

MAYOR OF LONDON

Dr Philip Barlow

Assistant Coroner

London Inner South Coroner's Court

C/o [REDACTED]

Date: 16 June 2021

Dear Dr Barlow,

Inquest arising from the death of Ella Adoo-Kissi-Debrah

I welcome your Report to Prevent Future Deaths (PFD) dated 20 April 2021 following the inquest arising from the death of Ella Adoo-Kissi-Debrah.

I would like to take this opportunity to offer my sincere condolences to Ella's family and friends.

I am fully committed to addressing the areas of concern raised in your report and will continue to do everything in my power to ensure that all Londoners are aware of the dangers of air pollution, what they may do to help manage their exposure and, ultimately, can breathe clean air.

There are three areas of concern raised in your PFD report. The second area of concern is addressed to the Central Government departments, the Mayor of London and the London Borough of Lewisham:

'There is a low public awareness of the sources of information (such as UK-Air website) about national and local pollution levels. Greater awareness would help individuals reduce their personal exposure to air pollution. It was clear from the evidence at the inquest that publicising this information is an issue that needs to be addressed by national as well as local government. The information must be sufficiently detailed and this is likely to require enlargement of the capacity to monitor air quality, for example by increasing the number of air quality sensors.'

I outline below my response to your second area of concern and also make some brief observations on the other two areas of concern raised in the report that are addressed to other organisations.

I have made tackling air pollution a priority, embedding it across my strategies for London, including my Transport, Environment and Health Inequalities Strategies and the London Plan, and identifying it as a priority in the London Health and Care Vision. This informed my decision to implement ambitious measures such as the early introduction of the world's first Ultra Low Emission Zone (ULEZ) in central London in April 2019, its forthcoming expansion up to the North and South Circular Roads this October and the introduction of tougher standards for heavy vehicles operating in the existing Londonwide Low Emission Zone (LEZ), enforced from 1 March 2021.

MAYOR OF LONDON

My policies have contributed to an acceleration in improvement in air quality, with a 97 per cent reduction in the number of London state schools located in areas exceeding legal pollution limits and initial estimates of a 94 per cent reduction in the number of Londoners living in areas exceeding legal limits for nitrogen dioxide (NO₂) between 2016 and 2019. Since 2016, the scale of reduction in NO₂ has been five times greater in central London than the national average, but I know there is still more to do.

Second area of concern – Public awareness of sources of information about national and local pollution levels

As noted above, this second area of concern is addressed, amongst others, to the Mayor of London. There are a number of policies and tools we use to help raise awareness of sources of information about local pollution levels.

Air Quality Alerts

Raising awareness about air pollution has been a major priority for me. In 2016, I instituted an alerts system to warn Londoners about air pollution episodes. During high and very high air pollution days, air quality alerts are displayed at:

- 2,500 bus countdown signs and river pier signs across London
- 140 road-side dot matrix message signs on the busiest main roads into London, with instructions to switch engines off when stationary to reduce emissions
- Electronic update signs in the entrances of all 270 London Underground stations

During moderate, high and very high alerts, the alerts system directly emails over 3,000 school contacts informing them of the potential pollution episode and provides a link to more information. Schools are also provided with details of the London Schools Pollution Helpdesk, which I launched in February 2021 in partnership with Global Action Plan and Impact on Urban Health to provide further support to schools in helping reduce staff and student exposure to pollution. During these episodes, we also send a direct email to the London boroughs and encourage them to share the alert with their relevant stakeholders.

Additionally, during a high or very high alert, the NHS, Public Health England (PHE) and the London Fire Brigade are contacted via the London Resilience Forum to cascade to their networks. We use social media channels to make people aware of moderate air quality episodes as well as for high and very high alerts. We also work with London's councils to promote the free airTEXT service, which provides borough-specific air quality alerts for local residents. 29 of the London boroughs actively fund the network, though alerts are provided for all London boroughs. A number of boroughs have also developed local air quality alerts apps.

However, I appreciate that some of the most vulnerable Londoners may not be aware of the alerts which is why my officers are currently undertaking a review of my Londonwide alerts system, including message testing and exploring additional methods to increase its use by vulnerable populations. As part of this process, we are working with the London boroughs to understand how they share the alerts with their communities and explore how we can support them further to share the messaging.

We are working with partners to improve our coordination with the NHS in order to enable the dissemination of the alerts to health authorities and London GPs. This process will require support from PHE and the NHS to ultimately enable the alerts to reach more vulnerable Londoners. This

MAYOR OF LONDON

review is already underway with both boroughs and health partners, and we intend to share the findings and implement the suggested improvements this autumn.

Air Quality Monitoring

London has one of the most comprehensive air quality monitoring networks of any global city and air quality is constantly monitored at over 130 locations. These sites are operated and funded by the London boroughs, Transport for London (TfL) and Heathrow Airport. A number of these monitoring sites are included in the national Automatic Urban and Rural Network (AURN), which is the main network used for compliance reporting against the Ambient Air Quality Directives.

To expand London's monitoring capacity, in 2019 I piloted the Breathe London low cost sensor network, an air quality monitoring system that is being used to analyse pollution at known air quality hotspots across the city. As part of the pilot, over 100 sensors were fitted to lampposts and buildings, Google Street View cars took air quality measurements across the city and personal wearable monitors measured the exposure of children as they travelled to school.

Following its successful pilot, I have since provided an additional £779,000 to fund 135 new Breathe London air quality sensors across London. These sensors are being delivered by Imperial College London. This new phase is prioritising hospitals, schools and community groups, as well as providing at least one sensor per borough. Sensors have already been installed at hospitals and reference sites with the remaining sensors to be installed by the end of July. Air quality data is now available through the Breathe London website (<https://www.breathelondon.org/>) which launched in March 2021, making it easier for all Londoners to access reliable, localised, real-time air quality data.

I have also secured funding from Bloomberg Philanthropies who are contributing an additional £720,000 towards the Breathe London network to fund 60 more sensors over three years, in part to support a sponsorship programme that will enable organisations and individuals to apply for a free sensor. In response to demand, businesses and other groups will also be able to buy into the network, at a reduced rate, thereby choosing their own sensor location. Throughout June we will be hosting workshops with various stakeholder groups, including schools, businesses, and health organisations to raise awareness of the network and its benefits.

The Greater London Authority (GLA) also hosts the public London Air Quality Map on the London Datastore. This tool shows the locations of air quality monitoring stations across London and links to the real-time air quality data. We work closely with the London boroughs as well as academic partners to promote this information and use the resulting data to inform both Londonwide and local policies.

Information Campaigns

I have arranged and funded regular marketing campaigns to raise awareness of the dangers of air pollution and ways individuals can reduce their contribution to it. In October 2017, I launched a hard-hitting advertising campaign to drive home the point that "if you could see London's air, you'd want it clean too." The campaign ran on social media and on posters across the TfL network. An example from the campaign is appended to this response.

Other campaigns include #LetLondonBreathe, which helped raise awareness of a number of policy initiatives to improve air quality that I delivered in 2019, including the introduction of the central London ULEZ and London's Car Free Day celebrations.

MAYOR OF LONDON

The introduction of the central ULEZ in April 2019, was supported by an awareness campaign delivered in coordination with TfL to raise awareness of air pollution in London and highlight why the scheme was necessary to address it. This included social media content, posters, print, radio, online adverts and email newsletters as well as 600,000 letters sent through the DVLA to drivers with non-compliant vehicles. Similar activity began again in October 2020 and will run through to November 2021 to support preparations for the expansion of the ULEZ in October of this year. This will be further supported by a new Mayor of London air quality marketing campaign.

Most recently, in February 2021 I joined 31 of the London boroughs in launching the Londonwide anti-idling marketing campaign “Engines Off. Every Stop.” This is part of the Idling Action London project funded through my Air Quality Fund. The aim of the campaign is to reduce unnecessary engine idling by raising awareness of how harmful toxic pollution can be to human health. An example from the campaign is appended to this response.

I will continue to use the resources and platforms available to me to ensure more Londoners are aware of the health effects of air pollution and ways they can reduce their exposure and contribution to it.

Case Making

The GLA also regularly commissions research to inform policy decisions and design effective communication and behaviour change interventions. For example, the GLA has published research exploring the inequalities in air pollution exposure across different groups in London, particularly across different income levels and ethnic groups. This research will be updated later this year as new air quality modelling data becomes available and I will ensure it is reflected in my ongoing air quality programme.

In 2021, we have commissioned a number of studies to provide additional evidence on the links between air pollution and health (respectively COVID-19 and other communicable diseases, and asthma). Additionally, we have commissioned work investigating how different transport choices can reduce an individual’s exposure to air pollution. This will be used to develop an online tool to inform and encourage individual behaviour change. The results of these studies will be published later this year and we will work with stakeholders from the health and care communities to ensure widespread dissemination of the findings.

Borough Support

As discussed during the inquest, in 2012 the GLA produced borough-specific air quality public health guidance to inform each borough’s Joint Strategic Needs Assessments (JSNAs) on air quality and Health and Wellbeing Strategy. The inquest highlighted the value of these documents and officers from my Air Quality and Health teams have since begun the process of preparing updated JSNA guidance documents, in collaboration with PHE. These documents will be shared with borough public health officers this autumn. To my knowledge, no other similar resources have been developed for use outside of London.

The updated documents have been tailored to reflect the latest scientific evidence on both the impacts of, and solutions to, air pollution, in order to help facilitate and enhance collaboration between borough public health and air quality teams and inform policy. They will also bring together the latest health and air quality data and analysis for each of London’s boroughs.

MAYOR OF LONDON

Collaboration

I know that encouraging behaviour change is difficult and requires the continuous and widespread provision of detailed, accessible and actionable information, as well as consideration of the barriers and enablers of behavioural change, which are often unequally distributed. The scale of the challenge requires collaboration across national, regional and local government, as well as with non-governmental groups such as academia, NGOs and international bodies.

I have hosted several national and international air quality summits, bringing together central Government, Metro Mayors and city leaders from across the UK as well as academics and medical professionals from across the globe to raise awareness of the problem of air pollution. Furthermore, I work closely with environmental and health NGOs to inform and amplify my policies and awareness campaigns. Through London's leadership of the C40 Air Quality Network, the GLA shares lessons from London's successful policies and learns from other interventions implemented by cities across the world. I will continue to work closely with these organisations to inform and broaden the reach of my work wherever possible.

I am fully committed to working closely with Defra, the Department for Transport and the Department for Health and Social Care as well as the London boroughs to share examples of what has worked in London, and to improve scientific understanding, including of non-transport sources of pollution. I am also committed to working in partnership to promote existing and upcoming campaigns and sources of information to further raise public awareness. As part of this, I am exploring opportunities to bring together ministers and health professionals to agree on how best to take this collaboration forward in London.

However, this cannot be achieved without national leadership. As a priority, I believe that Government should launch a national awareness campaign to amplify this crucial message on a scale much larger than can be delivered by regional and local government. I would also welcome further action from central Government, such as the creation of a national alerts system and the provision of additional funding for cities to develop and promote our own monitoring and awareness raising tools.

First area of concern – World Health Organization (WHO) limits

Your first area of concern sets out that the national limits for Particulate Matter (PM_{2.5}) are set at a level far higher than the WHO guidelines. The evidence at the inquest was that there is no safe level for Particulate Matter and that the WHO guidelines should be seen as minimum requirements. Legally binding targets based on WHO guidelines would reduce the number of deaths from air pollution in the UK. This area of concern is addressed to the central Government departments.

I fully agree with your area of concern on this issue. In 2018, I set a target in my statutory London Environment Strategy for London to meet current WHO guidelines for PM_{2.5} no later than 2030. I have also signed London up to the WHO/UNEP Breathe Life Campaign, a network of 73 cities, regions and countries that have joined to demonstrate their commitment to bring air quality to safe levels by 2030 and collaborate on the clean air solutions that will help achieve this.

Road transport is the largest individual source of local PM_{2.5} in London, accounting for 30 per cent of local emissions. Since 2016, I have taken a number of actions to tackle these emissions, through policies such as the early introduction and upcoming expansion of the ULEZ, introducing tougher standards for the Londonwide LEZ, upgrading the bus fleet to meet Euro VI standards and moving to zero emission buses, only licensing zero emission capable taxis since 2018 and encouraging mode shift to more sustainable forms of transport through record investment in walking and

MAYOR OF LONDON

cycling. These measures have helped contribute to a 15 per cent reduction in PM_{2.5} concentrations since 2016.

The GLA has set out in detail the key sources of PM_{2.5} for London and the additional measures needed to meet the WHO guidelines in a [report](#) published in October 2019. Despite having some of the highest concentrations of PM_{2.5} in the UK the report shows that, with the delegation of appropriate funding and powers, such as over construction machinery, commercial cooking and woodburning, it would be possible for London to meet this target. Additionally, around half of all PM_{2.5} measured in London comes from sources outside of the city, such as from industry and agriculture. This means a national approach to tackling air pollution is needed.

If London can meet the target, with the multiple challenges it faces, so also can the rest of England and Wales. The GLA has submitted responses to Government consultations on the draft Environment Bill and on setting new targets for PM_{2.5}. In these responses we highlighted the importance and achievability of setting legally binding PM_{2.5} targets based on the WHO guidelines. The Environment Bill provides an ideal opportunity to do so. I previously called on Government to introduce a new Clean Air Act. In its absence I would encourage the Government to, at the very least, take this opportunity to amend the Bill to enshrine the WHO targets in law. I remain committed to working with ministers to support their efforts and demonstrate how action in London can help inform national policy and ensure the rest of the country also meets these targets as rapidly as possible, delivering significant improvements to population health.

Third area of concern – Communication of the adverse effects of air pollution on health

Your third area of concern notes that the adverse effects of air pollution on health are not being sufficiently communicated to patients and their carers by medical and nursing professionals. The evidence at the inquest indicated that this needs to be addressed at three levels: (i) undergraduate education, (ii) postgraduate education and (iii) professional guidance. This area of concern is addressed to various professional organisations as listed in the PFD report.

The London Health and Care Vision sets out the ambition shared by me, London Councils, the NHS and PHE to make London the world's healthiest global city and the best global city in which to receive health and care services. Together we have identified 10 priority areas for pan-London collaboration, including improving air quality. Building on this, and in light of your PFD report, we have committed to work even more closely together to increase awareness of air pollution, its health impacts and mitigation measures, and to maximise health and care system support for vital structural changes such as the expansion of ULEZ and enabling more walking and cycling. This will also necessitate improved information sharing and communication across London's health and care networks.

We are working to develop the right structures to support this in London and exploring a range of approaches to drive engagement with frontline clinicians and carers, who are often best placed to provide this crucial information. However, this also requires Government leadership and national support from the relevant professional organisations to ensure this issue is prioritised and appropriately resourced.

Conclusion

The inquest into Ella's death has underlined yet again the importance of urgent, ambitious and coordinated action to tackle air pollution. Every death and illness caused or worsened by living, studying or working in areas of poor air quality is an avoidable tragedy. I am fully committed to

MAYOR OF LONDON

acting on your concerns and I look forward to working with Government, the London boroughs, clinicians and other health professionals and Londoners to do so.

My ultimate ambition is for London to become a zero-pollution city, and I hope Ella's legacy will be to inspire the change needed by all levels of government and the wider stakeholder community for this to happen.

I trust this response is helpful. Please do not hesitate to contact me if I can be of any further assistance.

Yours sincerely,

A handwritten signature in blue ink, appearing to read 'Sadiq Khan', with a small '2' written below the 'h'.

Sadiq Khan
Mayor of London

Appx.

MAYOR OF LONDON

APPENDIX A – Examples of pan-London air quality awareness campaigns



2017 air quality campaign poster



2021 anti-idling campaign poster