CABINET

22 March 2022

Title: Air Quality Action Plan Delivery Update

Report of the Cabinet Members for Enforcement & Community Safety and Finance, Performance & Core Services

Open Report	For Decision
Wards Affected: All	Key Decision: Yes
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Summary

Every Local Authority that has an active Air Quality Management Area (AQMA) is required under Part IV of the Environmental Protection Act 1995 to provide an Air Quality Action Plan (AQAP) to address the identified areas of poor air quality in the Borough. The London Borough of Barking and Dagenham (LBBD) declared the whole borough an Air Quality Management Area (AQMA) and adopted an Air Quality Action Plan (AQAP) in 2008. An updated five-year Action Plan was approved for implementation by Cabinet on 15 February 2021 (Minute 83).

This report provides an update on the first-year implementation of the AQAP to improve air quality in the borough and recommends introducing additional free parking concessions for electric and low emission vehicles. The report also presents a review of vehicle idling regulations and corresponding enforcement options detailing the benefits and challenges of each as well as recommending an enforcement and behaviour change approach for the borough.

Recommendation(s)

That Cabinet is recommended to:

- (i) Note progress on the delivery of the Air Quality Action Plan;
- (ii) Agree that to promote the use of electric and low emission vehicles with between 0 50 emissions (CO2) g/km, free parking concessions in respect of parking permits and Council on-street bays and car parks shall apply, as detailed in paragraphs 2.8 and 2.9 of the report; and
- (iii) Agree the introduction of new arrangements to discourage vehicle engine idling and raise driver awareness through positive engagement and targeted

communications, including enforcement by means of the issue of Fixed Penalty Notices (FPN) in cases where drivers refuse to comply, as detailed in paragraphs 2.21 – 2.23 of the report.

Reason(s)

To assist the Council in achieving its priorities of 'Prevention, Independence and Resilience' and 'Inclusive Growth' by improving the environment

1. Introduction and Background

- 1.1 Barking and Dagenham suffers from some of the worst pollution in London. Cabinet agreed to adopt an Air Quality Management Area (AQMA) due to exceedances of legal limits for Nitrogen Dioxide and Particulate Matter in 2008. This AQMA is still adopted to date for the same pollutants.
- 1.2 The health impacts of air pollution are increasingly well understood. Air quality is a public health issue as well as an environmental issue. This, as well as recent national court cases and the threat of legal action on Government for not achieving the legal limits has helped push the issue of air quality higher up the national and local agenda.
- 1.3 Following a public consultation, Cabinet approved the Air Quality Action Plan in February 2021, which committed to 49 actions and interventions between 2021 and 2025 to improve air quality and reduce harmful emissions which impact upon on respiratory health and blight local communities. The AQAP set out seven broad areas, including monitoring and core statutory duties; emissions from developments and buildings; public health and awareness raising; delivery, servicing and freight; borough fleet; localised solutions and cleaner transport.
- 1.4 Delivery of significant elements of the AQAP depend upon funding and finite resources and the Council is continually seeking external sources of capital and grant to provide a service beyond the basic statutory requirements. Whilst this report sets out significant progress in many areas a key priority is to secure additional resource to ensure effective delivery of all aspects of the plan.
- 1.5 On 29 January 2020, the council declared a Climate Emergency in recognition that Barking and Dagenham needs to reduce greenhouse gas and carbon emissions and help meet national targets for the UK to attain net zero carbon by 2050. Local air pollution and climate change are directly linked in respect to atmospheric emissions being released from the combustion of fossil fuels and the negative effects on the environment and human health. They are also directly linked by energy use and sustainability.
- 1.6 Tackling vehicle engine idling can achieve immediate improvement in local air quality. Recent research has confirmed that idling a vehicle engine for a thirty-second period produces nearly twice as much pollution as switching off and then restarting the engine. Further to this, research by Kings College London has identified that idling engines can increase the level of pollution in an area by 20-

¹ Idling Action Research – Review of Emissions Data (TRL, 2021)

30%². Lowering levels of pollutants reduces the risk of residents experiencing health impacts as a direct result of poor air quality. In 2019, it is estimated that poor air quality contributed to the deaths of over 4000 Londoners³.

- 1.7 Barking and Dagenham participate in the pan-London Idling Action Project, which was set up in 2019 to tackle the issue of unnecessary engine idling. The project comprises 31 London boroughs with funding from the Mayor of London's Air Quality Fund. The primary focus of Idling Action is on driver education/engagement and behaviour change. However, all participating boroughs are expected to adopt and advertise enforcement powers. In particular, participating boroughs are expected to:
 - investigate the feasibility of introducing an enforcement mechanism to tackle vehicle engine idling (if this is not in place already) and if possible, to implement this within the timeframe of the Idling Action Project
 - create a page on its website outlining fines and penalties, and a council contact for reporting idling
 - publish a press release outlining the commitment to enforce against idling and detailing the fines
 - include idling enforcement formally in the role of street marshals/traffic wardens/enforcement officers etc.
- 1.8 Participating boroughs also provide yearly updates on enforcement that include:
 - The number of staff undertaking on-street enforcement as part of their role
 - The number of idling drivers spoken to by these officers (even if not fined)
 - o Number of penalty notices served
 - Idling complaints received
- 1.9 Barking and Dagenham is to transition to a low-carbon, clean growth borough to meet its 2030 and 2050 carbon reduction targets and address issues of poor air quality caused by nitrous oxides (NOx) from car emissions. The Council must improve resident and business appetite in electric vehicles, stimulate demand, and provide the appropriate infrastructure. There are already concessions in place for electric and low emission vehicles but it is believed this could be strengthened further. Resident permits are already free for electric and low emission vehicles so it is proposed to introduce this for the rest of the parking permits available for council staff and partners to ensure consistency and provide even more of an incentive to drive a low emission vehicle.

2. Proposal and Issues

Air Quality Action Plan Update

2.1 The Council's AQAP sets out proposed measures to improve air quality within the Borough. Further review and assessments have confirmed earlier findings that have identified road traffic as the main source of pollutants. The Council's review and assessment of air quality is periodically updated and the report of the latest review

² Clean Air Action Days Anti-Idling Campaign Monitoring Report (KCL, 2016)

³ Health burden of air pollution in London (ICL, 2021)

- and assessment, including maps of predicted NO2 and PM10 concentrations, can be downloaded from the Council's website at Report air quality issues | LBBD.
- 2.2 Since the AQAP's adoption in February 2021, extensive work has begun to eliminate harmful emissions from buildings, support the transition of the fleet to electric, improve cycle and walking networks and encourage active travel, as well as planning for increased tree-planting.
- 2.3 With the national lockdown at the beginning of 2020, monitoring data was only collected from July to December 2020 which has been submitted and approved by DEFRA and the GLA. All 10 passive monitoring locations and two automatic monitoring stations achieved the national air quality objectives with all locations for both NO₂ and PM10 less than 40ug/m3. The borough registered an improvement on its NO₂ concentrations at its two automatic monitoring stations at Rush Green Primary School and Scrattons Farm. The current number of passive monitoring by diffusion tubes has been increased to 30 for analysing the monitoring data for 20/21 reporting year and will be built into future reporting.

Emissions from buildings

- 2.4 Buildings account for approximately 15% of nitrogen oxide concentrations across London so designing out carbon and harmful emissions in new developments and retrofitting existing stock will make an important contribution to long-term reductions.
- 2.5 The Council's current Cosy Homes programme, funded by a mix of Energy Company Obligation (ECO3), Green Homes Grants and HRA Capital programme monies, has been rolling out loft, cavity, solid wall insulation, electric immersion heat pads, solar panels and air source heat pumps to qualifying homes to limit the requirement to heat space, the largest factor in energy bills, reduce energy consumption, switch households onto renewable, clean energy sources and cut emissions from cooking and heating through fossil fuels.
- 2.6 The scheme has delivered 928 installs in 734 properties and is expected to have delivered measures to 2,000 homes by May 2022. The Council continues to bid for grant funding to support this area of work and is drawing up a 10 Year Stock Decarbonisation Plan to provide fabric upgrades, replace gas systems and install renewable energy sources and storage systems on the pathway to making it a carbon neutral organisation by 2030.
- 2.7 In tandem with cutting emissions to domestic stock, the Council has recently appointed Ameresco to draw up decarbonisation proposals for its corporate estate. Phase 1 includes measures to support 16 of the Council's greatest energy consuming buildings move onto a net zero carbon trajectory, including fabric and glazing upgrades, old boiler systems switching to either air source heat pumps or low-carbon district heat networks, replacement of heat controls, LED lighting and air handling units plus solar PV arrays over the course of 2022/23.

Free Parking for Electric and Low emission Vehicles

2.8 To promote the use of electric and low emission vehicles with between 0-50 emissions (CO2) g/km it is proposed that whilst vehicle owners will still need to

meet the criteria and to register for a permit these will be issued free of charge. These are currently only free of charge for resident permits so it is proposed to extend this concession to the full range of permits including Health & Community, Council Operational and Staff permits.

2.9 Further, it is recommended that all vehicles between 0-50 emissions (CO2) g/km will be able to park in the council's on-street bays and car parks for free. These concessions will be provided subject to compliance with maximum stay and any other terms or conditions of use for each location when parking.

Electric vehicles and fleet

- 2.10 The Department of Transport funded the Energy Savings Trust assessment of the Council's 'grey fleet' (own vehicles used by employees to conduct council business) and the operational fleet. It concluded that 353 members of staff were using their own vehicles impacting upon the council's carbon footprint, producing 98 tonnes of carbon per year and 147kg of NOx and particulates. 96% of vehicles were petrol or diesel and identified a number of vehicles that would not meet Euro 4 or Euro 6 emission standards and be liable for charges under the Ultra-Low Emissions Zone (ULEZ).
- 2.11 The operational fleet of 326 vehicles is responsible for the production of 2,002 tonnes of carbon and 3,900kg of NOx and particulates. There are currently low numbers of electric or hybrid vehicles and some of the current fleet would not pass Euro 4 and 6 emission standards.
- 2.12 To address this the Council is planning the introduction of a staff pool of electric cars and bikes which can be charged up and deployed on council business from various key buildings in the borough. Subject to further cost analysis, such a scheme should discourage use of staff cars and a reduction in emissions. With regard to the operational fleet, only 53 vehicles have like-for-like electric equivalents at present, but the fleet team are looking to make 32 acquisitions by May 2022 as it swaps out petrol/diesel vehicles nearing the end of their life for electric. This market will develop over the course of the next decade to support a full transition of the fleet and discussions are underway with Ameresco on how best to increase electric charging infrastructure and capacity on the corporate estate to facilitate that expansion.
- 2.13 The Cabinet also recently agreed to procure an electric charge-point operator as a preferred partner to install and manage a significant wave of new charge points across our public realm, corporate estate and council new-build, to intensify the supply of EV infrastructure available to the public as more residents' switch to low emission vehicles. Recent analysis by Project Centre has identified 150 sites which may be suitable for new charge-points. The borough currently has 800 registered EV car owners, and this is doubling every year, with 4,000 owners forecast by 2025.
- 2.14 The key attraction for Barking and Dagenham is the future potential for their EV charging systems to do more than just top-up vehicles with a charge. Deployed with fast fibre, sensors, data and telecommunications technologies can be deployed at minimal extra cost. As part of this pilot Connected Kerb is also funding the deployment of Airily air quality sensors (operating on the charging infrastructure) across a number of the EV charging sites.

2.15 The sensors use lasers to detect all the key pollution markers - particulate matter (PM1, PM2.5, PM10), NO2, O3, SO2 and CO gases, formulating a real-time data accurate picture of the air quality in the vicinity of the site. These can then be translated into online maps which also integrate temperature, humidity, air pressure and wind data. This will enormously improve on the quantity and quality of data currently collated.

Promoting active travel

- 2.16 Discouraging car use in general and encouraging active travel remains a central plank to tackling poor air quality. The new LBBD Walking and Cycling Strategy will set out a programme for refreshed pedestrian walking routes, creating safe and inviting walking experiences and recommends significant improvements to the borough's cycle network with a programme of new and upgraded segregated cycle ways.
- 2.17 Walking network development will be prioritised in areas of greatest walking potential, focusing on high quality walking networks within 15-minute walking catchments of the borough's key trip attractors, including local centres, schools, and tube stations, in line with 15-minute city principles. The Borough Future Cycle Network will improve north-south connections, link key destinations such as Barking Town Centre to Barking Riverside, with additional supporting programmes such as cycle hubs, a cycle hire scheme and subsidised cycle training for residents.

Green localised solutions

- 2.18 We depend on healthy ecosystems to capture carbon and absorb harmful emissions and alongside the phased delivery for master-planning of our major parks we are developing urban tree planting schemes and habitat restoration among our Sites of Interest for Nature Conservation. Working with Thames Chase we are developing a joint Tree Planting and Biodiversity Action Plan for the next 10 years which is likely to commit to a vast amount of new trees by 2030 and we are developing that with the SUGI charity to provide more high-density urban forests based on the Miyawaki method as well as plantings in residential areas with sites of low ecological value. Over the last three years, the Council has planted 35,000 new trees and is evaluating whether it can deliver an additional 50,000 trees by 2026, ensuring where feasible every street and road in Barking & Dagenham has a number of trees.
- 2.19 Working with external partners, the Council is also planning an Urban Nature Recovery Network. In addition to repurposing neglected corner greens across the Becontree Estate, we aim to maximise the use of all green sites and create opportunities for nature conservation, foster wildlife corridors between new and existing developments, planting shrubbery like cotoneasters, which absorb pollution; re-establishing grass types, restoring hedgerows and foliage for cooling and shading.
- 2.20 Other key areas of AQAP delivery include:
 - Installation of 4 new indicative monitors by the Environmental Protection team working in partnership with the council's Data Insight Team and an

- external company, Clear Channel. This will give the Council further monitoring capability and improve our understanding of the problem and feed into the annual status report to Defra.
- More School Streets to be rolled out to reduce traffic movement and improve air quality near schools
- The Low Emission Neighbourhood (LEN project)
- Addressing air quality through planning obligations including placing a levy on developers to be re-invested into mitigating measures
- Promoting domestic energy efficiency
- The councils parking strategy including standardising emissions based charging

Enforcement approaches to Vehicle idling

- 2.21 Vehicle engine idling is a contravention of traffic regulations. There are three ways Councils can enforce against engine idling:
 - a) Fixed Penalty Notices (FPNs) under Regulation 98 of The Road Vehicles (Construction and Use) Regulations 1986 and under Regulation 12 of the Road Traffic (Vehicle Emissions) (Fixed Penalty) (England) Regulations 2002⁴
 - b) Penalty Charge Notices (PCNs) through the creation of a Traffic Management Order, under the Road Traffic Regulation Act 1984 and enforced using the Traffic Management Act 2004 (as amended)
 - c) Public Spaces Protection Order (PSPO).
- 2.22 It is important to note that all enforcement approaches require a warning to be issued first. It is therefore expected that the number of fines issued will be minimal. The main aim is behaviour change through positive engagement and the initial focus will be on a targeted communications campaign to raise awareness, place signage in relevant areas and to train officers in how to engage with drivers. Having an enforcement approach will enable the Council to demonstrate the issue is being taken seriously. It also enables a penalty to be issued if the situation arises where a motorist ignores an enforcement officer's warning to switch their engine off.
- 2.23 It is recommended that enforcement is via the Fixed Penalty Notice route. The aim of this option is to maximise driver engagement and education whilst introducing the enforcement powers for the Parking Teams' Civil Enforcement Officers. Other enforcement staff will also be able to engage and educate where necessary.

3. Options Appraisal

- 3.1 **Do Nothing** this has been discounted as the borough needs a formal mechanism to be able to enforce vehicle idling as per the pan-London Idling Action Project requirements.
- 3.2 **FPN Enforcement** (recommended) Under Regulation 98 of The Road Vehicles (Construction and Use) Regulations 1986⁵, it is a contravention to leave a vehicle

⁴ https://www.legislation.gov.uk/uksi/1986/1078/regulation/98/made

⁵ https://www.legislation.gov.uk/uksi/1986/1078/regulation/98/made

engine running unnecessarily while that vehicle is stationary on a road. There are exemptions to this:

- a) when the vehicle is stationary owing to the necessities of traffic.
- to prevent the examination or working of the machinery where the examination is necessitated by any failure or derangement of the machinery or where the machinery is required to be worked for a purpose other than driving the vehicle; or
- c) in respect of a vehicle propelled by gas produced in plant carried on the vehicle, to such plant.

Under Regulation 12 of the Road Traffic (Vehicle Emissions) (Fixed Penalty) (England) Regulations 2002⁶ Local Authorities are able to issue a fixed penalty notice of £20 if a driver does not switch off their engine when requested. This increases to £40 if not paid within 28 days.

This option is recommended as it will be quick to put in place, does not require further consultation and therefore will come at minimal cost to the council. Further, as the intention is to focus on education and awareness, the fine levy is not excessively punitive.

- 3.3 **TMO / PCN Enforcement** Aside from enforcing idling by issuing FPNs, a council may choose to create a Traffic Management Order, under the Road Traffic Regulation Act 1984, so that traffic enforcement officers within the local authority are able to issue Penalty Charge Notices (PCNs) to drivers idling their vehicles. London Councils sets out the PCN contravention codes⁷ version 6.7.8 states code 63 is "parked with engine running where prohibited". The fine for this is up to £80 when a motorist does not switch off their engine when requested (£80 fine, or £40 if paid within 14 days). This has been discounted primarily because it will require formal consultation, which will take additional time to implement and will come at a cost to the council.
- 3.4 **Public Space Protection Order** this has been discounted as the council believe that the required powers already exist and can be effectively enforced using the FPN's. PSPOs require evidence gathering and formal consultation, which will be both lengthy and have cost/capacity implications. PSPOs are also required to set out specific areas where this will apply so may limit the geographical locations where enforcement can take place.

4. Consultation

4.1 Extensive consultation was undertaken during the development of the air quality action plan. Delivery of the plan is overseen by a steering group which has a range of stakeholders so there is ongoing engagement and review of the plan so further consultation is not required at this stage.

⁶ https://www.legislation.gov.uk/ukdsi/2002/0110423887

⁷ https://www.londoncouncils.gov.uk/services/parking-services/parking-and-traffic/parking-information-professionals/contravention-code

4.2 Formal consultation is not required on the introduction of measures to introduce vehicle idling enforcement but an extensive communications campaign will be delivered to raise awareness before enforcement commences.

5. Financial Implications

Implications completed by Nurul Alom, Finance Manager

5.1 There are no direct cost implications with regards to the delivery of the AQAP and any agreed actions will be funded from the existing agreed budgets for the service area. If additional actions are required to improve the air quality, the funding sources will need to be identified. The management of vehicle idling will be delivered within existing resources and whilst there may be some fine income this is expected to be minimal and will not significantly impact on parking income. The further concessions on permit prices is also expected to have a minimal financial initially as electric and low emission vehicle ownership is limited. This will grow in the coming years though so will be factored into future financial forecasting.

6. Legal Implications

Implications completed by Simon Scrowther (Litigation Lawyer)

- 6.1 Air quality standards and objectives are set out in the Air Quality (England)
 Regulations 2000. The Council has a duty to review the quality of air within their
 area under Part IV of the Environment Act 1995.
- 6.2 An action plan must include the time(s) within which the Council proposes to implement its measures and include proposals submitted by the Mayor of London for the exercise of the Mayor's powers.
- 6.3 The Department for Food, Environment and Rural Affairs, in conjunction with Public Health England and Department of Health, Social Services and Public Safety have published the Clean Air Strategy in May 2018.
- Under Regulation 98 of The Road Vehicles (Construction and Use) Regulations 19868, it is a contravention to leave a vehicle engine running unnecessarily while that vehicle is stationary on a road subject to the exemptions highlighted at 3.2. Under Regulation 12 of the Road Traffic (Vehicle Emissions) (Fixed Penalty) (England) Regulations 20029 Local Authorities are able to issue a fixed penalty notice of £20 if a driver does not switch off their engine when requested. This increases to £40 if not paid within 28 days.

7. Other Implications

7.1 **Corporate Policy and Equality Impact –** The Borough Manifesto, Theme 5 'Health and Social Care' and Theme 7 'Environment' are addressed by the AQAP and the actions to reduce local air pollution.

⁸ https://www.legislation.gov.uk/uksi/1986/1078/regulation/98/made

⁹ https://www.legislation.gov.uk/ukdsi/2002/0110423887

The delivery of the AQAP will improve:

- the short, medium- and long-term health of those who live, work and visit the borough.
- breaking down disproportionate health inequalities within the borough both geographically and demographically
- more sustainable travel modes which in turn has direct and indirect positive changes in transport efficiencies and economic productivity. Delivery of cleaner air does not prejudice economic growth.
- lowering greenhouse gas and carbon emissions which in turn contributes towards LBBD corporate carbon reduction targets.
- 7.2 **Equality Impact Assessment –** An EIA was undertaken when the AQAP was adopted in February 2021. This highlights how the community are disproportionately affected by poor air quality and detail mitigation actions. By delivering the actions in the AQAP we are contributing to increasing healthy life expectancy and reducing early death from cardiorespiratory diseases.
- 7.3 **Safeguarding Adults and Children –** The link between health inequalities and pollution is complex however studies show that the greatest burden of air pollution usually falls on the most vulnerable in the population, particularly the young and elderly and those with existing health conditions that are exacerbated by pollution.

Delivery of the AQAP will positively improve the health of the most vulnerable persons at risk of air pollution including the adults and children. Agreed actions in the AQAP would target emission sources and increase the public's protection to air pollution exposure.

Public Background Papers Used in the Preparation of the Report:

- GLA 'Borough Air Quality Action Matrix' 2019 https://www.london.gov.uk/sites/default/files/air quality action matrix.pdf
- LBBD Air Quality Action Plan (AQAP) 2020 2025 Air Quality Action Plan 2020 to 2025.pdf (Ibbd.gov.uk)

List of appendices:

Appendix A – Greater London Authority Focus Areas in Barking and Dagenham