

## Environmental Audit Committee – Air Quality Enquiry

### Written Submission by the Chair and Vice-Chair of the Exeter Health and Wellbeing Board, and the Portfolio Holder for Environment, Health and Wellbeing, Exeter City Council

#### Executive Summary

- Exeter City Council is concerned about the impact that air pollution is having on the population of the city.
- The main source of poor air quality in Exeter is traffic emissions.
- The Council is taking steps to reduce emissions, using the tools that it has available as a second tier (district) council.
- Future air quality is still expected to have a significant impact on the health of the local population.
- Further action by Government is recommended to reduce the impact of traffic emissions, and to give local councils the tools to take effective local action.

#### 1 Introduction

- 1.1 Exeter City Council is committed to working with our partners to improve the quality of life for all people living, working in and visiting the city. This includes commitments to<sup>1</sup>:
- Reduce car dependency and encourage walking, cycling and the use of public transport
  - Encourage lower emissions in Exeter's taxi fleet
  - Submit an Air Quality Action Plan to DEFRA and seek to increase awareness of the health impacts of poor air quality
- 1.2 The evidence for the impact of poor air quality on health is building, including respiratory and cardiovascular effects. Recent research by Public Health England<sup>2</sup> estimates that the equivalent of 42 deaths per year in Exeter can be attributed to particulate pollution alone.
- 1.3 Exeter City Council first declared five Air Quality Management Areas in 2005, because of exceedences of the annual objective level for NO<sub>2</sub>. Since then, the original areas have been combined and extended, and possible exceedences of the hourly objective have also been identified. Road transport has been identified as the most significant local contributor to the NO<sub>2</sub> problem<sup>3</sup>.

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<sup>1</sup> Exeter City Council, Corporate Plan 2012-2014.

<http://www.exeter.gov.uk/index.aspx?articleid=10038&detailid=12770>

<sup>2</sup> Public Health England, PHE-CRCE-010: Estimating Local Mortality Burdens associated with Particulate Air Pollution 2014.

<http://www.hpa.org.uk/Publications/Environment/PHECRCEReportSeries/PHECRCE010/>

<sup>3</sup> Exeter City Council, Air Quality Progress Report 2014.

<http://www.exeter.gov.uk/index.aspx?articleid=15179>

- 1.4 Significant growth is planned for the greater Exeter area, including 12,000 homes within the city and a further 13,500 within the greater Exeter area<sup>4</sup>. Accommodating this growth in a sustainable fashion will require significant effort by the City Council, and partners.

## **2 Air Pollution in Exeter**

- 2.1 Monitoring by Exeter City Council<sup>5</sup> has shown that concentrations of NO<sub>2</sub> at hotspots are over 60 µg/m<sup>3</sup>. Background concentrations of NO<sub>2</sub> in the city are around 15 µg/m<sup>3</sup>, so a reduction in the local contribution of over 50% would be required in order to achieve the EU limit value (40µg/m<sup>3</sup>). NO<sub>2</sub> concentrations in the last five years are stable, or possibly show a slight decline.
- 2.2 Exeter City Council also operates an ozone monitoring station, as part of the DEFRA network. Ozone has no local air quality objective, but there is an EU limit value. For the first time in 2013, the Exeter monitoring station recorded an exceedence of this limit value. Concentrations of ozone over the last five years are stable, or increasing slightly.
- 2.3 Peak time traffic levels in Exeter have been stable, or reduced in the last five years. This is unusual in the national context, and reflects the work that the Highways Authority (Devon County Council) have done in managing traffic in the city. Given zero or negative growth in traffic, and predicted improvements in vehicle technology, traffic pollution in Exeter would have been expected to improve significantly. This has not taken place.
- 2.4 Other than Public Health England's estimate of local mortality associated with particulate pollution, no data is available on the impact of air pollution on Exeter's population. This data is a key piece of missing evidence which would demonstrate the need for local action to reduce air pollution.

## **3 Action to Improve Air Quality in Exeter**

- 3.1 Exeter City Council's current Air Quality Action Plan<sup>6</sup> covers the period from 2011 to 2016. The Plan's four objectives are discussed below:
- 3.1.1 To describe the impact of predicted growth and existing plans on NO<sub>2</sub> concentrations within the Air Quality Management Area.
- 3.1.1.1 Current plans and policies are expected to have a low positive impact on air quality, although there is some uncertainty associated with this. This is a modest predicted change, but should be set against the background of significant

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<sup>4</sup> Exeter City Council, Core Strategy 2012. <http://www.exeter.gov.uk/CHttpHandler.ashx?id=16913&p=0>

<sup>5</sup> Exeter City Council, Air Quality Progress Report 2014.  
<http://www.exeter.gov.uk/index.aspx?articleid=15179>

<sup>6</sup> Exeter City Council, Air Quality Action Plan 2011. <http://www.exeter.gov.uk/index.aspx?articleid=15179>

development in the city and therefore significant upward pressure on emissions.

3.1.2 To identify where further improvements are required, how these could be achieved and where multiple benefits can be realised.

3.1.2.1 The Council obtained a DEFRA grant for establishing a Low Emission Strategy. This project will be completed in February 2015 and has the following strategic aims:

- a) To integrate low emission strategies into mainstream policy development for transport and planning within Exeter and to influence policy in the greater Exeter area.
- b) To reduce emissions from the Council-owned fleet and grey fleet, including by increased uptake of low emission vehicles.
- c) To work with partners in the private and public sectors to increase the uptake of sustainable transport choices, including low emission vehicles within the greater Exeter area.

3.1.2.2 The Low Emissions Strategy project started in January 2014. So far, models have been produced of current baseline emissions and emissions in 2018. These will be used to test scenarios and assess the impact of potential actions. Six stakeholder meetings and a steering group workshop have identified a range of actions which will be considered for inclusion in the final strategy.

3.1.2.3 Initial consultation on the Strategy options has begun, by means of an online survey. The Council hopes to engage with residents groups and businesses by means of targeted publicity at specific groups, as well as a general press release. This is seen as the first step in raising awareness of air pollution as a localised problem, and so the Council is seeking to obtain as wide coverage of this consultation as possible. A more detailed consultation on the draft strategy will take place later in the autumn.

3.1.2.4 In the Action Plan, the Council also commits to making closer links between air quality and climate change work, to recognise multiple benefits. The Plan also recognises the need for the negative health impacts of poor air quality to be better understood and communicated locally.

3.1.3 To provide a process for assessing the air quality aspect of the sustainability of future plans and policies.

3.1.4 To provide tools to engage local communities in air quality issues alongside wider sustainability issues.

- 3.2 Exeter City Council has already invested in its fleet, with the purchase of two electric pool cars. A bid has also been made to the Clean Vehicle Technology Fund to install Lightfoot<sup>7</sup> technology to the majority of the Council's vehicles. This technology improves driving style, to reduce fuel consumption and emissions. The manufacturer predicts reductions in NO<sub>x</sub> emissions of up to 21%.
- 3.3 Exeter City Council is currently consulting on changes to hackney carriage licenses which would require all vehicles to either be electric, or meet the Euro 6 emissions standard.

#### **4 Predicted Future Air Quality in Exeter**

- 4.1 The best estimates currently available (the Low Emissions Strategy project has not yet been completed), are that action in Exeter will have a modest positive effect on emissions<sup>8</sup>. This will not be sufficient to remove the exceedences of the NO<sub>2</sub> limit value at hotspot locations.
- 4.2 Although no exceedences of the PM<sub>10</sub> objective are predicted, the Council is still concerned about the impact of PM<sub>10</sub> and PM<sub>2.5</sub> on the health of the local population. The modest predicted reduction in emissions achieved by local action in Exeter is unlikely to significantly change the estimated 4.2% of local mortality that is attributable to particulate pollution<sup>9</sup>.
- 4.3 If expected improvements in vehicle technology deliver reductions in real world emissions, then significant improvements to local air pollution will occur. However recent trends in local pollution<sup>10</sup>, and a growing body of research suggest that these improvements are not achieved in practice<sup>11</sup>. This is caused by factors beyond the control of Exeter City Council, such as a taxation policy which has encouraged the uptake of diesel vehicles, and the fact that test cycles used for engine testing are not realistic of real world driving.

#### **5 Recommendations**

- 5.1 Exeter City Council would wish to the committee to consider the following recommendations for action by the Government.

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<sup>7</sup> <http://www.ashwoodslightfoot.co.uk/>

<sup>8</sup> Exeter City Council, Air Quality Action Plan 2011. <http://www.exeter.gov.uk/index.aspx?articleid=15179>

<sup>9</sup> Public Health England, PHE-CRCE-010: Estimating Local Mortality Burdens associated with Particulate Air Pollution 2014.

<http://www.hpa.org.uk/Publications/Environment/PHECRCEReportSeries/PHECRCE010/>

<sup>10</sup> Exeter City Council, Air Quality Progress Report 2014.

<http://www.exeter.gov.uk/index.aspx?articleid=15179>

<sup>11</sup> BBC Radio 4, Costing the Earth 26 August 2014. <http://www.bbc.co.uk/news/science-environment-28898901>

- 5.1.1 That Government fund further research into mortality and morbidity on a local level as a result of poor air quality to provide evidence for action.
- 5.1.2 That Government clarify how any European Commission fines for failing to meet the limit values might be passed on to Local Authorities.
- 5.1.3 That the Government provide greater support for local authorities in tackling air pollution, and greater resources dedicated to air pollution work, in particular:
  - 5.1.3.1 That Government implement a national framework for Low Emissions Zones that Local Authorities can implement to ensure consistency and reduce burdens on individual Local Authorities, businesses etc.
  - 5.1.3.2 That Government take urgent action to ensure that real world vehicle emissions are reduced.
  - 5.1.3.3 That Government initiate national public awareness campaigns.

Cllr Pete Edwards, Chair Exeter Health and Wellbeing Board  
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