

<b>GROWTH, ENVIRONMENT AND RESOURCES SCRUTINY COMMITTEE</b>	AGENDA ITEM No. 5
<b>5 MARCH 2018</b>	<b>PUBLIC REPORT</b>

Report of:	Simon Machen	
Cabinet Member(s) responsible:	Cllr Peter Hiller - Cabinet Member for Growth, Planning, Housing and Economic Development	
Contact Officer(s):	Charlotte Palmer, Group Manager - Transport and Environment	Tel. 01733 453538

**AIR QUALITY MONITORING**

<b>R E C O M M E N D A T I O N S</b>	
<b>FROM:</b> Simon Machen - Director of Growth and Regeneration	<b>Deadline date:</b> N/A
<p>It is recommended that the Growth, Environment and Resources Scrutiny Committee consider the content of the Air Quality Monitoring report and the discussion during the meeting and determine what actions, if any, the Committee recommends should be undertaken by the Council.</p>	

**1. ORIGIN OF REPORT**

1.1 This report follows a request made by Councillor Nick Sandford following a briefing paper that was issued to members of the Growth, Environment and Resources Scrutiny Committee in June 2017. The report is intentionally brief, as agreed at the Groups Representatives meeting in January, because the intention is to have an in depth discussion during the meeting with officers from a range of different service areas in order to address this extensive and cross cutting topic.

**2. PURPOSE AND REASON FOR REPORT**

- 2.1 This report is being presented to provide members of the Growth, Environment and Resources Scrutiny Committee further information on: the Council's existing processes for monitoring air quality and Council activities that influence air quality.
- 2.2 This report is for the Growth, Environment and Resources Scrutiny Committee to consider under its Terms of Reference No. Part 3, Section 4 - Overview and Scrutiny Functions, paragraph 2.1, Functions determined by Council: Environmental Capital
- 2.3 Air quality is a topic that, to varying degrees, relates to all of the Council's corporate priorities.

**3. TIMESCALES**

Is this a Major Policy Item/Statutory Plan?	<b>NO</b>	If yes, date for Cabinet meeting	<b>N/A</b>
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**4. BACKGROUND AND KEY ISSUES**

4.1 A briefing paper was issued to members of the Growth, Environment and Resources Scrutiny Committee in June 2017. This report follows the briefing paper and intends to introduce the topic, provide further contextual information (Appendix A) and provide the basis for an in-depth

discussion with key officers at the meeting.

#### **4.2 Recommendations for next steps.**

Members are asked to consider the content of this report and the discussion during the meeting to determine what actions, if any, the Committee recommends should be undertaken by the Council. For example the Committee may wish to consider:

The direct links between health, active travel and air quality mean that there is an opportunity for officers working in these specialists areas to share learning and develop opportunities for targeted programmes of work. In order to achieve this members of the committee may wish to make a recommendation to establish an officer group tasked with seeking external funding to deliver monitoring and mitigation projects.

In order to ensure that any major highway infrastructure schemes are considered from an air quality perspective members of the committee may wish to make a recommendation to ask officers to share the plans with air quality colleagues at the inception stage in order to ensure any negative impacts are understood and the appropriate mitigation action taken.

### **5. CONSULTATION**

- 5.1 This report and the associated appendix provide a summary of activity taking place in the city, as such no consultation activity has taken place to date. If any consultation activity is required from resultant recommendations made following this report it will be undertaken in line with the Council's processes.

### **6. ANTICIPATED OUTCOMES OR IMPACT**

- 6.1 It is anticipated that members of the Growth, Environment and Resources Scrutiny Committee consider the content of this report and the discussion during the meeting to determine what actions, if any, the Committee recommends should be undertaken by the council.

### **7. REASON FOR THE RECOMMENDATION**

- 7.1 N/A

### **8. ALTERNATIVE OPTIONS CONSIDERED**

- 8.1 This report follows a request made by Councillor Nick Sandford following a briefing paper that was issued to members of the Growth, Environment and Resources Scrutiny Committee in June 2017 and as such provides further information on this subject. As such no alternative options have been considered.

### **9. IMPLICATIONS**

#### **Financial Implications**

- 9.1 There are no financial implications as a result of this report. If members of this Committee make any recommendations then they would be subject to further analysis and would be considered as part of the Council's budget setting process.

#### **Legal Implications**

- 9.2 There are no legal implications as a result of this report. If members of this Committee make any recommendations then they would be subject to further analysis and any legal implications identified with key officers.

## **Equalities Implications**

- 9.3 There are no equality implications as a result of this report. If members of this Committee make any recommendations then they would be subject to further analysis and any equality implications identified with key officers.

## **Rural Implications**

- 9.4 There are no rural implications as a result of this report. If members of this Committee make any recommendations then they would be subject to further analysis and any rural implications identified with key officers.

## **10. BACKGROUND DOCUMENTS**

Used to prepare this report, in accordance with the Local Government (Access to Information) Act 1985

- 10.1
- Peterborough City Council's 2016 Air Quality Annual Status Report: <https://www.peterborough.gov.uk/upload/www.peterborough.gov.uk/business/environmental-health/AirQualityAnnualStatusReport2016.pdf?inline=true>
  - Fourth Local Transport Plan. [www.peterborough.gov.uk/ltp](http://www.peterborough.gov.uk/ltp)
  - Proposed submission of the Local Plan. [www.peterborough.gov.uk/localplan](http://www.peterborough.gov.uk/localplan)

## **11. APPENDICES**

- 11.1 Appendix A: Air Quality, contextual information

Appendix B: Briefing paper issued to members of the Growth, Environment and Resources Scrutiny Committee in June 2017. Subject - Air Quality Monitoring / Impact on Health in Peterborough and what actions are being taken to reduce this.

## **Appendix A - Air Quality, contextual information**

### **Existing processes for monitoring air quality**

As detailed in the briefing paper issued to members of the Growth, Environment and Resources Scrutiny Committee in June 2017 (Appendix B) the Environment Act 1995, Part IV, places a statutory obligation on all local authorities for Local Air Quality Management (LAQM) which requires them to review and assess air quality within their area against National Air Quality objectives, usually achieved through screening, modelling and monitoring. If this process identifies that pollutant concentrations are unlikely to meet the Air Quality Objectives the Local Authority is required to declare an Air Quality Management Area (AQMA) and prepare an Air Quality Action Plan (AQAP) setting out the measures it intends to put in place to achieve the objectives.

DEFRA issues technical guidance to support and direct LA's conducting this task. Methodologies and associated tools are provided in the guidance that LA's should use to screen sources of pollution as part of their annual reporting requirements. Screening is undertaken by this process to identify locations at risk of exceeding the prescribed air quality objectives. The screening procedure is to ensure a proportionate, cost-effective process, approved by DEFRA, for Local Authorities to identify air quality impacts over a range of identified locations within a local authority area. Financial and other implications should be fully understood in determining the most appropriate monitoring programme. Screening assessments should provide the information on the likely locations where the air quality objective for the pollutant of concern may be exceeded. This information can be used to identify any monitoring sites requiring detailed studies using automatic monitors.

Screening modelling is quick and inexpensive and screening monitoring for nitrogen dioxide using a diffusion tube costs approximately £250 per site per annum. It is therefore relatively simple to assess a number of locations where air quality may be identified as a concern, and to relocate monitoring activities as required. The screening procedures have not identified any sites within Peterborough requiring Detailed Assessment, which may be undertaken in part by the use of Automatic Analysers. However if such a situation was identified, or further monitoring was required the annual costs, including associated staff and maintenance cost is likely to be between £75k and £121k per site.

The National Air Quality Strategy sets air quality objectives or levels for pollutants such as Nitrogen dioxide (NO<sub>2</sub>) on the basis of scientific and medical evidence on the health effects of each pollutant, and according to practicability of meeting the standards. Standards for NO<sub>2</sub>, the principal pollutant related to traffic emissions, have been adopted as the objectives in the NAQS. Since the air quality standard for NO<sub>2</sub> is a concentration below which effects on human health are expected to be zero or negligibly small at a population level, further reduction below these levels is unlikely to have any recognisable benefit. Nitrogen Dioxide is monitored at 16 sites across Peterborough through diffusion tubes, with locations chosen on a risk based approach. Tube locations are reviewed annually. Levels of NO<sub>2</sub> are within prescribed levels which is likely due to the lower levels of traffic congestion in Peterborough compared to many other cities.

There is no statutory requirement to review and assess fine Particulate Matter (PM<sub>2.5</sub>) as it is recognised there are no absolute safe levels of exposure. As such any improvement in air quality will have positive health consequences. Since there is no recognised safe level for exposure to PM<sub>2.5</sub>, for this pollutant, focusing attention on hotspots only, is not going to generate the maximum improvement in public health for the investment made. DEFRA have therefore adopted an 'exposure reduction' approach for PM<sub>2.5</sub> to seek a more efficient way of achieving further reductions in the health effects of air pollution; by providing a driver to improve air quality everywhere in the UK rather than just in localised hotspot areas. This will act to make policy measures more cost-effective and is more likely to maximise public health improvements across the general population.

As detailed in the 'Transport and Health JSNA dataset - Peterborough' PM<sub>2.5</sub> has the strongest link to health outcomes however the Council do not have a statutory duty to monitor PM<sub>2.5</sub>. Modelled data estimates background level of manmade PM<sub>2.5</sub> across Peterborough to be 8.5µgm<sup>3</sup> which is below the Air Quality Objectives. Further modelling suggests that long term exposure to PM<sub>2.5</sub> in Peterborough contributed to approximately 5% of deaths in 2015, this is similar to England and comparator authorities. It should be noted that in general air pollution contributes a small amount to the cause of death of a large number of exposed individuals, who also have other risk factors (heart disease, lung disease etc), rather

than being the main cause of death.

Peterborough has one AQMA for emissions of Sulphur Dioxide (SO<sub>2</sub>) which is detailed in Appendix A. This relates to brickworks located in the Fenland District Council (FDC) area. FDC are considering liaising with DEFRA to revoke the AQMA due to a significant decrease in activity at the brickworks.

Due to the specific nature of air quality monitoring it is not appropriate to provide comparisons to activity happening in other parts of the country.

### **Council activities that influence air quality**

#### **Links to the Local Plan**

The Local Plan (Proposed Submission version January 2018) objectives link to the Environment Action Plan and looks to reduce reliance on fossil fuels and to minimise pollution which effects human health. The Transport Policy (LP13) also links to the requirements of the Local Transport Plan which looks to reduce the need to travel especially by car. The Biodiversity and Geological Conservation Policy (LP28) looks to address adverse impacts such as air pollution. The following policies also influence air quality:

- Presumption in Favour of Sustainable development (Policy LP1)
- Health and Wellbeing (Policy LP7)
- Trees and Woodland (Policy LP29)

In addition, we are currently looking to add policy requirements on impacts to human health and health impact assessments into the emerging Cambridgeshire and Peterborough Minerals and Waste Local Plan. The nature of minerals and waste management development can have implications relating to the issue of air quality, therefore an appropriate and effective policy framework is required to address this.

#### **Links to Passenger Transport services**

At Full Council in December 2017 it was resolved that Cabinet and Officers would work with Stagecoach, who operate the majority of bus services across the city, and the Combined Authority 'to investigate the feasibility of introducing more hybrid, electric and other ultra-low emission buses in Peterborough'. In addition at Full Council in July 2017 it was resolved that the Council would 'work with the Bus Company to look at the feasibility of relocating the Bus Depot' due to reported issues relating to congestion in this part of the city.

#### **Transport Infrastructure Schemes**

Each year the Peterborough Highway Services department carries out a number of major infrastructure improvement schemes on the highway. For example, public realm improvements at Lower Bridge Street. In order to ensure that air quality is taken into consideration the Council will seek advice on whether air quality monitoring is required on specific schemes. As such processes have been updated to ensure that internal air quality experts are able to view the plans at an early stage in order to ensure any negative impacts are understood and the appropriate mitigation action taken.

#### **Increase levels of active travel**

'Active travel' means walking or cycling as an alternative to motorised transport (notably cars, motorbikes/mopeds etc.) for the purpose of making every day journeys. Public transport can also contribute to levels of physical activity, as people who take public transport are likely to walk further than car users – for example, by walking to and from bus stops. Active travel has an important role to play in improving the health and wellbeing of Peterborough residents by maintaining levels of physical activity. For most people the easiest and most acceptable forms of physical activity are those that can be built into everyday life such as walking and cycling. Studies show that people who cycle for travel purposes (as opposed to leisure purposes) are four times as likely to meet physical activity guidelines as those who do not and that active commuting confers around a 10% reduction in the risk of developing heart disease and stroke.

There is a clear relationship between the amount of physical activity people do and health. While increasing the activity levels of all adults who are not meeting physical activity recommendations is important, targeting those adults who are significantly inactive i.e. engaging in less than 30 minutes of activity per week, will produce the greatest reduction in chronic disease. Research indicates that a combination of distance, perceived safety of walking/cycling routes and individual characteristics such as age, gender and access to a car are the most important influences on walking and cycling behaviour.

The Council receives Integrated Transport Block funding from the Department for Transport via the Cambridgeshire and Peterborough Combined Authority on an annual basis. This funding, (currently £1.407m per year) is used to fund small to medium sized highway improvements. The majority of this funding is used to make walking, cycling and public transport improvements, as well as installing additional electric vehicle charging posts in the city centre. Recent examples include bus stop upgrades, pedestrian crossings and cycleway improvements with more planned in the future. The Council will also match fund businesses (to a maximum of £3,000) who want to install sustainable travel infrastructure such as cycle parking, showers, and electric vehicle charging posts.

In addition to infrastructure, the Council continues to deliver Travelchoice, a local campaign to promote sustainable travel. Travelchoice runs a number of initiatives with businesses and residents. For example, Bikeability training that takes place in primary schools (cycle proficiency training), funding for the Sustrans Bike-It scheme which works directly with primary schools to promote cycling. The Bike-It Officers are currently working on a trial initiative with Queens Drive Infant School to implement an air quality and anti-idling campaign. Dependent on the success of this and available funding the Council will then see whether this can be rolled out to other schools.

### **Tree Canopy Cover Analysis / Tree and Woodland Strategy**

The value of trees, in respect to urban air quality, has been long recognised by the Council. In contrast to grey infrastructure trees provide a comparatively large surface area for deposition of pollutants and thereby remove more PM, NO<sub>2</sub>, and O<sub>3</sub>. Equally at street level trees can help alter the flow of air, leading to the dilution of pollutants and also separating local clean air from less clean regional air.

In 2014 a canopy cover survey was commissioned which involved analysing aerial photography and measuring the area occupied by tree crowns. This found that the average canopy cover in the City is 9.43%. The Council's Trees & Woodland Strategy aims to target increasing canopy cover in those wards with lowest coverage. In addition the Council will, wherever possible, work in partnership with PECT to deliver its aspiration to plant more trees within the Forest For Peterborough project.

### **Idling signage**

Whilst there is no specific statutory duty for the council to enforce against unnecessary vehicle idling the Regulatory Services team have proactively provided air quality educational information to taxi and private hire drivers (available on the Council's website) and installed advisory signs on ranks reminding drivers to switch engines off. However, the ability to enforce this is limited due to financial constraints.

In relation to licensing taxi drivers and vehicles, the council has a duty to ensure the drivers and vehicles it licenses are fit and proper as required by legislation, public safety being the priority. Prior to licensing (plating) our vehicles they must undergo and pass a mechanical test with the measurement of emission levels being part of the assessment criteria. Hackney vehicles, those that are present on ranks and are older than six years are tested every six months and are de-licensed after 15 years. Outside of these testing requirements, where concerns are raised in respect to specific vehicles, officers carry out a full investigation to ensure the vehicle is up to the expected standards and if appropriate will require the vehicle owner to represent the vehicle for further testing.

Officers meet regularly with the Hackney Carriage and Private Hire Federation representatives and raise the issue of idling of vehicles to ensure the message is getting to all drivers. As new technologies develop and appropriate vehicles become available on the market the council will review its vehicle conditions to help promote and enable cleaner low emission vehicles. To date the manufacturers of the most common hackney carriage vehicles have been slow to introduce low emission vehicles into the UK.

### **Commitment to increase charging infrastructure for electric vehicles**

In the proposed submission of the Local Plan, all development requiring parking provision should be designed, where practical, to incorporate facilities for electric plug-in and other ultra-low emission vehicles, or as a minimum the ability to easily introduce such facilities in the future.

The Council has installed five charging posts in the city centre and these are all dual use except Park Rd and City Rd where only one side can be used at a time (therefore eight vehicles can be charging at any one time). These posts are in addition to private car parks that have their own charging posts. For the

charging posts that are owned by the Council there is an app that shows live availability so that drivers can find an empty charging bay and it is free to park in these bays for up to 3 hours. In 2018/19, the Council plans to install an additional eight dual use charging posts. The Council will also match fund businesses (to a maximum of £3,000) who want to install sustainable travel infrastructure including electric vehicle charging posts.

**Appendix B - Briefing paper issued to members of the Growth, Environment and Resources Scrutiny Committee in June 2017.**

**BRIEFING NOTE REQUEST FORM**

<b>SCRUTINY COMMITTEE REQUESTING BRIEFING NOTE</b>	Growth, Environment and Resources Scrutiny Committee
<b>DATE REQUEST MADE</b>	19 May 2017
<b>OFFICER REQUESTED TO PROVIDE BRIEFING NOTE</b>	Peter Gell / Dr Liz Robin
<b>SUBJECT</b>	Air Quality Monitoring / Impact on Health in Peterborough and what actions are being taken to reduce this

**RESPONSE:**

**Impact of Air quality on health**

As recently as the Nineties it was felt that air pollution was no longer a major health issue in the United Kingdom as legislation had made the great smogs of the Fifties a thing of the past.

However, evidence started to emerge that small particles emitted to the air from various sources, such as road transport, industry, agriculture and domestic fires, were still having a considerable effect on health. This type of air pollution is so small that it can't be seen by the naked eye, but can get into our respiratory system<sup>1</sup>.

Other air pollutants, such as nitrogen dioxide and ozone, can also affect our health. Nitrogen dioxide is produced by burning fuel, whilst ozone is formed by chemical reactions in the air.

It is estimated that long term exposure to particulate matter alone has an effect equivalent to 25,000 deaths a year in England by increasing the risk of diseases such as heart disease, stroke, respiratory disease and cancers<sup>2</sup>. In Peterborough in 2015 long term exposure to particulate matter was estimated to contribute towards 4.8% of all deaths over the age of 30 years<sup>3</sup>. It should be noted that in general air pollution contributes a small amount to the cause of death of a large number of exposed individuals, who also have other risk factors, rather than being the main cause of death.

Diesel engine exhaust, outdoor air pollution and particulate air pollution have been classified by the World Health Organization as carcinogenic.

Air pollution can also worsen lung conditions such as Chronic Obstructive Pulmonary Disease (COPD) and asthma. In addition, air pollution can reduce lung development in children, which may increase symptoms in youngsters who develop conditions such as asthma.

Evidence suggest that short-term exposure to air pollution is associated with increased ill health and risk of death among those with pre-existing health conditions e.g. heart disease, stroke and lung disease, although the numbers are thought to be lower than for long-term exposure<sup>4</sup>.

**Air pollutants in the UK**

The main air pollutants in the UK are associated with road traffic emissions. Petrol and diesel-engined motor vehicles emit a wide variety of pollutants, principally carbon monoxide (CO), oxides of nitrogen (NOx), volatile organic compounds (VOCs) and particulate matter (PM), which have an increasing impact on urban air quality. Of particular concern are PM and Nitrogen Dioxide (NO<sub>2</sub>) at locations close to busy, congested roads where people may live, work or shop.

<sup>1</sup> Air Quality A Briefing for Directors of Public Health March 2017

<sup>2</sup> <https://publichealthmatters.blog.gov.uk/2017/06/15/clean-air-day-taking-steps-to-reduce-air-pollution/>

<sup>3</sup> <http://fingertips.phe.org.uk/search/particulate#page/3/qid/1/pat/6/par/E12000006/ati/102/are/E06000031/iid/30101/age/230/sex/4>

<sup>4</sup> [http://www.hpru-ech.nihr.ac.uk/files/2016/12/T2\\_Heaviside\\_Air-pollution\\_health.pdf](http://www.hpru-ech.nihr.ac.uk/files/2016/12/T2_Heaviside_Air-pollution_health.pdf)



## **Particulate matter (PM)**

PM has three sizes that are commonly used as indicators PM10, PM2.5 and PM0.1. PM is made up of a wide range of materials and arise from a variety of sources. Concentrations of PM comprise primary particles emitted directly into the atmosphere from combustion sources and secondary particles formed by chemical reactions in the air. PM derives from both human-made and natural sources (such as sea spray and Saharan dust). In the UK the biggest human-made sources are stationary fuel combustion and transport. Road transport gives rise to primary particles from engine emissions, tyre and brake wear and other non-exhaust emissions. Other primary sources include quarrying, construction and non-road mobile sources. Secondary PM is formed from emissions of ammonia, sulphur dioxide and oxides of nitrogen as well as from emissions of organic compounds from both combustion sources and vegetation.

Primary emissions from road traffic, including the non-exhaust component, make a significant (about 30-50%) contribution to the urban background increment of PM2.5 above rural concentrations. Road traffic can make substantial contributions to PM2.5 concentrations at the kerbside (within 1 m of the kerb) of around a third of total concentrations, but at the roadside (a few metres from the kerb) the contributions are more limited. There is evidence to suggest that domestic and commercial sources make a contribution to concentrations of PM2.5 during the evening period, which may be due to solid fuel combustion and to particles released during cooking.

## **Nitrogen Dioxide**

The gaseous pollutant nitrogen dioxide (NO<sub>2</sub>) is a gas produced along with nitric oxide (NO) by combustion processes and together they are often referred to as oxides of nitrogen (NO<sub>x</sub>). On average around 80% of oxides of nitrogen (NO<sub>x</sub>) emissions in areas where the UK is exceeding NO<sub>2</sub> limit values is due to transport, although urban and regional background non-transport sources are still considerable. The largest source is emissions from diesel light duty vehicles (cars and vans) and there has been significant growth in these vehicle numbers over the last ten years in the UK.

## **What are the duties of a local authority?**

### **Local Air Quality Management (LAQM)**

The Environment Act 1995, Part IV places a statutory obligation on all local authorities for Local Air Quality Management (LAQM) which requires them to review and assess the air quality within their area against National Air Quality Objectives and to report annually to DEFRA by way of Progress Reports, Updating & Screening Assessments or Detailed Assessments. Where this process identifies that pollutant concentrations are unlikely to meet the Air Quality Objectives i.e. exceed to prescribed limit, the Local Authority is required to declare an Air Quality Management Area (AQMA) and prepare an Air Quality Action Plan (AQAP) setting out the measures it intends to put in place to achieve the objectives.

### **Air Quality Objectives and standards**

The EU Directive and the National Air Quality Strategy set air quality objectives for pollutants on the basis of scientific and medical evidence on the health effects of each pollutant, and according to practicability of meeting the standards. The relevant objectives are listed in Appendix 1.

With respect to Particulate Matter (PM) it is recognised that there are no absolute safe levels of exposure. As such any improvement in air quality will have positive health consequences, although PM2.5 is still not incorporated into the LAQM Regulations, and therefore there is no statutory requirement to review and assess PM2.5 for LAQM purposes, there is a specific Public Health Outcome measure for mortality attributable to particulate air pollution. Whilst an increase in PM2.5 monitoring across the UK is desirable given the links to the Public Health Outcomes Framework, it is also recognised that the costs involved can be prohibitive.

The current Government policy framework, and the legislative requirement to meet EU air quality limit values everywhere in the UK, tends to direct our attention to localised hotspot areas of pollution (where the objectives are not met). Monitoring of Nitrogen Dioxide by screening using diffusion tubes has been happening in Peterborough since 1994. There is clear health advice that there is no accepted threshold effect, i.e. no recognised safe level for exposure to fine particles (PM2.5). For this pollutant, focusing attention on hotspots only, is therefore not going to generate the maximum improvement in public health for the investment made, since much more widespread adverse effects on health are likely. DEFRA have

therefore adopted an ‘exposure reduction’ approach for PM2.5 to seek a more efficient way of achieving further reductions in the health effects of air pollution by providing a driver to improve air quality everywhere in the UK rather than just in a small number of localised hotspot areas, where the costs of reducing concentrations are likely to be exceedingly high. This will act to make policy measures more cost-effective and is more likely to maximise public health improvements across the general population.

## What is air quality like in Peterborough?

### Nitrogen Dioxide

There are currently no exceedances of the Nitrogen Dioxide objective in the Peterborough City Council administrative area.

### Particulate Matter (PM2.5)

Based on national modelled monitoring data from DEFRA the population weighted annual mean level of PM2.5<sup>5</sup> in Peterborough is slightly higher than England average (8.5µg/m<sup>3</sup> compared to 8.3µg/m<sup>3</sup> respectively)<sup>6</sup> and average compared to its similar local authorities (see figure 1).

Area	Value	Lower CI	Upper CI
England	8.3	-	-
Thurrock	10.0	-	-
Medway	9.7	-	-
Derby	9.0	-	-
Swindon	9.0	-	-
Luton	8.8	-	-
Coventry	8.8	-	-
Peterborough	8.5	-	-
Milton Keynes	8.4	-	-
Bedford	8.4	-	-
Bolton	7.4	-	-
Oldham	7.3	-	-
Telford and Wrekin	7.1	-	-
Rochdale	7.0	-	-
Bury	7.0	-	-
Calderdale	6.5	-	-
Stockton-on-Tees	6.2	-	-

Source: Defra: various instruments used to derive estimates including Pollution Climate Mapping model, Automatic Urban and Rural Network and National Atmospheric Emissions Inventory. Also makes use of census population estimates (ONS). See [https://uk-air.defra.gov.uk/data/pcm-data#population\\_weighted\\_annual\\_mean\\_pm25\\_data](https://uk-air.defra.gov.uk/data/pcm-data#population_weighted_annual_mean_pm25_data) for more detail.

Figure 1 – Estimated background level of PM2.5 compared to most similar local authorities

### Sulphur Dioxide

Historically, the main air pollution problem in both developed and rapidly industrialising countries has typically been high levels of smoke and sulphur dioxide (SO<sub>2</sub>) emitted following the combustion of sulphur-containing fossil fuels such as coal, used for domestic and industrial purposes. A large proportion of the Peterborough City Council has been declared a Smoke Control Area, which has resulted in significant reductions in levels of smoke and SO<sub>2</sub>.

There is currently one Air Quality Management Area (AQMA) in Peterborough, for emissions of Sulphur Dioxide (SO<sub>2</sub>). The source of these emissions is a brickworks located in the area administered by Fenland District Council. It was proposed in the 2015 Updating and Screening Assessment (USA) to revoke the AQMA, subject to the agreement of DEFRA. However the AQMA is still in force and Peterborough City Council remain in consultation with Fenland District Council about this. Further details of this AQMA can be found on our website at <https://www.peterborough.gov.uk/business/environmental-health/pollution/>.

### What are we doing to improve local air quality?

Actions, local priorities and challenges are summarised in the 2016 Annual Screening Report, the main areas of focus are:

<sup>5</sup> This is based on anthropogenic components (generated by human activity)

<sup>6</sup>

## **Local Transport Plan**

Peterborough City Council has the following priorities with regards to local air quality.

- To reduce the number of trips made by fossil fuelled vehicles.
- To continue to develop a council fleet of electric or low emission vehicles.
- Explore the opportunities to introduce short term measures to reduce exposure to traffic related air pollution.
- To promote sustainable travel modes as a solution for the increasing demand for travel to reduce the impact on local air quality.
- To continue to seek contributions from new developments to implement measures identified in travel plans to support sustainable travel
- To encourage new and existing businesses to embrace the use of an electric vehicle fleet.
- Work with private bus companies to reduce emissions from the public transport fleet
- Consider introducing incentives for low emission vehicles for taxis.
- To develop a fleet of council electric vehicles or other low emission fuels as appropriate
- Various departments across the Council working closely alongside one another to deliver Major Improvement schemes. In addition to reduced exhaust emissions, these schemes will reduce non-exhaust emissions from brake and tyre wear by making traffic flows smoother.

## **Travelchoice**

Travelchoice, the Council's sustainable travel initiative, directly works with businesses, schools and the general public to promote sustainable travel planning. Travelchoice promotes smarter choice measures that make it easier for residents, businesses and visitors in Peterborough to contribute to reducing air pollution and carbon emissions through promoting less dependency on the private car. Examples include:

- Bikeability (cycle proficiency training in primary schools)
- Bike-It (cycling promotions and activities) in schools
- School and business travel planning
- Various Travelchoice campaigns/promotions (Travelchoice is the name of our sustainable travel initiative with branding)
- Electric vehicle charging posts
- Walking and cycling infrastructure improvements
- Business grant scheme (where we match-fund organisations who want to buy an electric vehicle charger, cycle shelters etc.)

Travelchoice was unsuccessful in obtaining further funding for tailored Travelchoice initiatives from the DfT (through the 2017-2020 Access fund) which has reduced its remit and is currently exploring other opportunities for funding, including the combined authority.

## **Air Quality and Planning**

Air quality is considered at the planning stage and for development control. Additionally particulate implications are also considered for individual planning applications, such as those for quarrying activities. Controlled schemes and construction management plans are also required for activities likely to generate emissions during the construction phase of developments

## **Prescribed Processes**

Regular inspections of industrial processes permitted by Peterborough City Council are made. Peterborough City Council continues to work with operators and enforce conditions to control emissions, to ensure the best available techniques are in place to reduce emissions from these installations.

## **Development of an air pollution health summary**

Public health are currently developing an air pollution summary or profile which looks at the health impact of air pollution and actions which can be taken to mitigate.

## **Other actions**

The council encourages taxi drivers not to let their engines idle through displaying no idling signage at taxi ranks and promoting the message through information given to drivers.

## Appendix 1

Pollutant	Air Quality Objective	
	Concentration	Measured as
Nitrogen Dioxide (NO <sub>2</sub> )	200 µg/m <sup>3</sup> not to be exceeded more than 18 times a year	1-hour mean
	40 µg/m <sup>3</sup>	Annual mean
Particulate Matter (PM <sub>10</sub> )	50 µg/m <sup>3</sup> , not to be exceeded more than 35 times a year	24-hour mean
	40 µg/m <sup>3</sup>	Annual mean
Indicative 2010 objectives (from the 2000 strategy and 2003 Addendum) have been replaced by an exposure reduction approach for PM <sub>2.5</sub>		
Sulphur Dioxide (SO <sub>2</sub> )	350 µg/m <sup>3</sup> , not to be exceeded more than 24 times a year	1-hour mean
	125 µg/m <sup>3</sup> , not to be exceeded more than 3 times a year	24-hour mean
	266 µg/m <sup>3</sup> , not to be exceeded more than 35 times a year	15-minute mean