

SCRUTINY REVIEW PANEL 3 – AIR QUALITY

MINUTES

Thursday 19 July 2018

PRESENT: Councillors: Anthony Young (Chair), Linda Burke, Karanvir Dhadwal, Paul Driscoll, Kate Crawford (Vice-Chair), Abdullah Gulaid.

LBE Officers Present:

Harjeet Bains	Scrutiny Review Officer
Alison Forde	Head of Property Regulation, Planning Enforcement and Environment
John Freeman	Regulatory Services Officer
Paula Portas	Democratic Services Officer

Others:

Emma Fenton	Senior Policy and Programme Officer, Air Quality Team, Greater London Authority (GLA)
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1. Apologies for Absence (Agenda Item 1)

Apologies were received from Councillor Kamaljit Nagpal and Councillor Gary Busuttil.

2. Declarations of Interest (Agenda Item 2)

There were none.

3. Matters to be Considered in Private (Agenda Item 3)

There were none.

4. Panel Terms of Reference and Work Programme 2018-19 (Agenda Item 5)

The Chair said that whilst air pollution was a regional, national and international problem it was the intention of the Panel to be as relevant and effective at the local (borough) level as possible.

Cllr Burke suggested to reorder the work programme and agenda for September in order to include and review the problematic Southall Gas Works Site redevelopment. The Gas works redevelopment was relevant as a case study because key decisions fell on different agencies, and the Council became powerless to act early on.

Officers responded that the Gas Works Site was an ongoing case and they were currently working on it. The Council was highly reactive when receiving complaints from residents and councillors had been briefed on this matter. It was a special, unusual case as it related to contaminated land, unlike most construction sites. Officers said that they would prefer the Panel not to progress with this matter, or, alternatively, to scrutinise how planning and other legislative regimes and agencies interacted in the case.

Resolved: That

- (i) the construction element in the Work Programme be brought forward to September and the Southall Gas Works Site be used as a case study
- (ii) the Terms of Reference and Work Programme be approved.

5. Overview of Air Quality in the Borough.
(Agenda Item 6)

The Chair invited John Freeman, Regulatory Services Officer, to present the report on the Overview of Air Quality in the Borough.

John Freeman addressed the Panel and said that air quality and the character of air pollution in London had changed dramatically over the last sixty years. Through regulatory controls on fuels and emissions, together with advances in emissions control technologies, large reductions had been achieved in the levels of several pollutants that were previously of concern (smoke from coal burning, sulphur dioxide, benzene or lead). However, the challenge now remained in the form of two quite intractable pollutants: particulate matter and nitrogen dioxide remained at levels where their effects on health and the natural environment required ongoing intervention at national, regional and local levels.

John Freeman presented a map of Ealing which modelled annual mean nitrogen dioxide concentrations for 2013 (from the London Atmospheric Emissions Inventory, Mayor of London/GLA, April 2017). The map showed a pattern of variation in roadside and background concentrations where the main pollutants were the major roads and railway lines. It showed how increased background concentrations in the east of the borough increased in turn the extent of pollution impacts from the road network, so that locations at a greater distance from the road were also at risk of exceeding the annual average Air Quality Objective. The borough's main roads, including the A40 (Western Avenue), A406 (North Circular Road), the A4020 (Uxbridge Road) and the roads connecting them, continue to be major sources of pollution from vehicles.

John Freeman presented a slide with the sources of nitrogen oxides (NO_x) pollution (from the London Atmospheric Emissions Inventory 2013). Diesel emissions from road vehicles, off-road plant (Non-Road Mobile Machinery; henceforth NRMM) and diesel trains together made up the main source of this pollutant in the borough.

Particulate matter (PM) was a term used to describe the mixture of solid particles and liquid droplets in the air. It could be either human-made or naturally occurring. Some examples included dust, ash and sea-spray. Particulate matter varied in size (i.e. the diameter or width of the particle). The trends in annual mean PM₁₀ concentrations at automatic monitoring stations were presented in a chart. PM₁₀ particulate pollution

levels complied with the Air Quality Objectives for a sustained period, with a reduction in concentrations (especially at the Horn Lane monitoring station) during the period from 2011 to 2017. The Horn Lane hotspot had responded well to the incremental improvement of the industrial site, as well as to the Council's prosecutions and sponsored non-statutory procedures to deal with pollution such as voluntary non-emission pacts.

John Freeman said that the monitoring of the nitrogen dioxide pollutant in the borough also showed that levels had been stable in the long term but there was now a downward trend. This was shown both on the west and east of the borough. However, changes year on year were sensitive to weather so more data was needed to confirm this trend downwards. Besides, levels of nitrogen dioxide remained well above objective in many parts of the borough.

John Freeman noted that to assist London local authorities in prioritising their actions to improve air quality, the GLA, in consultation with borough air quality officers, identified 187 Air Quality Focus Areas across Greater London. These were locations that not only exceeded the EU annual mean limit value for nitrogen dioxide but also where there was significant human exposure. Some were added recently at the Council's request. There needed to be more emphasis on tackling pollution at those focus areas, for instance the A40 in East Acton, where there was heavy traffic or Uxbridge road in Southall where residents stood near traffic.

John Freeman presented a chart detailing the sources of nitrogen oxides by vehicle type (from the London Atmospheric Emissions Inventory 2013). In Ealing borough diesel-powered cars and light goods vehicles made a significant contribution to emissions alongside buses and Heavy Goods Vehicles (HGVs). There was a need to move away from the use of diesel. A table from a Policy Exchange report summarising the currently available technology options for cleaning up road transport was presented. It included an assessment of the time to deployment, decarbonisation potential, air quality potential and cost and infrastructure requirements for each type of vehicle. For instance, battery and electric vehicles had high decarbonisation and air quality potential with medium deployment time, high infrastructure requirements but only medium cost.

In 2017 the Council held a public consultation on a draft Air Quality Action Plan to replace the original Action Plan issued in 2003. This followed the declaration of the whole of the borough as an Air Quality Management Area for nitrogen dioxide and PM₁₀ in 2000. A final draft was prepared in early 2018 for internal sign-off and submission to the GLA for approval. The GLA has presented additional proposals for the Council to incorporate into the plan. The aim was to publish the revised Action Plan as early as possible.

Questions and Comments:

- It was asked whether it was known if there were more diesel or petrol vehicles circulating on the borough's roads. Officers responded that the latest available data on that was from 2013 when the number of diesel and petrol vehicles circulating was roughly the same. It was foreseeable that the number of diesel vehicles was in decline.
- It was queried why, if PM_{2.5} was more dangerous to human health than PM₁₀, there was seemingly more focus on measures to tackle PM₁₀.

Officers replied that the main effort for local authorities was to tackle and regulate PM₁₀ because it was a pollutant more susceptible to respond to measures that could be implemented at the local level. Officers were keen not to downplay the health impact of PM_{2.5}. However, they noted that it was a smaller particle, with a more widespread and regional impact, whose monitoring was more geographically dispersed and that needed a more concerted approach at many different regulatory levels to be tackled. Emma Fenton, GLA Senior Policy and Programme Officer, clarified that central government had not adopted a standard about this pollutant and therefore there was not an agreed way of measuring performance in tackling it for now. There were no statutory responsibilities and no legal targets. There was no target pointing to legal safe levels of this particular matter, and therefore the best course of action was to aim to reduce it as much as possible.

- It was queried when would the GLA be likely to respond to Ealing Council Action Plan.
Officers advised that the GLA was preparing a revised matrix of actions that London boroughs would need to incorporate into any revision of their action plans. Therefore, further amendments would need to be made to the draft action plan for Ealing borough before final publication. Emma Fenton noted that the GLA was at this point finalising the matrix of actions. It would be signed off in the Mayor's Office in 2018.
- The lack of targets and more quantifiable measures in the action plan were queried.
Officers acknowledged this lack and recognised that it was a point for their attention. However, they also noted that it was difficult to ascribe targets and quantifiable measures to some of the improvements that were being pursued. They noted that planning policy would carry some measurable actions for developments. Emma Fenton noted that the GLA did not seek to commit boroughs to specific targets. However, the matrix would lean more heavily towards actions that have demonstrable impact and therefore it would provide a degree of measurability.
- It was asked whether best practice was being benchmarked.
Officers noted that comparison with other boroughs was problematic due to the nature of the problem of air pollution. The geographical location of the borough determined to a large extent its air pollution problem so comparison would be relevant only with areas of similar characteristics and location, for instance Brent Council. However, the Council's performance in tackling pollution and its Action Plan were subjected to overview by the Mayor's Office. The GLA could approve or reject the borough's plans and performance. Ealing Council had obtained the Cleaner Air Borough accreditation, for boroughs that effectively monitored and reduced air pollution.

Resolved: That the report on Overview of Air Quality in the Borough be received.

6. GLA Presentation on Air Quality in London.

The Chair welcomed Emma Fenton, Senior Policy and Programme Officer in the Air Quality team at GLA, to make a presentation to the Panel on Air Quality in London.

Emma Fenton said that over 90% of the UK population was exposed to particulate matter (PM_{2.5}) levels that exceed safe limits set by the World Health Organisation. In tackling NO₂ pollution, she noted that, whilst it was the responsibility of central Government to report compliance the GLA also carried out their own air quality modelling which, coupled with monitoring data, presented a picture about air quality in the present day (since 2010) and how it was likely to change in the future given the expected improvements in vehicle technology and committed environmental policies to reduce pollution. The main source of NO₂ pollution was road transport, so it was foreseeable that as this pollution was being brought under control, the proportion of other pollutants in the air would rise. Construction made for the third largest contribution to air pollution.

A chart with the sources of NO_x emissions was presented. NO_x was produced when fuel was combusted in the engine in the presence of air. NO_x comprised a mixture of nitric oxide (NO) and nitrogen dioxide (NO₂). NO was not harmful to health at the concentrations typically found in the atmosphere. However, in contrast, NO₂ was associated with a range of environmental and health problems. Fifty per cent of NO_x emissions came from road traffic. The proportion of harmful NO₂ in the NO_x emissions of a diesel vehicle was far higher than the proportion found in emissions of a conventional petrol vehicle. Older diesel had 95% NO and 5% NO₂ but now the ratio had changed to 12% / 70%.

The Mayor's Air Quality Plans and Initiatives had been laid out in the London Environment Strategy, Mayor's Transport Strategy and The London Plan. The key objectives in these plans were:

- to reduce exposure of Londoners to harmful pollution across London – especially at priority locations like schools – and to tackle health inequality;
- to achieve legal compliance with UK and EU limits as soon as possible, including by mobilising action from the London boroughs, government and other partners;
- to establish and achieve new, tighter air quality targets for a cleaner London, meeting World Health Organisation (WHO) health-based guidelines by 2030 by transitioning to a zero emission London.

A new toxicity charge had started on 23 October 2017. This meant a £10 charge during Congestion Charge hours for older polluting vehicles on top of the existing £11.50 Congestion Charge for pre-Euro 4/VI. This was the toughest standard of any world city.

More Low Emission Bus Zones (LEBZ) had been introduced in 2017 deploying greener buses (a combination of hybrid and clean buses that meet Euro VI standards) on the capital's most polluted routes to cut harmful nitrogen oxide (NO_x) emissions. The first LEBZ along Putney High Street reduced the number of hours breaching legal limits by more than 90% (vs. 2016).

An Ultra-Low Emission Zone (ULEZ) would be in place in central London from 2019. This would replace the toxicity charge. It would operate 24 hours a day, 7 days a week, every day of the year within the same area as the current Congestion Charging Zone (CCZ). From 2019, a London-wide ULEZ would be introduced for buses and heavy vehicles and from 2021 the ULEZ area will be expanded to the

inner London area bounded by the North and South Circular roads. The ULEZ standards would be:

- Petrol: Euro 4
- Diesel: Euro 6
- Motorcycle and L-Cat: Euro 3

Taxis would be exempt but subjected to new licensing requirements.

The impact of expanding the ULEZ would be that:

- It would lead to approximately 100,000 people no longer living in areas exceeding legal limits.
- In outer London there would be a 28 per cent reduction in NO_x road transport emissions, and in inner London there would be around a 31 per cent reduction in NO_x road transport emissions in 2021.
- Over 3,000 primary school children in polluted areas of London and Luton would have their lung health monitored over a four-year period in a new international study led by Queen Mary University of London.

Emma Fenton noted that GLA had not ruled out taking things further in the future. Their analysis concluded that a 'zero emission capable' standard was unlikely to be workable for all vehicles by 2020 and it would be more appropriate to implement it later on. Besides, new requirements for TfL services would pave the way by creating demonstrator fleets and opportunities for geofencing. It was feasible in principle for the zone to be extended in the future. This would entail extensive social and economic impacts and must be carefully evaluated and consulted on.

The new transport strategy meant that the dirtiest diesel vehicles would be removed before 2020. However, the Mayor wanted a holistic approach and had set out a strategy to make London's transport network zero carbon by 2050 with zero emission zones in town centres and central London from 2020 and all new cars and vans included in London zero emission by 2030 at the latest.

Another target was to achieve a zero-emission bus fleet by 2037 at the latest. New double decks would be hybrid, hydrogen or electric from 2018 and new single decks would be zero exhaust emission from 2020.

There would also be new requirements for GLA fleets such as the Fire Brigade and Police force with 'ULEV only' streets being brought in this year. Zero Emission Zones would be introduced in town centres from 2020 and in central London from 2025.

Besides, air quality alerts were being introduced. During and on the day before high and very high air pollution days, air quality alerts would be displayed at 2,500 bus countdown signs and river pier signs; 140 road signs, with instructions to switch engines off when stationary to reduce emissions, as well as the entrance of all 270 London Underground stations.

The Mayor also announced in Paris in March 2017 the launch of a 'Cleaner vehicle checker' for Londoners. The GLA was working with a well-respected vehicle testing company that have 'real-world' emissions data from most new cars and vans sold in the UK.

As regards the impact of air pollution on children, the GLA identified that 360 primary schools were located in areas exceeding legal pollution limits. The Mayor completed 'air quality' audits at 50 schools that would identify new measures to protect pupils from toxic air. Grants were also being made available to schools so they could act. A master report and toolkit was available with recommendations such as the following:

- moving school entrances and play areas away from busy roads;
- 'no idling' schemes to reduce emissions from the school run;
- reducing emissions from boilers, kitchens and other sources;
- local road changes including better road layouts, restricting the most polluting vehicles around schools and pedestrianisation by school entrances;
- adding green infrastructure like 'barrier bushes' along busy roads and in playgrounds to help filter fumes;
- encouraging students to walk and cycle to school along less polluted routes.

Another important area that was being tackled was emissions from construction. The latest version of the London Atmospheric Emissions Inventory estimated that in 2013 the NRMM used on construction sites was responsible for 7% of NO_x emissions, 14% for PM_{2.5} and 8% of PM₁₀ emissions in Greater London. The GLA put in place policies to control the emissions from NRMM by establishing emissions standards for London. These emission standards were administered through the planning system and known as the London Non-Road Mobile Machinery Low Emission Zone. The scheme operated across two zones: the inner zone, known as the Central Activities Zone, which also includes Canary Wharf and the wider Greater London Zone. The Low Emission Zone sought to drive emissions reductions through a staged approach to adopting newer diesel technologies.

The NRMM Low Emission Zone would include progressively tightening standards, with the current proposals as follows:

- Currently: Stage IIIB in the Central Activities Zone (CAZ) plus Canary Wharf area, Stage IIIA everywhere else
- 2020: Stage IV in CAZ plus Opportunity Areas, Stage IIIB everywhere else.
- 2025: Stage IV throughout London
- 2030: Stage V throughout London
- 2040: zero emissions throughout London

The Mayor would to continue to review the NRMM Low Emission Zone standards to ensure that they delivered the largest possible improvements.

In terms of Transport Fleet Management, the Mayor, via two proposals (Proposal 4.2.1.b and Proposal 4.2.1.c), through TfL, planned to clean up the bus fleet by phasing out fossil fuels, prioritising action on diesel, and switching to zero emission technologies plus reducing emissions in the taxi and private hire fleet by phasing out fossil fuels, prioritising action on diesel, and switching to zero emission technologies.

Besides, the GLA launched a scheme on October 2017 to help motorists make more informed choices when buying new cars and vans. All new cars sold in Europe must meet Euro 6 emissions standards, yet it has been found that vehicles often perform differently on the road compared to when they were tested in labs. The Cleaner Vehicle Checker allowed consumers to see how much NO_x was actually emitted in real world driving conditions. The Cleaner Fleet Checker formed part of a suite of

tools offered by the Cleaner Vehicle Checker scheme. It used an A+ to H rating system: A+, for example, meant the vehicle met the current Euro 6 NOx limit for petrol vehicles in real-world driving and H meant the car emitted more than 12 times more NOx than the current diesel limit. The outcomes sought were:

- for consumers to use this information to choose cleaner vehicles and to see the benefits of zero-emission cars/vans.
- to use information to prioritise dirtiest vehicles for replacement
- ratings could be easily incorporated into fleet policies, for example during the procurement of new cars and van helping to ensure any diesel or petrol vehicles brought into fleets were as clean as possible.

The GLA also currently hosted the Hydrogen London Partnership, which was the centre for expertise for hydrogen and fuel cell technology in London and was driving forward growth and investment to make London a leader in the sector. Through its ground-breaking projects, Hydrogen London demonstrated that hydrogen and fuel cell technology was a viable alternative for powering the capital. The GLA highlighted the range of applications available and the array benefits – from performance, to environmental benefits. GLA was working to ensure that fuel cell technology was rolled out, making London the capital for hydrogen and fuel cell technology.

Questions and comments:

Panel members:

- Asked whether the Low Emission Bus Zone could be introduced in Ealing. They also queried whether there was any risk of older, more polluting buses being pushed out to Ealing when new buses were introduced in inner London. Officers responded that the LEBZ was a Transport for London initiative and therefore the Council would need to contact TfL to discuss extending it to Ealing with them. Appropriate contacts in TfL could be provided. The initiative had been introduced first to priority locations: the hotspots where there was a clear and demonstrable case for the need of low emission buses. The Panel was reassured that older buses would not get pushed to outer boroughs. There were no purchases of new diesel buses and the ULEZ for buses and heavy vehicles for the whole of London would be introduced shortly. Besides, there were already low emission buses circulating on Uxbridge Road routes and some hybrid buses in Southall.
- Queried the consequences of the boundaries introduced with the ULEZ: would there be a negative boundary effect for Ealing as possibly more traffic would re-route to pass through the borough to avoid charges? Officers responded that whilst the concern was understandable, GLA analysis suggested that the overall impact for Ealing of the introduction of ULEZ would be positive. The boundaries on ULEZ had been consulted on but that consultation was now closed. Different boroughs had pressed the GLA with different and, at times, opposing interests: Ealing had pressed for ULEZ to be extended to the whole of London whilst outer boroughs had pressed for no ULEZ. The details of the modelling that showed a net positive impact for Ealing would be forwarded to the Panel.
- Asked for details of the pollution alerts issued to schools.

Officers responded that the alerts contained information about the severity and the nature of the pollution episode. They also signposted advice for vulnerable children. The alerts were issued to every school. Officers would also study the master report to find out how to access funding available to schools to protect pupils from toxic air.

- Asked what the uptake had been of the online scheme in October 2017 to help motorists make more informed choices when buying new cars and vans. Officers said that there had been a positive uptake but did not know the exact numbers.
- Queried the potential emissions of making hydrogen. Officers responded that hydrogen could be derived, stored and converted through various processes, each of which represented various levels of carbon intensity, efficiency and use functionality. It was not inherently more dangerous than other energy sources.
- Asked whether Ealing had been in receipt of Air Quality funds. Officers replied affirmatively, particularly for transport initiatives. Most recently funds had been received for a freight delivery project in central Ealing. The Council aimed to continue taking advantage of funding opportunities.

Resolved: That

- (i) the presentation on Air Quality in London be noted; and
- (ii) the modelling that showed a net positive impact for Ealing on the introduction of ULEZ be fed back to the Panel through the Scrutiny Review Officer.

7. Date of Next Meeting (Agenda Item 7)

The Panel were advised that the next meeting of the Panel would take place on 27 September 2018.

Councillor Anthony Young, Chair.

The meeting ended at 9 pm.