

**Environment and Sustainable
Communities Overview and Scrutiny
Committee**



8 January 2020

Air Quality Management in County Durham

**Joint report of John Hewitt, Corporate Director of Resources and
Ian Thompson, Corporate Director of Regeneration and Local
Services**

Electoral division(s) affected:

Countywide

Purpose of the Report

- 1 To provide Members of the Environment and Sustainable Communities Overview and Scrutiny Committee (ESC OSC) with background information on progress made on the Durham City air quality action plan measures, the air quality elsewhere across the County and traffic improvements in Durham City prior to a presentation by Denyse Holman, Pollution Control Manager, David Gribben, Senior Air Quality Officer, and Dave Wafer, Strategic Traffic Manager, . Regeneration and Local Services

Executive summary

- 2 Members will recall that at the meeting of the Environment and Sustainable Communities Overview and Scrutiny Committee held on the 4 October 2018 an update was provided on the further development of the Air Quality Action Plan for Durham City and on the air quality in Chester le Street.
- 3 It was agreed by members at the meeting on the 12 July 2018 that the Environment and Sustainable Communities Overview and Scrutiny Committee would receive a further progress update as part of its 2019/2020 work programme. This update would include progress on the development of local air quality management work across the county and in particular the implementation of the Durham City Air Quality Action Plan.

Arrangements have been made for Denyse Holman, Pollution Control Manager, David Gribben, Senior Air Quality Officer and Dave Wafer, Strategic Traffic Manager to attend the meeting and deliver a presentation focusing on:

- The current position on the revocation of the Air Quality Management Area at Menceforth Cottages in Chester le Street and the extension of the Durham City Air Quality Management Area.
- The annual mean monitoring results that have been measured for consecutive years in 2016, 2017 and 2018 at sites across Durham City and at Menceforth Cottages in Chester le Street.
- An update on the progress of the implementation of the action measures detailed in the Durham City Air Quality Action Plan.
- Air quality projects that have been carried out since the previous presentation by referring specifically to the assessment of the impact of taxis on air quality and the potential for using Green Infrastructure (GI) to improve air quality across Durham City. These have both been included as new actions in the Durham City Air Quality Action Plan.
- Traffic projects that improve the traffic flow at key junctions, specifically Gilesgate and Leazes Bowl. This covers work completed in 2016 giving extra capacity on key parts of the junctions and the signals that are linked together by a system called SCOOT, which bring additional benefits when the network is not operating in its normal state. Also the potential range of projects for Durham City that are covered by a bid via the North East Transforming Cities fund.

A copy of the presentation is attached as Appendix 2.

Recommendations

- 4 That the Environment and Sustainable Communities Overview and Scrutiny Committee consider and comment on the information provided in the report and presentation.
- 5 That the Environment and Sustainable Communities Overview and Scrutiny Committee includes in its work programme for 2020/2021 a further progress update on the management of air quality in County Durham.

Background

- 6 To fulfil the requirements of the Environment Act 1995 the Council is required to carry out an annual review and assessment of air quality across the County. This involves the monitoring of levels of nitrogen dioxide, an air quality pollutant that is emitted from vehicle exhaust

emissions, at sites across Durham City and at Menceforth Cottages in Chester le Street.

- 7 The measured levels of nitrogen dioxide at monitoring sites at Queen Alexandra Cres/Sutton Street, Church Street (New Elvet) and at residential properties close to the carriageway on Gilesgate Bank in Durham City have exceeded the annual mean air quality objective ($40 \mu\text{g}/\text{m}^3$).
- 8 The measured levels of nitrogen dioxide at Nos 1 and 5 Menceforth Cottages in Chester le Street have previously also exceeded the annual mean air quality objective ($40 \mu\text{g}/\text{m}^3$). However, the levels measured over the previous 3 consecutive years (2016,2017 and 2018) have been below the level of the annual mean objective.
- 9 An Air Quality Management Area (AQMA) was declared for nitrogen dioxide across the centre of Durham City on the 9th May 2011. This extended from Highgate, through the city centre over Milburngate Bridge to the Hild and Bede roundabout and then through Gilesgate to the junction of Sunderland Road and Dragon Lane.
- 10 The boundary of the Durham City AQMA was extended in July 2014 to incorporate a section to the west following the route of the A690 to Neville's Cross and then to the Stonebridge roundabout together with incorporating sections of Claypath and New Elvet.
- 11 An Air Quality Management Area (AQMA) was declared for nitrogen dioxide that incorporated Menceforth and Glen Terrace on Pelton Fell road situated to the west of Chester le Street town centre on the 17 May 2013.
- 12 The boundary of the declared Air Quality Management Area was subsequently amended to solely include Menceforth Cottages on 25 March 2015 since the levels of nitrogen dioxide monitored at Glen Terrace were consistently well below the annual mean air quality objective
- 13 The Council adopted an Air Quality Action Plan for Durham City with fifteen action measures on 15th June 2016. The air quality action measures are targeted towards reducing the levels of nitrogen dioxide to achieve compliance with the annual mean objective ($40 \mu\text{g}/\text{m}^3$).
- 14 Following discussions with DEFRA, the Council set out an approach in the Annual Air Quality Status Report 2018 that if the monitored annual mean was below $36 \mu\text{g}/\text{m}^3$ (ten percent below the annual mean air quality objective) then the Chester le Street AQMA will be revoked.

- 15 The monitored annual mean levels of nitrogen dioxide at the sites at No 1 and No 5 Menceforth Cottages were below 36 µg/m³ in 2017 and 2018 and therefore the revocation of the Chester le Street AQMA has been progressed and will be completed early next year.
- 16 The traffic volumes in Durham City remain high which is the principle reason for the air pollution problem. This is particularly an issue with residential properties being close to the roadside, hence the AQMA. Whilst managing traffic more efficiently through the City will assist in reducing overall air pollution levels this is likely to have less impact on specific residential properties. Although traffic congestion is seen mainly during the morning and evening peak hours, traffic volumes remain relatively high throughout the day.
- 17 The approach to reducing emissions from vehicles focuses on a number of issues:
- Reducing the number of vehicles in the City.
 - Reducing congestion and improving traffic flow through the City.
 - Reducing the emissions from those vehicles which remain.

Information systems have been introduced that channel traffic information into one place (Urban Traffic Management Control-UTMC). This already includes traffic cameras and roadside signs. This will be extended in early 2020 to include more detection equipment to provide journey time and car park capacity monitoring.

- 18 The next steps are a bid via the North East Transforming Cities fund. This will potentially see investment of up to £21 million on a range of projects including:
- Walking and cycling improvements, £7.5 million.
 - Park and Ride Expansion, £4.5 million.
 - Bus Priority Measures, £0.35 million.
 - Access to Durham Rail Station, £0.2 million.
 - Durham Bus Station, £8.5 million.

Conclusion

- 19 Overview and Scrutiny Members will be aware of work currently being undertaken to manage air quality in County Durham and work planned for the future.

Background papers

-

Other useful documents

- None

Contacts:

Denyse Hollman, Pollution Control Manager

Tel: 03000 260992

David Gribben, Senior Air Quality Officer

Tel: 03000 260997:

Dave Wafer, Strategic Traffic Manager

Tel: 03000 263577

Appendix 1: Implications

Finance

There are cost implications with the implementation of the air quality improvement measures incorporated within the Durham City Air Quality Action Plan. The source of the pollution is from vehicle emissions and therefore the majority of the actions are traffic improvement measures and the capital funds required for these is yet to be determined and would need to be met from the Local Transport Planning budget or other relevant external funding streams.

There are also cost implications with the ongoing requirement to carry out monitoring of air quality pollutant (nitrogen dioxide) and 'indicators' e.g. traffic volume flow rates following the implementation of the action measures. The expansion of the existing network of monitors that measure air quality pollutants (nitrogen dioxide) is likely to be required going forward. In particular the use of further portable continuous monitors will be required to provide a daily profile of levels of nitrogen dioxide at locations where the implementation of the action measures is likely to have an impact. The portable continuous monitors were replaced in September 2016 with an upgraded specification that includes the capability of measuring particulates. The cost to cover this was £10,628 and the funding for this was sourced from the budget for the implementation of the Local Transport Plan.

Staffing

Officers in the Pollution Control Team will be required to plan and then undertake monitoring at locations across the County with a particular focus on the Durham City Air Quality Management Area. The responsibility for the implementation of the actions will involve a number of key service areas across the Council in accordance with an agreed Implementation Plan. This will require the allocation of staff resources in these sections to ensure the actions are effectively delivered and monitored.

Meetings of the Air Quality Technical Working Group will continue and progress on the implementation of the proposed action measures will be reported to the Air Quality Corporate Steering Group on a regular basis.

Consultation

The Council is legally required to consult, under Schedule 11 of the Environment Act 1995, following the completion of Local Air Quality Management projects. The requirements are to consult with statutory consultees comprising of neighbouring local authorities, DEFRA, the

Highways Authority, the Environment Agency and organisations/associations that represent business interests in areas to which the project relates.

The main purpose of previous consultation was to obtain feedback on the air quality improvement actions that have been included in the Durham City Air Quality Action Plan. Some of the actions have indirect benefits on air quality and are dependent on participation by the public such as encouraging other forms of travel to private car use. The carrying out of a campaign that highlights the importance of air quality is included as one of the action measures and this will also provide an opportunity to raise the profile of air quality across the city and therefore impact on the effectiveness of these actions.

Equality and Diversity / Public Sector Equality Duty

Local Air Quality Management focusses on improving or reducing the impacts of air quality. Therefore the completion of air quality projects and especially the implementation of the Durham City Air Quality Action Plan will have a beneficial impact irrespective of the background of the residents of the properties of the areas to which the projects relate.

An Equalities and Diversity Impact Assessment was initially prepared for the draft Air Quality Action Plan to the NSMT on 25th August 2015. This has been reviewed and updated to take into consideration the outcome of the consultation that concluded on 14th December 2015. Further reviews will be undertaken as necessary.

Human Rights

Not applicable

Climate Change

Many of the action measures in the Durham City Air Quality Action Plan that are targeted towards reducing levels of nitrogen dioxide will also be beneficial for reducing carbon emissions. This will, for example, be the case with action measures targeted on improving the emission standards of the profile of the buses operating in Durham City and by those actions that seek to encourage a shift to other modes of travel such as cycling or walking.

Crime and Disorder

Not applicable

Accommodation

Not applicable

Legal

The Council is legally required, under the Environment Act 1995, to implement the air quality improvement actions in an Air Quality Action Plan to demonstrate that it is pursuing compliance with the air quality objectives.

Risk

To fail to carry out this duty may lead to judicial proceedings being taken against the Council and/or intervention by the Secretary of State.

The UK Government is also required to comply with EU legislation and failure to do so can lead to infraction fines being imposed. Under the Localism Act 2011 all or a proportion of the fine maybe passed on to Local Authorities where there is failure to carry out its statutory duties in relation to air quality.

Procurement

It may be necessary to purchase further monitoring equipment and/or consultancy services to enable the Council to complete these projects. The purchase of further monitoring equipment or consultancy services, if required, will be undertaken in accordance with the applicable Council procurement policies and procedures.