Non-Executive Report of the: Health and Wellbeing Board 17/01/23

Air Quality Action Plan



Report of:

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Wards affected	All wards

Executive Summary

Poor air quality in the borough puts our residents at risk of poor health. This is felt the most by those living on low incomes in the most polluted areas and vulnerable population groups including pregnant women; children; older people; and those with existing health conditions.

Addressing this issue is a priority at national, regional, and local level. The London Borough of Tower Hamlets (LBTH) has highlighted its commitment to improve air quality in the strategic plan and recently publishing its updated Air Quality Action Plan that outlines how the council will address air pollution over the next five years.

Health partners are also undertaking work to improve air quality in the borough, as well as supporting vulnerable population groups to mitigate against the impact of poor air quality on their health.

This paper highlights the importance of good air quality on health and outlines the current measures being taken to make the air cleaner in the borough.

Recommendations:

The Health and Wellbeing Board is recommended to:

- 1. Review the council's Air Quality Action Plan and propose any further action that the borough should consider to improve air quality.
- 2. Support, and advocate for, measures that protect residents, particularly vulnerable population groups, from poor air quality.
- 3. Advocate for action across the system, so all partner organisations have comprehensive and ambitious air quality plans.

4. Assess progress against improving air quality on an annual basis, timed with the annual review of the Air Quality Action Plan.

Health and Wellbeing Strategy:

The Health and Wellbeing Strategy is grounded upon 6 principles that matters most to residents of Tower Hamlets.

- 1. Resources to support health and wellbeing should go to those who most need it
- 2. Feeling connected and included is a foundation of wellbeing and the importance of this should be built into services and programme
- 3. Being treated equally, respectfully and without discrimination should be the norm when using services
- 4. Health and wellbeing information and advice should be clear, simple, and produced with those who will benefit from them
- 5. People should feel that they have equal power in shaping and designing services and programme that impact on their health and wellbeing
- 6. We should all be working together to make the best use of the assets we already have that support people's health and wellbeing.

Detail how this report relates to one or more of these principles:

This paper advocates for action to improve air quality that protects those most vulnerable to air pollution. It outlines details on the council's Air Quality Action Plan which includes action to provide information to residents with clear and simple messages on air quality.

1. REASONS FOR THE DECISIONS

- 1.1 Poor air quality continues to be a significant issue in the borough.
- 1.2 It is timely to discuss this topic now: the Chief Medical Officer has just published his annual report on air pollution; the Mayor of London is taking further measures to tackle this issue; and LBTH have recently published their new Air Quality Action Plan.

2. <u>ALTERNATIVE OPTIONS</u>

- 2.1 Do nothing.
- 2.2 Take forward some of the recommendations only.

3. <u>DETAILS OF THE REPORT</u>

Defining air quality

3.1 Air quality is the term we use to describe how polluted the air we breathe is.

When air quality is poor, pollutants in the air can be hazardous to people. An

air pollutant is anything in the air that could harm people's health: sources can be indoor or outdoor pollutants, and some are more harmful than others. This report will cover outdoor air quality, which is the focus of the borough's recently published Air Quality Action Plan.

Air quality and health

- 3.2 Outdoor air pollution is the largest environmental risk to public health, linked to between 28,000 and 36,000 deaths in the UK (1), and costing society over £20 billion (2), each year.
- 3.3 The main pollutants in outdoor air from a health perspective are considered to be particles (PM10 and PM2.5), oxides of nitrogen (principally NO2) and ozone (O3), with sulphur dioxide (SO2), carbon monoxide (CO) and hydrocarbons (including benzene, butadiene and metals).
- 3.4 It is well understood that long term exposure to poor air quality reduces life expectancy (3), mainly due to cardiovascular and respiratory illnesses; with studies also finding links with dementia, low birth weight and diabetes (2).
- 3.5 Research shows that when pregnant women are exposed to polluted air, they are more likely to give birth prematurely and have low birth-weight children. Air pollution also impacts neuro-development and cognitive ability, and can trigger asthma, as well as childhood cancer. Children who have been exposed to high levels of air pollution may be at greater risk for chronic diseases such as cardiovascular disease later in life (4) and poor air quality also impacts on children's lung development (5). The impacts of air pollution on health have been made even more apparent with the recent Coroner's inquiry into the causes of the death of Ella Kissi-Debrah in Lewisham which included exposure to excessive air pollution as a cause of death (6).
- 3.6 Poor air quality has been found to worsen the impact of Covid, with air pollution increasing the risk of many health conditions that make Covid more severe, including lung diseases, asthma, cancer, and heart disease. It has also been hypothesised that the risk of infection is affected by the impact of air pollution on the immune system, with further research needed in this area (7,8,9,10).
- 3.7 Short-term exposure to air pollution can cause a range of effects including exacerbation of asthma, impact on lung function, and increases in respiratory and cardiovascular hospital admissions (3).
- 3.8 Addressing air quality will not only have a direct impact on people's health but if car use reduces, and more residents choose to increase their walking and cycling levels, there will be an additional health benefit from a more active population.
- 3.9 Tackling poor air quality will also help us move forward the borough's commitment to take action on climate change.

3.10 Poor air quality worsens health inequalities: see Section 4.

Guidelines

- 3.11 There are a number of standards and guidelines relating to air quality, including national and regional strategies (see Appendix 1) and guidelines set by the World Health Organisation (WHO).
- 3.12 Air quality is one of Mayor of London's top priorities, with the ambition for London to meet the WHO health-based guideline limits by 2030 and have the best air quality of any major world city by 2050 (12). The Chief Medical Officer has also recently published his annual report (December 2022) which focuses on the importance of air quality and health (13).
- 3.13 As part of the London Environment Strategy (12) process, evidence-based actions were identified for boroughs to deliver locally as part of their local air quality management plan. The themes include the importance of monitoring; cleaner transport; localised solutions (such as low emission neighborhoods); reducing emissions from developments and buildings, delivery servicing and freight; and public health and awareness raising.

Air quality in Tower Hamlets: the current picture

- 3.14 A report by the Greater London Authority (GLA) found that Tower Hamlets is one of five London boroughs with the highest numbers of people living in London's worst air quality areas and with the highest proportion of most deprived populations (top 30%) in London's areas of worst air quality (14).
- 3.15 The WHO's limit for both PM2.5 and PM10 is exceeded across the borough. LBTH has the 9th highest mortality rate attributed to human made air pollution in London, higher than the London and England average (11).
- 3.16 Things are moving in the right direction. We have seen a significant improvement in air quality in the borough over the last 5 years. The national lockdown has shown that with a reduction in the source of air pollution, such as reduced number of cars on the road and fewer emissions from construction activities, there was a significant drop in air pollution nationally and in the borough. Along with the numerous fundamental health benefits of less exposure to air pollution for the most vulnerable, there are also wider benefits for society such as safer, cleaner streets, an increase in community interaction and greater equality.
- 3.17 There is still a lot of work to do. The whole borough is an air quality management area due to high concentration of NO2 and PM10. Although the Council is now meeting the UK legal limits for PM10, there is exceedance of the WHO health-based air quality guideline limit for this pollutant.

Tackling air quality in Tower Hamlets

- 3.18 Where an air quality management area is declared, the local authority is required to prepare an air quality action plan (AQAP) setting out remedial measures to address poor air quality and achieve the air quality standards and objectives.
- 3.19 The recently published AQAP (2022-2027) replaces the previous action plan and outlines the actions the council intends to undertake to improve air quality. It directly links to the Mayor's manifesto pledge to work with the Mayor of London to tackle pollution in Tower Hamlets and research the causes of poor local air quality. The AQAP has developed 30 actions to tackle the sources of air pollution. The Plan also highlights the successes that Tower Hamlets has had in tackling air pollution in recent years and includes notable achievements since the publication of the last Plan. Highlights of some of the successful projects delivered through the past Plan include:
 - Achieved targets for sustainable travel through the Staff Travel Plan and School Travel Plans.
 - Maintained the council's Ambient Air Quality Monitoring stations and added two new PM2.5 monitors to the network
 - Delivery of low emission neighbourhoods and School Streets programme
 - Funded 21 local community air quality projects from the Tower Hamlets Mayor's Air Quality Fund.
 - Supported the GLA to undertake air quality audits at 4 schools (2 primary and 2 nursery)
 - Adopted anti-idling powers to issue fixed penalty notices to idling drivers and deployed idling signs to schools and hotspot locations
 - All Council fleets are now Euro 6 or better
 - Successfully delivered a DEFRA funded air quality project jointly with Poplar HARCA
 - Delivery of the Zero Emissions Network (ZEN) with Islington and Hackney councils. ZEN offers sustainable transport initiatives to businesses and residents including cargo bike trials, bike maintenance workshops and scooter switches. The ZEN project has been hailed as a good practice by DEFRA
 - Using LIF funding provided living green infrastructure at 3 primary schools exposed to high pollution levels
 - Funded delivery of 24 'pollution solution' workshops at 16 primary schools
- 3.20 The AQAP follows the GLA requirements and is divided into seven broad themes that will help to improve air quality in Tower Hamlets:
 - Monitoring and other core statutory duties
 - Emissions from developments and buildings
 - Public health and awareness raising

- Delivery servicing and freight
- Borough fleet actions
- Localised solutions
- Cleaner transport
- 3.21 The AQAP sets out how LBTH plan to effectively deliver against the above broad themes, improving air quality issues within our control and leading by example to reduce concentrations of pollution, and exposure to pollution; thereby positively impacting on the health and quality of life of residents and visitors to the borough.
- 3.22 The AQAP sets out our key priority work areas for the next 5 years, these are outlined below:
 - Continue monitoring air pollutants and carrying out other core statutory duties to improve air quality within the borough
 - Reducing emissions from developments and buildings
 - Increasing public health and awareness raising to reduce exposure to air pollution
 - Working with businesses in delivery servicing and freight to decrease air emissions
 - Reducing emission from Council fleet
 - Localised solutions such as expanding and improving green infrastructure and Low Emission Neighbourhoods (LENs). (School streets are currently under review to see if each initiative has been successful in improving local air quality).
 - Improving cleaner transport within the Borough through transport and air quality policies, idling enforcement, car free days, pedestrianisation schemes projects, installation of electric vehicle charging points, and supporting walking and cycling.
- 3.23 For each of the 7 themes, the AQAP actions matrix sets out our proposed actions, the responsible departments who will deliver this action, estimated cost to the Council, expected benefit in terms of emissions and concentration reduction, the timescale for implementation, the outputs, targets and KPIs and how progress will be monitored.
- 3.24 The draft AQAP was sent to the GLA for review and approval before commencing public consultation between 1 December 2021 and 28 February 2022. A re-consultation was undertaken between 10 May and 30 June 2022 specifically targeted at BAME and other minority groups as the response from these groups were low during the first run of the consultation. Following the

- consultation, the draft AQAP action matrix was amended to take account of comments and feedback received.
- 3.25 The final version of the AQAP was published on 24 November 2022. This is a live document, with a requirement to report on progress to the GLA each year. The Health and Wellbeing Board will also be updated annually, with the opportunity for the Board to input into its review and consider how the borough can contribute towards this agenda more widely.
- 3.26 Partners are also taking action on air quality including the Royal London who have developed a Clean Air Hospital Framework and the NHS who implemented an AQ and asthma initiative; both supported by LBTH's Public Health team. An air quality health clinic, to support children with asthma who are living in environments with poor air quality, has also recently been established. At a strategic level, a number of partners have expressed an interest in working together on this agenda, including East London NHS Foundation Trust; WEL Clinical Commissioning Group; and Barts Health NHS Trust (the Royal London and Mile End Hospitals).

4. EQUALITIES IMPLICATIONS

- 4.1 Poor air quality worsens health inequalities.
- 4.2. Although air pollution can be harmful to everyone, some people are more affected because they live in a polluted area and are exposed to higher levels of air pollution in their day-to-day lives, or they are more susceptible to health problems caused by air pollution.
- 4.3 People living in more deprived areas are more likely to live in areas of poor air quality (15).
- 4.4 Groups that are more affected by air pollution include:
 - Older people
 - Children
 - Individuals with existing cardiovascular disease or respiratory disease
 - Pregnant women
 - Communities in areas of higher pollution, such as close to busy main roads
 - Low-income communities

Linked Reports, Appendices and Background Documents

Linked Report

• Tower Hamlets Air Quality Action Plan

Appendices

Appendix 1: Key national and regional policies/guidelines on air quality

Local Government Act, 1972 Section 100D (As amended)
List of "Background Papers" used in the preparation of this report
List any background documents not already in the public domain including officer contact information.

NONE

Officer contact details for documents:

N/A

References

- 1. Public Health England. Review of interventions to improve outdoor air quality and public health (link here)
- 2. Royal College of Physicians (RCP), Every breath we take: the lifelong impact of air pollution. Report of a working party 2016 (link <u>here</u>)
- 3. Committee on the Medical Effects of Air Pollutants (COMEAP). Long-term exposure to air pollution: effect on mortality (link here)
- 4. World Health Organisation. Air Pollution and Child Health, Prescribing Clean Air (link here)
- 5. Mudway et al. Impact of London's low emission zone on air quality and children's respiratory health: a sequential annual cross-sectional study (link <u>here</u>)
- 6. Report to prevent future deaths (link here)
- 7. Office for National Statistics, Does exposure to air pollution increase the risk of dying from the coronavirus (COVID-19)? (link <u>here</u>)
- 8. Deaths involving COVID-19 by local area and socioeconomic deprivation: deaths occurring between 1 March and 17 April 2020 (link here)
- 9. Exposure to air pollution and COVID-19 mortality in the United States: A nationwide cross-sectional study (link here)
- 10. Centre of Research on Energy and Clean Air, How air pollution worsens the COVID-19 pandemic (link <u>here</u>)
- 11. London Atmospheric Emissions Inventory (LAEI) 2019 (link here)
- 12. Greater London Authority. London environment strategy 2018 (link here)
- 13. Chief Medical Officer's Annual Report 2022: Air pollution (link here)
- 14. Aether. Updated Analysis of Air Pollution Exposure in London: report to Greater London Authority (link here)
- 15. Air Quality and Social Deprivation in the UK: an environmental inequalities analysis (link <u>here</u>)

Appendix 1: Key national and regional policies/guidelines on air quality

- Air Quality Standards Regulations: Puts the EU limits into national UK law and determines how achievement of the objective values should be assessed.
- <u>National Air Quality Strategy</u>: The Strategy provides a policy framework for air
 quality management and assessment in the UK. It sets out these proposals in
 detail and indicates how devolved administrations intend to make their share of
 emissions reductions. It identifies air quality standards and objectives for key air
 pollutants which are designed to protect health and the environment.
- <u>DEFRA Clean Air Strategy</u>: shows how we will tackle all sources of air pollution, making our air healthier to breathe, protecting nature and boosting the economy.
- NHS Long Term plan: Outlines action the NHS is taking to reduce air pollution.
 The NHS plans to cut business mileages and fleet air pollutant emissions by 20% by 2023/24.
- Environment Act, 2021: The Environment Act operates as the UK's new framework of environmental protection, allowing the UK to enshrine some environmental protection into law and offering new powers to set new binding targets, including for air quality.
- <u>Annual Report of the Chief Medical Officer 2022</u>: A statutory report on the state of the public's health, with this edition focusing on the health impacts of air pollution.

Regional

The GLA and Mayor of London have a number of policies and strategies in place to reduce exposure to air pollution across London. These include:

- The London Plan: Air Quality is one of the six Mayoral objectives for London. The aim of the plan is that London will have the best air quality of any major world city by 2050, going beyond the legal requirements to protect human health and minimise inequalities
- The London Environments Strategy: The London Mayor is taking a range of
 actions to improve the environment now, setting London on the path to create a
 better future. This is the first strategy to bring together approaches to every
 aspect of London's environment, including air quality.
- Mayor of London Pollution and Air Quality: Outlines action being taken at a London Level, including Ultra Low Emissions Zones; Clean Vehicle Checker; London Air Quality Map; School Air Quality Audits; Nursery Audits; Good Growth Fund; Mayors Air Quality Fund; Low Emission Bus Zones; Non- Road Mobile Machinery; Monitoring Air Pollution; and EV Infrastructure.
- <u>Mayor's Transport Strategy</u>: Statutory document setting out Transport for London's vision and how it will be delivered.