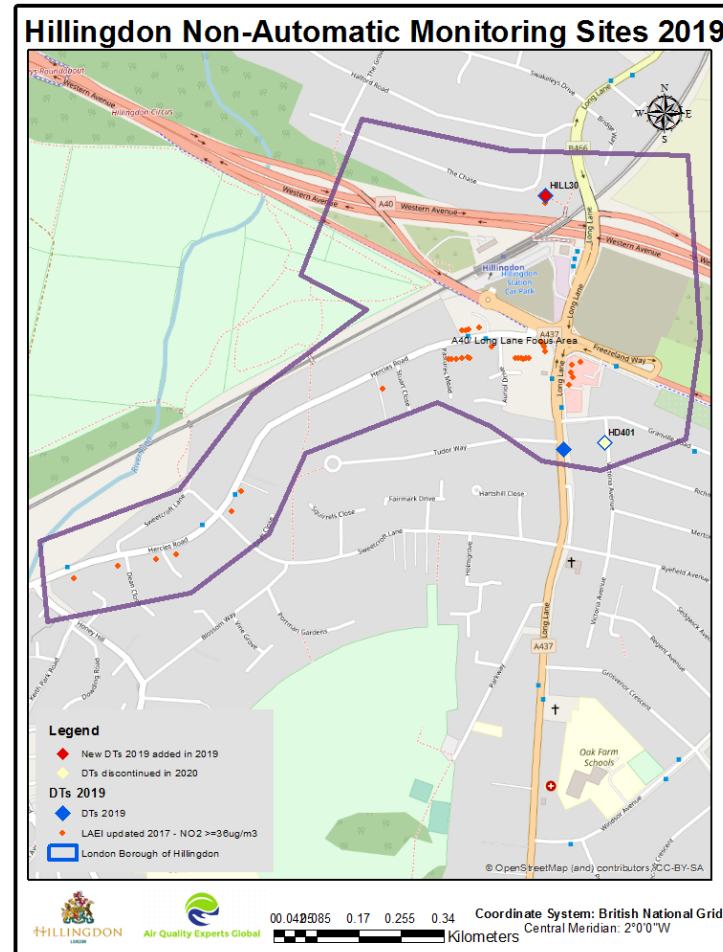


Figure D4 – HILL30

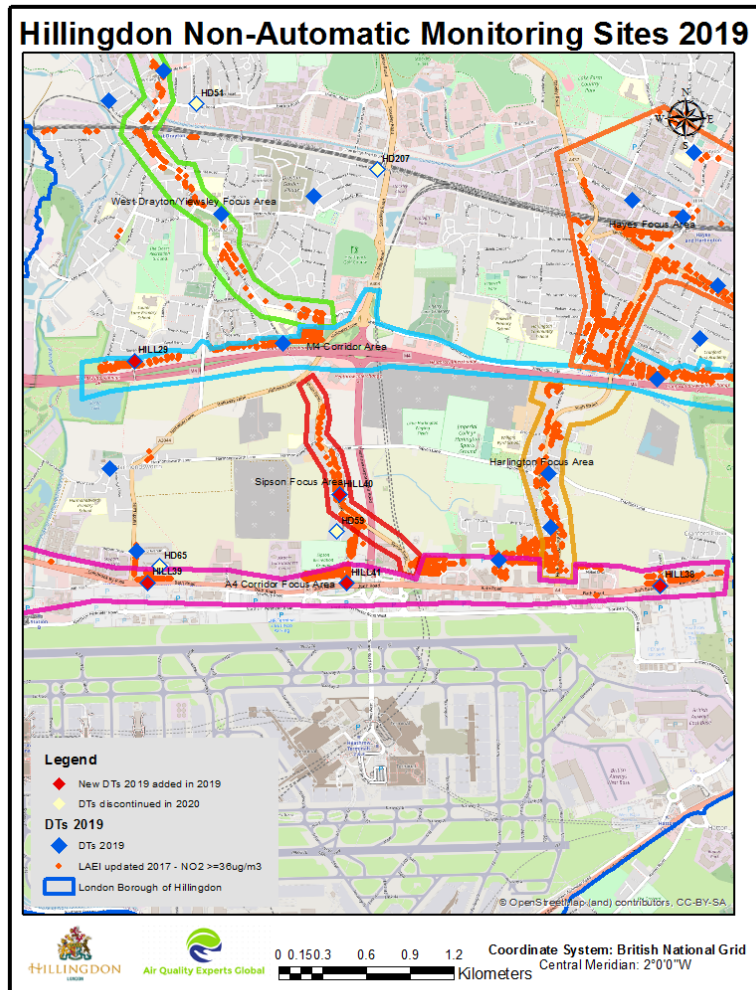


Figure D5 - Hill29, Hill40, Hill38, Hill39, Hill41

Appendix E Details of planning applications for 2019 by Focus Area

Name, Location & Proposal description	Air Quality Issues in AQ Assessment	LA Requirements	Planning Conditions Text/S106 Agreements/ Status/Outcome	Neutral
HAYES FOCUS AREA				
Planning Ref	2102/APP/2018/4231			NO
<p>CHAILEY INDUSTRIAL ESTATE PUMP LANE HAYES UB3 3ND</p> <p>Redevelopment of the site to provide three buildings ranging from 2 to 11 storeys in height delivering 333 residential units and 710 sq.m of ground floor commercial floorspace (Use Classes A1, A2, A3, B1, D1 or D2), including the provision of private and communal amenity areas, child play space, car parking, secure cycle parking, refuse storage areas and other associated development.</p>	<p>The development proposal is for 333 residential units and commercial floorspace. The location is within an Air Quality Focus Area as defined by the GLA (Focus Area 85, Hayes Town Botwell Lane/Pump Lane) and included within the Hillingdon Hayes Focus Area. Focus Areas are defined as areas where the air quality limits are exceeded, there is relevant public exposure and actions should be prioritised to achieve significant improvements in air quality.</p> <p>Current poor ambient air quality within Hays Focus Area at sensitive receptors means that current Local Authority air quality measures to</p>	<p>The air quality assessment recently submitted has incorporated clean by design improvements which are standard and supported by the LA:</p> <p>a) the incorporation of low NOx energy sources within the development;</p> <p>b) maximising the distance between the building and the road source;</p> <p>c) locating sensitive uses such as play areas and amenity space away from the road source;</p> <p>d) the number of residential units fronting the road source.</p> <p>As noted, these are standard design measures aimed at protecting future occupiers, and with the exception of the first item</p>	<p>In Focus areas, such as Hayes, where the limit values are already being exceeded, further mitigation is required. To understand the level of improvements required a NOx damage cost has been applied to the development. The air quality assessment calculates this as £401, 677 which is agreed.</p> <p>The quantifiable reductions from specific mitigation measures on-site have been agreed, namely full and effective implementation of a targeted Travel Plan and a bespoke air quality positive green infrastructure plan. The mitigation in terms of damage costs reductions has been agreed with the Council and calculated at £95,007.</p> <p>This leaves a quantified damage cost of £306,670. This is required as efforts are to be made to reduce emissions further. This is a requirement as listed and agreed by the applicant's air quality report in its Legislation and Policy section, National Planning Practice Guidance (page 8),</p> <p>Source: https://www.gov.uk/guidance/air-quality--3#how-can-an-impact-on-air-quality-be-mitigated</p> <p>Paragraph: 008 Reference ID: 32-008-20140306</p> <p>The applicant has however applied a methodology that suggests that, as the existing site produces £301, 974 in terms of damage costs from existing use of the site, then this change of use should be taken into account as a mitigation measure therefore the remaining damage cost has a final value of £4,696.</p>	

Name, Location & Proposal description	Air Quality Issues in AQ Assessment	LA Requirements	Planning Conditions Text/S106 Agreements/ Status/Outcome	Neutral
	<p>improve air quality within this area need to be supported by the planning system and that additional efforts to improve air quality are required, as prescribed in the NPPF.</p>	<p>(a), they do not reduce the emissions arising from the development itself. Traffic emissions are the main concern in Hays and these need to be significantly minimised.</p>	<p>This approach is not supported by the Council in an area where air quality limits, as demonstrated within the air quality assessment, are already being exceeded. The Council's transport comments reinforce that the local road network at key junctions in close proximity to the site are over the desired capacity and that the development does result in a net increase in traffic movements entering and leaving the site. The comments that the Travel Plan requires further work to ensure and encourage walking and cycling is also noted as a concern, especially as this has been stated as a key mitigation measure in reducing emissions. The approach followed by the applicant is in contradiction with the NPPF which requires the impact on air quality arising from the new development on its own to be accounted for.</p> <p>In terms of achieving further air quality mitigation, the following schemes are supported as measures which if secured and implemented via a s106 obligation could actively contribute to improving the use of sustainable modes of travel:</p> <ul style="list-style-type: none"> • Funding of works required to link the development to the town centre thereby reducing future occupiers reliance on the private car - suggested as £250,000; • Contribution towards the establishment of a new bus route from Heathrow Airport to Ruislip which will provide occupiers of the site with direct public transport access to other town centres in the Borough - suggested as £25k for 3 years; • Contribution towards improvements to the canal towpath to provide cyclists and pedestrians with direct car free route between Hayes and Harlington and West Drayton stations - suggested as £50k • Implementation of the Healthy Streets approach in Hayes - suggested as £25k <p>The full amount of £306.670 for air quality was therefore to be paid in full, contributing to the measures listed above for traffic management purposes. This is without prejudice to remaining value due for transport measures to be accounted for.</p>	
Planning Ref	73238/APP/2018/1145			NO

Name, Location & Proposal description	Air Quality Issues in AQ Assessment	LA Requirements	Planning Conditions Text/S106 Agreements/ Status/Outcome	Neutral
<p>AND AT 3, 233-236 NESTLES AVENUE HAYES UB3 4SB Demolition of existing buildings, site clearance and redevelopment to provide a mixed use scheme, including 474 residential units, 264 sqm (GEA) A1 retail use, 229 sqm (GEA) A3 cafe use and 341 sqm (GEA) B1 office, together with 286 car parking spaces and 703 cycle parking spaces, hard and soft landscaping, refuse and recycling facilities, and public and private amenity space</p>	<p>The proposed development is located in a Focus Area, bringing traffic and energy production emissions which will add to the current exceedances. As per the new London Plan, developments need to be neutral as minimum and positive in Focus Areas, contributing to the reduction of emissions in these sensitive areas. The proposal increases emissions from associated transport by an estimated 1.6 tonnes NOx per year and it is not air quality neutral as per London Plan requirements. It is noted that damage cost calculations have been undertaken for NOx only (PM10 and PM2.5 are very important too but the LA is focusing on the former pollutant to achieve NO2 compliance as soon as possible given the location of the proposed</p>	<p>The applicant has identified mitigation measures to reduce emissions. The equivalent emission reductions achieved by the proposed mitigation measures have been quantified using Defra's tools (current version of the EFT (version 8.0.1), damage cost calculator 2019 prices) wherever possible or given an overall standard LBH discount of 10% for effective travel plan implementation and an additional overall 5% discount for sustainable measures with potential contribution to air quality improvement. It is important to note that the damage cost calculations focused on transport only, not accounting for energy emissions which will also contribute to the pollution levels in the area, in particular cumulatively with other operating facilities in the area.</p>	<p>After all deductions have been applied to the transport sector, there are still 0.94 tonnesNOx/annum to be abated by LBH. Therefore, a section 106 agreement with the LAP of £161,299 was required to be paid for Hillingdon to deliver its air quality local action plan and or implement specific measures on/along the road network affected by the proposal that reduce vehicle emissions and or reduces human exposure to nitrogen dioxide levels.</p> <p>Condition Air Quality - Low Emission Strategy</p> <p><i>No development shall commence until a low emission strategy has been submitted to and approved in writing by the Local Planning Authority. The low emission strategy shall address 1) the specification of the CHP as low NOx emissions; 2) show what benefits are given to development purchasers that own a Euro 6 or cleaner or have implemented retrofitting devices that will enable compliance with such Euro standards; 3) a travel plan for residents; and 4) an electric vehicle bay charging aligned with the London Plan requirements.</i></p> <p><i>The strategy shall detail the steps that will be followed in addressing the lower emissions requirements stated above and what measures will be taken to take into account future changing standards and available technologies and be updated accordingly in agreement with the local planning authority.</i></p> <p><i>The Low Emission Strategy shall have targets for emission reduction and time-scales, with pollution savings quantified. At the end of each calendar year an implementation plan shall be submitted for approval in writing by the local planning authority, which on approval shall be fully implemented in accordance with the details and measures so approved. The measures in the agreed scheme shall be maintained throughout the life of the development.</i></p> <p><i>The LES shall include details of the following components:</i></p> <ul style="list-style-type: none"> • <i>Travel plan including mechanisms for discouraging high emission vehicle use and encouraging the uptake of low emission fuels and technologies</i> • <i>A Welcome Pack available to all new residents online and as a booklet during the sales period, containing information and incentives to encourage the use of sustainable transport modes</i> 	

Name, Location & Proposal description	Air Quality Issues in AQ Assessment	LA Requirements	Planning Conditions Text/S106 Agreements/ Status/Outcome	Neutral
	development in a Focus Area where the annual mean value for this pollutant is being exceed).		<ul style="list-style-type: none"> • Car club provision within development or support given to local car club/eV car clubs • Designation of parking spaces for low emission vehicles <p>Reason - As the application site is within an Air Quality Management Area and Focus Area and to comply with paragraph 124 of the NPPF, policy 7.14 of the London Plan, and policy DMEI 14 of the London Borough of Hillingdon Local Plan (part 2).</p> <p>Condition - Air Quality – Construction Phase No development shall commence until proof of the registration in GLA’s database (nrmm.london/nrmm/about/what-nrmm-register) and compliance with the London’s Low Emission Zone for non-road mobile machinery requirements is submitted to and approved in writing by the Local Planning Authority. The non-road mobile machinery shall comply with the standards set out at Supplementary Planning Guidance 'The Control of Dust and Emissions from Construction and Demolition'. This will apply to both variable and constant speed engines for both NOx and PM. These standards will be based upon engine emissions standards set in EU Directive 97/68/EC and its subsequent amendments. NRMM used on the site of any major development within Greater London will be required to meet Stage IIIA of the Directive as a minimum. Reason: Compliance with the London’s Low Emission Zone for non-road mobile machinery as per requirements as of 1st September 2015, and Supplementary Planning Guidance 'The Control of Dust and Emissions from Construction and Demolition'.</p>	
Planning Ref	73785/APP/2018/3115			NO
LAND NORTH OF NORTH HYDE ELECTRICITY SUBSTATION NORTH HYDE GARDENS HAYES UB3 4QR	The application site falls within Hays Focus Area with the probability of impacting local air pollution levels. The proposed Facility is composed of 11 natural gas fired 4.5 MW	11 engines operating for 2000 hours per annum and emitting NOx at 0.87g/s per engine, result in total emissions of 68.9 tonnes per annum. This would equate to a Damage Cost of	The application is within Hays Focus Area and its total annual emissions are difficult to mitigate being likely to generate air quality impact in an area where air quality is known to be poor. The proposed development is likely to adversely impact upon the implementation of LBH air quality action plan which aims to significantly reduce air pollution in the Hays Focus Area. The above is against NPPF policy.	

Name, Location & Proposal description	Air Quality Issues in AQ Assessment	LA Requirements	Planning Conditions Text/S106 Agreements/ Status/Outcome	Neutral
<p>Redevelopment of the site for a gas-powered electricity generator and related infrastructure</p>	<p>generators. The likely effect of potential emissions to air from a proposed Facility to generate electricity for the National Grid, on an as required basis, has been assessed. Whereas the proposed Facility does not have fixed hours of operation, it is expected that the majority of operating hours would occur during the colder months of the year and be restricted to periods of greatest power demand (07:00 to 09:00 and 16:30 to 19:00). The extent of the demand in future years will be largely dependent on weather conditions that occur and consequently there will be considerable variation in the number of hours per year during which emissions occur. The assessment undertaken assumed a level of usage of no more than 2,000 hours per year.</p>	<p>£609,181 based on Defra's new 2018 base year spreadsheet. 11 engines operating for 1500 hours per annum and emitting NOx at 0.87g/s per engine, equates to an emission of 51.7 tonnes per annum. This would equate to a Damage Cost of £457,107 based on Defra's new 2018 base year, which is still a considerable effort to clean up produced emissions.</p>		
<p>Planning Ref</p>	<p>59872/APP/2019/784</p>			<p>YES</p>

Name, Location & Proposal description	Air Quality Issues in AQ Assessment	LA Requirements	Planning Conditions Text/S106 Agreements/ Status/Outcome	Neutral
<p>THE OLD VINYL FACTORY BLYTH ROAD HAYES UB3 1SY Phased refurbishment and installation of two mezzanine floors within the existing Powerhouse and construction of a two-storey extension to the north to create Class B1 floorspace and cafe (Use Class A3), with associated landscaping, lighting, access and parking together with detailed public realm and landscaping for Vinyl Square and the permanent siting of the Nipper the Dog sculpture, plus additional soft landscaping works to the south of Blyth Road.</p>	<p>The proposed development is located with the Hayes Focus Area, bringing traffic and energy production emissions which will add to current poor air quality. As per the new London Plan, developments need to be neutral as minimum and positive in Focus Areas, contributing to the reduction of emissions in these sensitive areas.</p>	<p>Updated calculations undertaken by the developer classified the proposed development as air quality neutral.</p> <p>The developer has also taken a very worst case approach calculating emissions at 2017 Defra's national average predictions for fleet composition for outer London, which will have a more polluting vehicle fleet that in the opening year of the proposal (2021), and resulting in a very conservative assessment of the likely impacts of the proposal on local air quality.</p>	<p>On the basis of the updated information provided by the applicant and clarifications sought by LBH on the contributions made to the Santander Scheme (25K) complemented by additional green infrastructure contributions, the likely impact of the proposed development on the sensitive area of Hays has been re-evaluated. In alignment with the observations made above, Defra Damage Cost calculations were updated with a resulting pollution cost of £2,204.</p> <p>Therefore, a section 106 agreement with the LAP of £2,204 was required to be paid for Hillingdon to deliver its air quality local action plan and or implement specific measures on/along the road network affected by the proposal that reduce vehicle emissions and or reduce human exposure to pollution levels. Given the small amount due, this amount can be considered equivalent to achievable further modal shift activities and reduction in car use associated with the proposal, to be secured by a robust travel plan delivery, via a planning condition.</p> <p>Condition Air Quality – Travel Plan <i>No development shall commence until a detailed Travel Plan has been submitted to and approved in writing by the Local Planning Authority. It shall include</i></p> <ol style="list-style-type: none"> 1) <i>Detailed listing and quantification of measures in terms of annual emission reductions (in Kg/year using Defra's Emission Factor Toolkit) to be implemented to achieve a further 10% reduction in vehicle trips.</i> 2) <i>Measures will be presented in a delivery plan, with set achievable targets, associated with clear time scales;</i> 3) <i>The efficiency of measures proposed will be monitored and the indicators for evaluation clearly indicated and quantified.</i> <p><i>The measures in the agreed scheme shall be maintained throughout the life of the development.</i></p> <p>Reason - As the application site is within an Air Quality Management Area and to comply with paragraph 124 of the NPPF, policy 7.14 of the</p>	

Name, Location & Proposal description	Air Quality Issues in AQ Assessment	LA Requirements	Planning Conditions Text/S106 Agreements/ Status/Outcome	Neutral
			London Plan, and policy DMEI 14 of the London Borough of Hillingdon Local Plan (part 2).	
Planning Ref	71737/APP/2019/1979			NO
<p>GETHCELN HOUSE DAWLEY ROAD HAYES Proposed demolition of existing office and warehouse/workshops and erection of one flexible use class B1(c)/B2/B8 building comprising 3 units with associated access and parking</p>	<p>The proposal is for one flexible use class B1(c)/B2/B8 building comprising 3 units with associated access and parking. It is noted that whereas the Transport Assessment supporting the application indicates that there is only a net change of 6 vehicle movements in relation to the current use of the site, the proposed use includes B8 (storage or distribution) which usually presents a higher number of vehicle movements and percentage of heavy duty vehicles with higher NOx emissions to the atmosphere. In addition, the review of the air quality assessment has indicated that:</p> <p>1) the proposal is not air quality neutral for transport emissions. 2) the proposed development is within a</p>	<p>The proposed development is located in a Focus Area, originating traffic emissions which will add to the current exceedances. As per the new London Plan, developments need to be neutral as minimum and positive in Focus Areas, contributing to the reduction of emissions in these sensitive areas.</p>	<p>Therefore, a section 106 agreement with the LAP of £13,000 was required to be paid for Hillingdon to deliver its air quality local action plan and or implement specific measures on/along the road network affected by the proposal that reduce vehicle emissions and or reduces human exposure to nitrogen dioxide levels. In addition, the following conditions will apply. See text below.</p> <p>Condition Air Quality - Low Emission Strategy</p> <p><i>No development shall commence until a low emission strategy (LES) has been submitted to and approved in writing by the Local Planning Authority. The LES shall specify the following</i></p> <p>1) <i>A clear and effective strategy to encourage users of the office units to</i></p> <ul style="list-style-type: none"> <i>a) use public transport;</i> <i>b) cycle / walk to work where practicable;</i> <i>c) enter car share schemes;</i> <i>d) purchase and drive to work zero emission vehicles.</i> <p><i>The measures in the agreed scheme shall be maintained throughout the life of the development.</i></p> <p>Reason - As the application site is within an Air Quality Management Area and to comply with paragraph 124 of the NPPF, policy 7.14 of the London Plan, and policy DMEI 14 of the London Borough of Hillingdon Local Plan (part 2).</p> <p>Condition Air Quality - Construction and demolition phase</p>	

Name, Location & Proposal description	Air Quality Issues in AQ Assessment	LA Requirements	Planning Conditions Text/S106 Agreements/ Status/Outcome	Neutral
	Focus Area. Proposals are required to improve air quality within Focus Areas.		<p><i>In order to control the dust and emissions from the demolition and construction phases, the Construction Management Plan must be developed in accordance with the Air Quality Management (IAQM) 'Guidance on the assessment of dust from demolition and construction' and the GLA, Control of Dust and Emissions from Construction and Demolition Supplementary Planning Guidance. All Non-Road Mobile Machinery (NRMM) used during construction must meet Stage IIIA criteria of EU Directive 97/68/EC and must be registered online on the NRMM website at http://nrmm.london/. Confirmation of the registration must be submitted to the LPA.</i></p> <p>Reason: To ensure the development reduces and manages its air quality impacts in an air quality management area in accordance with Policy EM8 of the Local Plan</p>	
Planning Ref	58758/APP/2019/3517			NO
AIRVIEW BUSINESS CENTRE CLAYTON ROAD HAYES UB3 1AN Demolition of existing buildings, site clearance and redevelopment to provide a mixed use scheme, including 398 residential units, 308 sqm (GEA) B1/A3 retail (café) use, 768 sqm (GEA) B1 employment, together with 187 car parking spaces and 754 cycle parking spaces, public open	The proposals comprise the demolition of existing industrial units, site clearance and redevelopment to provide a mixed use scheme, including 398 residential units, 308 sqm (GEA) B1/A3 retail (café) use, 768 sqm (GEA) B1 employment, together with 187 car parking spaces and 754 cycle parking spaces, public open space, hard and soft landscaping, refuse and recycling facilities, and public and private amenity space.	As per the London Plan and London Borough of Hillingdon Local Action Plan, developments need to be neutral as minimum and contribute actively to reduce pollution in Focus Areas, contributing to the reduction of emissions in these sensitive areas. The proposed development is not neutral for transport emissions. In addition, the proposal has not offered suitable mitigation measures that in a quantifiable manner would demonstrate the	A section 106 agreement with the LAP of £173,899 was required to be paid for Hillingdon to deliver its air quality local action plan and or implement specific measures on/along the road network affected by the proposal that reduce vehicle emissions and or reduce human exposure to pollution levels, assuming no local network congestion would be exacerbated by the proposal. The above is subject to revision once LBH Highways comments on the traffic impacts of the proposal are issued. Should an exacerbation of congestion at the road network affected by the vehicular movements associated with the operational phase of the proposed development be observed, there will be further resulting hazardous impacts on local air quality and public health and an updated calculation of the damage cost value will need to be issued. In addition, two Air Quality conditions are required to develop and implement a Low Emission Strategy and manage the construction fleet as per Mayor requirements. See text below.	

Name, Location & Proposal description	Air Quality Issues in AQ Assessment	LA Requirements	Planning Conditions Text/S106 Agreements/ Status/Outcome	Neutral
<p>space, hard and soft landscaping, refuse and recycling facilities, and public and private amenity space</p>	<p>The site is located within an area identified by London Borough of Hillingdon as experiencing elevated pollutant concentrations with high density of population being exposed to hazardous levels – the application site falls within the Hayes Focus Area. Developments within this area have the potential to introduce future users to an existing area of poor air quality, as well as to cause potential impacts at sensitive receptor locations within the vicinity during the construction and operational phases. The proposed development, due to its size and location, will add to current exceedances of the nitrogen dioxide annual mean limit value within this sensitive area as a result of both traffic and energy production emissions.</p>	<p>exceeding traffic emissions would be removed.</p>	<p>Condition Air Quality - Low Emission Strategy</p> <p><i>1. No above ground works shall be undertaken until a clear and effective low emission strategy (LES) have been submitted to and approved in writing by the Local Planning Authority. The strategy shall include, but not be restricted to:</i></p> <p><i>a) effective ways to both encourage residents and manage contractual arrangements with the occupiers of the employment use so that the fleet composition visiting/using the site will be Euro 6/VI or cleaner (e.g. electric) or have implemented retrofitting devices that will enable compliance with such Euro standards;</i></p> <p><i>b) provision of a clean supply of energy to the site. Any CHP or gas boiler will have to conform with the London Ultra Low NOx requirements. The boilers to be specified to meet ultra-low NOx emissions standards of < 40mg/kWh. The strategy shall detail the steps that will be followed in addressing the lower emissions requirements stated above and what measures will be taken to take into account future changing standards and available technologies and be updated accordingly in agreement with the local planning authority.</i></p> <p><i>c) an electric vehicle fast charging bay. This is to be implemented as part of the proposal with the minimum requirements as per the London Plan.</i></p> <p><i>d) a clear and effective strategy to encourage/support staff and residents of the site to</i></p> <p><i>i) use public transport;</i></p> <p><i>ii) cycle / walk to work where practicable;</i></p> <p><i>iii) enter car share schemes;</i></p> <p><i>iv) enter cab share schemes to and from the airport and or home / work locations;</i></p> <p><i>iv) purchase and drive to work zero emission vehicles.</i></p> <p><i>Measures to support and encourage modal shift, will include but be not restricted to incentives for residents and employees to use public transport to reduce their car ownership.</i></p>	

Name, Location & Proposal description	Air Quality Issues in AQ Assessment	LA Requirements	Planning Conditions Text/S106 Agreements/ Status/Outcome	Neutral
			<p><i>The measures in the agreed scheme shall be maintained throughout the life of the development.</i></p> <p>Reason - As the application site is within an Air Quality Management Area and to reduce the impact on air quality in accordance with policies E2, EM1, EM8 of the Local Plan: Part 1 (November 2012), policy DMT 2, DMEI 1, and DMEI 14 of the emerging London Borough of Hillingdon Local Plan (part 2), London Plan Policy 7.14, and paragraph 170 of the National Planning Policy Framework (2019).</p> <p>Air Quality - Construction</p> <p>1. No development shall commence until proof of the registration in GLA's database (nrmm.london/nrmm/about/what-nrmm-register) and compliance with the London's Low Emission Zone for non-road mobile machinery requirements is submitted to and approved in writing by the Local Planning Authority.</p> <p>2. The London's Low Emission Zone for non-road mobile machinery to comply with the standards set out at Supplementary Planning Guidance 'The Control of Dust and Emissions from Construction and Demolition'.</p> <p>3. This will apply to both variable and constant speed engines for both NOx and PM. These standards will be based upon engine emissions standards set in EU Directive 97/68/EC and its subsequent amendments.</p> <p>Reason: Compliance with the London's Low Emission Zone for non-road mobile machinery as per requirements as of 1st September 2015, and London Plan Supplementary Planning Guidance 'The Control of Dust and Emissions from Construction and Demolition' (2014).</p>	
Planning Ref	58758/APP/2019/3517			NO
AIRVIEW BUSINESS CENTRE CLAYTON ROAD HAYES UB3 1AN	The proposals comprise the demolition of existing industrial units, site clearance and redevelopment to	As per the London Plan and London Borough of Hillingdon Local Action Plan, developments need to be neutral as minimum	Therefore, a section 106 agreement with the LAP of £173,899 is to be paid for Hillingdon to deliver its air quality local action plan and or implement specific measures on/along the road network affected by the proposal that reduce vehicle emissions and or reduce human exposure to pollution levels,	

Name, Location & Proposal description	Air Quality Issues in AQ Assessment	LA Requirements	Planning Conditions Text/S106 Agreements/ Status/Outcome	Neutral
<p>Demolition of existing buildings, site clearance and redevelopment to provide a mixed use scheme, including 398 residential units, 308 sqm (GEA) B1/A3 retail (café) use, 768 sqm (GEA) B1 employment use, together with 187 car parking spaces and 754 cycle parking spaces, public open space, hard and soft landscaping, refuse and recycling facilities, and public and private amenity space</p>	<p>provide a mixed use scheme, including 398 residential units, 308 sqm (GEA) B1/A3 retail (café) use, 768 sqm (GEA) B1 employment, together with 187 car parking spaces and 754 cycle parking spaces, public open space, hard and soft landscaping, refuse and recycling facilities, and public and private amenity space.</p> <p>The site is located within an area identified by London Borough of Hillingdon as experiencing elevated pollutant concentrations with high density of population being exposed to hazardous levels – the application site falls within the Hayes Focus Area. Developments within this area have the potential to introduce future users to an existing area of poor air quality, as well as to cause potential impacts at sensitive receptor</p>	<p>and contribute actively to reduce pollution in Focus Areas, contributing to the reduction of emissions in these sensitive areas. The proposed development is not neutral for transport emissions.</p> <p>In addition, the proposal has not offered suitable mitigation measures that in a quantifiable manner would demonstrate the exceeding traffic emissions would be removed.</p>	<p>assuming no local network congestion would be exacerbated by the proposal.</p> <p>The above is subject to revision once LBH Highways comments on the traffic impacts of the proposal are issued. Should an exacerbation of congestion at the road network affected by the vehicular movements associated with the operational phase of the proposed development be observed, there will be further resulting hazardous impacts on local air quality and public health and an updated calculation of the damage cost value will need to be issued. In addition, two Air Quality conditions are required to develop and implement a Low Emission Strategy and manage the construction fleet as per Mayor requirements. See text below.</p> <p>Condition Air Quality - Low Emission Strategy</p> <p><i>1.No above ground works shall be undertaken until a clear and effective low emission strategy (LES) have been submitted to and approved in writing by the Local Planning Authority. The strategy shall include, but not be restricted to:</i></p> <p><i>a)effective ways to both encourage residents and manage contractual arrangements with the occupiers of the employment use so that the fleet composition visiting/using the site will be Euro 6/VI or cleaner (e.g. electric) or have implemented retrofitting devices that will enable compliance with such Euro standards;</i></p> <p><i>b) provision of a clean supply of energy to the site. Any CHP or gas boiler will have to conform with the London Ultra Low NOx requirements. The boilers to be specified to meet ultra-low NOx emissions standards of < 40mg/kWh. The strategy shall detail the steps that will be followed in addressing the lower emissions requirements stated above and what measures will be taken to take into account future changing standards and available technologies and be updated accordingly in agreement with the local planning authority.</i></p> <p><i>c) an electric vehicle fast charging bay. This is to be implemented as part of the proposal with the minimum requirements as per the London Plan.</i></p>	

Name, Location & Proposal description	Air Quality Issues in AQ Assessment	LA Requirements	Planning Conditions Text/S106 Agreements/ Status/Outcome	Neutral
	<p>locations within the vicinity during the construction and operational phases. The proposed development, due to its size and location, will add to current exceedances of the nitrogen dioxide annual mean limit value within this sensitive area as a result of both traffic and energy production emissions.</p>		<p><i>d) a clear and effective strategy to encourage/support staff and residents of the site to</i></p> <ul style="list-style-type: none"> <i>i) use public transport;</i> <i>ii) cycle / walk to work where practicable;</i> <i>iii) enter car share schemes;</i> <i>iv) enter cab share schemes to and from the airport and or home / work locations;</i> <i>iv) purchase and drive to work zero emission vehicles.</i> <p><i>Measures to support and encourage modal shift, will include but be not restricted to incentives for residents and employees to use public transport to reduce their car ownership.</i></p> <p><i>The measures in the agreed scheme shall be maintained throughout the life of the development.</i></p> <p>Reason - As the application site is within an Air Quality Management Area and to reduce the impact on air quality in accordance with policies E2, EM1, EM8 of the Local Plan: Part 1 (November 2012), policy DMT 2, DMEI 1, and DMEI 14 of the emerging London Borough of Hillingdon Local Plan (part 2), London Plan Policy 7.14, and paragraph 170 of the National Planning Policy Framework (2019).</p> <p>Air Quality - Construction</p> <ul style="list-style-type: none"> <i>1.No development shall commence until proof of the registration in GLA's database (nrmm.london/nrmm/about/what-nrmm-register) and compliance with the London's Low Emission Zone for non-road mobile machinery requirements is submitted to and approved in writing by the Local Planning Authority.</i> <i>2.The London's Low Emission Zone for non-road mobile machinery to comply with the standards set out at Supplementary Planning Guidance 'The Control of Dust and Emissions from Construction and Demolition'.</i> 	

Name, Location & Proposal description	Air Quality Issues in AQ Assessment	LA Requirements	Planning Conditions Text/S106 Agreements/ Status/Outcome	Neutral
			<p>3. This will apply to both variable and constant speed engines for both NOx and PM. These standards will be based upon engine emissions standards set in EU Directive 97/68/EC and its subsequent amendments.</p> <p>Reason: Compliance with the London's Low Emission Zone for non-road mobile machinery as per requirements as of 1st September 2015, and London Plan Supplementary Planning Guidance 'The Control of Dust and Emissions from Construction and Demolition' (2014).</p>	
Planning Ref	13338/APP/2019/2414			NO
<p>29-31 SHEPISTON LANE HAYES UB3 1LJ Demolition of existing buildings and erection of 3 storey plus basement 97-bedroom hotel (Use Class C1), together with soft and hard landscaping, servicing, cycle storage, car parking and refuse and recycling facilities</p>	<p>The application site falls within the Hayes Focus Area, identified Greater London Authority and London Borough of Hillingdon as experiencing elevated pollutant concentrations with high density of population being exposed to hazardous levels. As per the London Plan and London Borough of Hillingdon Local Action Plan, developments need to be neutral as minimum and contribute actively to reduce pollution in Focus Areas, contributing to the reduction of emissions in these sensitive</p>	<p>The proposed development is not neutral for transport emissions. In addition, the proposal has not offered suitable mitigation measures that in a quantifiable manner would demonstrate the exceeding traffic emissions would be removed</p>	<p>A section 106 agreement with the LAP of £58,994 was required to be paid for Hillingdon to deliver its air quality local action plan and or implement specific measures on/along the road network affected by the proposal that reduce vehicle emissions and or reduce human exposure to pollution levels, assuming no local network congestion would be exacerbated by the proposal. In addition, two Air Quality conditions are required to develop and implement a Low Emission Strategy and manage the construction fleet as per Mayor requirements. See text below.</p> <p>Condition Air Quality - Low Emission Strategy</p> <p><i>No above ground works shall be undertaken until a clear and effective low emission strategy (LES) have been submitted to and approved in writing by the Local Planning Authority. The strategy shall include, but not be restricted to:</i></p> <p><i>a. effective ways to manage contractual arrangements so that the fleet composition serving the Hotel facilities will be Euro 6/VI or cleaner (e.g. electric) or have implemented retrofitting devices that will enable compliance with such Euro standards;</i></p> <p><i>b. provision of a clean supply of energy to the Hotel. Any CHP or gas boiler will have to conform with the London Ultra Low NOx requirements. The</i></p>	

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	<p>areas.</p>		<p>boilers to be specified to meet ultra-low NOx emissions standards of < 40mg/kWh.</p> <p>The strategy shall detail the steps that will be followed in addressing the lower emissions requirements stated above and what measures will be taken to take into account future changing standards and available technologies and be updated accordingly in agreement with the local planning authority.</p> <p>c.an electric vehicle fast charging bay. This is to be implemented as part of the proposal with the minimum requirements as per the London Plan.</p> <p>d.a clear and effective strategy to encourage/support staff and users of the Hotel Functions and Facilities to</p> <p>i) use public transport; ii) cycle / walk to work where practicable; iii) enter car share schemes; iv) enter cab share schemes to and from the airport and or home / work locations; iv) purchase and drive to work zero emission vehicles.</p> <p>Measures to support and encourage modal shift, will include but be not restricted to incentives for employees to use public transport to reduce their car ownership.</p> <p>The measures in the agreed scheme shall be maintained throughout the life of the development.</p> <p>Reason - As the application site is within an Air Quality Management Area and to reduce the impact on air quality in accordance with policies E2, EM1, EM8 of the Local Plan: Part 1 (November 2012), policy DMT 2, DMEI 1, and DMEI 14 of the emerging London Borough of Hillingdon Local Plan (part 2), London Plan Policy 7.14, and paragraph 170 of the National Planning Policy Framework (2019).</p>	

Name, Location & Proposal description	Air Quality Issues in AQ Assessment	LA Requirements	Planning Conditions Text/S106 Agreements/ Status/Outcome	Neutral
			<p>Air Quality - Construction</p> <p>1.No development shall commence until proof of the registration in GLA's database (nrmm.london/nrmm/about/what-nrmm-register) and compliance with the London's Low Emission Zone for non-road mobile machinery requirements is submitted to and approved in writing by the Local Planning Authority.</p> <p>2.The London's Low Emission Zone for non-road mobile machinery to comply with the standards set out at Supplementary Planning Guidance 'The Control of Dust and Emissions from Construction and Demolition'.</p> <p>3. This will apply to both variable and constant speed engines for both NOx and PM. These standards will be based upon engine emissions standards set in EU Directive 97/68/EC and its subsequent amendments.</p> <p>Reason: Compliance with the London's Low Emission Zone for non-road mobile machinery as per requirements as of 1st September 2015, and London Plan Supplementary Planning Guidance 'The Control of Dust and Emissions from Construction and Demolition' (2014).</p>	
Planning Ref	73238/APP/2018/1145			NO
<p>LAND AT 3, 233-236 NESTLES AVENUE HAYES UB3 4SB Demolition of existing buildings, site clearance and redevelopment to provide a mixed use scheme, including 457 residential units, 264 sqm (GEA) A1 retail use, 229 sqm (GEA) A3 cafe use and 2,273 sqm (GEA) B1 office,</p>	<p>The application site falls within the Hayes Focus Area, identified Greater London Authority and London Borough of Hillingdon as experiencing elevated pollutant concentrations with high density of population being exposed to hazardous levels where air quality limits are already exceeded.</p>	<p>As per the London Plan and London Borough of Hillingdon Local Action Plan, developments need to be neutral as minimum and contribute actively to reduce pollution in Focus Areas, contributing to the reduction of emissions in these sensitive areas. The proposed development is not neutral for transport emissions.</p>	<p>A section 106 agreement with the LAP of £ 161,299 was required to be paid for Hillingdon to deliver its air quality local action plan and or implement specific measures on/along the road network affected by the proposal that reduce vehicle emissions and or reduce human exposure to pollution levels.</p> <p>Condition Air Quality - Low Emission Strategy</p> <p>No development shall commence until a low emission strategy has been submitted to and approved in writing by the Local Planning Authority. The low emission strategy shall address 1) the specification of the CHP as low NOx emissions; 2) show what benefits are given to development purchasers that own a Euro 6 or cleaner or have implemented retrofitting devices that will enable compliance with such Euro standards; 3) a travel plan for residents; and 4) an electric vehicle bay charging scheme</p>	

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<p>together with 237 car parking spaces and 1,070 cycle parking spaces, hard and soft landscaping, refuse and recycling facilities, and public and private amenity space.</p>		<p>The proposal has offered a certain level of mitigation in a quantifiable manner and that has been deducted from the total damage cost for the proposal.</p> <p>A damage cost has been applied in terms of the increased pollution emissions from the associated transport (1.6tonnes NOx/year), where quantification has been possible this has been applied, this includes;</p> <ul style="list-style-type: none"> · 10% reduction from full effective implementation of the Travel Plan; · Developer contribution quantification from the Bulls Bridge improvements to ease congestion; · Quantification of new bus route (assumed hybrid) 	<p><i>The Low Emission Strategy shall have targets for emission reduction and time-scales, with pollution savings quantified. The measures in the agreed scheme shall be maintained throughout the life of the development.</i></p> <p><i>The LES shall include details but not be limited to the following components:</i></p> <ul style="list-style-type: none"> • <i>Travel plan including mechanisms for discouraging high emission vehicle use and encouraging the uptake of low emission fuels and technologies</i> • <i>A Welcome Pack available to all new residents online and as a booklet during the sales period, containing information and incentives to encourage the use of sustainable transport modes</i> • <i>Car club provision within development or support given to local car club/eV car clubs</i> • <i>Designation of parking spaces for low emission vehicles</i> <p>Reason - As the application site is within an Air Quality Management Area and to reduce the impact on air quality in accordance with policy EM8 of the Local Plan: Part 1 (November 2012), policy DMEI 14 of the emerging London Borough of Hillingdon Local Plan (part 2), London Plan Policy 7.14, and paragraph 170 of the National Planning Policy Framework (2018).</p> <p>Air Quality - Construction</p> <p>1. <i>No development shall commence until proof of the registration in GLA's database (nrmm.london/nrmm/about/what-nrmm-register) and compliance with the London's Low Emission Zone for non-road mobile machinery requirements is submitted to and approved in writing by the Local Planning Authority.</i></p>	

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		<p>Additional 5 % reductions for sustainable transport measures, if fully secured via indicated highways and transport s106 agreements.</p> <p>The remainder, 0.94 tonnes NOx/annum are to be abated / offset through implementation of LBH Local Action Plan so that the exceeding traffic emissions can be removed.</p>	<p>2. <i>The London's Low Emission Zone for non-road mobile machinery to comply with the standards set out at Supplementary Planning Guidance 'The Control of Dust and Emissions from Construction and Demolition'.</i></p> <p>3. <i>This will apply to both variable and constant speed engines for both NOx and PM. These standards will be based upon engine emissions standards set in EU Directive 97/68/EC and its subsequent amendments.</i></p> <p>Reason: Compliance with the London's Low Emission Zone for non-road mobile machinery as per requirements as of 1st September 2015, and London Plan Supplementary Planning Guidance 'The Control of Dust and Emissions from Construction and Demolition' (2014).</p>	
Planning Ref	59872/APP/2019/3852			NO
<p>1 VINYL SQUARE, THE OLD VINYL FACTORY BLYTH ROAD HAYES UB3 1HA</p> <p>Redevelopment of the site to provide a mixed-use development comprising 134 residential units (C3 Use Class) and ground floor commercial floorspace (flexible A1/A2/A3/A5/B1 Use Class), with</p>	<p>The proposed development is located within the Hays Focus Area, producing traffic emissions which will add to current high ambient annual mean values and exceedances of nitrogen dioxide in this sensitive area.</p>	<p>The proposal is also not air quality neutral (being air quality neutral is a Mayor's requirement) and originates NOx and PM2.5 emissions from associated transport for at an equivalent damage cost of £116,183.</p> <p>A Travel Plan is to be finalised and delivered with targets of reducing traffic by at least 10% achieved, secured by a bond. In this context, a discount of 10% of the</p>	<p>A section 106 agreement with the LAP of £104,565 was required to be paid to contribute to Hillingdon to deliver its air quality local action plan and or implement specific measures on/along the road network affected by the proposal that reduce vehicle emissions and or reduce human exposure to pollution levels.</p> <p>Condition Air Quality - Low Emission Strategy</p> <p><i>No development shall commence until a low emission strategy (LES) has been submitted to and approved in writing by the Local Planning Authority. The LES shall be linked to and consistent with the Travel Plan and address</i></p> <p>1) <i>the fleet composition associated with the A1/A2/A3/A5/B1 Use Classes of the proposed development to be Euro 6/VI or cleaner (e.g. electric) or have implemented retrofitting devices that will enable compliance with such Euro standards.</i></p>	

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<p>associated car parking, cycle parking and landscaping.</p>		<p>total damage cost can be applied (to be confirmed by transport colleagues regarding suitability of the travel plan proposed).</p>	<p>2) <i>the supply of energy to the proposed development. Any CHP or gas boiler will have to conform with the London Ultra Low NOx requirements;</i></p> <p><i>The strategy shall detail the steps that will be followed in addressing the lower emissions requirements stated above and what measures will be taken to take into account future changing standards and available technologies and be updated accordingly in agreement with the local planning authority.</i></p> <p>3) <i>an electric vehicle fast charging bay. This is to be implemented as part of the proposal with a minimum of the number of charging points required in the London Plan.</i></p> <p>4) <i>a clear and effective strategy to encourage residents/ staff / users to</i> <i>a) use public transport;</i> <i>b) cycle / walk to work where practicable;</i> <i>c) enter car share schemes;</i> <i>d) purchase and drive to work zero emission vehicles.</i></p> <p><i>The measures in the agreed scheme shall be maintained throughout the life of the development.</i></p> <p>Reason - As the application site is within an Air Quality Management Area and Focus Area and to reduce the impact on air quality in accordance with policy EM8 of the Local Plan: Part 1 (November 2012), policy DME1 14 of the emerging London Borough of Hillingdon Local Plan (part 2), London Borough of Hillingdon Air Quality Local Action Plan 2019-2024, London Plan Policy 7.14, and paragraph 170 of the National Planning Policy Framework (2018).</p> <p>Air Quality - Construction</p> <p>1. <i>No development shall commence until proof of the registration in GLA's database (nrm.london/nrm/about/what-nrm-register) and compliance with the London's Low Emission Zone for non-road mobile</i></p>	

Name, Location & Proposal description	Air Quality Issues in AQ Assessment	LA Requirements	Planning Conditions Text/S106 Agreements/ Status/Outcome	Neutral
			<p><i>machinery requirements is submitted to and approved in writing by the Local Planning Authority.</i></p> <p>2. <i>The London's Low Emission Zone for non-road mobile machinery to comply with the standards set out at Supplementary Planning Guidance 'The Control of Dust and Emissions from Construction and Demolition'.</i></p> <p>3. <i>This will apply to both variable and constant speed engines for both NOx and PM. These standards will be based upon engine emissions standards set in EU Directive 97/68/EC and its subsequent amendments.</i></p> <p>Reason: Compliance with the London's Low Emission Zone for non-road mobile machinery as per requirements as of 1st September 2015, and London Plan Supplementary Planning Guidance 'The Control of Dust and Emissions from Construction and Demolition' (2014).</p>	
Planning Ref	61202/APP/2019/3510			NO
<p>T C M HOUSE NEWPORT ROAD HAYES Demolition of three existing buildings (Use Classes B1(a) and B1(c)) and erection of a four storey residential hostel building (Sui Generis) containing 28 units, comprising 12 x 1-bedroom, 8 x 2-bedroom and 8 x 3-bedroom dwellings with associated car parking, landscaping and children's play area.</p>	<p>The proposed development is located within the Hays Focus Area producing traffic emissions which will add to current high ambient annual mean values and exceedances of nitrogen dioxide in this sensitive area.</p>	<p>The proposal is also not air quality neutral for transport (being air quality neutral is a Mayor's requirement) and originates NOx and PM2.5 emissions from associated transport for at an equivalent damage cost of £24,277.</p>	<p>A section 106 agreement with the LAP of minimum £24,277 was required to be paid to contribute to Hillingdon to deliver its air quality local action plan and or implement specific measures on/along the road network affected by the proposal that reduce vehicle emissions and or reduce human exposure to pollution levels.</p> <p>It is noted that the proposal will have a CHP unit but due to model/size of the plant not being available, the emissions of the unit were not reported. Therefore, the Air Quality report will need to be updated to include assessment of point source emissions and a complete air quality neutral assessment for both transport and CHP emissions. That version of the report is required to support the full planning application and update the total damage cost S106 value due for air quality.</p> <p>Condition Air Quality - Low Emission Strategy</p> <p><i>No development shall commence until a low emission strategy (LES) has been submitted to and approved in writing by the Local Planning Authority. The LES shall be linked to and consistent with the Travel Plan and address</i></p>	

Name, Location & Proposal description	Air Quality Issues in AQ Assessment	LA Requirements	Planning Conditions Text/S106 Agreements/ Status/Outcome	Neutral
			<p>1) <i>The support and fostering of the fleet composition associated with the use of the proposed development to be Euro 6/VI or cleaner (e.g. electric) or have implemented retrofitting devices that will enable compliance with such Euro standards.</i></p> <p>2) <i>the supply of energy to the proposed development. Any CHP or gas boiler will have to conform with the London Ultra Low NOx requirements;</i></p> <p><i>The strategy shall detail the steps that will be followed in addressing the lower emissions requirements stated above and what measures will be taken to take into account future changing standards and available technologies and be updated accordingly in agreement with the local planning authority.</i></p> <p>3) <i>an electric vehicle fast charging bay. This is to be implemented as part of the proposal with a minimum of the number of charging points required in the London Plan.</i></p> <p>4) <i>a clear and effective strategy to encourage residents/ staff / users to</i> <i>a) use public transport;</i> <i>b) cycle / walk to work where practicable;</i> <i>c) enter car share schemes;</i> <i>d) purchase and drive to work zero emission vehicles.</i></p> <p><i>The measures in the agreed scheme shall be maintained throughout the life of the development.</i></p> <p><i>Reason - As the application site is within an Air Quality Management Area and Focus Area and to reduce the impact on air quality in accordance with policy EM8 of the Local Plan: Part 1 (November 2012), policy DME1 14 of the emerging London Borough of Hillingdon Local Plan (part 2), London Borough of Hillingdon Air Quality Local Action Plan 2019-2024, London Plan Policy 7.14, and paragraph 170 of the National Planning Policy Framework (2018).</i></p>	

Name, Location & Proposal description	Air Quality Issues in AQ Assessment	LA Requirements	Planning Conditions Text/S106 Agreements/ Status/Outcome	Neutral
			<p>Air Quality - Construction</p> <p>1. No development shall commence until proof of the registration in GLA's database (nrmm.london/nrmm/about/what-nrmm-register) and compliance with the London's Low Emission Zone for non-road mobile machinery requirements is submitted to and approved in writing by the Local Planning Authority.</p> <p>2. The London's Low Emission Zone for non-road mobile machinery to comply with the standards set out at Supplementary Planning Guidance 'The Control of Dust and Emissions from Construction and Demolition'.</p> <p>3. This will apply to both variable and constant speed engines for both NOx and PM. These standards will be based upon engine emissions standards set in EU Directive 97/68/EC and its subsequent amendments.</p> <p>Reason: Compliance with the London's Low Emission Zone for non-road mobile machinery as per requirements as of 1st September 2015, and London Plan Supplementary Planning Guidance 'The Control of Dust and Emissions from Construction and Demolition' (2014).</p>	
Planning Ref	73955/APP/2020/139			NO
CROWN TRADING CENTRE CLAYTON ROAD HAYES Demolition of existing buildings for residential-led mixed use development comprising buildings between 3 and 11 storeys to provide residential units (Use Class C3) and ground floor employment floorspace (Use Class B1) with	The proposal seeks 407 residential units, located within the Hays Focus Area. The proposed development, due to its size and location, will add to current exceedances of the nitrogen dioxide annual mean limit value within this sensitive area as a result of both traffic and energy production emissions.	However, to support the process, LBH has undertaken the calculations and the proposal is not air quality neutral in terms of traffic emissions. As per the London Plan, developments need to be neutral as minimum and contribute actively to reduce pollution in Focus Areas, contributing to the reduction of emissions in these sensitive areas.	A section 106 agreement with the LAP of £294,522 would have to be paid for Hillingdon to deliver its air quality local action plan and or implement specific measures on/along the road network affected by the proposal that reduce vehicle emissions and or reduce human exposure to pollution levels, assuming no local network congestion would be exacerbated by the proposal. However, LBH Highways comments on the traffic impacts of the proposal reveal that there will be an exacerbation of congestion at the road network affected by the vehicular movements associated with the operational phase of the proposed development. Congested traffic emits significantly higher loads of pollution levels due to idling and stop start emissions. As per LBH Highways reported concerns, the highway/transport related consequences of the residentially dominant 514 residential proposal with a commercial component will impose added and unreasonable traffic burden on the local road network (namely the Hillingdon Circus signalled junction which currently	

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<p>associated access and car and cycle parking, landscape and amenity areas and associated servicing. Details: Comprising 407 residential units (Use Class C3) (188 x 1 bed, 144 x 2 beds, 71 x 3 beds and 4 x 4 beds) and 1175 sqm of employment floorspace (Use Class B1) at ground floor with associated access and car parking for 203 vehicles and cycle parking, landscape and amenity areas and associated servicing.</p>	<p>It is noted that the impact on local air quality of nitrogen dioxide emissions associated with energy production was not assessed as part of the air quality assessment submitted to support the planning application.</p> <p>When such contribution is added to the traffic emissions,</p> <p>In addition, the applicant has not submitted the air quality neutral assessment as per the Mayor's requirement.</p>		<p>operates at and beyond workable capacity) with resulting hazardous impacts on local air quality and public health. In addition, as reported above, the proposal is not air quality neutral, as required by the London Plan, and no suitable mitigation measures were offered by the applicant, as required by the National Planning Policy Framework (2019).</p> <p>This is contrary to Policy EM8 of the Development Plan (2012) and emerging Local Plan Part 2 Development Plan Policy DME1 14, the London Plan, and the National Planning Policy Framework (2019).</p>	
Planning Ref	12795/APP/2019/3828			NO
<p>MURRAY ENGINEERING (HAYES) LTD SILVERDALE ROAD HAYES UB3 3BN Demolition of the existing building (Use Class B1) and the erection of a 6 storey building to provide 26 (16 x 1</p>	<p>The application site falls within the Hayes Focus Area, identified Greater London Authority and London Borough of Hillingdon as experiencing elevated pollutant concentrations with high density of population being</p>	<p>As per the London Plan and London Borough of Hillingdon Local Action Plan, developments need to be neutral as minimum and contribute actively to reduce pollution in Focus Areas, contributing to the reduction of emissions in these sensitive areas.</p> <p>The proposed</p>	<p>A section 106 agreement with the LAP of £20,036 was required to be paid for Hillingdon to deliver its air quality local action plan and or implement specific measures on/along the road network affected by the proposal that reduce vehicle emissions and or reduce human exposure to pollution levels, assuming no local network congestion would be exacerbated by the proposal.</p> <p>In addition, the following Air Quality condition is required to manage the construction fleet as per Mayor requirements. See text below.</p>	

Name, Location & Proposal description	Air Quality Issues in AQ Assessment	LA Requirements	Planning Conditions Text/S106 Agreements/ Status/Outcome	Neutral
<p>bed, 7 x 2 bed and 3 x 3 bed) residential units (Use Class C3) and commercial floor space at ground floor level (Use Class B1) including the excavation of a basement to provide 13 car parking spaces and 36 cycle parking spaces with associated works</p>	<p>exposed to hazardous levels.</p>	<p>development is not neutral for transport emissions.</p> <p>In addition, the proposal has not offered suitable mitigation measures that in a quantifiable manner would demonstrate the exceeding traffic emissions would be removed.</p>	<p>Conditions - Reducing Emissions from Demolition and Construction</p> <p><i>A No development shall commence until a Plan has been submitted to, and approved in writing by, the LPA. This must demonstrate compliance (drawn up accordance with) the GLA Control of Dust and Emissions from Construction and Demolition SPG (or any successor document).</i></p> <p>Reason: Compliance with London Plan Policy 7.14 and in accordance with Mayor of London "The Control of Dust and Emissions from Construction and demolition (or any successor document).</p> <p><i>B Non-road mobile machinery (standard condition recommended by Mayor of London, London Local Air Quality Management Policy Guidance 2019)</i></p> <p><i>All Non-Road Mobile machinery (NRMM) of net power of 37kW and up to and including 560kW used during the demolition, site preparation and construction phases shall comply with the emissions standards set out in chapter 4, proposal 4.2.3.a of the London Environment Strategy. Unless it complies with the standard set out in the London Environment Strategy, no NRMM shall be onsite, at any time, whether in use or not, without the prior written consent of the LPA. The developer shall keep an up to date list of all NRMM used during the demolition, site preparation and construction phases of the development on the online register https://nrmm.london/</i></p> <p>Reason: Compliance with the London's Low Emission Zone for non-road mobile machinery as per requirements of the London Environment Strategy</p>	
<p>Planning Ref</p>	<p>1331/APP/2019/2314</p>			<p>NO</p>
<p>FORMER NESTLE FACTORY NESTLES AVENUE HAYES Development of 4no. new buildings</p>	<p>The proposal seeks to add a further 88 residential units to the permitted 917 residential units by planning permission ref:</p>	<p>In addition, the applicant has not submitted the air quality neutral assessment as per the Mayor's requirement. However, to support the</p>	<p>Therefore, an additional section 106 agreement with the LAP of £72,283 was required to be paid for Hillingdon to address the resulting increase in air pollution emissions associated with this additional proposed development. As per standard practice, the required amount will be used to continue to deliver its air quality local action plan and or implement specific measures on/along</p>	

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<p>comprising residential units (in addition to those approved under planning permission ref: 1331/APP/2017/1883), a basement extension to Block B, flexible commercial uses (including but not limited to use classes A1/A3/A4/B1/D1/D2) and associated landscaping, access, car parking and other engineering works. The plans show a development of 917 residential units (totalling 1,474 units involving a net additional uplift of 88 units from that permitted by planning permission ref: 1331/APP/2017/1833), amendments to Blocks B, C, F3, F4, H, and 232sqm of commercial floorspace.</p>	<p>1331/APP/2017/1833, and 232sqm of commercial floorspace. This additional increase in the number of residential dwellings in the Hays Focus Area will result in a net increase of transport 172.7 kg/year of NOx which will add to current exceedances of the nitrogen dioxide annual mean limit value within this sensitive area and 9.9 kg/year of PM2.5 emissions.</p> <p>.-</p>	<p>process, LBH has undertaken the calculations and the proposal is not air quality neutral in terms of traffic emissions. As per the London Plan, developments need to be neutral as minimum and contribute actively to reduce pollution in Focus Areas, contributing to the reduction of emissions in these sensitive areas. It is noted that LBH has not included building emissions associated with a likely increase in energy provision to the neutral assessment calculations as the applicant has not provided the required information; therefore the pollution damage calculation undertaken by the LAP in an underestimation of the additional emissions associated with the proposal</p>	<p>the road network affected by the proposal that reduce vehicle emissions and or reduce human exposure to pollution levels.</p> <p>In the instance LBH Highways comments on the traffic impacts of the proposal reveal that there will be an exacerbation of congestion at the road network affected by the vehicular movements associated with the operational phase of the proposed development, the calculations above will have to be updated accordingly. Congested traffic emits significantly higher loads of pollution levels due to idling and stop start emissions.</p> <p>In addition, two Air Quality conditions are required to develop and implement a Emission Mitigation Strategy and manage the construction fleet as per Mayor requirements. See text below.</p> <p>Condition Air Quality - Emission Mitigation Strategy</p> <p>1. <i>No construction works shall be undertaken until a clear and effective emission mitigation strategy (EMS) have been submitted to and approved in writing by the Local Planning Authority. The strategy shall include, but not be restricted to:</i></p> <ul style="list-style-type: none"> a) <i>Be clean by design as per the London Sustainable Design and construction Supplementary Planning Guidance,</i> b) <i>provision of an electric vehicle fast charging bay. This is to be implemented as part of the proposal with the minimum requirements as per the London Plan.</i> c) <i>a clear and effective strategy, aligned with the Travel Plan, to encourage residents of the site to</i> <ul style="list-style-type: none"> i) <i>use public transport;</i> ii) <i>cycle / walk to work where practicable;</i> iii) <i>enter car share schemes;</i> iv) <i>enter cab share schemes to and from the airport and or home / work locations;</i> iv) <i>purchase and drive to work zero emission vehicles.</i> 	

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			<p>Measures to support and encourage modal shift, will include but be not restricted to incentives for residents to use public transport to reduce their car ownership.</p> <p>The measures in the agreed scheme shall be maintained throughout the life of the development.</p> <p>Reason - As the application site is within an Air Quality Management Area and to reduce the impact on air quality in accordance with policy EM8 of the Local Plan: Part 1 (November 2012), policy DME1 14 of the London Borough of Hillingdon Local Plan (part 2), London Plan Policy 7.14, and paragraph 170 of the National Planning Policy Framework (2018).</p> <p>Conditions - Reducing Emissions from Demolition and Construction</p> <p>A No development shall commence until a Plan has been submitted to, and approved in writing by, the LPA. This must demonstrate compliance (drawn up accordance with) the GLA Control of Dust and Emissions from Construction and Demolition SPG (or any successor document).</p> <p>Reason: Compliance with London Plan Policy 7.14 and in accordance with Mayor of London "The Control of Dust and Emissions from Construction and demolition (or any successor document).</p> <p>B Non-road mobile machinery (standard condition recommended by Mayor of London, London Local Air Quality Management Policy Guidance 2019)</p> <p>All Non-Road Mobile machinery (NRMM) of net power of 37kW and up to and including 560kW used during the demolition, site preparation and construction phases shall comply with the emissions standards set out in chapter 4, proposal 4.2.3.a of the London Environment Strategy. Unless it complies with the standard set out in the London Environment Strategy, no NRMM shall be onsite, at any time, whether in use or not, without the prior written consent of the LPA. The developer shall keep an up to date list of all</p>	

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			<p><i>NRMM used during the demolition, site preparation and construction phases of the development on the online register https://nrmm.london/</i></p> <p>Reason: Compliance with the London's Low Emission Zone for non-road mobile machinery as per requirements of the London Environment Strategy</p>	
WEST DRAYTON/YIEWSLEY FOCUS AREA				
Planning Ref	5746/APP/2019/2403			YES
<p>FORMER CHANTRY SCHOOL SITE FALLING LANE YIEWSLEY UB7 8AG Demolition of the existing school and redevelopment of the site to provide a new school with associated car parking, Multi Use Games Area and All-Weather Pitches and associated works.</p>	<p>The application site is within West Drayton/Yiewsley Focus Area, with wider impacts throughout the network as parents drop/pick up the children at school and drive to/from their workplaces. The proposed development is estimated to generate 85 vehicle movements / day on the effected road network. There is no transport assessment however to confirm the trip generation of the proposed development nor providing suitable information on travel plan, mitigation measures, etc.</p>	<p>Whereas the proposal may not generate a significant number of additional vehicles on the local road network, it is important to control and minimise to the possible maximum extent the impacts within Focus Areas where several exceedances to the annual mean limit value for nitrogen dioxide are observed.</p>	<p>A section 106 agreement with the LAP of £53,454 was required to be paid for Hillingdon to deliver its air quality local action plan and or implement specific measures on/along the road network affected by the proposal that reduce vehicle emissions and or reduce human exposure to pollution levels.</p> <p>In addition, a good travel plan is required to minimise any vehicle emissions and promote the use of public transport into sensitive locations.</p>	
Planning Ref	75127/APP/2019/3221			NO

Name, Location & Proposal description	Air Quality Issues in AQ Assessment	LA Requirements	Planning Conditions Text/S106 Agreements/ Status/Outcome	Neutral
<p>Yiewsley & West Drayton Leisure Centre, Harmondsworth Road/ ROWLHEYS PLACE WEST DRAYTON</p> <p>Redevelopment of the site including the demolition of the existing buildings (Use Class D1) to provide a part 2, part 3 storey building including a basement to provide a leisure centre (Use Class D2) with access, car parking, landscaping and associated works</p>	<p>The proposed development is located within the West Drayton / Yiewsley Focus Area producing traffic emissions which will add to current high ambient annual mean values and exceedances of nitrogen dioxide in this sensitive area. Focus Areas are areas within LBH Air Quality Management Area where current level of action is not sufficient to reduce current levels of air pollution below the standards set by Government to protect human health. Focus Areas are defined as areas where the air quality limits are exceeded, there is relevant public exposure and actions should be prioritised to achieve significant improvements in air quality.</p> <p>Current poor ambient air quality within Hays Focus Area at sensitive receptors means that current Local Authority</p>	<p>LBH requires new developments to incorporate air quality positive design measures from the outset and suitable mitigation measures to reduce pollution, especially in areas where the air quality is already poor (LBH Air Quality Local Action Plan 2019-2024), namely Focus Areas. Furthermore, policy DMEI 14 of the emerging London Borough of Hillingdon Local Plan (part 2), requires active contribution towards the continued improvement of air quality, especially within the Air Quality Management Area.</p> <p>In addition, the London Plan requires development to be at least 'air quality neutral' and not lead to further deterioration of existing poor air quality (such as areas designated as Air Quality Management Areas (AQMAs)).</p>	<p>A section 106 agreement with the LAP of £108,582 was required to be paid to contribute to Hillingdon to deliver its air quality local action plan and or implement specific measures on/along the road network affected by the proposal that reduce vehicle emissions and or reduce human exposure to pollution levels.</p> <p>Suitable measures to reduce exposure along Harmondsworth road/Sipson Road are green walls of suitable height to effectively reduce exposure from people to harmful levels of air pollution in the area. This will be secured via a condition (please see below).</p> <p>A Travel Plan is to be submitted and delivered with targets of reducing traffic by at least 10% achieved, secured by a bond. In this context, a discount of 10% of the total damage cost can be applied (confirmed by transport colleagues regarding suitability of the travel plan proposed).</p> <p>The following Air Quality conditions are required. See text below.</p> <p>Condition Air Quality – Green Wall/Tree Panel along Harmondsworth Road/Sipson Road</p> <p><i>No development shall commence until a mitigation greening plan is designed, submitted to and approved in writing by the Local Planning Authority to include, but not be restricted to, the implementation of green walls / fences / tree screens of appropriate length, height and composition to reduce exposure to harmful levels of air pollution at the most affected areas. The map attached indicate locations represented by red dots where green walls/fencing is required.</i></p> <p>Reason - As the application site is within an Air Quality Management Area and Focus Area and to reduce the impact on air quality in accordance with policy EM8 of the Local Plan: Part 1 (November 2012), policy DMEI 14 of the emerging London Borough of Hillingdon Local Plan (part 2), London Borough of Hillingdon Air Quality Local Action</p>	

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	<p>air quality measures to improve air quality within this area need to be supported by the planning system and that additional efforts to improve air quality are required, as prescribed in the NPPF.</p>	<p>The proposal is not air quality neutral (being air quality neutral is a Mayor’s requirement) and originates NOx and PM2.5 emissions from associated transport for at an equivalent damage cost of £108,582.</p>	<p>Plan 2019-2024, London Plan Policy 7.14, and paragraph 170 of the National Planning Policy Framework (2018).</p> <p>Condition Air Quality - Low Emission Strategy</p> <p><i>No development shall commence until a low emission strategy (LES) has been submitted to and approved in writing by the Local Planning Authority. The LES shall be linked to and consistent with the Travel Plan and address</i></p> <ol style="list-style-type: none"> 1) <i>the fleet composition serving the proposed development to be Euro 6/VI or cleaner (e.g. electric) or have implemented retrofitting devices that will enable compliance with such Euro standards.</i> 2) <i>the supply of energy to the proposed development. Any CHP or gas boiler will have to conform with the London Ultra Low NOx requirements;</i> <p><i>The strategy shall detail the steps that will be followed in addressing the lower emissions requirements stated above and what measures will be taken to take into account future changing standards and available technologies and be updated accordingly in agreement with the local planning authority.</i></p> <ol style="list-style-type: none"> 3) <i>an electric vehicle fast charging bay. This is to be implemented as part of the proposal with a minimum of the number of charging points required in the London Plan.</i> 4) <i>a clear and effective strategy to encourage staff / users to</i> <ol style="list-style-type: none"> a) <i>use public transport;</i> b) <i>cycle / walk to work where practicable;</i> c) <i>enter car share schemes;</i> d) <i>purchase and drive to work zero emission vehicles.</i> <p><i>The measures in the agreed scheme shall be maintained throughout the life of the development.</i></p>	

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			<p>Reason - As the application site is within an Air Quality Management Area and Focus Area and to reduce the impact on air quality in accordance with policy EM8 of the Local Plan: Part 1 (November 2012), policy DMEI 14 of the emerging London Borough of Hillingdon Local Plan (part 2), London Borough of Hillingdon Air Quality Local Action Plan 2019-2024, London Plan Policy 7.14, and paragraph 170 of the National Planning Policy Framework (2018).</p>	
<p>Planning Ref</p>	<p>68663/APP/2020/705</p>			<p>NO</p>
<p>217 HIGH STREET YIEWSLEY UB7 7GN Erection of 5 and 6 storey buildings to provide a D1 Health Facility (approximately 10,000sqft) and 235 residential apartments with associated parking, communal podium garden, landscaping, pedestrian and cycle canal link and external works following the demolition of the existing buildings</p>	<p>The application site falls within the West Drayton/Yiewsley Focus Area, identified Greater London Authority and London Borough of Hillingdon as experiencing elevated pollutant concentrations with high density of population being exposed to hazardous levels.</p> <p>Analysis of the Air Quality report submitted to support the planning application indicates that whereas the proposed energy strategy to use air-source heat pumps for the development, it is possible that the proposed development will also include an emergency back-up diesel generator. Should</p>	<p>As per the London Plan and London Borough of Hillingdon Local Action Plan, developments need to be neutral as minimum and contribute actively to reduce pollution in Focus Areas, contributing to the reduction of emissions in these sensitive areas.</p> <p>The proposed development is not neutral for transport emissions and total building emissions are still unknown, given the uncertainty in relation to the back-up generator.</p> <p>The total number of LDV trips anticipated to be generated by the Proposed Development during operation exceeds the calculated benchmark trip rate by 152,803 trips per annum. As such, the Proposed Development</p>	<p>A section 106 agreement with the LAP was required to be paid for Hillingdon to deliver its air quality local action plan and or implement specific measures on/along the road network affected by the proposal that reduce vehicle emissions and or reduce human exposure to pollution levels, including from the backup generator emissions, assuming no local network congestion would be exacerbated by the proposal (this is subject to Highways views).</p> <p>Using information provided to date (excluding additional emissions from the possible backup generator and exacerbation of congested conditions in the affected network), a section 106 agreement with the LBH of £131,568 is to be paid for local air quality management purposes.</p> <p>The above is subject to revision once LBH Highways comments on the traffic impacts of the proposal are issued. Should an exacerbation of congestion at the road network affected by the vehicular movements associated with the operational phase of the proposed development be observed, and or emissions from the implementation of the backup generator occur, there will be further resulting hazardous impacts on local air quality and public health and an updated calculation of the damage cost value will need to be issued. In addition, the following Air Quality conditions are required. See text below.</p> <p>Condition Air Quality - Low Emission Strategy</p> <p>1. <i>No construction works shall be undertaken until a clear and effective low emission strategy (LES) have been submitted to and approved in writing by the Local Planning Authority. The strategy shall include, but not be restricted to:</i></p>	

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	<p>an emergency back-up generator be installed, there will be the potential for significant air quality impacts as a result of associated emissions of NOx, and the full assessment of clean design measures and the mitigation of resulting impacts required.</p>	<p>is not 'air quality neutral' in terms of transport emissions. In addition, the proposal has not offered suitable mitigation measures that in a quantifiable manner would demonstrate the exceeding traffic emissions would be removed.</p>	<p>a) <i>The design, implementation and maintenance of any backup generator to be installed to be clean in terms of NOx and PM emissions;</i> b) <i>provision of an electric vehicle fast charging bay. This is to be implemented as part of the proposal with the minimum requirements as per the London Plan.</i> c) <i>a clear and effective strategy, aligned with the Travel Plan, to encourage/support staff, users and residents of the site to</i> i) <i>use public transport;</i> ii) <i>cycle / walk to work where practicable;</i> iii) <i>enter car share schemes;</i> iv) <i>purchase and drive to work zero emission vehicles.</i></p> <p><i>Measures to support and encourage modal shift, will include but be not restricted to incentives for residents and employees to use public transport to reduce their car ownership.</i></p> <p><i>The measures in the agreed scheme shall be maintained throughout the life of the development.</i></p> <p>Reason - As the application site is within an Air Quality Management Area and to reduce the impact on air quality in accordance with policy EM8 of the Local Plan: Part 1 (November 2012), policy DME1 14 of the London Borough of Hillingdon Local Plan (part 2), London Plan Policy 7.14, and paragraph 170 of the National Planning Policy Framework (2018).</p> <p>Conditions - Reducing Emissions from Demolition and Construction</p> <p>A <i>No development shall commence until a Plan has been submitted to, and approved in writing by, the LPA. This must demonstrate compliance (drawn up accordance with) the GLA Control of Dust and Emissions from Construction and Demolition SPG (or any successor document).</i></p> <p>Reason: Compliance with London Plan Policy 7.14 and in accordance with Mayor of London "The Control of Dust and Emissions from Construction and demolition (or any successor document).</p>	

Name, Location & Proposal description	Air Quality Issues in AQ Assessment	LA Requirements	Planning Conditions Text/S106 Agreements/ Status/Outcome	Neutral
			<p><i>B Non-road mobile machinery (standard condition recommended by Mayor of London, London Local Air Quality Management Policy Guidance 2019)</i></p> <p><i>All Non-Road Mobile machinery (NRMM) of net power of 37kW and up to and including 560kW used during the demolition, site preparation and construction phases shall comply with the emissions standards set out in chapter 4, proposal 4.2.3.a of the London Environment Strategy. Unless it complies with the standard set out in the London Environment Strategy, no NRMM shall be onsite, at any time, whether in use or not, without the prior written consent of the LPA. The developer shall keep an up to date list of all NRMM used during the demolition, site preparation and construction phases of the development on the online register https://nrmm.london/</i></p> <p>Reason: Compliance with the London's Low Emission Zone for non-road mobile machinery as per requirements of the London Environment Strategy</p>	
Planning Ref	35810/APP/2020/187			NO
<p>TAVISTOCK WORKS TAVISTOCK ROAD YIEWSLEY Redevelopment of the site to include the demolition of the existing building (Use Class B1a) and the erection of a 7-storey building and a basement to provide residential units (Use Class C3) and associated works. The plans show:</p>	<p>The application site falls within the West Drayton/Yiewsley Focus Area, identified Greater London Authority and London Borough of Hillingdon as experiencing elevated pollutant concentrations with high density of population being exposed to hazardous levels.</p> <p>As per the London Plan and London Borough of</p>	<p>In addition, the proposal has not offered suitable mitigation measures that in a quantifiable manner would demonstrate the exceeding traffic emissions would be removed. It is noted that the applicant quite helpfully has calculated the damage cost associated with the proposal. Whereas the value calculated by LBH differs slightly from the reported in the air quality</p>	<p>A section 106 agreement with the LAP of £31,232 was required to be paid for Hillingdon to deliver its air quality local action plan and or implement specific measures on/along the road network affected by the proposal that reduce vehicle emissions and or reduce human exposure to pollution levels, assuming no local network congestion would be exacerbated by the proposal (subject to Highways views).The above is subject to revision once LBH Highways comments on the traffic impacts of the proposal are issued.</p> <p>Should an exacerbation of congestion at the road network affected by the vehicular movements associated with the operational phase of the proposed development be observed, there will be further resulting hazardous impacts on local air quality and public health and an updated calculation of the damage cost value will need to be issued. In addition, the following Air Quality conditions are required. See text below.</p> <p>Condition Air Quality - Emission Mitigation Strategy</p>	

Name, Location & Proposal description	Air Quality Issues in AQ Assessment	LA Requirements	Planning Conditions Text/S106 Agreements/ Status/Outcome	Neutral
<p>Redevelopment of the site to provide 34 residential units (11 x 1-bed, 15 x 2-bed and 8 x 3-bed), 34 cycle parking spaces, 28 car parking spaces and 685 sq.m of private and communal amenity spaces with associated landscaping and works.</p>	<p>Hillingdon Local Action Plan, developments need to be neutral as minimum and contribute actively to reduce pollution in Focus Areas, contributing to the reduction of emissions in these sensitive areas. The proposed development is not neutral for transport emissions and as such, it is not 'air quality neutral' in terms of the London Plan requirements.</p>	<p>assessment, we remain available to discuss any variations in the input assumptions made and adjust accordingly.</p> <p>Please note that the damage cost required below does not account for the usual 10% discount applicable to the travel plan emission reduction achievements. The applicant is claiming the travel plan presented is to achieve a 18% reduction which is challenged. Until Highways comments and confirmation of the emission reduction achieved by the travel plan presented no discount is applied. If the travel plan presented is in the same measure of a standard travel plan allowance, then a 10% reduction of the value below is to be applied, to be secured by a minimum bond of £3,123. If it is accepted that the travel plan presented will achieve a 18% reduction</p>	<p>1. No construction works shall be undertaken until a clear and effective emission mitigation strategy (EMS) have been submitted to and approved in writing by the Local Planning Authority. The strategy shall include, but not be restricted to:</p> <ul style="list-style-type: none"> a) Be clean by design as per the London Sustainable Design and construction Supplementary Planning Guidance, b) provision of an electric vehicle fast charging bay. This is to be implemented as part of the proposal with the minimum requirements as per the London Plan. c) a clear and effective strategy, aligned with the Travel Plan, to encourage both students and staff of the site to <ul style="list-style-type: none"> i) use public transport; ii) cycle / walk to work where practicable; iii) enter car share schemes; iv) enter cab share schemes to and from the airport and or home / work locations; iv) purchase and drive to work zero emission vehicles. <p>Measures to support and encourage modal shift, will include but be not restricted to incentives for residents to use public transport to reduce their car ownership.</p> <p>The measures in the agreed scheme shall be maintained throughout the life of the development.</p> <p>Reason - As the application site is within an Air Quality Management Area and to reduce the impact on air quality in accordance with policy EM8 of the Local Plan: Part 1 (November 2012), policy DME1 14 of the London Borough of Hillingdon Local Plan (part 2), London Plan Policy 7.14, and paragraph 170 of the National Planning Policy Framework (2018).</p> <p>Conditions - Reducing Emissions from Demolition and Construction</p>	

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		<p>in emissions as claimed by the applicant, the equivalent discount is to be applied but to be secured by a minimum bond of the same amount (£5,622).</p>	<p><i>A No development shall commence until a Plan has been submitted to, and approved in writing by, the LPA. This must demonstrate compliance (drawn up accordance with) the GLA Control of Dust and Emissions from Construction and Demolition SPG (or any successor document).</i></p> <p>Reason: Compliance with London Plan Policy 7.14 and in accordance with Mayor of London "The Control of Dust and Emissions from Construction and demolition (or any successor document).</p> <p><i>B Non-road mobile machinery (standard condition recommended by Mayor of London, London Local Air Quality Management Policy Guidance 2019)</i></p> <p><i>All Non-Road Mobile machinery (NRMM) of net power of 37kW and up to and including 560kW used during the demolition, site preparation and construction phases shall comply with the emissions standards set out in chapter 4, proposal 4.2.3.a of the London Environment Strategy. Unless it complies with the standard set out in the London Environment Strategy, no NRMM shall be onsite, at any time, whether in use or not, without the prior written consent of the LPA. The developer shall keep an up to date list of all NRMM used during the demolition, site preparation and construction phases of the development on the online register https://nrmm.london/</i></p> <p>Reason: Compliance with the London's Low Emission Zone for non-road mobile machinery as per requirements of the London Environment Strategy</p>	
A40 SWAKELEYS ROAD FOCUS AREA				
Planning Ref	74738/APP/2019/1181			YES
<p>13A NORTH COMMON ROAD UXBRIDGE UB8 1PD Erection of 5 two storey, 3-bed,</p>	<p>The proposed development is located in-between two Focus Areas: Uxbridge Road and A40- Swakeleys Focus Areas being likely</p>	<p>LBH requires new developments to incorporate air quality positive design measures from the outset and suitable mitigation</p>	<p>A section 106 agreement with the LAP of £12,277 was required to be paid to contribute to Hillingdon to deliver its air quality local action plan and or implement specific measures on/along the road network affected by the proposal that reduce vehicle emissions and or reduce human exposure to pollution levels.</p>	

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<p>attached dwellings with associated parking and amenity space, involving demolition of existing detached house (AMENDED PLANS 18/10/19) 13A NORTH COMMON ROAD UXBRIDGE UB8 1PD</p>	<p>to contribute to the area in exceedance of the nitrogen dioxide annual mean value to the north of the application site (Swakeleys Roundabout). The proposal is likely to originate emissions from associated transport at an equivalent damage cost of £12,277.</p>	<p>measures to reduce pollution, especially in areas where the air quality is already poor (LBH Air Quality Local Action Plan 2019-2024), namely Focus Areas. Furthermore, policy DMEI 14 of the emerging London Borough of Hillingdon Local Plan (part 2), requires active contribution towards the continued improvement of air quality, especially within the Air Quality Management Area.</p> <p>In addition, the London Plan requires development to be at least 'air quality neutral' and not lead to further deterioration of existing poor air quality (such as areas designated as Air Quality Management Areas (AQMAs)).</p>		
<p>Planning Ref</p>	<p>44160/APP/2019/3737</p>			<p>NO</p>
<p>253 PARK ROAD UXBRIDGE Erection of a two and a half storey building to contain 4 x 3-bed and 5 x 2-</p>	<p>The proposed development is within LBH Air Quality Management Area (AQMA) and the he A40/Swakeleys Road Air</p>	<p>In the absence of substantiated evidence that new residents will not be exposed to hazardous levels of pollution, namely</p>	<p>In addition, a section 106 agreement with the LAP of £ £8,946 was required to be paid for Hillingdon to deliver its air quality local action plan and or implement specific measures on/along the road network affected by the proposal that reduce vehicle emissions and or reduce human exposure to</p>	

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<p>bed self-contained flats with associated parking, landscaping and amenity space involving the demolition of the existing dwelling house</p>	<p>Quality Focus Area (AQFA), where special focus in reducing elevated levels of air pollution is a priority of the Borough.</p> <p>Whereas the impact of the proposed extension on local air quality is likely to be small, given its proximity to the congested Park Road/A40 junction, there is a risk of introducing the new residents to hazardous levels of pollution. The air quality report submitted to support the planning application predicts 36.1 ug/m3 at receptor R3 and 37.1 at receptor R4, which, assuming the error of the model is +/- 4 ug/m3, could indicate exposure above the nitrogen dioxide annual mean limit value to safeguard human health (40ug/m3) for new residents. In addition, the proposed development is not air quality neutral for</p>	<p>locations R3 and R4, the development should demonstrate appropriate mitigation measures to ensure the future occupiers are protected in compliance with DME14, in particular, Part Bii. This can include, but is not limited to:</p> <p>a. where practicable to do so, setback the buildings further from the road source(s),</p> <p>b. ensure air intakes are located away from the main source of air pollution;</p> <p>c. optimise the building design to ensure adequate dispersion of emissions from discharging stacks and vents, the location of equipment should not result in flues and exhaust vents being in close proximity to recreational areas;</p> <p>d. consider the location of outside space including gardens, balconies and roof</p>	<p>pollution levels, assuming no local network congestion would be exacerbated by the proposal.</p> <p>Condition Air Quality - Low Emission and Exposure Reduction Strategy</p> <p>1. <i>No construction works shall be undertaken until a clear and effective low emission strategy (LES) have been submitted to and approved in writing by the Local Planning Authority. The strategy shall include, but not be restricted to:</i></p> <p>a) <i>a clean supply of energy to the site. Any CHP or gas boiler will have to conform with the London Ultra Low NOx requirements. The boilers to be specified to meet ultra-low NOx emissions standards of < 40mg/kWh.</i></p> <p>b) <i>provision of an electric vehicle fast charging bay. This is to be implemented as part of the proposal with the minimum requirements as per the London Plan.</i></p> <p>c) <i>a clear and effective strategy, aligned with the Travel Plan, to encourage residents of the site to</i></p> <p>i) <i>use public transport;</i></p> <p>ii) <i>cycle / walk to work where practicable;</i></p> <p>iii) <i>enter car share schemes;</i></p> <p>iv) <i>enter cab share schemes to and from the airport and or home / work locations;</i></p> <p>iv) <i>purchase and drive to work zero emission vehicles.</i></p> <p><i>Measures to support and encourage modal shift, will include but be not restricted to incentives for residents to use public transport to reduce their car ownership.</i></p> <p>d) <i>the design and implementation of an effective green infrastructure to absorb and screen the development from the pollution source</i></p> <p><i>The measures in the agreed scheme shall be maintained throughout the life of the development.</i></p> <p>Reason - As the application site is within an Air Quality Management Area and to reduce the impact on air quality in accordance with policy EM8 of the Local Plan: Part 1 (November 2012), policy DME14 of the</p>	

Name, Location & Proposal description	Air Quality Issues in AQ Assessment	LA Requirements	Planning Conditions Text/S106 Agreements/ Status/Outcome	Neutral
	<p>transport, which is a requirement of the London Plan.</p> <p>In addition, these reported results are assuming a decline of vehicle emissions as per national projections, which may or may not be the case. In reality, predicted concentrations could be well above the nitrogen dioxide annual mean value, should the turnover of the fleet not occur as per national projections, and or proper model set up to replicate congested conditions at the roundabout adequately taken into account in the assessment. Furthermore, no contributions of the energy production for the site were quantified at this stage. These will also add to current levels.</p> <p>Finally, an adjustment factor of 3.069 has been applied across the study</p>	<p>terraces proposed in areas of particular poor air quality;</p> <p>e. consider the use of effective green infrastructure to absorb and screen the development from the pollution source;</p> <p>f. consider the use of mechanical ventilation with specific pollution filtration with maintenance regime for the life of the development.</p> <p>g. Further information is available in the Mayor of London, Sustainable Design and Construction SPG:</p> <p>h. https://www.london.gov.uk/sites/default/files/gla_migrate_files_destination/Sustainable%20Design%20%26%20Construction%20SPG.pdf</p>	<p>London Borough of Hillingdon Local Plan (part 2), London Plan Policy 7.14, and paragraph 170 of the National Planning Policy Framework (2018).</p> <p>Conditions - Reducing Emissions from Demolition and Construction</p> <p>A No development shall commence until a Plan has been submitted to, and approved in writing by, the LPA. This must demonstrate compliance (drawn up accordance with) the GLA Control of Dust and Emissions from Construction and Demolition SPG (or any successor document).</p> <p><i>Reason: Compliance with London Plan Policy 7.14 and in accordance with Mayor of London "The Control of Dust and Emissions from Construction and demolition (or any successor document).</i></p> <p>B Non-road mobile machinery (standard condition recommended by Mayor of London, London Local Air Quality Management Policy Guidance 2019)</p> <p><i>All Non-Road Mobile machinery (NRMM) of net power of 37kW and up to and including 560kW used during the demolition, site preparation and construction phases shall comply with the emissions standards set out in chapter 4, proposal 4.2.3.a of the London Environment Strategy. Unless it complies with the standard set out in the London Environment Strategy, no NRMM shall be onsite, at any time, whether in use or not, without the prior written consent of the LPA. The developer shall keep an up to date list of all NRMM used during the demolition, site preparation and construction phases of the development on the online register https://nrmm.london/</i></p> <p>Reason: Compliance with the London's Low Emission Zone for non-road mobile machinery as per requirements of the London Environment Strategy</p>	

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	<p>area, which is considered very high for urban conditions. Because only one monitoring location was used to verify the results, the robustness and adequacy of the model results is unquantified.</p>			
UXBRIDGE ROAD FOCUS AREA				
Planning Ref	35805/APP/2019/137			NO
<p>1 & 1A BATH ROAD HEATHROW TW6 2AA Outline planning application for demolition of two existing buildings, including a banqueting/ conference hall (Use Class D2) and office/warehouse (Use Class B1/B8), and erection of a five storey 192-bedroom hotel (Use Class C1), with associated works (landscaping reserved for</p>	<p>The proposed development is located with the A4 Corridor Focus Area, bringing traffic and energy production emissions which will add to current exceedances.</p>	<p>As per the new London Plan, developments need to be neutral as minimum and positive in Focus Areas, contributing to the reduction of emissions in these sensitive areas.</p>	<p>A section 106 agreement with the LAP of £155,013 was required to be paid for Hillingdon to deliver its air quality local action plan and or implement specific measures on/along the road network affected by the proposal that reduce vehicle emissions and or reduce human exposure to pollution levels.</p> <p>In addition, an Air Quality condition is required to develop and implement a Low Emission Strategy. See text below.</p> <p>Condition Air Quality - Low Emission Strategy</p> <p><i>No development shall commence until a low emission strategy (LES) has been submitted to and approved in writing by the Local Planning Authority. The LES shall address</i></p> <p>1) <i>the fleet composition serving the Hotel to be Euro 6/VI or cleaner (e.g. electric) or have implemented retrofitting devices that will enable compliance with such Euro standards.</i></p> <p>2) <i>the supply of energy to the Hotel. Any CHP or gas boiler will have to conform with the London Ultra Low NOx requirements;</i></p>	

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subsequent approval).			<p><i>The strategy shall detail the steps that will be followed in addressing the lower emissions requirements stated above and what measures will be taken to take into account future changing standards and available technologies and be updated accordingly in agreement with the local planning authority.</i></p> <p>3) <i>an electric vehicle fast charging bay. This is to be implemented as part of the proposal with a minimum of three charging points.</i></p> <p>4) <i>a clear and effective strategy to encourage staff to</i> <i>a) use public transport;</i> <i>b) cycle / walk to work where practicable;</i> <i>c) enter car share schemes;</i> <i>d) purchase and drive to work zero emission vehicles.</i></p> <p><i>The measures in the agreed scheme shall be maintained throughout the life of the development.</i></p> <p>Reason - As the application site is within an Air Quality Management Area and to comply with paragraph 124 of the NPPF, policy 7.14 of the London Plan, and policy DMEI 14 of the London Borough of Hillingdon Local Plan (part 2).</p>	
Planning Ref	68069/APP/2019/22			NO
FORMER BELMORE ALLOTMENT SITE BURNS CLOSE HAYES UB4 0EJ Re-development of former allotment site to provide 5 x two to three storey blocks comprising 112 residential units including 30 x 1-bed,	The review of the air quality assessment has indicated that whereas the proposal is not within a Focus Area, it is not neutral for transport. In addition, we don't know its impact on the exceeding residential sensitive receptors nearby within Uxbridge Road Focus Area which		<p>The concentrations predicted in the opening year are below the Nitrogen dioxide annual mean Limit Value but is close to Grange Park school. As the proposal is not neutral, a S106 contribution of £54,530 was recommended.</p> <p>Condition Air Quality - Low Emission Strategy</p> <p><i>No development shall commence until a low emission strategy (LES) has been submitted to and approved in writing by the Local Planning Authority. The LES shall specify the following</i></p> <p>1) <i>Any CHP or gas boiler will have to conform with the London Ultra Low NOx requirements;</i></p>	

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<p>47 x 2-bed ,33 x 3-bed and 2 x 4 bed units with associated access, parking and amenity space. (AMENDED PLANS 06/06/2019)</p>	<p>333 additional vehicles will certainly have (or a share of them), because the receptors modelled are only in the vicinity of the application site.</p>		<p>2) <i>A clear and effective strategy to encourage users of the residential units to</i></p> <ul style="list-style-type: none"> a) <i>use public transport;</i> b) <i>cycle / walk to work where practicable;</i> c) <i>enter car share schemes;</i> d) <i>purchase and drive to work zero emission vehicles.</i> <p><i>The measures in the agreed scheme shall be maintained throughout the life of the development.</i></p> <p>Reason - As the application site is within an Air Quality Management Area and to comply with paragraph 124 of the NPPF, policy 7.14 of the London Plan, and policy DME1 14 of the London Borough of Hillingdon Local Plan (part 2).</p> <p>Condition Air Quality - Construction and demolition phase</p> <p><i>In order to control the dust and emissions from the demolition and construction phases, the Construction Management Plan must be developed in accordance with the Air Quality Management (IAQM) 'Guidance on the assessment of dust from demolition and construction' and the GLA, Control of Dust and Emissions from Construction and Demolition Supplementary Planning Guidance. All Non-Road Mobile Machinery (NRMM) used during construction must meet Stage IIIA criteria of EU Directive 97/68/EC and must be registered online on the NRMM website at http://nrmm.london/. Confirmation of the registration must be submitted to the LPA.</i></p> <p>Reason: To ensure the development reduces and manages its air quality impacts in an air quality management area in accordance with Policy EM8 of the Local Plan.</p>	
<p>Planning Ref</p>	<p>40050/APP/2018/1737</p>			<p>YES</p>

Name, Location & Proposal description	Air Quality Issues in AQ Assessment	LA Requirements	Planning Conditions Text/S106 Agreements/ Status/Outcome	Neutral
<p>BRIDGE HOUSE OXFORD ROAD UXBRIDGE UB8 1HS Demolition of existing rooftop plant room and replacement with two storey extension to provide 25 new residential units (Use Class C3), ancillary gymnasium (Use Class D2) plus associated landscaping and parking (AMENDED APRIL 2019).</p>	<p>Bridge House benefits from a Prior Approval granted on the 1st September 2017 (Reference 40050/APP/2017/2438) for the change of use of the existing buildings across the site (Bridge House, Waterside House and Riverview House) from office accommodation (Class B1) to 237 residential units (15 x Studio and 224 x 1-Bed) together with ancillary car parking, cycle storage and waste and recycling storage.</p> <p>This development was not supported by an air quality assessment and is located within Hillingdon Air Quality Management Area and Uxbridge Focus Area. It is noted that whereas a Section 106 was agreed for a contribution of a maximum of £500, 000 to be determined in accordance with a transport study to be</p>	<p>The proposed development is located with the Uxbridge Focus Area, bringing additional air pollutant emissions which will add to current exceedances. As per the new London Plan, developments need to be neutral as minimum and positive in Focus Areas, contributing to the reduction of emissions in these sensitive areas.</p>	<p>A section 106 agreement with the LAP of £20,706 was required for Hillingdon to deliver its air quality local action plan and or implement specific measures on/along the road network affected by the proposal that reduce vehicle emissions and or reduce human exposure to pollution levels</p> <p>Condition Air Quality – Alleviating Congestion within Uxbridge Focus Area</p> <p><i>No development shall commence until a scheme to alleviate congestion within Uxbridge Focus Area (UFA) has been submitted to and approved in writing by the Local Planning Authority. The scheme will include the following</i></p> <p><i>A) An updated Transport Study to determine the S106 contribution to Highways works in relation to 40050/APP/2017/2438, to include the cumulative additional 25 dwellings proposed. The study will include measures to alleviate congestion in UFA having into consideration total NOx and PM2.5 emissions to be calculated using Defra’s Emission Factor Toolkit;</i></p> <p><i>B) A robust Travel (TP) plan for users of the proposed additional 25 dwellings. The TP shall detail the strategies and steps that will be followed in promoting effectively modal shift and the usage of clean vehicles namely electric cars, euro 6/VI and above by the users of the proposed development and quantify, wherever appropriate, the reduction of emissions achieved. As a minimum the TP shall include</i></p> <p><i>1) an electric vehicle fast charging bay. This is to be implemented as part of the proposal with the London Plan minimum requirements;</i></p> <p><i>2) a clear and effective strategy to encourage users to</i></p> <ul style="list-style-type: none"> <i>a) use public transport;</i> <i>b) cycle / walk to work where practicable;</i> <i>c) enter car share schemes;</i> <i>d) purchase and drive zero emission vehicles.</i> 	

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	<p>submitted by the developer, no provision was made for a contribution towards air quality improvements in the sensitive Uxbridge Focus Area. In addition, the transport study to be submitted to determine the contribution to Highways works, may not have an impact in alleviating existing congested conditions which are the main factor contributing to the high levels of nitrogen dioxide ambient air concentrations within the Uxbridge Focus Area. Analysis of the Transport Assessment submitted to support the current proposal (40050/APP/2018/1737) indicates that Bridge House could generate 30 two-way vehicle trips in the AM peak and 24 in the PM peak, with some 300 vehicle movements across the day with the additional 25 units representing approximately 40 vehicle</p>		<p><i>The measures in the agreed scheme shall be maintained throughout the life of the development.</i></p> <p>Reason - As the application site is within an Air Quality Management Area and to comply with paragraph 124 of the NPPF, policy 7.14 of the London Plan, and policy DMEI 14 of the London Borough of Hillingdon Local Plan (part 2).</p>	

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	movements across the day.			
Planning Ref	8057/APP/2019/3862			YES
The former Star PH, corner of Star Road and UXBRIDGE ROAD HILLINGDON Erection of a part 4, part 5 storey building accommodating 14 dwellings (9 x 1 bed, 3 x 2 bed and 2 x 3 bed flats) and commercial space, erection of a 2 storey building with roof accommodation comprising 2 x 3 bed houses, car and cycle parking and private and communal amenity space.	The proposed development is located within the Uxbridge Road Focus Area where current high ambient annual mean values exceed the limit value to safeguard public health for nitrogen dioxide in this sensitive area.	Whereas the proposal is air quality neutral it originates NOx and PM2.5 emissions from associated activities at an equivalent damage cost of £6,419. The air quality report submitted to support the planning application recommends a Welcome Pack available to all new residents online and as a booklet, containing information and incentives to encourage the use of sustainable transport modes from new occupiers. If this is implemented and secured via a Travel Plan condition, then a 10% discount is applied and a value of £5,777 is due towards the implementation of LBH Air Quality Action Plan.	Therefore, either a section 106 agreement with the LAP of £5,777 to be paid to contribute to Hillingdon to deliver its air quality local action plan in this sensitive area, or the applicant to implement specific measures on/along the road network affected by the proposal that reduce human exposure to pollution levels (e.g. green walls along selected locations to be agreed with LBH Air Quality Officer) was required. Condition Air Quality - Low Emission Strategy <i>No development shall commence until a low emission strategy (LES) has been submitted to and approved in writing by the Local Planning Authority. The LES shall be linked to and consistent with the Travel Plan and also address the supply of energy to the proposed development. Any CHP or gas boiler will have to conform with the London Ultra Low NOx requirements.</i> <i>The measures in the agreed scheme shall be maintained throughout the life of the development.</i> Reason - As the application site is within an Air Quality Management Area and Focus Area and to reduce the impact on air quality in accordance with policy EM8 of the Local Plan: Part 1 (November 2012), policy DME1 14 of the emerging London Borough of Hillingdon Local Plan (part 2), London Borough of Hillingdon Air Quality Local Action Plan 2019-2024, London Plan Policy 7.14, and paragraph 170 of the National Planning Policy Framework (2018).	
Planning Ref	43495/APP/2020/888			NO
WEIR HOUSE, 50 RIVERSIDE WAY UXBRIDGE	The proposed development is within LBH Air Quality	The original air quality report submitted to support the planning	A section 106 agreement with the LAP of £ 30,116 was paid for Hillingdon to deliver its air quality local action plan and or implement specific measures on/along the road network affected by the proposal that reduce vehicle	

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<p>Demolition of existing building and the erection of a part four and part five storey block providing 34 x Class C3 units; associated access and other works including landscaping and amenity space, car and cycle parking and refuse storage.</p>	<p>Management Area (AQMA) and in the vicinity of the Uxbridge Air Quality Focus Area (approximately 130 m) generating a total of 60 movements / day on the adjoining road network. Whereas it is not a significant number of additional vehicles on the local road network, it is important to control and minimise to the possible maximum extent the impacts within this Focus Area where exceedances to the annual mean limit value for nitrogen dioxide are observed and where special focus in reducing elevated levels of air pollution is a priority of the Borough.</p>	<p>application, whereas including an air quality neutral assessment as per London Plan requirements, reported the proposal as being air quality neutral. LBH has undertaken the required calculations and did not agree with the reported results, with calculations undertaken indicating the proposed development is not air quality neutral for transport, as required by the London Plan. A recent note submitted by the applicant has corrected the calculations undertaken and the number of trips associated with the operation of the proposed development, which is 60 daily movements in total, as opposed to 35 AADT as initially reported. The updated conclusion agrees with LBH that the proposal is not air quality neutral for transport.</p>	<p>emissions and or reduce human exposure to pollution levels, assuming no local network congestion would be exacerbated by the proposal. Please note that a 10% discount has already been applied due to the application of the Travel Plan.</p> <p>In addition, the following air quality conditions are required:</p> <p>Condition Air Quality - Low Emission Strategy</p> <p>1. <i>No construction works shall be undertaken until a clear and effective low emission strategy (LES) have been submitted to and approved in writing by the Local Planning Authority. The strategy shall include, but not be restricted to:</i></p> <ul style="list-style-type: none"> a) <i>Be clean by design as per the London Sustainable Design and construction Supplementary Planning Guidance,</i> b) <i>provision of an electric vehicle fast charging bay. This is to be implemented as part of the proposal with the minimum requirements as per the London Plan.</i> c) <i>a clear and effective strategy, aligned with the Travel Plan, to encourage residents of the site to</i> <ul style="list-style-type: none"> i) <i>use public transport;</i> ii) <i>cycle / walk to work where practicable;</i> iii) <i>enter car share schemes;</i> iv) <i>enter cab share schemes to and from the airport and or home / work locations;</i> v) <i>purchase and drive to work zero emission vehicles.</i> <p><i>Measures to support and encourage modal shift, will include but be not restricted to incentives for residents to use public transport to reduce their car ownership.</i></p> <p><i>The measures in the agreed scheme shall be maintained throughout the life of the development.</i></p> <p>Reason - As the application site is within an Air Quality Management Area and to reduce the impact on air quality in accordance with policy</p>	

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			<p>EM8 of the Local Plan: Part 1 (November 2012), policy DME1 14 of the London Borough of Hillingdon Local Plan (part 2), London Plan Policy 7.14, and paragraph 170 of the National Planning Policy Framework (2018).</p> <p>Conditions - Reducing Emissions from Demolition and Construction</p> <p>A No development shall commence until a Plan has been submitted to, and approved in writing by, the LPA. This must demonstrate compliance (drawn up accordance with) the GLA Control of Dust and Emissions from Construction and Demolition SPG (or any successor document).</p> <p><i>Reason: Compliance with London Plan Policy 7.14 and in accordance with Mayor of London "The Control of Dust and Emissions from Construction and demolition (or any successor document).</i></p> <p>B Non-road mobile machinery (standard condition recommended by Mayor of London, London Local Air Quality Management Policy Guidance 2019)</p> <p><i>All Non-Road Mobile machinery (NRMM) of net power of 37kW and up to and including 560kW used during the demolition, site preparation and construction phases shall comply with the emissions standards set out in chapter 4, proposal 4.2.3.a of the London Environment Strategy. Unless it complies with the standard set out in the London Environment Strategy, no NRMM shall be onsite, at any time, whether in use or not, without the prior written consent of the LPA. The developer shall keep an up to date list of all NRMM used during the demolition, site preparation and construction phases of the development on the online register https://nrmm.london/</i></p> <p>Reason: Compliance with the London's Low Emission Zone for non-road mobile machinery as per requirements of the London Environment Strategy</p>	
Planning Ref	72722/APP/2019/347			N/A

Name, Location & Proposal description	Air Quality Issues in AQ Assessment	LA Requirements	Planning Conditions Text/S106 Agreements/ Status/Outcome	Neutral
<p>25-30 BAKERS ROAD UXBRIDGE UB8 1RG Demolition of existing buildings and redevelopment to provide a new hotel and retail unit, along with refurbishment of part of the existing car park and service area (amended plans 06/04/20)</p>	<p>The application site falls within the Uxbridge Focus Area Focus Area (FA), which is a zone identified by both the Greater London Authority (GLA) and London Borough of Hillingdon (LBH) as experiencing pollutant concentrations above the limit value to safeguard human health, with high density of population being exposed to such hazardous levels.</p>	<p>As per the London Plan and London Borough of Hillingdon Local Action Plan, developments need to be neutral as minimum and contribute actively to reduce pollution in Focus Areas, contributing to the reduction of emissions in these sensitive areas. The proposed development is not supported by a neutral assessment as per London Plan’s requirements. Therefore, use was made of the transport statement of the application to derive transport emissions. In addition, the proposed development may include gas boilers and/or a gas fired Combined Heat and Power (CHP) unit to provide heat and hot water to the site which will contribute to the levels of pollution within the Focus Area. As the CHP emissions were not included in the air quality assessment (as full details of the energy</p>	<p>No air quality neutral assessment as per the London Plan requirements was submitted, which would indicate suitable mitigation for the additional traffic (and possibly energy centre) emissions within the sensitive Uxbridge Focus Area. Given the location of the application site within a sensitive area in terms of air pollution elevated levels and hazardous public exposure to such values within a Focus Area and in the absence of a neutral assessment and suitable mitigation measures that in a quantifiable manner would demonstrate the exceeding traffic emissions would be removed.</p> <p>In the event the application is approved, a section 106 agreement with the LAP of £155,600 is to be paid for Hillingdon to deliver its air quality local action plan and or implement specific measures on/along the road network affected by the proposal that reduce vehicle emissions and or reduce human exposure to pollution levels, assuming no local network congestion would be exacerbated by the proposal. It is noted that this value is underestimated as no energy centre emissions were accounted for in this value estimation due to the absence of its account in the air quality report.</p>	

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		strategy were not available) the total emissions generated by the proposal are underestimated.		
A40/ LONG LANE FOCUS AREA				
Planning Ref	4266/APP/2019/3088			NO
<p>FORMER MASTER BREWER SITE FREEZELAND WAY HILLINGDON Construction of a residential-led, mixed-use development comprising buildings of between 2 and 11 storeys containing 514 units (Use Class C3); flexible commercial units (Use Class B1/A1/A3/D1); associated car (165 spaces) and cycle parking spaces; refuse and bicycle stores; hard and soft landscaping including a new central space, greenspaces, new pedestrian links; biodiversity</p>	<p>The proposal seeks 514 residential units and comprises in total 12 buildings, located within the A4/Long Lane Focus Area. The proposed development, due to its size and location, will add to current exceedances of the nitrogen dioxide annual mean limit value within this sensitive area as a result of both traffic and energy production emissions.</p> <p>It is noted that the impact on local air quality of nitrogen dioxide emissions associated with energy production was not assessed as part of the air quality assessment submitted to support the planning application.</p>	<p>The applicant has not submitted the air quality neutral assessment as per the Mayor’s requirement. However, to support the process, LBH has undertaken the calculations and the proposal is not air quality neutral in terms of traffic emissions. As per the London Plan, developments need to be neutral as minimum and contribute actively to reduce pollution in Focus Areas, contributing to the reduction of emissions in these sensitive areas.</p>	<p>A section 106 agreement with the LAP of £294,522 would have to be paid for Hillingdon to deliver its air quality local action plan and or implement specific measures on/along the road network affected by the proposal that reduce vehicle emissions and or reduce human exposure to pollution levels, assuming no local network congestion would be exacerbated by the proposal.</p> <p>However, LBH Highways comments on the traffic impacts of the proposal reveal that there will be an exacerbation of congestion at the road network affected by the vehicular movements associated with the operational phase of the proposed development. Congested traffic emits significantly higher loads of pollution levels due to idling and stop start emissions. As per LBH Highways reported concerns, the highway/transport related consequences of the residentially dominant 514 residential proposal with a commercial component will impose added and unreasonable traffic burden on the local road network (namely the Hillingdon Circus signalled junction which currently operates at and beyond workable capacity) with resulting hazardous impacts on local air quality and public health. In addition, the proposal is not air quality neutral, as required by the London Plan, and no suitable mitigation measures were offered by the applicant, as required by the National Planning Policy Framework (2019).</p> <p>This is contrary to Policy EM8 of the Development Plan (2012) and emerging Local Plan Part 2 Development Plan Policy DME1 14, the London Plan, and the National Planning Policy Framework (2019).</p>	

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enhancement; associated highways infrastructure; plant; and other associated ancillary development.	When such contribution is added to the traffic emissions, there will be at least a moderate adverse impact on local air quality, at least at receptor "R18, Douye School East", which already experiences a concentration (51.35 $\mu\text{g}/\text{m}^3$) well above the limit to safeguard human health (40 $\mu\text{g}/\text{m}^3$).			
Planning Ref	10112/APP/2019/1244			NO
THE LONDON SCHOOL OF THEOLOGY GREEN LANE NORTHWOOD HA6 2UW Erection of a residential building comprising 15 flats with associated parking, cycle storage, motorcycle parking, disabled parking and bin storage following demolition of existing residential block and pair of semi-detached houses.	The proposed development is outside the LBH Air Quality Management Area (AQMA) but within approximately 130 m from Northwood West Focus Area, along the road network generating a total of 20 movements / day on Green Lane (the adjoining highway). Whereas it is not a significant number of additional vehicles on the local road network, it is important to control and minimise to the possible maximum extent the impacts within this Focus Area where	As the air quality report submitted to support the planning application does not include an air quality neutral assessment as per London Plan requirements, the LBH has undertaken the required calculations. Results indicate the proposed development is not air quality neutral for transport, which is a requirement of the London Plan.	A section 106 agreement with the LAP of £ 13,385 was required to be paid for Hillingdon to deliver its air quality local action plan and or implement specific measures on/along the road network affected by the proposal that reduce vehicle emissions and or reduce human exposure to pollution levels, assuming no local network congestion would be exacerbated by the proposal. In addition, the following air quality conditions are required: Condition Air Quality - Low Emission and Exposure Reduction Strategy 1. <i>No construction works shall be undertaken until a clear and effective low emission strategy (LES) have been submitted to and approved in writing by the Local Planning Authority. The strategy shall include, but not be restricted to:</i> a) <i>Be clean by design as per the London Sustainable Design and construction Supplementary Planning Guidance,</i> b) <i>provision of an electric vehicle fast charging bay. This is to be implemented as part of the proposal with the minimum requirements as per the London Plan.</i> c) <i>a clear and effective strategy, aligned with the Travel Plan, to encourage residents of the site to</i> i) <i>use public transport;</i>	

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	<p>exceedances to the annual mean limit value for nitrogen dioxide are observed and where special focus in reducing elevated levels of air pollution is a priority of the Borough.</p>		<p><i>ii) cycle / walk to work where practicable;</i> <i>iii) enter car share schemes;</i> <i>iv) enter cab share schemes to and from the airport and or home / work locations;</i> <i>iv) purchase and drive to work zero emission vehicles.</i></p> <p><i>Measures to support and encourage modal shift, will include but be not restricted to incentives for residents to use public transport to reduce their car ownership.</i></p> <p><i>The measures in the agreed scheme shall be maintained throughout the life of the development.</i></p> <p>Reason - As the application site is within an Air Quality Management Area and to reduce the impact on air quality in accordance with policy EM8 of the Local Plan: Part 1 (November 2012), policy DMEI 14 of the London Borough of Hillingdon Local Plan (part 2), London Plan Policy 7.14, and paragraph 170 of the National Planning Policy Framework (2018).</p> <p>Conditions - Reducing Emissions from Demolition and Construction</p> <p><i>A No development shall commence until a Plan has been submitted to, and approved in writing by, the LPA. This must demonstrate compliance (drawn up accordance with) the GLA Control of Dust and Emissions from Construction and Demolition SPG (or any successor document).</i></p> <p>Reason: Compliance with London Plan Policy 7.14 and in accordance with Mayor of London "The Control of Dust and Emissions from Construction and demolition (or any successor document).</p> <p><i>B Non-road mobile machinery (standard condition recommended by Mayor of London, London Local Air Quality Management Policy Guidance 2019)</i></p>	

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			<p><i>All Non-Road Mobile machinery (NRMM) of net power of 37kW and up to and including 560kW used during the demolition, site preparation and construction phases shall comply with the emissions standards set out in chapter 4, proposal 4.2.3.a of the London Environment Strategy. Unless it complies with the standard set out in the London Environment Strategy, no NRMM shall be onsite, at any time, whether in use or not, without the prior written consent of the LPA. The developer shall keep an up to date list of all NRMM used during the demolition, site preparation and construction phases of the development on the online register https://nrmm.london/</i></p> <p>Reason: Compliance with the London's Low Emission Zone for non-road mobile machinery as per requirements of the London Environment Strategy</p>	
A40/SOUTH RUISLIP FOCUS AREA				
Planning Ref	11891/APP/2020/20			NO
<p>BOURNE COURT SITE BOURNE COURT RUISLIP Outline planning application for the redevelopment of the site to provide 98 residential units in a single block, including access, car and cycle parking, refuse storage and amenity space, with landscape matters reserved.</p>	<p>The proposed development is within LBH Air Quality Management Area (AQMA) and the he A40/South Ruislip Focus Air Quality Focus Area (AQFA), where special focus in reducing elevated levels of air pollution is a priority of the Borough.</p> <p>The impact of the proposed development on local air quality is likely to be of 156 AADT, and there is a risk of</p>	<p>Whereas there is no air quality report submitted to support the planning application, the LBH has undertaken the required calculations, and the proposed development is not air quality neutral for transport, which is a requirement of the London Plan</p>	<p>A section 106 agreement with the LAP of £ 87,560 was required for Hillingdon to deliver its air quality local action plan and or implement specific measures on/along the road network affected by the proposal that reduce vehicle emissions and or reduce human exposure to pollution levels, assuming no local network congestion would be exacerbated by the proposal.</p> <p>In addition, in the absence of substantiated evidence that new residents will not be exposed to hazardous levels of pollution, the development should demonstrate appropriate mitigation measures to ensure the future occupiers are protected in compliance with DME1 14, in particular, Part Bii. This can include, but is not limited to:</p> <ul style="list-style-type: none"> a. where practicable to do so, setback the buildings further from the road source(s), b. ensure air intakes are located away from the main source of air pollution; 	

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	<p>introducing the new residents to hazardous levels of pollution</p>		<p>c. optimise the building design to ensure adequate dispersion of emissions from discharging stacks and vents, the location of equipment should not result in flues and exhaust vents being in close proximity to recreational areas;</p> <p>d. consider the location of outside space including gardens, balconies and roof terraces proposed in areas of particular poor air quality;</p> <p>e. consider the use of effective green infrastructure to absorb and screen the development from the pollution source;</p> <p>f. consider the use of mechanical ventilation with specific pollution filtration with maintenance regime for the life of the development.</p> <p>g. Further information is available in the Mayor of London, Sustainable Design and Construction SPG:</p> <p>h. https://www.london.gov.uk/sites/default/files/gla_migrate_files_destination/Sustainable%20Design%20%26%20Construction%20SPG.pdf</p> <p>In addition, the following air quality conditions were required:</p> <p>Condition Air Quality - Low Emission and Exposure Reduction Strategy</p> <p>1. <i>No construction works shall be undertaken until a clear and effective low emission strategy (LES) have been submitted to and approved in writing by the Local Planning Authority. The strategy shall include, but not be restricted to:</i></p> <p>a) <i>provision of an electric vehicle fast charging bay. This is to be implemented as part of the proposal with the minimum requirements as per the London Plan.</i></p> <p>b) <i>a clear and effective strategy, aligned with the Travel Plan, to encourage residents of the site to</i></p> <p><i>i) use public transport;</i></p> <p><i>ii) cycle / walk to work where practicable;</i></p> <p><i>iii) enter car share schemes;</i></p> <p><i>iv) enter cab share schemes to and from the airport and or home / work locations;</i></p> <p><i>iv) purchase and drive to work zero emission vehicles.</i></p>	

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			<p>Measures to support and encourage modal shift, will include but be not restricted to incentives for residents to use public transport to reduce their car ownership.</p> <p>c) the design and implementation of an effective green infrastructure to absorb and screen the development from the pollution source The measures in the agreed scheme shall be maintained throughout the life of the development.</p> <p>Reason - As the application site is within an Air Quality Management Area and to reduce the impact on air quality in accordance with policy EM8 of the Local Plan: Part 1 (November 2012), policy DME1 14 of the London Borough of Hillingdon Local Plan (part 2), London Plan Policy 7.14, and paragraph 170 of the National Planning Policy Framework (2018).</p> <p>Conditions - Reducing Emissions from Demolition and Construction</p> <p>A No development shall commence until a Plan has been submitted to, and approved in writing by, the LPA. This must demonstrate compliance (drawn up accordance with) the GLA Control of Dust and Emissions from Construction and Demolition SPG (or any successor document).</p> <p>Reason: Compliance with London Plan Policy 7.14 and in accordance with Mayor of London "The Control of Dust and Emissions from Construction and demolition (or any successor document).</p> <p>B Non-road mobile machinery (standard condition recommended by Mayor of London, London Local Air Quality Management Policy Guidance 2019)</p> <p>All Non-Road Mobile machinery (NRMM) of net power of 37kW and up to and including 560kW used during the demolition, site preparation and construction phases shall comply with the emissions standards set out in</p>	

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			<p><i>chapter 4, proposal 4.2.3.a of the London Environment Strategy. Unless it complies with the standard set out in the London Environment Strategy, no NRMM shall be onsite, at any time, whether in use or not, without the prior written consent of the LPA. The developer shall keep an up to date list of all NRMM used during the demolition, site preparation and construction phases of the development on the online register https://nrmm.london/</i></p> <p>Reason: Compliance with the London's Low Emission Zone for non-road mobile machinery as per requirements of the London Environment Strategy</p>	
OSSIE GARVIN FOCUS AREA				
Planning Ref	46378/APP/2019/2970			NO
<p>WEST LONDON FILM STUDIOS SPRINGFIELD ROAD HAYES UB4 0RG Development of an extension to West London Film Studios comprising construction of new sound stages, workshops and office accommodation, entrance structures and reception and security offices, creation of new vehicular and pedestrian accesses from Springfield Road, with</p>	<p>The proposed development is located within the Ossie Garden Focus Area, producing traffic emissions which will add to current high ambient annual mean values and exceedances of nitrogen dioxide in this sensitive area. The proposal originates emissions from associated transport of 0.529 tonnes per year at an equivalent damage cost of £139,415, for a standard day scenario.</p>	<p>LBH requires new developments to incorporate air quality positive design measures from the outset and suitable mitigation measures to reduce pollution, especially in areas where the air quality is already poor (LBH Air Quality Local Action Plan 2019-2024), namely Focus Areas. Furthermore, policy DME1 14 of the emerging London Borough of Hillingdon Local Plan (part 2), requires active contribution towards the continued improvement of air quality, especially</p>	<p>A section 106 agreement with the LAP of £131,670 was required to be paid to contribute to Hillingdon to deliver its air quality local action plan and or implement specific measures on/along the road network affected by the proposal that reduce vehicle emissions and or reduce human exposure to pollution levels</p> <p>Condition Air Quality - Low Emission Strategy</p> <p><i>No development shall commence until a low emission strategy (LES) has been submitted to and approved in writing by the Local Planning Authority. The LES shall address</i></p> <ol style="list-style-type: none"> 1) <i>the fleet composition serving the proposed development to be Euro 6/VI or cleaner (e.g. electric) or have implemented retrofitting devices that will enable compliance with such Euro standards.</i> 2) <i>the supply of energy to the proposed development. Any CHP or gas boiler will have to conform with the London Ultra Low NOx requirements;</i> <p><i>The strategy shall detail the steps that will be followed in addressing the lower emissions requirements stated above and what measures will be taken</i></p>	

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<p>associated car parking, landscaping and ecological enhancements.</p>		<p>within the Air Quality Management Area.</p> <p>In addition, the London Plan requires development to be at least 'air quality neutral' and not lead to further deterioration of existing poor air quality (such as areas designated as Air Quality Management Areas (AQMAs)).</p> <p>A Travel Plan is to be submitted and delivered with targets of reducing traffic by at least 10% achieved, secured by a bond. In this context, a discount of 10% of the total damage cost has been applied. Finally, a further 5% discount was applied to account for likely emission reductions (non-quantifiable) associated with implementation of cycle parking.</p>	<p><i>to take into account future changing standards and available technologies and be updated accordingly in agreement with the local planning authority.</i></p> <p>3) <i>an electric vehicle fast charging bay. This is to be implemented as part of the proposal with a minimum of the number of charging points required in the London Plan.</i></p> <p>4) <i>a clear and effective strategy to encourage staff / users to</i> <i>a) use public transport;</i> <i>b) cycle / walk to work where practicable;</i> <i>c) enter car share schemes;</i> <i>d) purchase and drive to work zero emission vehicles.</i></p> <p><i>The measures in the agreed scheme shall be maintained throughout the life of the development.</i></p> <p><i>Reason - As the application site is within an Air Quality Management Area and Focus Area and to reduce the impact on air quality in accordance with policy EM8 of the Local Plan: Part 1 (November 2012), policy DMEI 14 of the emerging London Borough of Hillingdon Local Plan (part 2), London Borough of Hillingdon Air Quality Local Action Plan 2019-2024, London Plan Policy 7.14, and paragraph 170 of the National Planning Policy Framework (2018).</i></p>	
Planning Ref	71371/APP/2019/2699			NO
UNIT 7B HAYES BRIDGE RETAIL PARK UXBRIDGE	The site forms part of the wider masterplan for mixed use residential led	The proposal, as expected, is not air quality neutral in terms of	A section 106 agreement with the LAP of £112,018 was required for Hillingdon to deliver its air quality local action plan and or implement specific measures on/along the road network affected by the proposal that reduce	

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<p>ROAD HAYES MIDDLESEX UB4 ORH Physical works to reconfigure and extend Unit 7B to create a foodstore (Class A1).</p>	<p>redevelopment. The proposal seeks up to 300 residential units over Site B along with appropriate community infrastructure, employment floorspace, pedestrian links and set-back landscaping on Nestles Avenue to be incorporated. The proposed site is located within Ossie Garvin Focus Area. Due to its impact on local air quality as a result of both traffic and energy production emissions and bearing in mind the cumulative impact with the wider plan, the proposed development will add to current exceedances (see "Wider Context" in section below). As per the London Plan, developments need to be neutral as minimum and positive in Focus Areas, contributing to the reduction of emissions in these sensitive areas.</p>	<p>traffic emissions, and no assessment undertaken for the building emissions</p>	<p>vehicle emissions and or reduce human exposure to pollution levels. In addition, two Air Quality conditions are required to develop and implement a Low Emission Strategy and manage the construction fleet as per Mayor requirements. See text below.</p> <p>Condition Air Quality - Low Emission Strategy</p> <p>1. <i>No above ground works shall be undertaken until a clear and effective low emission strategy (LES) have been submitted to and approved in writing by the Local Planning Authority. The strategy shall include, but not be restricted to:</i></p> <p>a) <i>effective ways to manage contractual arrangements so that the fleet composition serving the site facilities will be Euro 6/VI or cleaner (e.g. electric) or have implemented retrofitting devices that will enable compliance with such Euro standards;</i></p> <p>b) <i>provision of a clean supply of energy to the site. Any CHP or gas boiler will have to conform with the London Ultra Low NOx requirements. The boilers to be specified to meet ultra-low NOx emissions standards of < 40mg/kWh.</i> <i>The strategy shall detail the steps that will be followed in addressing the lower emissions requirements stated above and what measures will be taken to take into account future changing standards and available technologies and be updated accordingly in agreement with the local planning authority.</i></p> <p>c) <i>an electric vehicle fast charging bay. This is to be implemented as part of the proposal with the minimum requirements as per the London Plan.</i></p> <p>d) <i>a clear and effective strategy to encourage/support staff and users of the site to</i></p> <p>i) <i>use public transport;</i> ii) <i>cycle / walk to work where practicable;</i> iii) <i>enter car share schemes;</i> iv) <i>enter cab share schemes to and from the airport and or home / work locations;</i> iv) <i>purchase and drive to work zero emission vehicles.</i></p>	

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	<p>It is also noted that the impact of energy production emissions on local air quality was not assessed in the air quality report submitted to support the planning application, as per the London Plan requirements. When such contribution will be added to the traffic emissions, there will be a slight to moderate impact on local air quality, at least at receptor "142 Uxbridge Road".</p>		<p><i>Measures to support and encourage modal shift, will include but be not restricted to incentives for employees to use public transport to reduce their car ownership.</i></p> <p><i>The measures in the agreed scheme shall be maintained throughout the life of the development.</i></p> <p>Reason - As the application site is within an Air Quality Management Area and to reduce the impact on air quality in accordance with policy EM8 of the Local Plan: Part 1 (November 2012), policy DME1 14 of the emerging London Borough of Hillingdon Local Plan (part 2), London Plan Policy 7.14, the emerging London Plan policy SI1 and paragraph 170 of the National Planning Policy Framework (2018).</p> <p>Air Quality - Construction</p> <p>1. No development shall commence until proof of the registration in GLA's database (nrmm.london/nrmm/about/what-nrmm-register) and compliance with the London's Low Emission Zone for non-road mobile machinery requirements is submitted to and approved in writing by the Local Planning Authority.</p> <p>2. The London's Low Emission Zone for non-road mobile machinery to comply with the standards set out at Supplementary Planning Guidance 'The Control of Dust and Emissions from Construction and Demolition'.</p> <p>3. This will apply to both variable and constant speed engines for both NOx and PM. These standards will be based upon engine emissions standards set in EU Directive 97/68/EC and its subsequent amendments.</p> <p>Reason: Compliance with the London's Low Emission Zone for non-road mobile machinery as per requirements as of 1st September 2015, and London Plan Supplementary Planning Guidance 'The Control of Dust and Emissions from Construction and Demolition' (2014).</p>	

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A4 CORRIDOR FOCUS AREA				
Planning Ref	74351/APP/2018/4098			NO
<p>WORLD BUSINESS CENTRE 5 NEWALL ROAD HEATHROW AIRPORT TW6 2SN Erection of office building (Outline application with all matters reserved)</p>	<p>The proposal is for an office building (WORLD BUSINESS CENTRE at 5 Newall Road) and is located within the A4 Corridor Focus Area. The review of the air quality assessment has indicated that the proposal is within a Focus Area, and it is not neutral for transport:</p> <p>1) the proposal is not air quality neutral for transport emissions. 2) the proposed development is within a Focus Area.</p>	<p>Upon reviewing the Public Transport Accessibility Level (PTAL) rating for the development using the Transport for London WebCAT service, Highways comments indicated that "the site contains a PTAL rating of 1b which on a scale from 0 (worst) - 6b (best) is deemed poor. It is therefore likely that patrons would be dependent on the private car for journeys to and from the site."</p> <p>Whereas the application propose 146 parking spaces in the form of a two floor surface level and basement car park, the Councils currently adopted saved Unitary Development Plan (UDP) standard for office use (Use Class B1a) indicates a parking provision of 1 space per 100sqm, the emerging</p>	<p>A S106 contribution of £152,909 was required towards the implementation and delivery of LBH Air Quality Action Plan to improve air quality in the study area.</p> <p>In addition, the following conditions were applied. See text below.</p> <p>Condition Air Quality - Low Emission Strategy</p> <p><i>No development shall commence until a low emission strategy (LES) has been submitted to and approved in writing by the Local Planning Authority. The LES shall specify the following</i></p> <ol style="list-style-type: none"> 1) Any CHP or gas boiler will have to conform with the London Ultra Low NOx requirements; 2) A clear and effective strategy to encourage users of the office units to <ol style="list-style-type: none"> a) use public transport; b) cycle / walk to work where practicable; c) enter car share schemes; d) purchase and drive to work zero emission vehicles. <p><i>The measures in the agreed scheme shall be maintained throughout the life of the development.</i></p> <p>Reason - As the application site is within an Air Quality Management Area and to comply with paragraph 124 of the NPPF, policy 7.14 of the London Plan, and policy DME1 14 of the London Borough of Hillingdon Local Plan (part 2).</p> <p>Condition Air Quality - Construction and demolition phase</p>	

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		DMT6 policy provides a higher standard with a parking ratio of 1 space per 50-100sqm. This would suggest a maximum parking provision of 258 parking spaces.	<p><i>In order to control the dust and emissions from the demolition and construction phases, the Construction Management Plan must be developed in accordance with the Air Quality Management (IAQM) 'Guidance on the assessment of dust from demolition and construction' and the GLA, Control of Dust and Emissions from Construction and Demolition Supplementary Planning Guidance. All Non-Road Mobile Machinery (NRMM) used during construction must meet Stage IIIA criteria of EU Directive 97/68/EC and must be registered online on the NRMM website at http://nrmm.london/. Confirmation of the registration must be submitted to the LPA.</i></p> <p>Reason: To ensure the development reduces and manages its air quality impacts in an air quality management area in accordance with Policy EM8 of the Local Plan</p>	
Planning Ref	73298/APP/2018/4477			YES
LAND TO THE EAST SIDE OF NEWPORT ROAD HAYES UB4 8JX Demolition of existing buildings and redevelopment of the site to provide 24 residential units (14 x 1 bed, 8 x 2 bed and 2 x 3 bed) in a part 3, part 4 storey building and associated car parking, cycle parking, access and refuse (re-consultation on amended plans)	The proposed development is located with the A4 Corridor Focus Area, bringing additional air pollutant emissions which will add to current exceedances.	As per the new London Plan, developments need to be neutral as minimum and positive in Focus Areas, contributing to the reduction of emissions in these sensitive areas.	<p>A section 106 agreement with the LAP of £16,400 was required to be paid for Hillingdon to deliver its air quality local action plan and or implement specific measures on/along the road network affected by the proposal that reduce vehicle emissions and or reduce human exposure to pollution levels.</p> <p>Condition Air Quality – Travel Plan</p> <p><i>No development shall commence until a robust Travel Plan (TP) has been submitted to and approved in writing by the Local Planning Authority.</i></p> <p><i>The TP shall detail the strategies and steps that will be followed in promoting effectively modal shift and the usage of clean vehicles namely electric cars, euro 6/VI and above by the users of the proposed development and quantify, wherever appropriate, the reduction of emissions achieved. As a minimum the TP shall include</i></p> <ol style="list-style-type: none"> 1) <i>an electric vehicle fast charging bay. This is to be implemented as part of the proposal with the London Plan minimum requirements;</i> 2) <i>a clear and effective strategy to encourage users to</i> 	

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			<p>a) use public transport; b) cycle / walk to work where practicable; c) enter car share schemes; d) purchase and drive zero emission vehicles.</p> <p>The measures in the agreed scheme shall be maintained throughout the life of the development.</p> <p>Reason - As the application site is within an Air Quality Management Area and to comply with paragraph 124 of the NPPF, policy 7.14 of the London Plan, and policy DME1 14 of the London Borough of Hillingdon Local Plan (part 2).</p>	
Planning Ref	54794/APP/2019/2421			NO
<p>UNIT 2-4, AIRPORT GATE BUSINESS CENTRE BATH ROAD HEATHROW UB7 0NA Application for the change of use from B1c and B8, to B1c, B2 and B8, including the replacement of external cladding, and internal alterations to the first-floor.</p>	<p>The site is located within a business park adjacent to the A4 and directly north of Heathrow airport, within the A4 Corridor Focus Area. LBH requires new developments to incorporate air quality positive design measures from the outset and suitable mitigation measures to reduce pollution, especially in areas where the air quality is already poor, namely Focus Areas (Local Action Plan 2019-2024). In addition, the London Plan requires development to be at</p>	<p>Whereas the proposals do not represent an increase in floorspace they may result in significant change in travel demand due to the additional use B2 (General Industrial -use for industrial process other than one falling within class B1 (excluding incineration purposes, chemical treatment or landfill or hazardous waste). In addition, the proposal originates emissions from associated transport of 0.529 tonnes per year at an equivalent damage cost of £139,415. A Travel Plan is to be</p>	<p>Given the location of the site within a Focus Area, a section 106 contribution of £76,660 was required to be paid for Hillingdon to deliver its air quality local action plan and or implement specific measures on/along the road network affected by the proposal that reduce vehicle emissions and or reduce human exposure to hazardous pollution levels. In addition, Air Quality conditions are required to develop and implement a Low Emission Strategy and an Operator Travel Plan. See text below.</p> <p>Condition Air Quality - Low Emission Strategy</p> <p><i>No development shall commence until a low emission strategy (LES) has been submitted to and approved in writing by the Local Planning Authority. The LES shall address but not be limited to:</i></p> <p>1) <i>the fleet composition serving the proposed development to be Euro 6/VI or cleaner (e.g. electric) or have implemented retrofitting devices that will enable compliance with such Euro standards. The strategy shall detail the steps that will be followed in addressing the lower emissions requirements stated above and what measures will be taken to take into account future changing standards and available technologies and be updated accordingly in agreement with the local planning authority;</i></p>	

Name, Location & Proposal description	Air Quality Issues in AQ Assessment	LA Requirements	Planning Conditions Text/S106 Agreements/ Status/Outcome	Neutral
	<p>least 'air quality neutral' and not lead to further deterioration of existing poor air quality (such as areas designated as Air Quality Management Areas (AQMAs)).</p>	<p>submitted and delivered with its targets of reducing traffic by at least 10% achieved. Finally, a further 5% discount was applied to account for likely emission reductions associated dedicated cycle parking.</p>	<p>2) <i>make provision to include an electric vehicle fast charging bay with the number of charging units as per the Mayor's minimum requirements. This is to be linked with the Travel Plan to be implemented;</i></p> <p>3) <i>a clear and effective strategy to encourage staff to</i></p> <ul style="list-style-type: none"> <i>a) use public transport;</i> <i>b) cycle / walk to work where practicable;</i> <i>c) enter car share schemes;</i> <i>d) purchase and drive to work zero emission vehicles.</i> <p><i>The measures in the agreed scheme shall be maintained throughout the life of the development.</i></p> <p>Reason - As the application site is within an Air Quality Management Area and to comply with paragraph 124 of the NPPF, policy 7.14 of the London Plan, and policy DME1 14 of the London Borough of Hillingdon Local Plan (part 2).</p> <p>Condition Air Quality – Operator’s Travel Plan (B8 use)</p> <p><i>No development shall commence until an Operators Travel Plan (OTP) has been submitted to and approved in writing by the Local Planning Authority. The OTP shall be required of the occupiers of the new proposed use and include the following components in detail and with a plan of implementation associated with each of them. It shall include:</i></p> <p>1) <i>Any captive fleets and services (which are manageable via contractual procedures) associated with the operation of the proposed B8 use to be Euro 6/VI or cleaner or have implemented retrofitting devices that will enable compliance with such Euro standards;</i></p> <p>2) <i>Mechanisms for discouraging high emission vehicle use and encouraging the uptake of low emission fuels and technologies. This will</i></p>	

Name, Location & Proposal description	Air Quality Issues in AQ Assessment	LA Requirements	Planning Conditions Text/S106 Agreements/ Status/Outcome	Neutral
			<p>include making provision of heavy-duty electric vehicle fast charging bays which will supply at least 20% of total HGV usage,</p> <p>3) HGVs and LGVs traffic routing shall avoid residential areas;</p> <p>4) A clear and effective strategy to encourage staff to a) use public transport; b) enter car share schemes; c) purchase and drive to work zero emission vehicles; This is to include:</p> <ul style="list-style-type: none"> • a Welcome Pack available to all new staff online and as a booklet, containing information and incentives to encourage the use of sustainable transport modes; • Eco-driver training and provision of eco-driver aid to all staff • Car club provision within development or support given to local car club/eV car clubs • Designation of parking spaces for low emission vehicles • Adequate provision of secure cycle storage; offer season ticket loans to staff; and offer tax-free loans to allow for the purchase of cycle for travel to work, or sign up to the government's cycle to work scheme • Differential parking charges depending on vehicle emissions for staff • Public transport subsidy for employees <p>The measures in the agreed scheme shall be maintained throughout the life of the development.</p> <p>Reason - As the application site is within an Air Quality Management Area and to comply with paragraph 124 of the NPPF, policy 7.14 of the London Plan, policy DME1 14 of the London Borough of Hillingdon Local Plan (part 2), and London Borough of Hillingdon Air Quality Action Plan 2019-2024.</p>	
Planning Ref	73955/APP/2020/139			NO
CROWN TRADING CENTRE CLAYTON ROAD HAYES	The proposal seeks 407 residential units (Use Class C3) (188 x 1-bed, 144 x 2-beds, 71 x 3-	The proposal is not air quality neutral in terms of both traffic and building emissions (the applicant	A section 106 agreement with the LAP of £ £401,584 was required to be paid for Hillingdon to deliver its air quality local action plan and or implement specific measures on/along the road network affected by the proposal that	

Name, Location & Proposal description	Air Quality Issues in AQ Assessment	LA Requirements	Planning Conditions Text/S106 Agreements/ Status/Outcome	Neutral
<p>Demolition of existing buildings for residential-led mixed use development comprising buildings between 3 and 11 storeys to provide residential units (Use Class C3) and ground floor employment floorspace (Use Class B1) with associated access and car and cycle parking, landscape and amenity areas and associated servicing.</p>	<p>beds and 4 x 4-beds) and 1175 sq.m of employment floorspace (Use Class B1) at ground floor with associated access and car parking for 203 vehicles and cycle parking, located within the Hays Focus Area. The proposed development, due to its size and location, will add to current exceedances of the nitrogen dioxide annual mean limit value within this sensitive area as a result of both traffic and energy production emissions.</p> <p>It is noted that the impact on local air quality of nitrogen dioxide emissions associated with energy production was assessed assuming the diesel generator would only operate 2.08 days per year which is an unrealistic scenario. This planning application proposes that the hours</p>	<p>has incorrectly calculated the building emissions benchmark using a total residential area of 26651 m² as opposed to a total area of 2533m² as per documentation submitted). As per the London Plan and London Borough of Hillingdon Air Quality Action Plan 2019-2023, developments need to be neutral as minimum and contribute actively to reduce pollution in Focus Areas, contributing to the reduction of emissions in these sensitive areas.</p>	<p>reduce vehicle emissions and or reduce human exposure to pollution levels, assuming no local network congestion would be exacerbated by the proposal. Should an exacerbation of congestion at the road network affected by the vehicular movements associated with the operational phase of the proposed development be observed, there will be further resulting hazardous impacts on local air quality and public health and an updated calculation of the damage cost value will need to be issued.</p> <p>It is noted that a discount of 10% was already applied to account for the framework travel plan and an additional discount of 5% to account for green measures associated with the proposal. If any contributions to Highways can be demonstrated to reduce in a quantified way emission levels, a further discount in that measure can be applied.</p> <p>In addition, two Air Quality conditions are required to develop and implement a Low Emission Strategy and manage the construction fleet as per Mayor requirements. See text below.</p> <p>Condition Air Quality - Low Emission Strategy</p> <p>1. <i>No above ground works shall be undertaken until a clear and effective low emission strategy (LES) have been submitted to and approved in writing by the Local Planning Authority. The strategy shall include, but not be restricted to:</i></p> <p>a) <i>effective ways to manage contractual arrangements with the occupiers of the flexible commercial use so that the fleet composition serving the site facilities will be Euro 6/VI or cleaner (e.g. electric) or have implemented retrofitting devices that will enable compliance with such Euro standards;</i></p> <p>b) <i>provision of a clean supply of energy to the site. Any CHP or gas boiler will have to conform with the London Ultra Low NOx requirements. The boilers to be specified to meet ultra-low NOx emissions standards of < 40mg/kWh.</i></p> <p>c) <i>The diesel generator shall be subject to a limited annual operation time and, as a minimum, the diesel generator design must comply with the emissions limit values specified in the SDC SPG and Environmental</i></p>	

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	<p>during which the diesel generator or proposed boilers could operate is not time-limited and therefore the diesel generators could operate for far more than 50 hours per annum. It is therefore considered the air quality assessment was not conservative enough to robustly ascertain the impact of the proposed development on local air quality, with several receptors likely to have moderate adverse impact in the opening year.</p>		<p><i>Permitting Regulations 2017 (transposing the Medium Combustion Plant Directive).</i> <i>The strategy shall detail the steps that will be followed in addressing the lower emissions requirements stated above and what measures will be taken to take into account future changing standards and available technologies and be updated accordingly in agreement with the local planning authority.</i></p> <p>d) <i>an electric vehicle fast charging bay. This is to be implemented as part of the proposal with the minimum requirements as per the London Plan.</i> e) <i>a clear and effective strategy to encourage/support staff and residents of the site to</i> i) <i>use public transport;</i> ii) <i>cycle / walk to work where practicable;</i> iii) <i>enter car share schemes;</i> iv) <i>enter cab share schemes to and from the airport and or home / work locations;</i> iv) <i>purchase and drive to work zero emission vehicles.</i></p> <p><i>Measures to support and encourage modal shift, will include but be not restricted to incentives for residents and employees to use public transport to reduce their car ownership.</i></p> <p><i>The measures in the agreed scheme shall be maintained throughout the life of the development.</i> Reason - As the application site is within an Air Quality Management Area and to reduce the impact on air quality in accordance with policy EM8 of the Local Plan: Part 1 (November 2012), policy DMEI 14 of the London Borough of Hillingdon Local Plan (part 2), London Plan Policy 7.14, and paragraph 170 of the National Planning Policy Framework (2018).</p> <p>Air Quality - Construction</p>	

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			<p>1. No development shall commence until proof of the registration in GLA's database (nrmm.london/nrmm/about/what-nrmm-register) and compliance with the London's Low Emission Zone for non-road mobile machinery requirements is submitted to and approved in writing by the Local Planning Authority.</p> <p>2. The London's Low Emission Zone for non-road mobile machinery to comply with the standards set out at Supplementary Planning Guidance 'The Control of Dust and Emissions from Construction and Demolition'.</p> <p>3. This will apply to both variable and constant speed engines for both NOx and PM. These standards will be based upon engine emissions standards set in EU Directive 97/68/EC and its subsequent amendments.</p> <p>Reason: Compliance with the London's Low Emission Zone for non-road mobile machinery as per requirements as of 1st September 2015, and London Plan Supplementary Planning Guidance 'The Control of Dust and Emissions from Construction and Demolition' (2014).</p>	
SIPSON FOCUS AREA				
Planning Ref	12795/APP/2019/3828			YES
FORMER SIPSON GARDEN CENTRE SIPSON ROAD SIPSON UB7 OHW Reinstatement of Garden Centre (Use Class A1) with replacement buildings, outdoor sales areas, hard-standing, associated car parking and landscaping. New community centre (Use Class D1) with associated parking	The proposed development involves the demolition of the existing garden centre and the construction of a replacement garden centre complex comprising a café, farm shop, and gift centre. The new garden centre complex will have a Gross Internal Area (GIA) of 2366sqm. The site is located within an area identified by London Borough of	Given the nature of the site and the items that customers tend to buy from garden centres (i.e. bulky goods), customers are unlikely to travel to and from the site by rail, bus or cycle. The transport assessment indicates that the former garden centre would have generated in the order of 325 trips per day (12 hours), whilst the proposed garden centre complex is estimated to	<p>Given the location of the Garden Centre in a Focus Area, and in compliance with the Air Quality Action Plan 2019-2023, the following Air Quality conditions are required. See text below.</p> <p>Air Quality – Low Emission Strategy</p> <p><i>No above ground works shall be undertaken until a clear and effective low emission strategy (LES) have been submitted to and approved in writing by the Local Planning Authority. The strategy shall include, but not be restricted to:</i></p> <p>a. <i>effective ways to manage contractual arrangements so that the vehicles servicing the Garden Centre will be Euro 6/VI or cleaner (e.g. electric) or have implemented retrofitting devices that will enable compliance with such Euro standards;</i></p>	

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<p>and landscaping (RE-CONSULTATION ON AMENDED PLANS)</p>	<p>Hillingdon as experiencing elevated pollutant concentrations with high density of population being exposed to hazardous levels – the application site gives access to Sipson Focus Area.</p>	<p>generate in the order of 354 trips per day. This equates to a net increase of 29 trips per day; 33 parking spaces will be provided.</p> <p>The proposed development is neutral for transport emissions.</p> <p>Given the location of the garden centre, continuous improvement of air quality in the Focus Area affected is required and a Low Emission Strategy is to be submitted demonstrating steps towards cleaner transport associated with the activities of the centre.</p>	<p><i>The strategy shall detail the steps that will be followed in addressing the lower emissions requirements stated above and what measures will be taken to take into account future changing standards and available technologies and be updated accordingly in agreement with the local planning authority.</i></p> <p><i>b. a clear and effective strategy to encourage/support staff and users of the Garden Centre to</i></p> <p><i>i) use public transport;</i> <i>ii) cycle / walk to work where practicable;</i> <i>iii) enter car share schemes;</i> <i>iv) purchase and drive to work zero emission vehicles.</i></p> <p><i>Measures to support and encourage modal shift, will include but be not restricted to incentives for employees to use public transport to reduce their car ownership.</i></p> <p><i>The measures in the agreed scheme shall be maintained throughout the life of the development.</i></p> <p>Reason - As the application site is within an Air Quality Management Area and Focus Area and to reduce the impact on air quality in accordance with policies E2, EM1, EM8 of the Local Plan: Part 1 (November 2012), policy DMT 2, DMEI 1, and DMEI 14 of the emerging London Borough of Hillingdon Local Plan (part 2), London Plan Policy 7.14, and paragraph 170 of the National Planning Policy Framework (2019).</p> <p>Air Quality - Construction</p> <p><i>1. No development shall commence until proof of the registration in GLA’s database (nrmm.london/nrmm/about/what-nrmm-register) and compliance with the London’s Low Emission Zone for non-road mobile machinery requirements is submitted to and approved in writing by the Local Planning Authority.</i></p>	

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			<p>2. <i>The London's Low Emission Zone for non-road mobile machinery to comply with the standards set out at Supplementary Planning Guidance 'The Control of Dust and Emissions from Construction and Demolition'.</i></p> <p>3. <i>This will apply to both variable and constant speed engines for both NOx and PM. These standards will be based upon engine emissions standards set in EU Directive 97/68/EC and its subsequent amendments.</i></p> <p>Reason: Compliance with the London's Low Emission Zone for non-road mobile machinery as per requirements as of 1st September 2015, and London Plan Supplementary Planning Guidance 'The Control of Dust and Emissions from Construction and Demolition' (2014).</p>	
NORTHWOOD EAST FOCUS AREA				
Planning Ref	5564/APP/2020/847			N/A
<p>53-55 THE BROADWAY JOEL STREET NORTHWOOD HA6 1NZ</p> <p>Erection of a three-storey building to provide 3 x 1 bedroom and 4 x 2 bedroom residential units with associated parking and bin and cycle storage, involving alterations to existing crossover.</p>	<p>The proposed development is outside LBH Air Quality Management Area (AQMA) but within the identified Northwood East Focus Air Quality Focus Area (AQFA), where special focus in reducing elevated levels of air pollution is a priority of the Borough. Focus areas are defined as locations where pollution levels are already high and there is relevant public exposure in a high population density, with current measures not being sufficient to improve air</p>	<p>There is no air quality report submitted to support the planning application.</p>	<p>A section 106 agreement with the LAP of £ £3,904 was required to be paid for Hillingdon to deliver its air quality local action plan and or implement specific measures on/along the road network affected by the proposal that reduce vehicle emissions and or reduce human exposure to pollution levels.</p> <p>In addition, in the absence of substantiated evidence that new residents will not be exposed to hazardous levels of pollution, the development should demonstrate appropriate mitigation measures to ensure the future occupiers are protected in compliance with DME1 14, in particular, Part Bii. This can include, but is not limited to:</p> <ul style="list-style-type: none"> a. where practicable to do so, setback the buildings further from the road source(s), b. ensure air intakes are located away from the main source of air pollution; c. optimise the building design to ensure adequate dispersion of emissions from discharging stacks and vents, the location of equipment should not result in flues and exhaust vents being in close proximity to recreational areas; d. consider the location of outside space including gardens, balconies and roof terraces proposed in areas of particular poor air quality; 	

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	<p>quality. In such circumstances LBH has a requirement to put in place additional actions to improve air quality and therefore the damage cost is calculated on total development emissions.</p>		<p>e. consider the use of effective green infrastructure to absorb and screen the development from the pollution source; f. consider the use of mechanical ventilation with specific pollution filtration with maintenance regime for the life of the development.</p> <p>Further information is available in the Mayor of London, Sustainable Design and Construction SPG: https://www.london.gov.uk/sites/default/files/gla_migrate_files_destination/Sustainable%20Design%20%26%20Construction%20SPG.pdf</p> <p>Condition - Reducing Emissions from Demolition and Construction</p> <p><i>A No development shall commence until a Plan has been submitted to, and approved in writing by, the LPA. This must demonstrate compliance (drawn up accordance with) the GLA Control of Dust and Emissions from Construction and Demolition SPG (or any successor document).</i></p> <p><i>Reason: Compliance with London Plan Policy 7.14 and in accordance with Mayor of London "The Control of Dust and Emissions from Construction and demolition (or any successor document).</i></p> <p><i>B Non-road mobile machinery (standard condition recommended by Mayor of London, London Local Air Quality Management Policy Guidance 2019)</i></p> <p><i>All Non-Road Mobile machinery (NRMM) of net power of 37kW and up to and including 560kW used during the demolition, site preparation and construction phases shall comply with the emissions standards set out in chapter 4, proposal 4.2.3.a of the London Environment Strategy. Unless it complies with the standard set out in the London Environment Strategy, no NRMM shall be onsite, at any time, whether in use or not, without the prior written consent of the LPA. The developer shall keep an up to date list of all NRMM used during the demolition, site preparation and construction phases of the development on the online register https://nrmm.london/</i></p>	

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			<i>Reason: Compliance with the London's Low Emission Zone for non-road mobile machinery as per requirements of the London Environment Strategy</i>	
HARLINGTON FOCUS AREA				
Planning Ref	1932/APP/2020/401			N/A
324-326 HIGH STREET HARLINGTON UB3 5DU Demolition of existing buildings and the erection of an apart hotel and offices, associated parking and landscaping	The application site falls within the Harlington Focus Area (FA), which is a zone identified by both the Greater London Authority (GLA) and London Borough of Hillingdon (LBH) as experiencing pollutant concentrations above the limit value to safeguard human health, with high density of population being exposed to such hazardous levels.	As per the London Plan and London Borough of Hillingdon Local Action Plan, developments need to be neutral as minimum and contribute actively to reduce pollution in Focus Areas, contributing to the reduction of emissions in these sensitive areas. The proposed development is not supported by an air quality report nor have developers produced a neutral assessment as per London Plan's requirements. Therefore, use was made of GLA's mapping of levels of pollution for nitrogen dioxide to assess the application site location and the transport statement of the application to derive transport emissions. In	Given the location of the application site within a sensitive area in terms of air pollution elevated levels and hazardous public exposure to such values within a Focus Area and in the absence of both an air quality assessment report including a neutral assessment and suitable mitigation measures that in a quantifiable manner would demonstrate the exceeding traffic emissions would be removed, a refusal on air quality grounds was recommended. In the instance Members are minded to approve this application, a S106 contribution is required.	

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		addition, the ASR 2019 monitoring data for location H213 was analysed which indicated a value (39.3ug/m3) near the limit value (40ug/m3).		
M4 CORRIDOR FOCUS AREA				
Planning Ref	10181/APP/2018/4485			NO
FROGSDITCH FARM SHEPSTON LANE HAYES Outline planning application for the demolition of 5 existing buildings and construction of replacement building/s with a combined floor space of 1,402.9 sqm and associated hard standing, fencing and landscaping for use class B8.	The application site is within the M4 Corridor Focus Area. This Focus Area is a hot spot where several exceedances to the annual mean limit value for nitrogen dioxide are observed. The proposed development is predicted to generate at least a total of 202 two-way annual average daily traffic (AADT) movements / day on the adjoining highway which is a considerable impact on local air quality. The proposal generates a significant number of additional vehicles on the local road network, being very important to not counterfeit LBH efforts to improve Air	The total air pollution emissions, if not removed or offset by other contributions, amount to an air quality damage cost of £258,106. The % of HGVs is quite high for a B8 use – need to confirm value. In emission calculations a 50% figure was assumed as this information is not reported in the Transport Assessment. Transport colleagues to negotiate a very efficient Travel Plan. To support the planning application, a neutral assessment is required. In addition, a Low Emission Strategy and a delivery plan will need to	A good travel plan is required to minimise such vehicle emissions and promote the use of public transport into sensitive locations. B8 - Use for storage or as a distribution centre. This will inevitably attract a significant higher number of vehicle movements than existing use – not suitable for the proposed location.	

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	Quality in this sensitive area.	be developed – details to be agreed with LBH.		
RUISLIP TOWN CENTRE FOCUS AREA				
Planning Ref	53827/APP/2019/345			N/A
61 HIGH ROAD ICKENHAM Outline planning application for erection of 4 storey building with a semi-basement, containing 20 no. residential units, comprising 16 no. 2-bedroom flats and 4 no. 3 bedroom flats with associated works (appearance and landscaping reserved for subsequent approval).	The application site is approximately 370 m from Ruislip Town Centre Focus Area (FA), The proposed development has been supported by a Transport Assessment which estimates it is likely to generate approximately additional 71 vehicle movements / day on the adjoining highway	The transport assessment does not provide information on a travel plan. Whereas the proposal's trip generation is below 100 AADT, it could be a significant number of additional vehicles on the local road network given the congested nature of High Road. Given the proximity to Ruislip Town Centre Focus Area it is important to control and minimise to the possible maximum extent the impacts on this area where exceedances to the annual mean limit value for nitrogen dioxide are observed.	Therefore, a good travel plan is required to minimise any vehicle emissions and promote the use of public transport into sensitive locations. Given that no information on transport matters has been provided, it is not possible to provide a founded evaluation of the impacts of the proposal at hot spot locations.	
NORTHWOOD WEST FOCUS AREA				
Planning Ref	10112/APP/2019/1244			N/A
THE LONDON SCHOOL OF THEOLOGY GREEN LANE	The application site is approximately 190 m from Northwood West Focus Area, along the	Monitoring site HD74 was used to ascertain nitrogen dioxide air quality levels at the	A good travel plan is required to minimise such vehicle emissions and promote the use of public transport into sensitive locations	

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<p>NORTHWOOD HA6 2UW Erection of a residential building comprising 15 flats with associated parking, cycle storage, motorcycle parking, disabled parking and bin storage following demolition of existing residential block and pair of semi-detached houses</p>	<p>road network. The proposed development generates a total of 20 movements / day on Green Lane (the adjoining highway). Whereas it is not a significant number of additional vehicles on the local road network, it is important to control and minimise to the possible maximum extent the impacts within this Focus Area where several exceedances to the annual mean limit value for nitrogen dioxide are observed.</p>	<p>application site, which is not representative of the ambient air concentrations of this pollutant at the site. In addition, no explicit modelling was undertaken by the applicant. It is therefore not possible to ascertain the impact of the additional vehicles at hot spot locations within the Focus Area, namely heavily congested / queuing locations.</p>		
OUTSIDE FOCUS AREAS				
Planning Ref	1660/APP/2019/1018			N/A
<p>PRODUCTION FACILITY STONEFIELD CLOSE RUISLIP HA4 0YH Demolition of existing buildings and the erection of 4,367 sq.m to provide flexible commercial use (Use Class</p>	<p>The proposed development is not within a Focus Area being in the vicinity of the A40/South Ruislip Corridor and Ruislip Town Centre Focus Areas.</p>	<p>This is a change of use planning application. Therefore, in terms of Air Quality whereas the proposed development indicates a net reduction in traffic movements with improvement to air quality in relation to extant use, another planning application for the same site could have</p>	<p>A section 106 agreement with the LAP of £18,285 was recommended be paid for Hillingdon to deliver its air quality local action plan and or implement specific measures on/along the road network affected by the proposal that reduce vehicle emissions and or reduce human exposure to pollution levels.</p> <p>Condition Air Quality - Low Emission Strategy</p> <p><i>No development shall commence until a low emission strategy (LES) has been submitted to and approved in writing by the Local Planning Authority. The LES shall specify ways to manage the use of the site to conform with the following</i></p>	

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B1/B2/B8) with associated access, landscaping and servicing		<p>even lower trip generation and zero emissions.</p> <p>Given the application to change to uses B1; B8. B8 (Storage and Distribution), whereas the assessment indicates a reduction in vehicle movements in relation to the extant use, due to different traffic distribution patterns, the proposed development may have a higher impact within the Focus Areas nearby than the previous use bringing traffic emissions into these areas.</p>	<p>1) <i>the fleet composition of the users of the site to be Euro 6/VI or cleaner (e.g. electric) or have implemented retrofitting devices that will enable compliance with such Euro standards.</i></p> <p>2) <i>Any CHP or gas boiler will have to conform with the London Ultra Low NOx requirements;</i></p> <p><i>The strategy shall detail the steps that will be followed in addressing the lower emissions requirements stated above and what measures will be taken to take into account future changing standards and available technologies and be updated accordingly in agreement with the local planning authority.</i></p> <p>3) <i>a clear and effective strategy to encourage users of the site to</i> <i>a) use public transport;</i> <i>b) cycle / walk to work where practicable;</i> <i>c) enter car share schemes;</i> <i>d) purchase and drive to work zero emission vehicles.</i></p> <p><i>The measures in the agreed scheme shall be maintained throughout the life of the development.</i></p> <p>Reason - As the application site is within an Air Quality Management Area and to comply with paragraph 124 of the NPPF, policy 7.14 of the London Plan, and policy DMEI 14 of the London Borough of Hillingdon Local Plan (part 2).</p>	
Planning Ref	32/APP/2019/1637			YES
BRUNEL UNIVERSITY KINGSTON LANE HILLINGDON UB8 3PH Construction of a research building, together with associated substation,	<p>The proposed development is not within a Focus Area and has a trip generation of 10 vehicles movements a day.</p> <p>The existing site is a car park with 118 parking</p>	<p>As such, potential air quality impacts associated with operational phase road vehicle exhaust emissions are predicted to have an insignificant effect.</p>	<p><i>Condition Air Quality - Low Emission Strategy</i></p> <p><i>No development shall commence until a low emission strategy (LES) has been submitted to and approved in writing by the Local Planning Authority. The LES shall specify ways to manage the use of the building to conform with the following</i></p> <p>1) <i>the fleet composition of any contracted services supporting the operation of the site to be Euro 6/VI or cleaner (e.g. electric) or have</i></p>	

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storeroom, cycle store, bin store car parking, access and landscaping.	places. These car parking spaces will be removed during construction. The proposed development will include provision for 48 car parking spaces and it is anticipated that there would be a maximum of 10 vehicle movements a day, resulting from staff working in the proposed building.		<p><i>implemented retrofitting devices that will enable compliance with such Euro standards.</i></p> <p>2) <i>Any CHP or gas boiler will have to conform with the London Ultra Low NOx requirements;</i></p> <p><i>The strategy shall detail the steps that will be followed in addressing the lower emissions requirements stated above and what measures will be taken to take into account future changing standards and available technologies and be updated accordingly in agreement with the local planning authority.</i></p> <p>3) <i>a clear and effective strategy to encourage users of the site to</i> <i>a) use public transport;</i> <i>b) cycle / walk to work where practicable;</i> <i>c) enter car share schemes;</i> <i>d) purchase and drive to work zero emission vehicles.</i></p> <p><i>The measures in the agreed scheme shall be maintained throughout the life of the development.</i></p> <p><i>Reason - As the application site is within an Air Quality Management Area and to comply with paragraph 124 of the NPPF, policy 7.14 of the London Plan, and policy DME1 14 of the London Borough of Hillingdon Local Plan (part 2).</i></p>	
Planning Ref	68153/APP/2019/1319			N/A
15 GREEN LANE NORTHWOOD HA6 2UZ Redevelopment of site to erect a two storey building with a basement and accommodation at roof level to provide 12 residential units	The proposed development is not within a Focus Area and has a relatively small trip generation. As such, potential air quality impacts associated with operational phase road	vehicle exhaust emissions are predicted to have an insignificant effect. Nonetheless the application site is close to an emerging area of concern (Northwood West Focus Area) and a	Condition Air Quality - Low Emission Strategy <i>No development shall commence until a low emission strategy (LES) has been submitted to and approved in writing by the Local Planning Authority. The LES shall specify the following</i> 1) <i>Any CHP or gas boiler will have to conform with the London Ultra Low NOx requirements;</i>	

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with associated works.		cleaner energy production facility (if any) is required. This is to be secured by condition	<p>2) a clear and effective strategy to encourage users of the residential units to</p> <ul style="list-style-type: none"> a) use public transport; b) cycle / walk to work where practicable; c) enter car share schemes; d) purchase and drive to work zero emission vehicles. <p>The measures in the agreed scheme shall be maintained throughout the life of the development.</p> <p>Reason - As the application site is within an Air Quality Management Area and to comply with paragraph 124 of the NPPF, policy 7.14 of the London Plan, and policy DME1 14 of the London Borough of Hillingdon Local Plan (part 2).</p>	
Planning Ref	71737/APP/2019/1979			NO
<p>GETHCELN HOUSE DAWLEY ROAD HAYES</p> <p>Proposed demolition of existing office and warehouse/workshops and erection of one flexible use class B1(c)/B2/B8 building comprising 3 units with associated access and parking</p>	<p>The proposal is for one flexible use class B1(c)/B2/B8 building comprising 3 units with associated access and parking. It is noted that whereas the Transport Assessment supporting the application indicates that there is only a net change of 6 vehicle movements in relation to the current use of the site, the proposed use includes B8 (storage or distribution) which usually presents a higher number of vehicle movements and percentage of heavy</p>	<p>The proposed development is located in a Focus Area, originating traffic emissions which will add to the current exceedances. As per the new London Plan, developments need to be neutral as minimum and positive in Focus Areas, contributing to the reduction of emissions in these sensitive areas.</p> <p>Therefore, a section 106 agreement with the LAP of £13,000 is to be paid for Hillingdon to deliver its air quality local action plan and or implement</p>	<p>Condition Air Quality - Low Emission Strategy</p> <p>No development shall commence until a low emission strategy (LES) has been submitted to and approved in writing by the Local Planning Authority. The LES shall specify the following</p> <p>1) A clear and effective strategy to encourage users of the office units to</p> <ul style="list-style-type: none"> a) use public transport; b) cycle / walk to work where practicable; c) enter car share schemes; d) purchase and drive to work zero emission vehicles. <p>The measures in the agreed scheme shall be maintained throughout the life of the development.</p> <p>Reason - As the application site is within an Air Quality Management Area and to comply with paragraph 124 of the NPPF, policy 7.14 of the</p>	

Name, Location & Proposal description	Air Quality Issues in AQ Assessment	LA Requirements	Planning Conditions Text/S106 Agreements/ Status/Outcome	Neutral
	<p>duty vehicles with higher NOx emissions to the atmosphere. In addition, the review of the air quality assessment has indicated that:</p> <p>1) the proposal is not air quality neutral for transport emissions. 2) the proposed development is within a Focus Area. Proposals are required to improve air quality within Focus Areas.</p>	<p>specific measures on/along the road network affected by the proposal that reduce vehicle emissions and or reduces human exposure to nitrogen dioxide levels.</p>	<p>London Plan, and policy DMEI 14 of the London Borough of Hillingdon Local Plan (part 2).</p> <p>Condition Air Quality - Construction and demolition phase</p> <p><i>In order to control the dust and emissions from the demolition and construction phases, the Construction Management Plan must be developed in accordance with the Air Quality Management (IAQM) 'Guidance on the assessment of dust from demolition and construction' and the GLA, Control of Dust and Emissions from Construction and Demolition Supplementary Planning Guidance. All Non-Road Mobile Machinery (NRMM) used during construction must meet Stage IIIA criteria of EU Directive 97/68/EC and must be registered online on the NRMM website at http://nrmm.london/. Confirmation of the registration must be submitted to the LPA.</i></p> <p>Reason: To ensure the development reduces and manages its air quality impacts in an air quality management area in accordance with Policy EM8 of the Local Plan</p>	
Planning Ref	71665/APP/2019/2293			YES
<p>20 WATFORD ROAD AND 1 BROOKDENE DRIVE NORTHWOOD Demolition of two detached dwellings and erection 1 new building to provide 12 residential apartments with alterations to existing vehicular accesses, on-site parking, bin and cycle storage and amenity space.</p>	<p>The proposed development is not located within a Focus Area and has a relatively small impact on local air quality, due to the provision of only 12 parking spaces in a non-air quality sensitive area.</p>	<p>Therefore, there are no constraints in terms of local air quality.</p>		

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Planning Ref	2082/APP/2019/4091			N/A
<p>NORTHWOOD COLLEGE EDUCATIONAL FOUNDATION MAXWELL ROAD NORTHWOOD HA6 2YE</p> <p>The erection of a 3-storey science block within the existing car park; re-surfacing of the play space fronting Vincent House to facilitate re-located car parking spaces and associated works.</p>	<p>Whereas this planning application is not within the Air Quality Management Area it is on the edge of a declared Air Quality Focus Area in Northwood.</p> <p>The planning application seeks permission for permanent classroom accommodation at Northwood College, located on Maxwell Road, to the south of the junction with Anthus Mews and north of the junction with Leaf Close approximately 0.4km (5 min walking time) south west of Northwood Underground Station.</p> <p>Whereas there is no accompanying air quality assessment, the transport assessment submitted by the applicant was reviewed, which indicated that the development proposals at Northwood College will not include an uplift</p>	<p>the school currently hold the Gold STARS award for the promotion and achievement of sustainable travel. A new Travel Plan at the school will be produced prior to the opening of the redevelopment of the site which is welcomed. The opportunity is being taken to condition the inclusion of EV charging points which is supported from an air quality perspective.</p>	<p>Given its location, Air Quality conditions are required for the provision of low emission energy and manage the construction fleet as per Mayor requirements. Please see text below.</p> <p>Condition - Low Emission Energy Provision</p> <p><i>No building shall commence until details are supplied to the LPA, in writing, demonstrating that any CHP or gas boilers used conform with the London Ultra Low NOx requirements as set out on the Mayor of London Sustainable Design and Construction SPG (or successor document).</i></p> <p>Reason: to ensure compliance with LB Hillingdon Local Plan Part 1, Policy EM8, LB Hillingdon Local Plan Part 2, Policy DMEI 14, Hillingdon AQAP 2019-2024, London Plan Policy 7.14, NPPF 2019, paragraph 181</p> <p>Conditions - Reducing Emissions from Demolition and Construction</p> <p><i>A No development shall commence until a Plan has been submitted to, and approved in writing by, the LPA. This must demonstrate compliance (drawn up accordance with) the GLA Control of Dust and Emissions from Construction and Demolition SPG (or any successor document).</i></p> <p><i>Reason: Compliance with London Plan Policy 7.14 and in accordance with Mayor of London "The Control of Dust and Emissions from Construction and demolition (or any successor document).</i></p> <p><i>B Non-road mobile machinery (standard condition recommended by Mayor of London, London Local Air Quality Management Policy Guidance 2019)</i></p> <p><i>All Non-Road Mobile machinery (NRMM) of net power of 37kW and up to and including 560kW used during the demolition, site preparation and construction phases shall comply with the emissions standards set out in chapter 4, proposal 4.2.3.a of the London Environment Strategy. Unless it</i></p>	

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	<p>in student numbers above the cap imposed by Hillingdon. Given the number of students is not proposed to increase, the proposal is unlikely to result in an increase in traffic to/from the site or parking demand at the school, and no adverse impact on the surrounding highway network is expected. It is noted that this is provision of a new science block in direct replacement of the current temporary facility. The car parking numbers have reduced by 7 places and there are no highways objections to the scheme in terms of adverse impacts on the surrounding road network.</p>		<p><i>complies with the standard set out in the London Environment Strategy, no NRMM shall be onsite, at any time, whether in use or not, without the prior written consent of the LPA. The developer shall keep an up to date list of all NRMM used during the demolition, site preparation and construction phases of the development on the online register https://nrmm.london/</i></p> <p>Reason: Compliance with the London's Low Emission Zone for non-road mobile machinery as per requirements of the London Environment Strategy</p>	
Planning Ref	75249/APP/2019/3752			N/A
<p>3 BYRON PARADE UXBRIDGE ROAD HILLINGDON UB10 OLZ Change of use from retail (Use Class A1) to a mixed-use</p>	<p>The application site is located immediately below a residential unit and in the proximity of several other residences which could be exposed to fumes and odours</p>	<p>Details contained in the application documentation indicate that the kitchen extract flue has been located as far as possible from neighbouring buildings</p>	<p>Condition – Minimum Ventilation and Flue Design Requirements</p> <p><i>No development shall commence until an appropriate design of the ventilation system carried out by an expert has been submitted to, and approved in writing, by the LPA. This must demonstrate, as a minimum, compliance with the specifications listed below:</i></p>	

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<p>comprising retail/restaurant/hot food takeaway (Use Class A1/A3/A5), involving installation of flue to rear and alterations to shopfront</p>	<p>resulting from the ventilation system associated with the proposed development.</p>	<p>and is to be 1m above opening windows within 18 meters of the flue. This is not considered suffice and a planning condition is necessary to prevent any nuisance likely to result from the operation of the application site.</p>	<p><i>Kitchen extraction system</i> <i>The premises are located at the ground floor of a two-storey building. The kitchen itself, takeaway section and extraction system will be fully located inside of the building and will be connected to external acoustical aluminium weather louvres to the ground floor, to the rear.</i> <i>Kitchen smoke and odour will be filtered at least 90% with latest technology powerful extraction ventilation system. The concept is to filter kitchen extract and discharge minimum 90% filtered air.</i></p> <p><i>Minimum ventilation rates</i> <i>An internal ambient air temperature of 28° max.</i> <i>Max. humidity levels of 70%</i> <i>Internal noise level should be between NR40 – NR50.</i> <i>Dedicated make up air system to be approximately 85% of the extract flow rate.</i> <i>Minimum air charge rate of 40 per hour.</i></p> <p><i>Minimum Requirements for Canopy</i> <i>Velocity requirements - Heavy loading – 0.5 m/s (applies to chargrills, mesquite and specialist broiler units).</i></p> <p><i>Material of construction</i> <i>- A material that would comply with the food hygiene requirement is stainless steel.</i></p> <p><i>Grease filtration</i> <i>- Have a minimum performance the same as a baffle filter.</i> <i>- Be easy to clean</i></p> <p><i>Minimum Requirements for Duct Work</i> <i>- All ductwork should be Low Pressure Class ‘A’ and constructed in accordance with Heating and Ventilation Contractors’ Association (HVCA) Specification DW/144 with a minimum thickness of 0.8mm.</i> <i>- Duct velocities should be as follows:</i></p>	

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			<p style="text-align: center;">Supply (m/s) Extract (m/s)</p> <ul style="list-style-type: none"> • Main runs 6-8 6-9 • Branch runs 4-6 5-7 • Spigots 3-5 5-7 <p>- All internal surfaces of the ductwork should be accessible for cleaning and inspection. Access panels should be installed at 3.0m centres and should be grease tight using a heat proof gasket or sealant.</p> <p>- Duct work should not pass through fire barriers.</p> <p>- Where it is not possible to immediately discharge the captured air, fire rated ductwork may be required.</p> <p><i>Minimum Requirements for Fans</i> Fans must be capable of dealing with the operating static pressure within the duct work and should be designed with a minimum 10% pressure margin [note operating static pressure will increase throughout a maintenance cycle].</p> <p>Backward curved centrifugal, mixed flow or axial flow impellers are preferred as they are less prone to imbalance and are more easily maintained/cleaned due to their open construction. Fixed or adjustable metal impellers with a robust and open construction should be used.</p> <p>Fan motors should be rated according current guidance with no need to mount the motor outside of the air stream. For fans that have motors within the air stream and are ventilating cooking equipment that produce high levels of temperature and humidity the specification for the motor should be upgraded to withstand more onerous conditions. Drainage should be provided</p> <p><i>Minimum Requirements for Odour Control Objectives</i> The system shall be designed to avoid statutory nuisance and shall comply with the principles of Best Practical Means. The odour control system shall include an adequate level of: 1. odour control; and</p>	

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			<p><i>2. stack dispersion.</i> <i>The overall performance of the odour abatement system will represent a balance of 1 and 2.</i></p> <p><i>Minimum stack height</i> <i>The discharge stack shall discharge the extracted air not less than 1 m above the roof ridge height of any building within 20 m of the building housing the commercial kitchen. The prevailing wind direction should also be considered in the ducting positioning. The ducting should be rigid in construction and resiliently mounted.</i></p> <p><i>Reason: Compliance with the Environmental Protection Act 1990, The Town and Country Planning Act 1990 and subsequent amendments, policies and proposals in the Hillingdon Local Plan Saved Policies (2020) as incorporated into the Hillingdon Local Plan (2020), including Supplementary Planning Guidance, and to all relevant material considerations, including the London Plan (July 2016) and national guidance.</i></p>	

N/A – Not Available due to lack of air quality report or sufficient information

