

<b>Meeting:</b>	<b>Cabinet</b>	<b>Date:</b>	<b>7<sup>th</sup> March 2018</b>
<b>Subject:</b>	<b>Local Air Quality Management</b>		
<b>Report Of:</b>	<b>Cabinet Member for Environment, Cabinet Member for Communities and Neighbourhoods</b>		
<b>Wards Affected:</b>	<b>All</b>		
<b>Key Decision:</b>	<b>No</b>	<b>Budget/Policy Framework:</b>	<b>No</b>
<b>Contact Officer:</b>	<b>Alex Mason Environmental Health Officer, Community Wellbeing Email: <a href="mailto:alex.mason@gloucester.gov.uk">alex.mason@gloucester.gov.uk</a> Tel: 396316</b>		
<b>Appendices:</b>	<b>1. Map of Monitoring Sites including AQMA locations 2. Table illustrating annual nitrogen dioxide levels for Air Quality Management Areas (2012 – 2016)</b>		

## FOR GENERAL RELEASE

### 1.0 Purpose of Report

- 1.1 To update Cabinet on local air quality within the City and to outline measures that intend to form part of a new air quality action plan for the City.

### 2.0 Recommendations

- 2.1 Cabinet is asked to **RESOLVE** that:

- (1) the importance of raising awareness of air quality in order to empower residents to make positive choices be endorsed.
- (2) authority be delegated to The Head of Communities in consultation with the Cabinet Member for Communities & Neighbourhoods to undertake a consultation exercise with the Gloucester Taxi Trade on proposals to introduce air quality considerations into the Council's taxi licensing policy.
- (3) the development of an air quality action plan for the City to be completed by autumn 2018 be endorsed and presented back to this Cabinet for information.

### 3.0 Background and Key Issues

- 3.1 Local Air Quality Management is the statutory process by which local authorities monitor, assess and take action to improve local air quality. Where a local authority identifies areas of non-compliance with the national air quality objectives and there is relevant public exposure, there remains a statutory duty to declare the

geographic extent of non-compliance as an Air Quality Management Area (AQMA) and to draw up an action plan detailing remedial measures to address the problem.

3.2 Every local authority that has an active AQMA, is required under Part IV of the Environment Act 1995 to provide an Air Quality Action Plan (AQAP) as a means to address the areas of poor air quality that have been identified within the AQMA. The emphasis within AQAPs should be two-fold:

- To develop measures that will provide the necessary emissions reductions to achieve the air quality objectives within specified timescales; and
- Act as a live document which is continually reviewed and developed, to ensure current measures are progressing and new measures are brought forward.

3.3 In addition to an Action Plan each authority must produce an Annual Status Report (ASR) showing the strategies employed by the Council to improve air quality and any progress that has been made.

3.3 There are growing concerns regarding poor air quality both locally and nationally and there is an expectation that local authorities and the government will do more to improve air quality due to the simple fact that there is no safe level of pollutants in our atmosphere.

3.4 The nature of air pollution has changed over the past 40 years. Emissions of smoke and sulphur dioxide associated with smogs of the past have declined, while the proportion of pollution from vehicles has increased. The health effects of air pollution are still, however, significant. Evidence from the Government's Committee on the Medical Effects of Air Pollution (COMEAP) suggests that some 29,000 deaths per year are brought forward by exposure to man-made particulate air pollution at current levels.

#### **4.0 Air Quality in Gloucester**

4.1 The main source of air pollution in the City that gives rise to concern for compliance is road traffic emissions from major roads, notably the A417, A430 and the A38 which connect Gloucester with the main highway network in Gloucestershire, as well as local traffic in the centre of Gloucester. This is supported by a recent publication by Centre for Cities (Cities Outlook 2018) whereby Gloucester was ranked 8<sup>th</sup> when comparing Total CO<sub>2</sub> emissions per capita against the 63 largest cities in the UK. This is likely to be due to the fact that Gloucester does not have a large proportion of heavy industry hence why road traffic is the main source of emissions giving rise to our Air Quality Management Areas.

4.2 Three Air Quality Management Areas (AQMAs) have been declared in Gloucester due to exceedances of the annual mean objective for NO<sub>2</sub>: Barton Street AQMA (in the City centre) and Priory Road AQMA (on the A417), both declared in 2005; and Painswick Road AQMA (in the City centre, consisting of further section of Barton Street), declared in 2007 – see Appendix 1.

4.3 Monitoring of NO<sub>2</sub> is undertaken within Gloucester using a network of diffusion tubes. In 2016 there were thirty two monitoring locations where diffusion tubes were deployed. This is an increase of seven diffusion tubes compared to 2015. The duty to monitor air quality in Gloucester is found in section 82 of Part IV of the

Environment Act 1995 whereby district councils should carry out periodic review and assessment of air quality within their area.

- 4.4 The short periods of air quality exceedances we experience in Gloucester are linked to peak travel times and street canyons (urban streets flanked by buildings on both sides) meaning that vehicle emissions cannot disperse readily. Measures to definitively reduce levels into acceptable limits would require significant capital investment i.e. pedestrianisation or one way systems (no such projects are planned) and as a result the focus has been on shifting mode of travel (Local Sustainable Transport Plan Project) to try and reduce the number of car journeys made.
- 4.5 There was an increase in annual mean NO<sub>2</sub> concentrations reported at 23 out of the existing 25 monitoring sites in 2016 when compared to 2015 concentrations. Exceedances of the annual mean objective of 40µg/m<sup>3</sup> were reported at seven locations during 2016, this is reduced to six following distance correction of the results. The six exceeding sites are all located within the designated AQMAs. Please see Appendix 2 for monitoring results between 2012 and 2016 and the locations of the diffusion tubes throughout the city.
- 4.6 For clarity there were no exceedances of the NO<sub>2</sub> annual mean objective monitored by the network of diffusion tubes outside of any of the existing AQMAs within Gloucester. The following has been recommended in relation to the three existing AQMAs:
- Priory Road AQMA – To remain in force due to exceedances of the annual mean objective at all three monitoring locations located within the AQMA boundary;
  - Barton Street AQMA – Possibly amendment of the AQMA boundary due to concentrations below the annual mean objective being experienced in the southern section of the AQMA; and
  - Painswick Road AQMA – To remain in force due to the concentration at one diffusion tube location being above the annual mean objective. All other monitoring sites are within the objective level so an emphasis should be placed on reducing emissions at this location leading to possible revocation of the AQMA.

## **5.0 Proposals to Improve Air Quality in Gloucester**

- 5.1 Air Quality has attracted media attention over the last 18 months due to the actions of ClientEarth taking the British Government to the High Court in respect of the UK's pollution levels. In the coming months the Government will be releasing further plans for improving air quality in the UK which will affect Local Authorities.
- 5.2 Air Quality in the city is addressed through our current 2011 Air Quality Action Plan. This cabinet report seeks to update this Action Plan to ensure we are meeting the requirements of the National Air Quality Objectives and include ongoing projects that have the potential to further improve air quality and awareness. Some examples of the things that will be included are the Gloucestershire 2050 Vision whereby a number of 'Ambitions' and 'Structural Ideas' have been put forward for consultation. Public Health and air quality have clear links and building our current relationships is something that is already being done and will continue moving forward. Sustainable transport planning in association with Gloucestershire County Council is something that has been embedded in our AQAP since it was first written in 2007; however, shifting the mode of the general public's travel is an incredibly

difficult task and alone will unlikely bring air quality in line with national objectives however currently there is scope to explore the opportunity of introducing a bike hire scheme in the city.

5.3 In addition to the above there are larger projects which are currently in progress or are due to start. Further details are given below and your support would be welcomed.

#### **5.4 Raising Education and Awareness**

5.4.1 The general public are becoming increasingly aware of how air quality impacts on their health due to the media coverage of the court cases between Client Earth and the Government. To build on this raised awareness some proposals being considered are:

- Encouraging better maintenance of vehicles
- Erect signage in our AQMA's asking drivers to switch off their engines whilst idling – the 2013 Barton Street AQMA Atkins report identified that idling vehicles is a significant contributor to NO<sub>2</sub> levels in the Barton Street Corridor
- Designating no idling zones around schools, hospitals, care homes etc.
- Educating drivers asking them to switch off their engines whilst sat in traffic
- Issuing Fixed Penalty Notices for those not switching off idling vehicles when asked

#### **5.5 Development Control & Emerging City Plan**

5.5.1 Due to tight budget constraints and often the large scale nature of the planning applications received by Gloucester City Council, incorporating air quality into our regeneration schemes is a really useful way to promote sustainability.

5.5.2 Policies that promote high quality building standards, reduce energy use, and require the preparation of low emissions strategies, can help to reduce local emissions of air pollutants. They will also align with other policies aimed at increasing sustainability, notably for reducing greenhouse gas emissions. Development is not inherently negative for air quality. Whilst a new development at a particular site may have its own emissions, it may also bring an opportunity to reduce overall emissions in an area over time by installing new, cleaner technologies and applying policies that promote sustainability. The installation of more efficient low NO<sub>x</sub> boilers is one obvious example.

5.5.3 To ensure that Air Quality is at the forefront of regeneration in Gloucester the aim is to provide clear instruction to developers on what is required to be submitted with new applications. As it currently stands air quality is not routinely picked up during early conversations with developers and so improvements to the validation checklist will ensure that air quality is an early consideration in the early design stage.

5.5.4 The second part to ensuring that Air Quality is at the forefront of regeneration is through embedding it in the City Plan. We are fortunate that the new City Plan is currently being written and discussions are already underway to ensure that we provide comments and detailed information on air quality requirements in Gloucester utilising the most up to date guidance available.

5.5.6 It is hoped that this joint approach through the Planning Regime will ensure all new developments meet the requirements of the National Air Quality Objectives and if possible aid improvement of air quality in our current AQMA's.

## **5.6 Smart Technology**

5.6.1 During the summer of 2017 funding was secured from Gloucestershire County Council to implement a pilot scheme utilising smart technology and real-time monitoring with the help of a private company called EnLight. Their technology retrofits onto street lighting and although discussions are at a fairly early stage it is hoped that the pilot will take place on the Eastgate Street/ Barton Street junction. Barton Street is one of our AQMA's and it is hoped that through real time monitoring of NOx, particulates and traffic we will be able to influence the amount of traffic entering Barton Street with the idea being that when pollution levels are high, less traffic is allowed onto the street limiting congestion and as such better managing pollution levels in the AQMA.

5.6.2 This project has a lot of potential to aid our understanding of air quality in the City and if successful it is hoped that we will be able to add further monitoring locations to the smart network created by this pilot. The data will be available in real time enabling us to better understand the peaks and troughs of pollution episodes to enable better targeting of resources to tackle the issue. The danger is that we may shift an air quality issue to another location as we have not reduced the number of vehicles on the road or improved the emissions being released but the real time data will be invaluable in comparison to the monthly data currently collated through diffusion tubes. It is also worth noting that our air quality issues relate to the physical constraints of our streets and congestion and understanding our air quality further is only the first step in the aim to achieving compliance with the National Air Quality Objectives. It is envisaged that community liaison and education will be promoted as part of this pilot to highlight the benefits of alternative routes/ modes of transport to improve air quality in the AQMA.

## **5.7 Review of Taxi Licensing Policy**

5.7.1 Gloucester City Council currently license around 430 vehicles made up of both Hackney Carriages and Private Hire vehicles (HC/PHV's) clocking up a total of approximately 11million miles last year based on information taken from the <https://www.gov.uk/check-mot-history> website. As a result of the number of licensed vehicles and the total miles travelled, even a small reduction in emissions of NO<sub>2</sub> and particulate matter for each vehicle could have a significant overall reduction in pollution. With this in mind we are considering the following:

- Looking at reviewing annual vehicle renewal licence fees based on vehicle emissions - discount or exemption on fees for drivers of 'Low Emission Taxis' (petrol/ electric hybrids) or 'Ultra-Low Emission Taxis' (fully electric) and an increase for higher emission vehicles
- Consider an annual vehicle license renewal fee based on the age of the vehicle
- Reducing the age of the existing fleet from 10 years currently to 8 years (there is currently no age restriction on purpose built vehicles some of which are nearly 20 years old)
- Lowering the age that newly licensed vehicles can be licensed for
- MOT every 6 months when vehicle reach 5 years old and not 8 as currently

- Extending the maximum age limit allowed for HC/PHV's if they are fully electric or petrol/electric hybrids
- Introduce a minimum emission standard of Euro 5 for all HC/PHV's
- Promote the uptake of LPG, petrol-electric or compressed natural gas by offering a reduction in annual vehicle licence fees
- Education in relation to switching off engines when idling particularly at ranks, better maintenance of vehicles and driving techniques to ensure maximum fuel efficiency
- Consider including criteria into contract tenders (school contracts) to make them more favourable to operators with a low or ultra-low emission fleet of vehicles
- Restrict access to either current or future air quality management areas/low emission zones (LEZs) to all but low and ultra-low emission HC/PHV's
- Introducing ULEV only taxi ranks (or spaces at the head of ranks) in prime locations would provide a financial incentive for taxi drivers and operators to utilise zero-emission capable vehicles
- Revise conditions of fitness for newly licensed vehicles stating they must be zero-emission capable
- Creating an electric taxi-only rank
- Providing a number of taxi-only charging points

5.7.2 A number of local authorities already have air quality considerations embedded within their taxi licensing policy including; The City of London, City of York, Cambridge, Fylde Borough Council, Manchester City Council and Chichester District Council. Several of these authorities have adopted a policy that all vehicles must meet Euro 4 emissions standard or higher. The City of York recently introduced a new policy that vehicles applying to be licensed as taxis must meet Euro 5 for petrol, Euro 6 for diesel, or ultra-low emission vehicles from 1 June 2017 for replacement hackney carriage vehicles, and from 1 November 2017 for replacement private hire vehicles.

5.7.3 Transport for London has recently announced that from the 1<sup>st</sup> January 2018 it will no longer license new diesel taxis in a significant move to cut NO2 level in the capital.

5.7.4 Taxi Licensing has significant potential to aid the improvement of air quality in Gloucester City. At this stage colleagues in our Licensing Team have been tasked with researching what other local authorities are doing in regard to their taxi policies. This research will form the basis of a consultation with the trade in the New Year to find an agreeable way forward for improving the fleet of taxi's currently licensed by this authority. It is requested that Cabinet supports and grants approval for this authority to enter into a consultation with the taxi trade.

## **5.8 Council's Own Fleet**

5.8.1 As of the 8<sup>th</sup> January 2018 Gloucester City Council will also be aiding the improvement of air quality in the district through the procurement of 5 new pool cars for use by all council employees. The initiative will mean that employees will be required to use the pool cars as opposed to their personal vehicle hopefully resulting in more employees walking, taking public transport and utilising vehicles that are modern and efficient.

## **6.0 How does this relate to our Air Quality Management Strategy?**

- 6.1 The Local Transport Plan for Gloucestershire (LTP3) sets out the transport strategy for the County from 2011 to 2026. The document sets out its vision for transport in the future as: "Providing a safe and sustainable transport network within Gloucestershire" where safe means a transport network that people feel safe and secure using and sustainable means a transport network that is both environmentally and financially sustainable.
- 6.2 Tackling poor air quality also fits with both the City Vision 2012-2022 and Council Plan 2014-2017 in relation to "A Greener Gloucester" and "A Healthy City".

## **7.0 Asset Based Community Development (ABCD) Considerations**

- 7.1 We will consider the possibility of supporting residents/groups to become involved as Air Quality Champions – citizens, local business employees, schools and project staff who receive volunteer training, where they learn about air pollution and health with a view to promoting this in their communities including talking to drivers regarding idling vehicles.
- 7.2 Updates to the website have been carried out including the posting of previous air quality reports to inform interested parties.

## **8.0 Alternative Options Considered**

- 8.1 Do nothing – is not an option due to the aforementioned reasons, the Government will be putting extra impetus on Local Authorities to improve air quality in their districts. There is a predicted population increase and car ownership is set to rise in England resulting in more cars on the road. However, fuel efficiency improvements and the use of bio-fuel will help to offset CO2 emissions (Road Transport Forecasts 2013, Department for Transport).
- 8.2 To do the minimum - continue to do what we have already been doing and keep a watching brief in relation to air quality and should the situation change we may choose to explore further options at a later date.
- 8.3 A report produced by Atkins in January 2013 on behalf of Gloucestershire County Council identified a number of potential projects in relation to the Barton Street AQMA which is being considered for further investigation and possible delivery.

## **9.0 Reasons for Recommendations**

- 9.1 Air pollution not only harms the environment but also health and wellbeing.
- 9.2 Air quality matters to residents, businesses and visitors to the City.
- 9.3 Poor air quality can cause serious health problems and reduces the quality of life for us all.
- 9.4 The impacts of poor air quality are most severely felt by vulnerable people such as children, older people and those living with existing heart and lung conditions.

- 9.5 Residents living in areas near major roads which are some of the most deprived parts of Gloucester are exposed to particularly high levels of pollution.
- 9.6 At this point in time, it is not possible to identify, or assess with any degree of certainty, the potential implications of the referendum vote on UK environmental legislation and standards and as such should not prevent us from addressing the impacts of poor air quality.
- 9.7 Air pollution management is commonly considered an environmental health/ protection issue. However, tackling the health impacts of air quality requires action from partners across the County, including public protection, planning, transport and public health. A collaborative approach that brings together technical advice on the impact of interventions with health improvement and public engagement activities will enhance and add value to actions taken through the Local Air Quality Management (LAQM) regime.
- 9.8 An evidence review published in the Journal of Environmental Science and Policy suggests that the wider public health workforce can make a significant contribution to reducing air pollution risks, for example, by promoting active travel and encouraging walking and cycling over car use as a means of developing a healthier lifestyle and improving population health and resilience. (Local Air Quality Management policy and practice in the UK: The case for greater Public Health integration and engagement, April 2016).

## **10.0 Future Work and Conclusions**

- 10.1 To continue exploring new initiatives to reduce air pollution and promote sustainable travel.
- 10.2 To continue working with partners to explore new opportunities to share knowledge, information and pool resources.
- 10.3 To seek funding in relation to enhanced air quality monitoring and potential solutions to improve air quality.

## **11.0 Financial Implications**

- 11.1 The purpose of this report is to raise awareness of air quality and to outline what is currently being done in the City and so there are no financial implications to consider currently.
- 11.2 In relation to measures which the City Council is looking to implement, funding will be sought externally and/ or could be considered in the future Money Plan however this would increase the savings target to be found from elsewhere.

(Financial Services have been consulted in the preparation this report)

## 12.0 Legal Implications

- 12.1 The Environment Act 1995 requires local authorities to monitor air pollution against national targets and to take action where it is found that these targets are unlikely to be met.
- 12.2 The City Council is carrying out its statutory function in relation to monitoring air quality in addition to working with partners to reduce air pollution including exploring new initiatives and sustainable travel.

(One Legal have been consulted in the preparation this report)

## 13.0 Risk & Opportunity Management Implications

- 13.1 See table below –

Risk	Opportunities
Air Quality is attracting ever increasing local and national interest and there is an expectation that local authorities will do more to improve air quality.  Poor Air Quality Impacts on People’s Health and Wellbeing  Gloucester City could miss out on funding to deliver a project	To work more closely with the County Council and other stakeholders to improve air quality.  We are currently considering a number of possible initiatives to improve air quality and sustainable travel whilst looking to attract a different audience which is seen as initiative.  Funding may become available and we will actively seek out opportunities.

## 14.0 People Impact Assessment (PIA) and Safeguarding:

- 14.1 Improving air quality is important for all residents which live, travel or work in AQMA’s or areas which exceed permitted levels and we do not believe that our proposals will have a detrimental impact or prejudice against any one group or community.
- 14.2 The PIA Screening Stage was completed and did not identify any potential or actual negative impacts; therefore a full PIA was not required.

## 15.0 Other Corporate Implications

### Community Safety

- 15.1 Improving air quality has a critical role to play in protecting communities and we will continue to work with relevant stakeholders to consider how this is best achieved.

### Sustainability

- 15.2 Given the ongoing reductions to local authority resources there is a need to work more closely with partners and our communities to make them more aware of the potential issues and to support them to become more resilient.

Staffing & Trade Union

15.3 None.

**Background Documents:**

None