

## AIR QUALITY BRIEFING NOTE

<b>Committee name</b>	Residents, Education and Environmental Services Policy Overview Committee
<b>Officer reporting</b>	Val Beale – Residents Services
<b>Papers with report</b>	Appendix A - Details from Cabinet Meeting 30 May, 2019 Appendix B - School Pollution Results Table
<b>Ward</b>	All

### HEADLINES

To provide Members of the Committee with a brief update on the development of Hillingdon's Air Quality Action Plan, information in regard to actions taken to implement the RESPOC recommendations and to answer questions sent by the Committee in advance of the meeting. The opportunity has been taken to give the members of the Committee a briefing on the impact of the recent COVID lockdown period on monitored air pollution levels in the borough.

### RECOMMENDATIONS:

#### That the Committee:

1. **Notes the information presented in the report; and**
2. **Confirms whether there was any further information requested to be included in the report to come before the Committee in October 2020.**

### SUPPORTING INFORMATION

1 The RESPOC report "Review of Air Quality in Hillingdon" gave a number of recommendations (R) for the Council to consider in relation to the development of the Air Quality Action Plan 2019-2024. These were;

- The Action Plan should maintain a strong focus on Hillingdon school travel plans. It should prioritise work with schools most affected by air pollution, particularly to explore measures to tackle idling emissions from cars and coaches (R1);
- Further promotion of the Air Text service providing pollution alerts for Borough residents should be considered (R2);
- The Council should explore ways to work with businesses to help them and their employees improve air quality in the Borough (R3);
- The air quality monitoring networks across the Borough should be reviewed to ensure that there is appropriate coverage, particularly in Air Quality Focus Areas (R4);

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- The Council will explore further ways to make businesses and residents aware of their responsibilities recognising that the whole Borough is designated a Smoke Control Area (R5);
- Existing work by the Council to promote healthier and greener alternatives to driving, such as cycling and walking, and other practical ways to reduce pollution, should be integrated into the Action Plan along with ways to evaluate their impact in helping to reduce emissions.(R6)

1.1 The RESPOC report was approved by Cabinet and the recommendations taken forward into the review of the Air Quality Action Plan (AQAP).

1.2 Following a statutory and public consultation, the Air Quality Action Plan 2019-2024 was adopted by Cabinet on 30<sup>th</sup> May. The Plan is available on request.

1.3 The Air Quality Action Plan (AQAP) has two key objectives, to focus action to:

- *improve the areas of poorer air quality as soon as possible;*
- *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.*

1.4 The AQAP has a series of key priorities and an action plan delivery table containing 30 separate actions aimed at delivering the objectives and priorities of the Plan. The RESPOC report recommendations, which were endorsed by Cabinet, were key inputs which informed the consultation process for the finalisation of the AQAP and have been reflected in the key priorities and in the action plan measures. The Council priorities have been defined as:

- *Lead by example*

The Council will undertake a review of its own fleet and develop a programme for reducing emissions from this source over the five years of this Plan. This approach will also be adopted in regard to reducing emissions from Council buildings and the Council will both promote the use of, and seek funding to ensure the supply of, the infrastructure necessary for the increased use of low/zero emission technologies throughout the borough.

- *Prioritise reducing public exposure and improving air quality around schools*

The Council will work with schools to help them implement measures to reduce exposure both at school and on the journey to school. This will focus initially on those in the areas of poorer air quality and where schools are close to busy roads.

- *Prioritise the implementation of improvement strategies in the Air Quality Focus Areas*

The Council will investigate the development of an air quality improvement strategy for each Air Quality Focus Area on a rolling programme across the five years of the Plan.

- *Ensure the integration of the Healthy Streets approach in relevant council work programmes*

The Council will ensure its transport management projects and town centre improvements programmes incorporate delivery outcomes which include reducing pollution emissions and protecting public exposure.

- *Ensure the planning system supports the achievement of air quality improvements in relation to new developments*

The Council will use its planning policies to ensure new developments incorporate air quality positive design measures from the outset. Suitable mitigation measures will be sought to reduce pollution increases associated with new development, especially in areas where the air quality is already poor.

- *Raise awareness via targeted campaigns*

The Council will develop a rolling programme of awareness and enforcement campaigns focused on the protection of public health such as; promotion of the free pollution alert system, AirText, to vulnerable groups in the borough; a renewed focus on the issues of health impacts from particulate matter arising from sources such as from the burning of wood, coal and other substances especially in domestic fireplaces, enforcement on pollution issues arising from construction site activities and the enforcement of no idling throughout the borough.

- *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*

The Council will use available funding mechanisms to provide the necessary infrastructure and local improvements needed for increased cycling and walking facilities. Along with the use of enhanced green infrastructure to create greener walking and cycling routes away from the most polluted areas and roads, this will form an important integrated approach to reducing exposure to pollution and promoting healthier lifestyles as well as improving air quality by providing a zero-emission alternative to use of the car.

- *Work with external stakeholders*

The Council will ensure that external stakeholders, whose operations influence the pollution levels experienced within the borough, are actively engaged to deliver focused actions to reduce emissions from their operations and play their part in improving the air quality in the local communities..

1.5 Following the publication of an Air Quality Action Plan, the Council has a statutory duty to produce an Annual Status Report (ASR) and to submit it to the Mayor of London for approval on a yearly basis. The report has to include the monitoring data for the previous calendar year, trends in monitoring over time and report on the implementation of the actions within the AQAP.

1.6 The 2019 ASR was submitted on the 25th May 2020 to meet the GLA imposed 31<sup>st</sup> May deadline. Both the Full ASR Report and the Summary ASR Report are available on request. The ASR gives details of the monitoring data, the highlights in terms of actions taken and the action plan table of the 30 improvement actions with details of progress.

## **2 Specific progress on the Actions as recommended by RESPOC**

2.1 The remainder of this Report focuses on the implementation of actions taken in regard to the RESPOC recommendations. Answers to queries received in advance from the Committee have been included in the relevant sections.

***Recommendation 1 - Action Plan should maintain a strong focus on Hillingdon school travel plans. It should prioritise work with schools most affected by air pollution, particularly to explore measures to tackle idling emissions from cars and coaches;***

***Advance question from the Committee - could the Committee be provided with a list of schools located in areas where air quality was a concern?***

2.2 A study by the Mayor of London reported on the pollution levels experienced at school premises throughout London and highlighted those where the levels of pollution was a concern. Air quality concern was defined as where modelling had indicated the playing areas within the school premises were above the limit value set to protect health ie 40ug/m<sup>3</sup> annual mean nitrogen dioxide. None of the schools in Hillingdon were identified on this list in regards to being subjected to levels of pollution above the recognised health limits.

2.3 The list of all educational establishments (local authority schools, special schools, academies, independent schools etc) within Hillingdon has been attached (App B). This identifies the establishments ranked by their pollution levels within defined ranges, namely:

- under 40ug/m<sup>3</sup> but above 35ug/m<sup>3</sup>;
- below 35ug/m<sup>3</sup> but above 30ug/m<sup>3</sup>;
- below 30ug/m<sup>3</sup> but above 25ug/m<sup>3</sup>;
- below 25ug/m<sup>5</sup> but above 20ug/m<sup>3</sup>.

2.4 Hillingdon pupils, in terms of predicted levels of pollution within the outside playing areas, may not be in same situation imposed by the high levels of pollution as found in schools in places such as Inner London, but as reducing exposure to pollution has proven health benefits, especially for younger children, a key priority of the AQAP, as recommended by RESPOC, is to continue to further reduce exposure and improve air quality around our schools.

2.5 Whilst the Council can offer support and help to schools in issues such as the development of School Travel Plans, provision of access to pedestrian and cycling training, education campaigns in regard to sustainable travel and air quality, it does require the individual schools to actively engage with the Council to secure the maximum benefits.

2.6 In regard to School Travel Plans, the Council engagement continued throughout

2019/2020, paused only by the imposition of lockdown in March 2020. Whilst engagement is re-starting now schools are re-opening work on travel plans may not be to the same level straight away as the schools concentrate on getting back to a form of normality.

2.7 Transport for London has introduced a sustainable travel for school programme called STARS. This is an accreditation scheme (gold, silver, bronze levels) based upon achieving good levels of sustainable travel. The Council encourage all schools to consider the scheme when developing their school travel plans. In Hillingdon there are currently 10 schools at gold level, 3 at silver and 3 at bronze. Ten of the STARS accredited schools are within the above 30ug/m<sup>3</sup> but below 35ug/m<sup>3</sup> pollution category.

2.8 In addition, the Council has introduced a Hillingdon-specific parent parking pledge initiative which includes pledging to increase active travel as well as issues such as a pledge not to leave car engines running at drop off around schools. In 2019/2020 24 schools have actively engaged with the pledge initiative.

***Advance question from the Committee - regarding the Council's cycle schemes, how often were lessons held? Were the schemes available across the Borough, and were schools encouraging their pupils to cycle to school?***

2.9 The majority of schools are engaged with the Council in regards to gaining access to pedestrian and cycling training. In 2019/2020 this programme delivered pedestrian training and cycle training to 14,420 and 1,213 people respectively in 2019/2020 with additional support for family cycle training although delivery on this programme was cut short due to lockdown. Whilst the training will be restarted it may not be to the same level straight away as the schools concentrate on getting back into a form of normality.

2.10 The Council is participating in a pan-London "No Idling" raising awareness campaign funded by the Mayor of London. Following a call for interest to all schools, two campaigns were carried out in 2019/2020. The locations were Whiteheath Primary School and the Guru Nanak School. 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.

2.11 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.

2.12 The action events outside the schools involved the pupils engaging with around 73 drivers. The majority of drivers were supportive and either not idling while waiting or switching off their engines when asked. An additional five schools expressed an interest in participating in further events although arrangements were postponed due to lockdown restrictions.

2.13 The no idling at schools campaign is currently being adapted to being delivered potentially as an online resources for schools. The MAQF funded Project Officers are developing workshop material which can be delivered either by:

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- Idling Action project officers in the school,
- Idling Action project officers virtually via MS teams or Zoom;
- Independently by the teacher utilising the video workshop and lesson plan.

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

2.15 In addition to the above an air quality education package has been trialled at a school located in West Drayton. 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.

2.16 Following a call for interest a further ten schools were then identified for similar education packages in the school year 2019/2020. 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.

2.17 Following concerns raised by Highfield Primary School in regard to potential safety issues during the school run, the Council is undergoing the trial of a 'School Street'. This 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.

2.18 The Council held a public consultation with the school, parents and households in the surrounding residential areas and the pilot School Street scheme was introduced 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.

***Advance question from the Committee - was the Council supporting tree planting on school land? What was the most common tree planted, and was it effective at improving air quality?***

2.19 Working alongside other aspects such as the promotion of active travel for school children, the raising awareness of air pollution via the provision of education programmes and the implementation of no idling zones outside schools, the Council has undertaken to consider the installation of pollution barriers, including the use of hedges and trees, to provide further protection from exposure to pollution at the school site itself and complement other measures being undertaken to help provide a healthier environment at the school premises.

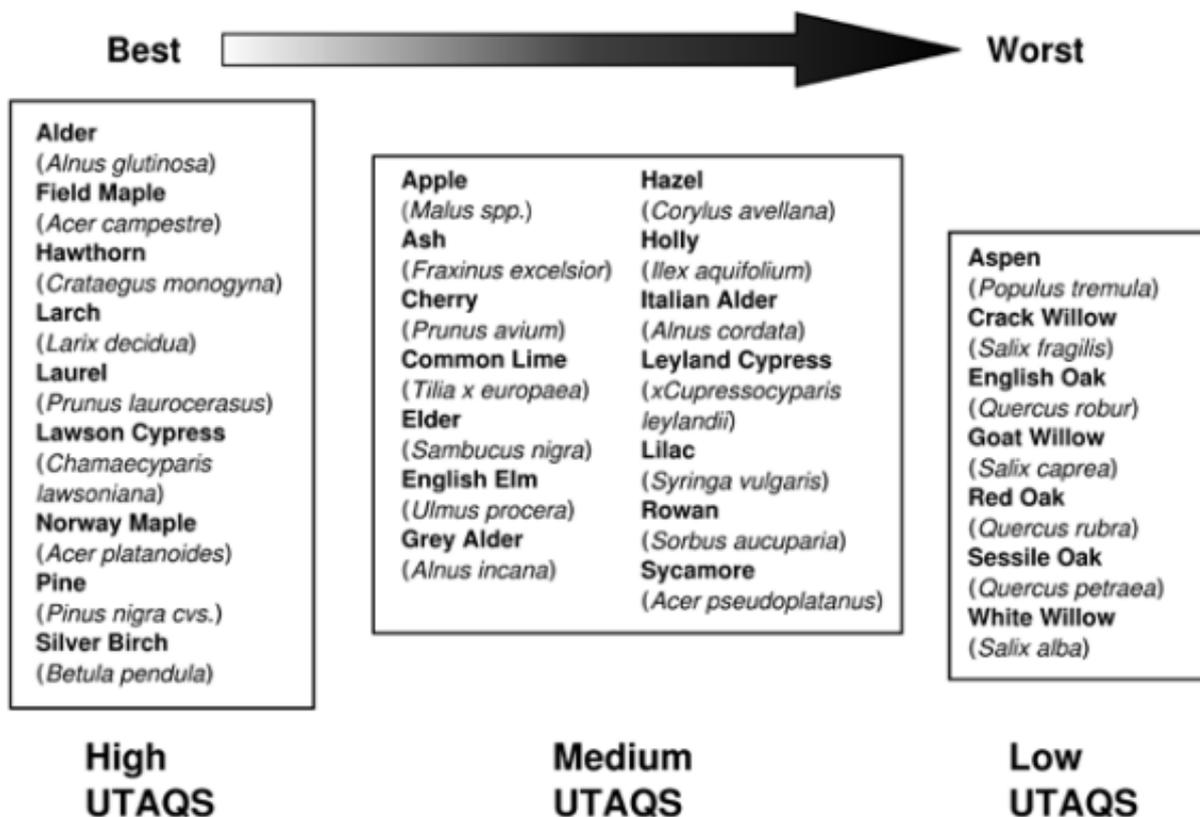
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2.20 Whilst the provision of pollution barriers themselves do not reduce pollution from the sources that cause the emissions eg road traffic, they can be relevant for consideration where school playgrounds/playing fields are in close proximity to pollution from roads. This is especially important at primary schools given the vulnerability of younger children to air pollution, therefore, even where schools are in generally less polluted areas there are benefits to be gained by reducing the exposure of young children during their recreational times to pollution from nearby traffic. A study by King’s College London found levels of nitrogen dioxide were reduced by 23 per cent when a green wall was placed between a busy road and a school playground.

2.21 In regards to the specific use of tree species, the Council is guided by information such as "Urban Trees and Air Quality", (Woodland Trust). This document ranks tree species with an Urban Tree Air Quality Score (UTAQ) from high benefit to local air quality to lower benefit.



Source - Trees Improve Urban Air Quality, Woodland Trust

2.22 The current planting scheme being undertaken at Cherry Lane Primary school includes the use of trees and those chosen were Hawthorn (*Crataegus* species) high UTAQ and Rowan (*Sorbus* species) medium UTAQ.

**Recommendation 2 - Further promotion of the Air Text service/pollution alerts for Borough residents should be considered.**

**Advance question from the Committee - could information on AirText be forwarded to the Committee?**

2.23 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.

2.24 The Council has been part of the airTEXT partnership since its inception. airTEXT is a free service for the public providing air quality alerts by SMS text message, email and/or voicemail and 3-day forecasts of air quality, pollen, UV and temperature across Greater London.

2.24 Member local authorities pay a small annual subscription to be part of the service. Residents and workers within the local authority can sign up for free and receive the alerts. In addition the alerts are sent to all schools, GP surgeries and care homes within the borough. See link below for full details and sign up. This is also available on the Hillingdon website.  
<https://www.airtext.info/about>

2.25 The data recorded for the time period April 2019 - November 2019, ie eight months of the reporting year, reported a total of 3,551 alerts sent out across the 176 members in Hillingdon, the majority of these via email and text. In Hillingdon this time period included 16 separate pollution events, of which there were 4 in April which coincided with a Sahara Dust event.

2.26 Information is available on the Council website and there was a specific article in the Hillingdon People magazine to raise awareness of the scheme.

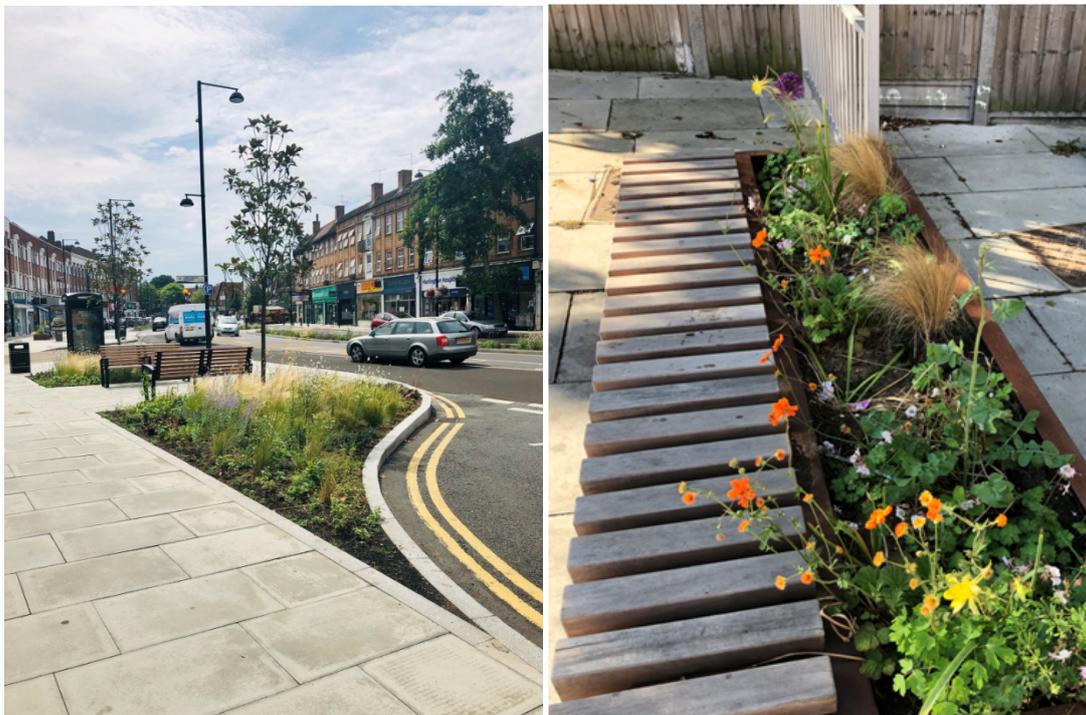
***The Council should explore ways to work with businesses to help them and their employees improve air quality in the Borough (R3);***

2.27 The Council's Town Centre improvement programme represents an opportunity for air quality benefits to be incorporated into this work, each scheme includes consultation with local businesses as part of the development process. The provision of improved cycling and pedestrian access to transport hubs can help local businesses develop their workplace travel plans targeted at improving access for their employees, examples are given below;

- An improvement scheme for a shopping parade in close proximity to the Uxbridge Road includes proposals to widen the pavements to enhance the separation of pedestrians from the Uxbridge Road along with the inclusion of cycle stands;
- additional improvements in Uxbridge Town Centre include new trees, footway widening for pedestrian access and cycle stands;
- 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 to encourage cycle use by both local communities and local businesses.

2.28 An innovative scheme to help both local air quality and local flooding occurrences has been implemented in Eastcote town centre. This incorporates the concept of rain gardens at the susceptible parts of the road system where flooding has occurred. This has also provided an additional buffer area between pedestrians and emissions from the road.

2.29 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.



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

2.30 In regard to working with local businesses and communities the Council has introduced a Targeted Problem Solving Group working with other partners such as the Police, Fire Brigade, TfL, Housing associations and a range of other Council departments. There is a rolling programme of events across the borough.

2.31 Information on issues such as improving air quality, information on airTEXT and raising awareness of the enforcement of no idling has now been included in the programme for dissemination at these events. In 2019/2020 the events engaged with a total of 2,258 people.

***Recommendation 4 - The air quality monitoring networks across the Borough should be reviewed to ensure that there is appropriate coverage, particularly in Air Quality Focus Areas;***

***Advance questions from the Committee - Where were air quality monitoring stations? Were these in proximity to areas of poor air quality? Were these near schools, and were the stations at the appropriate height to obtain correct readings?***

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2.32 As recommended by RESPOC, a review of the air quality monitoring network across the borough was commissioned with the aim to assess whether the current locations should be retained, whether there are locations that could be withdrawn and where new sites should be located, paying particular attention to the Air Quality Focus Areas.

2.33 This review reported in June 2019 and was up and running by August 2019. This monitoring network will help to assess the success of actions taken across the borough to improve air quality and allow the Council to assess the trends in air quality over time. Details of the air quality monitoring network and the review are reported below.

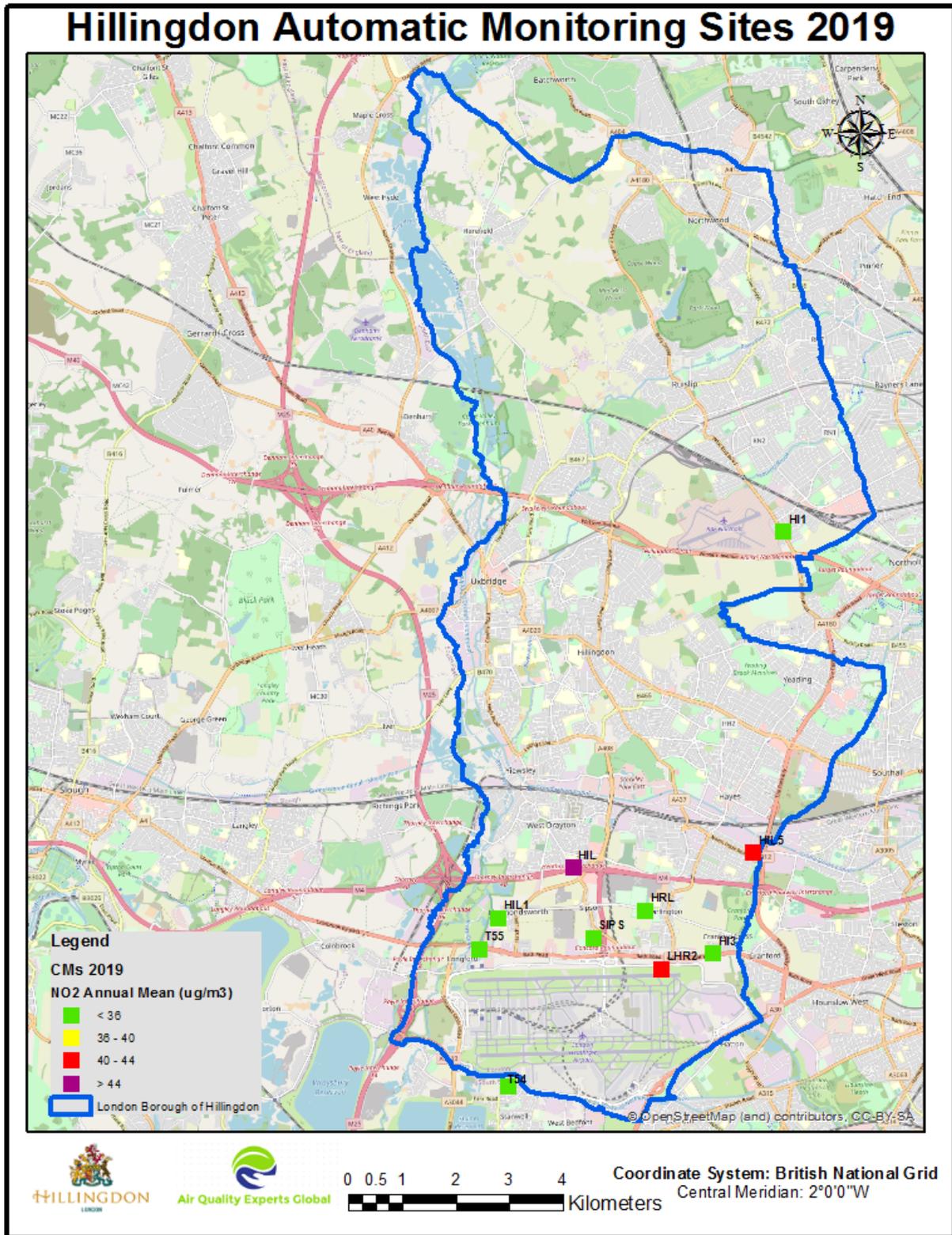
The Council assesses air quality levels using a) continuous air quality monitoring stations and b) by the use of indicative nitrogen dioxide diffusion tubes. The two types of monitoring are discussed below.

a) Continuous air quality monitoring stations

2.34 These require specific analysers, housed securely in units and are placed at fixed locations. The units require air conditioning units, access to phone-lines and electricity plus outside expertise to calibrate and quality control the data in accordance with specialised national technical guidance.

2.35 These have been in place for a number of years and are mainly located in the bottom two thirds of the borough. Additional monitors are in place and operated by Heathrow Airport Ltd (HAL) and one by the M4 is operated by central Government (DEFRA). There is public access to all the monitoring data. The map below shows the location of the monitors, the results are displayed for annual mean nitrogen dioxide, with green being below the health limit level, yellow close to the health limit value through to red and purple being above the health limit value. These are shown for the results in 2019.

Map 1:



2.36 The station locations as in the map are:

- H1 - West End Road, South Ruislip (LBH operated site)
- HIL5 - North Hyde Road, Hayes (LBH operated site)
- HIL - West Drayton, 30m north of the M4 (DEFRA operated site)
- HRL - Harlington, background site between M4 and the A4 and Heathrow Airport (HAL operated site)
- LHR2 - on-airport (HAL operated site)
- HI3 - Bath Road (LBH operated site)
- HIL1 - Harmondsworth, background site (Lakeside operated site)
- Sips - Sipson, background site closer to A4/Heathrow Airport (LBH operated site)
- T55 - Longford (HAL operated site)

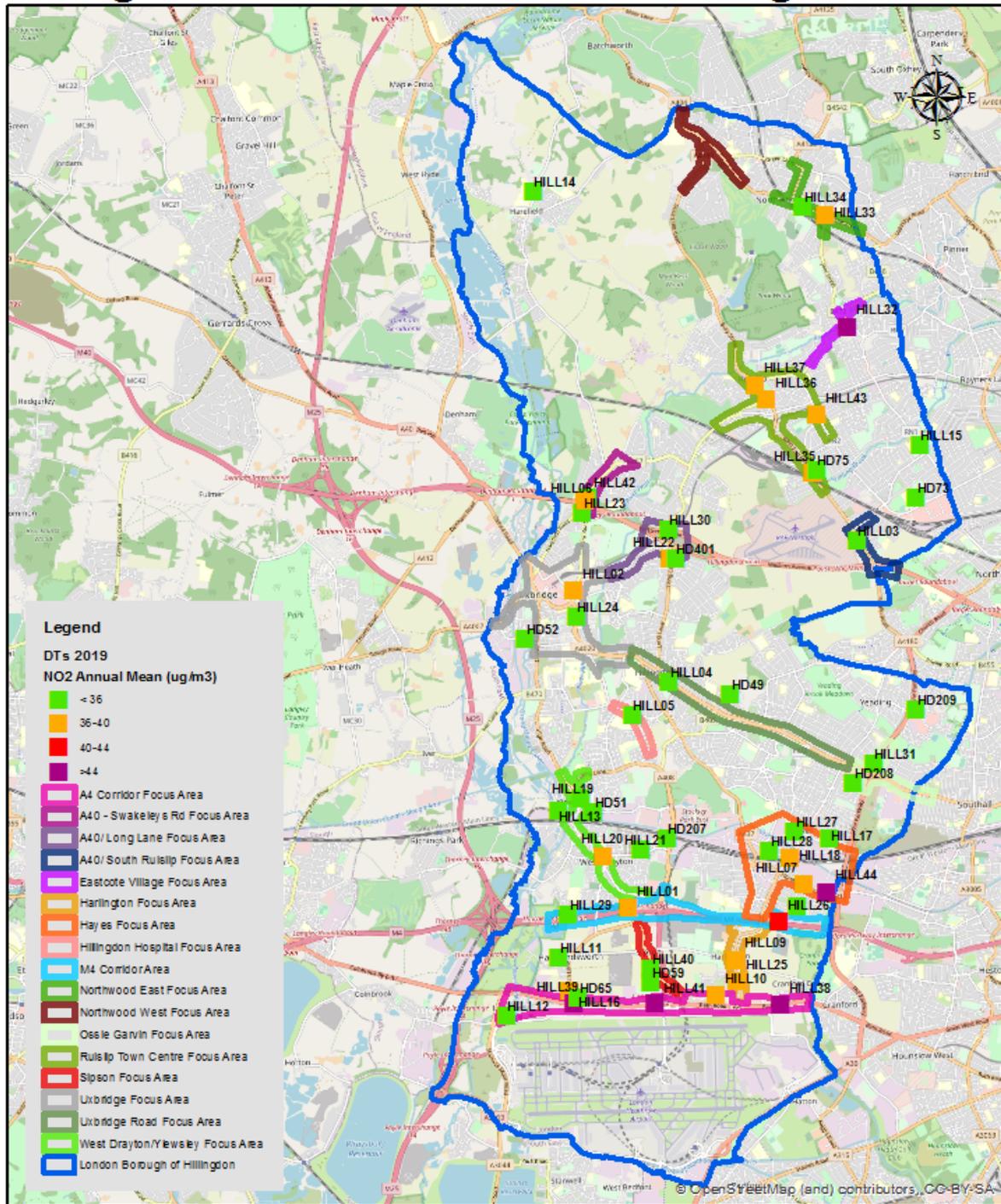
b) Diffusion tube network

2.37 In addition the council uses smaller diffusion devices called diffusion tubes. These are used to monitor pollution hotspots and to monitor background locations so trends across the borough can be assessed over time. These are easier to locate and only require a monthly exposure and collection regime with accredited laboratory analysis to ascertain the results.

2.38 As the continuous air quality monitoring stations require substantial funding to decommission and re-locate, the Air Quality Monitoring review recommended that the diffusion tube network provided a better opportunity to ensure there is coverage throughout the areas of concern such as the Air Quality Focus Areas.

2.39 The map below indicates the location of the reviewed diffusion tube network and includes the location of the Air Quality Focus Areas as identified in the AQAP. Some of the original diffusion tube locations have remained, others deleted and new locations identified to ensure coverage. The coloured dots represent the annual mean nitrogen dioxide levels recorded in 2019, with green being below the health limit level, orange close to the health limit value through to red and purple being above.

# Hillingdon Non-Automatic Monitoring Sites 2019



Map 2

2.40 It should be noted that the results for the year 2019 are not yet considered to be fully representative at all locations as the new network has only been in place since August 2019. This means new locations have only been monitored for 6 months instead of a full calendar year. The sites include background sites, school sites and road-side sites and are also located to assess worse case exposure eg residential housing by congested roads.

2.41 In regard to the question of the height of monitoring, this is largely dictated by the national technical guidance which suggests a minimum of 1.5m. This is part of the quality control of the data and ensures all monitoring throughout the country can be compared in terms of the analysers used, the laboratory analysis used and the pollution level at a given height. In terms of the diffusion tubes there is an added bonus of being at height meaning they are not so easily stolen.

2.42 In terms of public exposure there have been several studies looking at the pollution levels experienced at 1m and below. In situations close to busy roads, the levels have been found to be higher than those above 1m with studies using specialised monitoring techniques indicating young children in prams and buggies on busy roads being exposed to substantially more pollution than the adults pushing the pram. For further information please see the link <https://www.bbc.co.uk/news/health-45181761>

2.43 Avoiding busy roads, using pram and buggy covers and using pollution dispersal techniques with the planting of roadside hedges alongside busy roads, moving pedestrians further away from the road sources have all been identified as ways by which the exposure of young children to pollution can be reduced.

***Advance question from the Committee - could the Committee be provided with data from the monitoring stations, in order to identify any trends?***

2.44 Each year the Council is required to produce an annual status report (ASR) for the GLA which includes all the monitoring data and trend analysis. The graph below is from the 2019 ASR for the automatic monitoring sites in the borough and illustrates the trends over the last 10 years.

2.45 The three monitoring stations registering levels above the legal limit of 40ug/m<sup>3</sup> (red dotted line) for annual mean nitrogen dioxide in 2019 are;

- LHR2 - this is on-airport at Heathrow;
- HIL- this is 30m from the M4 in West Drayton
- HIL5 - this is in Hayes

The other stations registering levels below the limit value in 2019 are:

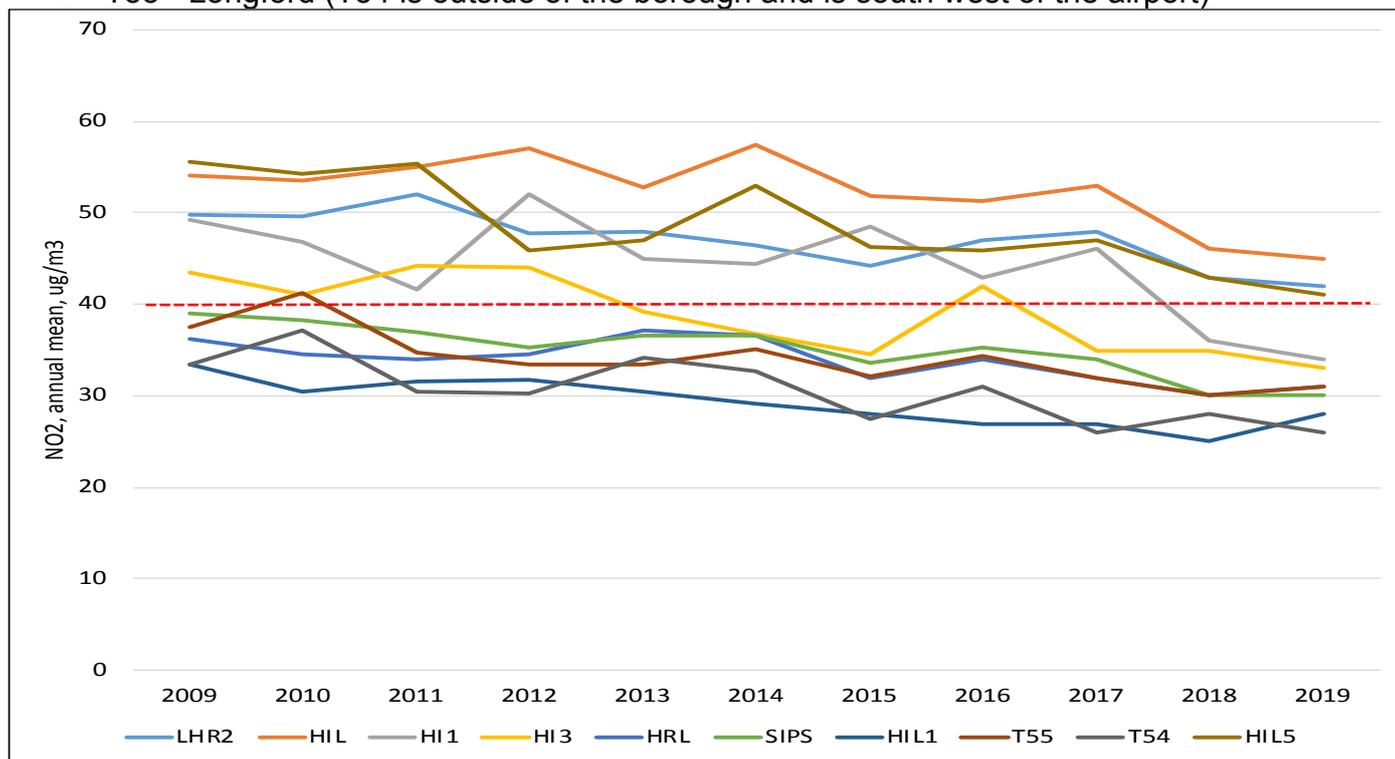
- HI1 - West End Road, South Ruislip
- HI3 - Bath Road
- HRL - Harlington, background site between M4 and the A4 and Heathrow Airport
- Sips - Sipson, background site closer to A4/Heathrow Airport
- HIL1 - Harmondsworth, background site

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- T55 - Longford (T54 is outside of the borough and is south west of the airport)



Annual mean NO<sub>2</sub> concentrations µg.m<sup>-3</sup> as measured at the automatic monitoring stations, 2009-2019,

2.46 The monitor in West End Road South Ruislip (HI1) as shown by the grey line indicates the influence of the proximity to a busy road on pollution levels. The monitoring levels have started to drop in the last two years as the monitor was moved towards the back of a grass verge from its previous position closer to the road. As this brings the monitor closer to where people live this is considered a better representation of public exposure over the year.

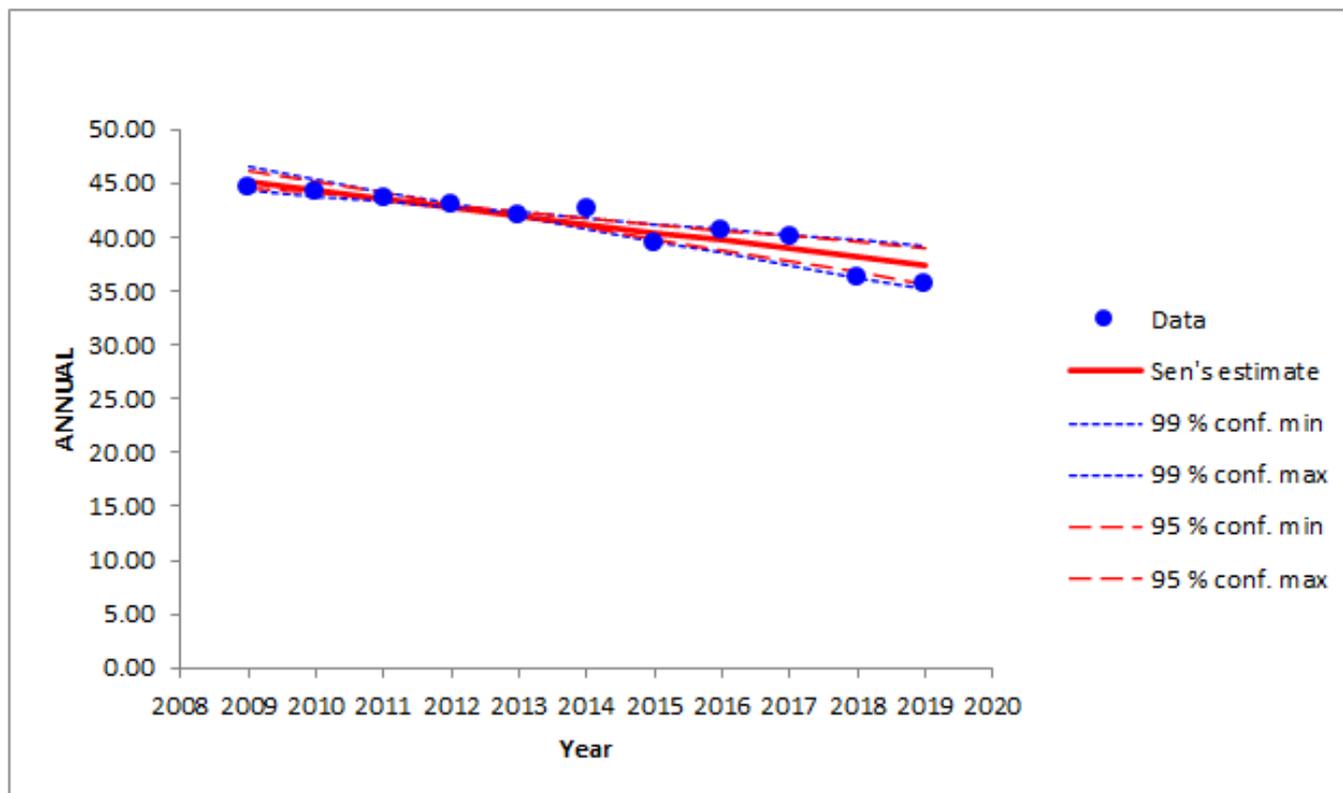
2.47 The other thing to note is the importance of weather patterns on pollution levels. The peaks can often be attributed to specific weather conditions in a particular year such as temperature inversions which tend to "hold" pollution closer to the ground.

**Advance question from the Committee - the review had made reference to a reduction in nitrogen dioxide. Was this statistically significant?**

2.48 A reduction in the highest levels of predicted pollution can be observed on page 6 of the RESPOC Review Report which shows the modelling map as predicted for 2005, and page 10 which shows the modelling map as predicted for 2013.

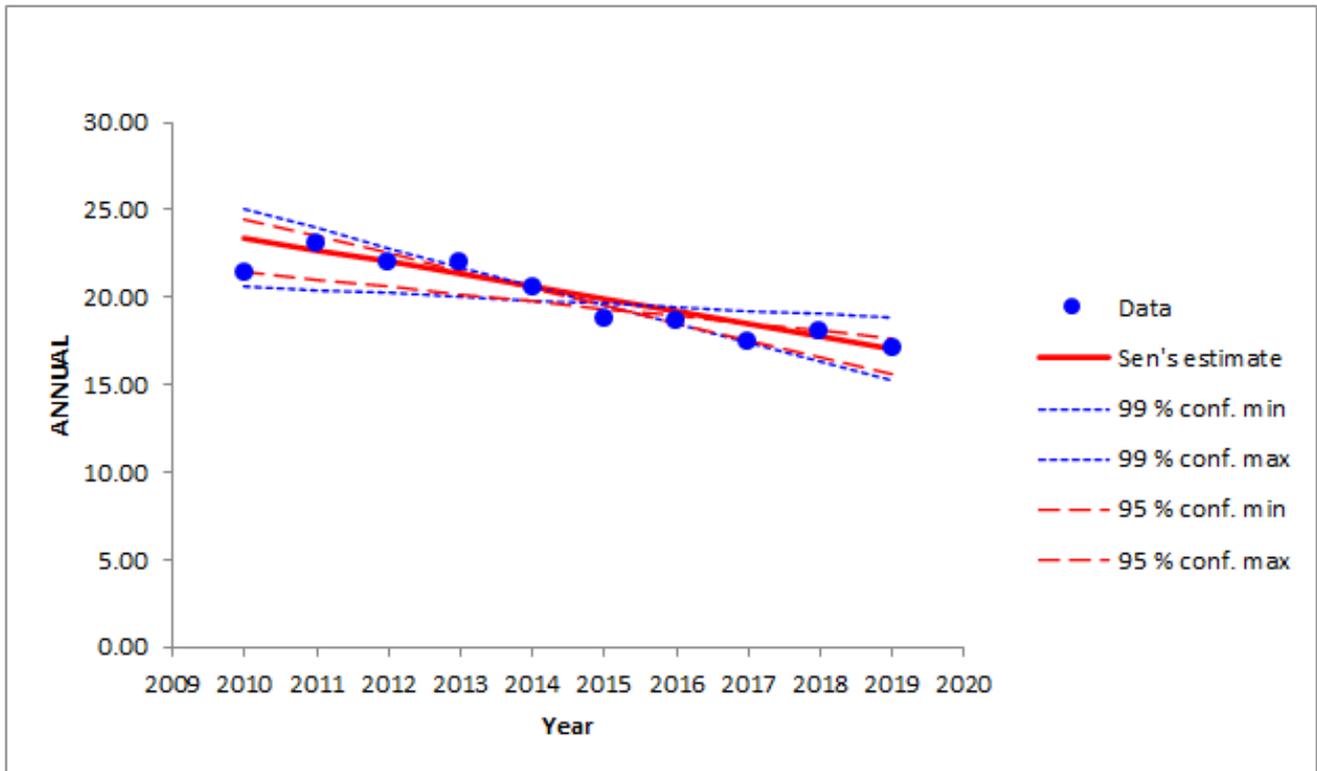
2.49 The graph above indicates there have been initial drops since 2009 with a general levelling out in more recent years, increases in concentration at some sites is observed for some years, this is usually attributable to variability in weather conditions.

2.50 To illustrate this more clearly in terms of statistical analysis a best fit line is computed. Taken as an average across all the automatic stations this indicates a slow overall reduction over 10 years.

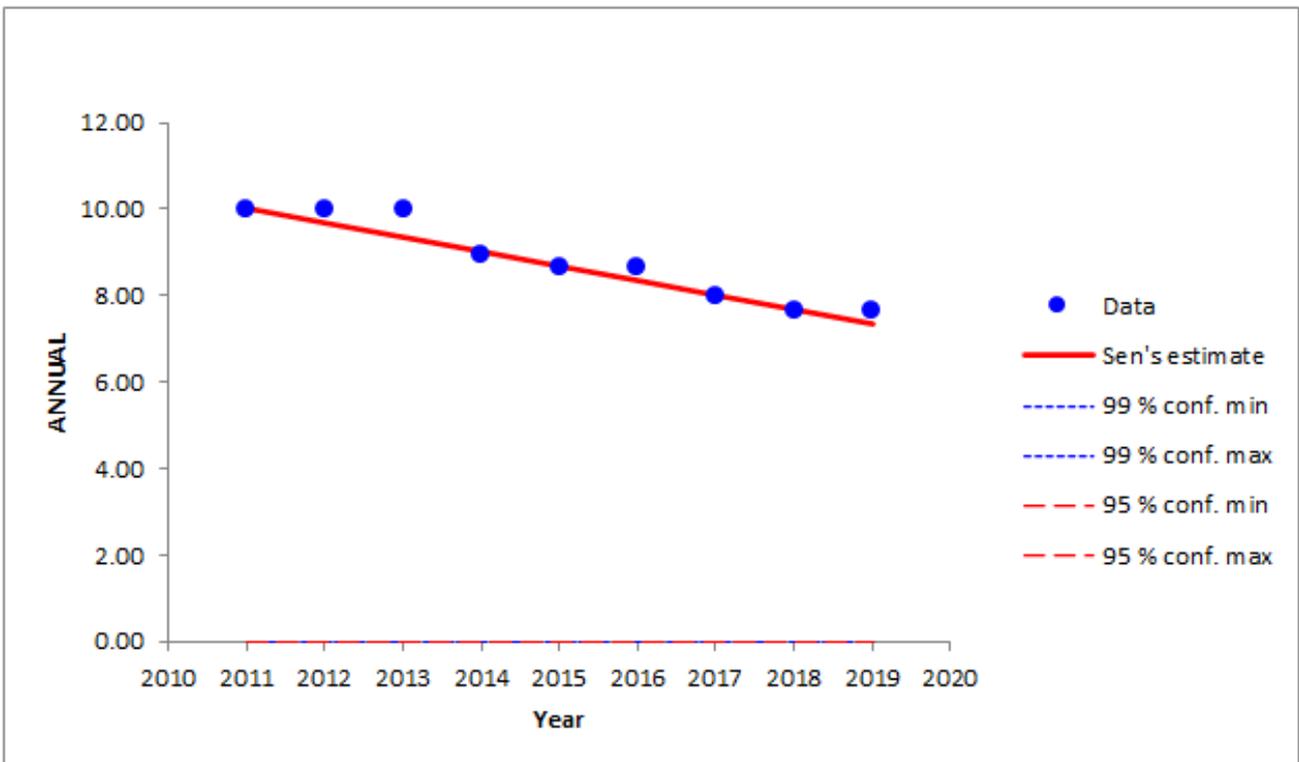


Annual mean NO<sub>2</sub> concentrations µg.m<sup>-3</sup> as measured at all the automatic monitoring stations, 2009-2019, (average across all sites in the borough) showing a mild downward trend in concentrations.

2.51 This pattern is repeated when looking at particulate matter, both for PM<sub>10</sub> and for the finer fraction PM<sub>2.5</sub>:



**PM10**



**PM2.5**

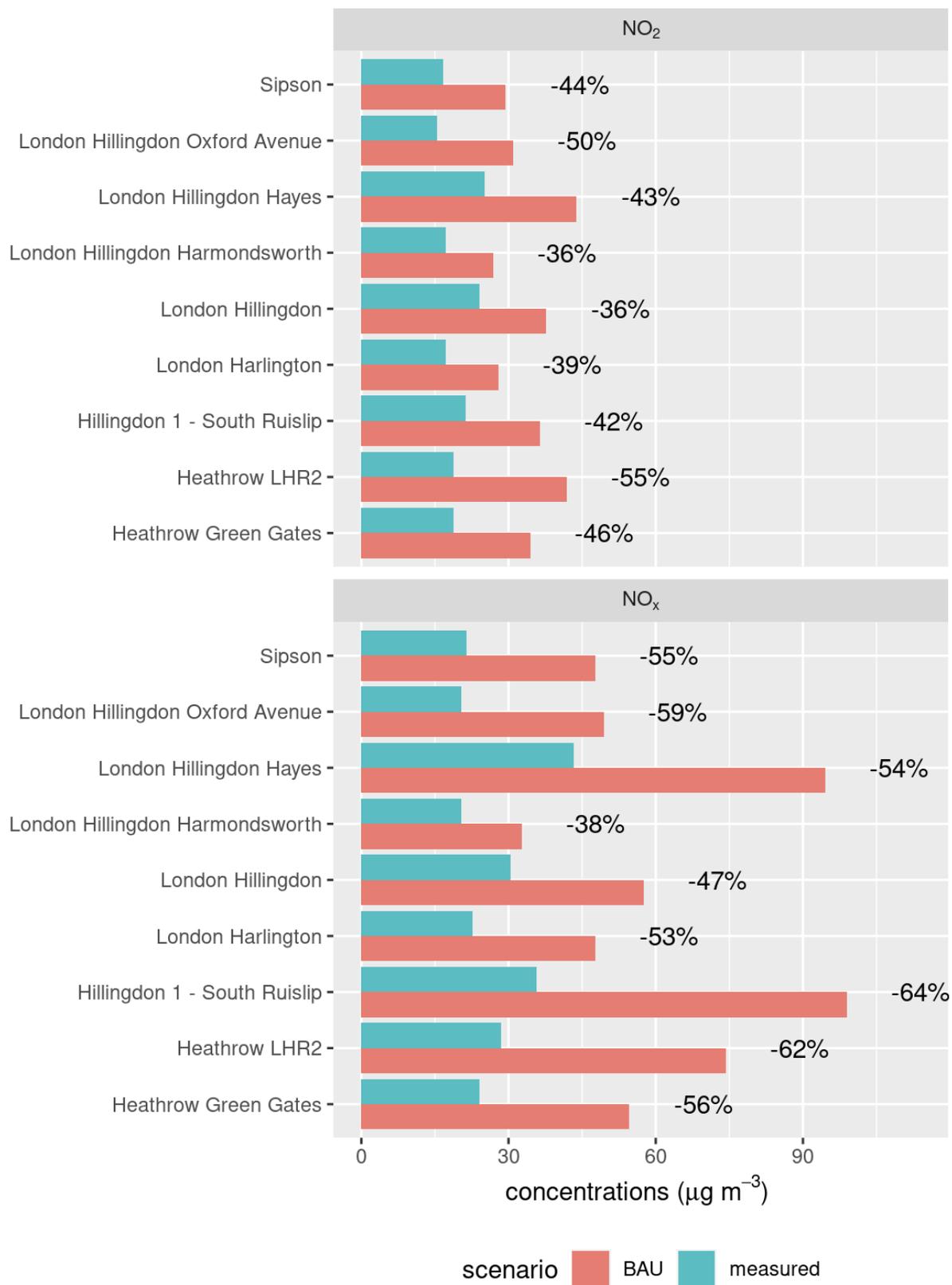
Annual mean PM<sub>10</sub> and PM<sub>2.5</sub> concentrations  $\mu\text{g.m}^{-3}$  as measured at the automatic monitoring stations, 2010-2019 (average across all sites in the borough). No sites exceed the annual mean objective.

2.52 Whilst it is too early to assess whether the impacts of lockdown in 2020, in terms of reductions in air pollution levels, will remain as a statistically significant trend over time, the reductions experienced at the air quality monitor stations in Hillingdon are notable. An initial analysis is given below.

2.53 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 16<sup>th</sup> March through to full lockdown on the 23<sup>rd</sup> March. In this month significant drops in pollution levels were recorded across all sites in the borough. Analysis by consultants on behalf of Hillingdon<sup>1</sup> shows the extent to which nitrogen dioxide (NO<sub>2</sub>) and total nitrogen oxides (NO<sub>x</sub>) concentrations fell between lockdown on March 23<sup>rd</sup>, through to May 12<sup>th</sup>, comparing measured data with a hypothetical business as usual (BAU) scenario representing concentrations that would have been observed in the absence of lockdown.

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<sup>1</sup> [https://www.airqualityengland.co.uk/assets/reports/199/Hillingdon\\_report\\_covid\\_analysis.html](https://www.airqualityengland.co.uk/assets/reports/199/Hillingdon_report_covid_analysis.html)



**Estimated effect of lockdown on NO<sub>2</sub> and NO<sub>x</sub> concentrations up to May 12<sup>th</sup> 2020.**

2.54 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. 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.

***Recommendation 5 - The Council will explore further ways to make businesses and residents aware of their responsibilities recognising that the whole Borough is designated a Smoke Control Area;***

2.55 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<sub>2.5</sub>, estimated as contributing to between 23% and 31% of emissions of this finer fraction of particulate matter across London.

2.56 With exposure to particulate matter, and especially the finer PM<sub>2.5</sub> fraction, 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 2m<sup>3</sup>) 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.

2.57 Research by the GLA 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.

2.58 Information available on Hillingdon's website has been enhanced (October 2019) and there has been specific information on the issue 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.

2.59 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.

2.60 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.

***Recommendation 6 - Existing work by the Council to promote healthier and greener alternatives to driving, such as cycling and walking, and other practical ways to reduce pollution, should be integrated into the Action Plan along with ways to evaluate their impact in helping to reduce emissions.***

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Classification: Public

Residents, Education and Environmental Services Policy Overview Committee – 15 October 2020

2.61 The Mayor of London's Transport Strategy has introduced the concept of Healthy Streets. Using a scorecard rating approach, projects to improve public realm are assessed in terms of their ability to improve on 10 key indicators, one of which is Clean Air:

## Healthy Streets Indicators



Source - Transport for London

2.62 The incorporation of this approach into Council schemes will ensure benefits for air quality, as well as the improvement of cycling and pedestrian provision, are an integral part of each Council scheme. The use of the healthy streets indicator system from a pre-scheme assessment to post-scheme assessment provides a means of demonstrating the level of improvement provided by implementation of the scheme.

### 3 Additional advance questions from the Committee

***How many vehicles did the Council operate and what progress had been made to improve emissions?***

***What were the next steps for the replacement of vehicles? How long would it take to update the fleet in respect of satisfactory emissions?***

3.1 The implementation of a Council Fleet replacement programme is being taken forward by the Fleet Management Team over the time period 2019-2024/25.

3.2 In 2019/2020 this has included the upgrade of 77 specialist vehicles (this includes refuse collection vehicles, road sweepers, cage tippers etc) to Euro V1 in terms of vehicle emissions for NOx and PM10. These will meet the future tighter standards being set for the TfL London Low Emission Zone (proposed for October 2020, now postponed to end of February 2021).

3.3 Consideration is currently being given for the purchase of eight pool cars which will be low/zero emissions technology, electric equipment is being trialled by the Green Spaces Team and plug in electric points are being provided for the ice cream vans at Ruislip Lido so that the constant running of the diesel engines required to keep the products cold can be switched off therefore removing the local pollution caused by the idling of the engines.

***How was the Council promoting the use of Green Fleets for sub-contractors and partners?***

3.4 The Fleet Operator Recognition Scheme (FORS) is a voluntary accreditation scheme for fleet operators. It aims to raise the level of quality within fleet operations, and to demonstrate which operators are achieving exemplary levels of best practice in safety, efficiency, and environmental protection. All current Council contracts include the requirement to be Freight Operators Recognition Scheme registered and also to be a minimum of Euro V1/6 in terms of emissions.

3.5 The Council is participating in the Mayor's Air Quality Fund No Idling campaign. The initial year 2019/2020 focused on working with schools, 2020/2021 will consider working with local authority fleets and local businesses. The opportunity will be taken to consider how the inclusion of low/zero emissions requirements and practices can be captured in relevant local authority contracts.

***Could planning polices be reviewed so that the Council was not forced to approve applications located in areas of poor air quality simply because the application provided some form of mitigation, such as mechanical air scrubbing?***

3.6 There has been a noticeable change in air quality planning policies over the last few years. The Council Local Plan Part 1 introduced the policy that planning developments should not cause a worsening of local air quality and introduced the notion of air quality neutrality. This has now been further enhanced by the Council's Local Plan Part 2 and the introduction of developments being "at least air quality neutral" as a minimum, with the protection of the public against unacceptable risk of pollution being specifically sought as well as developments needing to actively contribute to air quality improvements.

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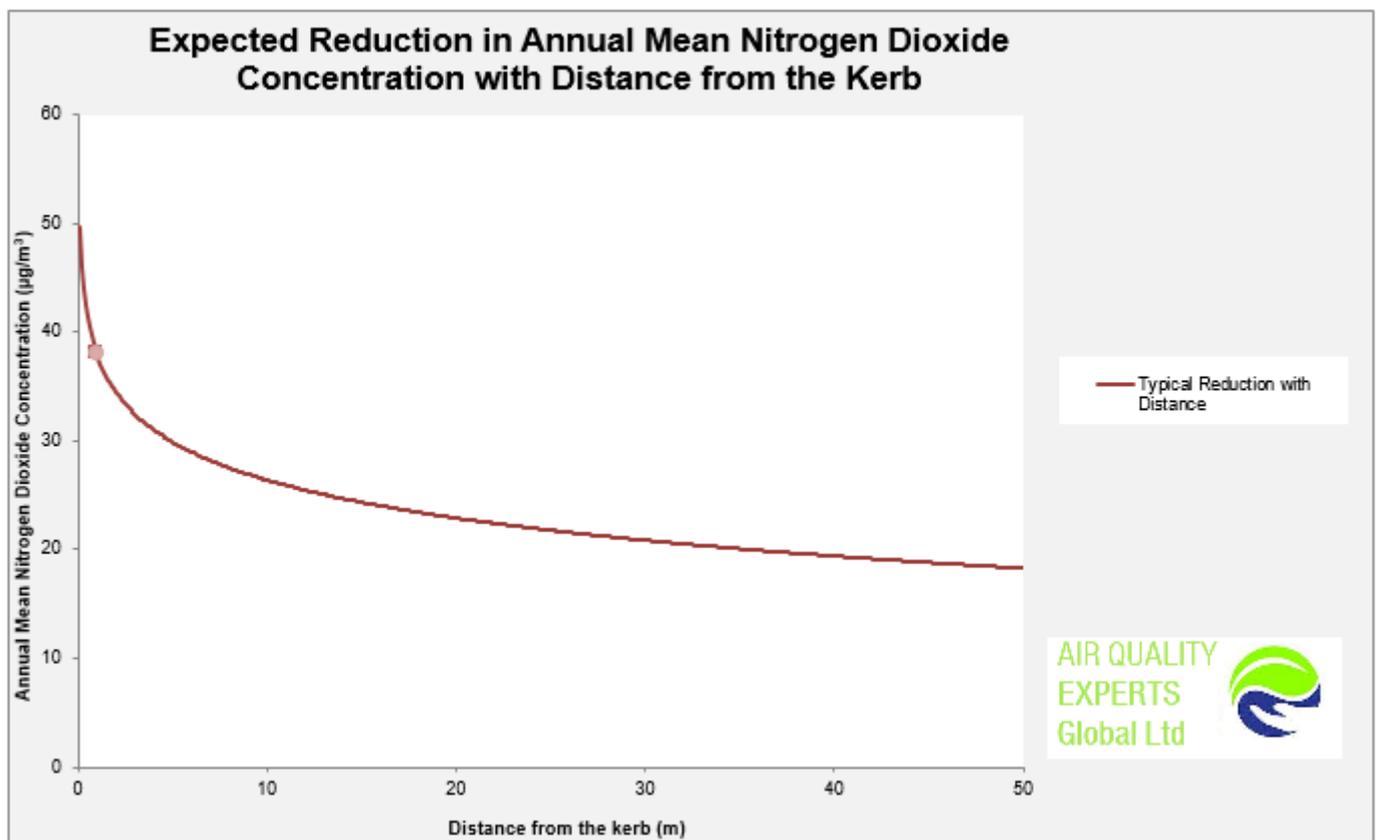
Classification: Public

Residents, Education and Environmental Services Policy Overview Committee – 15 October 2020

3.7 The Intend to Publish London Plan Policy for air quality introduces the concept of developments being clean by design to protect future occupiers, to address public exposure to existing air pollution and make provision to address local problems of air quality.

3.8 The introduction of clean by design measures should ensure that the improvements, which include protecting future occupiers, are built in at the right stage as opposed to add on mitigation at the end. Clean by Design measures include looking to move the accommodation away from the source of pollution, providing appropriate greening infrastructure to prevent exposure to pollution including associated amenity areas, the use of ultra low emissions energy sources to protect indoor air quality.

3.9 For the protection of future residential exposure, moving the accommodation away from the pollution source, ie back from the road, is a design measures which can be included in the initial stages of the development along with sufficient greening infrastructure to provide additional protection and negate the need for mechanical ventilation. The pollution drop off with distance is illustrated in the graph below.



Source DEFRA, AQ Technical Guidance

## **Implications on related Council policies**

A role of the Policy Overview Committees is to make recommendations on service changes and improvements to the Cabinet who are responsible for the Council's policy and direction.

## **How this report benefits Hillingdon residents**

Air quality is a significant issue across all areas of London, including for Hillingdon residents. Hillingdon's new Air Quality Action Plan seeks to tackle this through a number of measures, to improve the quality of life for residents.

## **Financial Implications**

None at this stage.

## **Legal Implications**

None at this stage.

## **BACKGROUND PAPERS**

Air Quality Action Plan 2019-2014  
Air Quality Annual Status Report 2019  
Air Quality Annual Status Report Summary 2019

## Appendix A

Details from Cabinet Meeting 30 May, 2019

### 8. [Hillingdon Air Quality Action Plan 2019-2024](#) PDF 163 KB

#### Additional documents:

- [Consultation Report , item 8.](#)  PDF 124 KB
- [Air Quality Action Plan 2019-2024 , item 8.](#)  PDF 2 MB

#### Minutes:

#### RESOLVED:

#### That Cabinet:

**Considers the responses to the consultation received in Appendix 1; and  
Approves the Hillingdon Air Quality Action Plan 2019-2024 for adoption by the Council.**

#### Reasons for decision

Cabinet approved the Hillingdon Air Quality Action Plan for 2019-2024. It was noted that the Plan fulfilled the Council's statutory requirement to update its current Plan and put in place actions to improve air quality, in accordance with guidance from the Mayor of London. Cabinet considered the consultation responses, and the process undergone by the Council to review the Action Plan, which had incorporated recommendations from the Residents' & Environmental Services Policy Overview Committee's review on Air Quality in 2017/18. In particular, Cabinet noted the health impacts on residents on poor air quality and efforts to tackle idling cars, particularly outside schools.

#### Alternative options considered and rejected

None. If the Council were not to update its Action Plan, it would not be using the most accurate information to tackle poor air quality and could be directed to do so under the Environment Act.