

Emissions and Air Quality briefing for Environment Select Committee

1. Local Air Quality Management

Background

The Local Air Quality Management (LAQM) regime was introduced under the Part IV of the Environment Act 1995. Under this legislation local councils have a duty to review and assess the air quality in their area, originally against seven pollutants, focusing on locations where members of the public are likely to be exposed over the prescribed period for the pollutant objectives. These are known as relevant locations. The pollutants were reviewed in 2016 and now cover:

- Sulphur dioxide (SO₂)
- Nitrogen Dioxide (NO₂)
- PM₁₀ (and PM_{2.5} particles in relation to the Public Health Outcomes Framework)
- Polycyclic aromatic hydrocarbons (PAH)

The assessment of air quality involves a multi-stage process starting with desktop studies looking at local industrial and traffic related sources, moving to modelling and monitoring then on to review and assessment.

The main parameters of concern in the UK are nitrogen dioxide (NO₂), fine particulates (PM₁₀) and sulphur dioxide. Initial monitoring in Wiltshire is carried out using diffusion tubes which are passive NO₂ monitors. These are installed for a year in relevant locations to give an annual picture of pollution levels. Currently we monitor at around 80 sites across Wiltshire using this technique. If these show potential exceedences then further more detailed monitoring is undertaken using real time equipment. The council has a very limited number of these expensive monitors.

There are two legislative regimes on air quality which can get confused.

- a) LAQM is UK legislation placing responsibility on Local Authorities to work toward the objectives in UK air quality regulations.
- b) EU directives place responsibility for achieving Limits on national governments.

Both regimes use the same objectives and limits but there are important differences in the way the data is managed. EU limits are averaged across an area (1km²). The UK system focuses on hotspots. The Department for Environment, Food and Rural Affairs (DEFRA) is increasingly seeing Local Authorities and LAQM as a means of achieving their EU obligations.

Where a local authority identifies areas exceeding statutory limits and there is relevant public exposure it is required to declare the exceedance as an Air Quality Management Area (AQMA). It must then draw up an Air Quality Action Plan (AQAP) detailing remedial measures to address the problem.

Air Quality in Wiltshire

There are currently 8 AQMAs in Wiltshire where traffic related pollution levels exceed national standards for NO₂ in Calne, Devizes, Marlborough, Salisbury (3) and Westbury, and for NO₂ and PM₁₀ in Bradford on Avon. Work has been ongoing with local air quality groups in the affected towns and reporting through the Area Boards.

The council is required to report each year to DEFRA on progress on air quality in the Annual Status Report. The latest report for 2017 concludes that the air quality monitoring across Wiltshire has indicated a significant improvement compared to 2016 with only 8 sites showing an exceedance of the annual mean objective for nitrogen dioxide as opposed to 29 in the previous year. Some details showing these trends are included in Appendix 1.

Despite some limited improvements in national air quality the targets imposed by EU legislation have been missed and as a result the UK Government has been taken to court on a number of occasions. In response to these legal challenges the Government published the Air Quality plan for nitrogen dioxide (NO₂) in UK (2017) in July last year. The plan was designed to reduce the impact of diesel vehicles and accelerate the move to cleaner transport; however the timescales are still beyond what lobbying groups have been pressing for as demonstrated by ending sales of all petrol and diesel cars by 2040. The legislation refers to limits being met in "*the shortest possible time*" and this has been the focus of the legal challenges. There are also demands that all local authorities with AQMAs be required to establish Clean Air Zones (CAZ). There are two types of CAZ; those that encompass voluntary actions and those that introduce road charging. Locally Southampton and Bath and North East Somerset Councils are currently working on plans for CAZs in light of requirements imposed on them by DEFRA.

The Government's plan has been heavily criticised for offloading the problem on to local authorities. Whilst the plan recognises that the problem of poor air quality is a national one and that national solutions are needed, it has given little support to local councils who are responsible for delivering improvements.

Relying on councils to take the lead will deliver positive results locally, but there is the risk that this will result in regional inconsistencies when considered on the national stage. In addition there is potential for actions taken by one authority in improving air quality to have negative impacts on neighbouring councils.

Health and economic impacts

Poor air quality is the largest environmental risk to public health in the UK and results in an estimated 40,000 premature deaths a year, with evidence that it contributes to illnesses such as cancer, stroke, asthma and heart disease. Local authorities are responsible for improving the health of their residents under the Health and Social Care Act 2012.

In addition air pollution costs the UK economy (businesses and the NHS) more than £20bn per year, which is just under 16% of the current annual NHS budget of around £116bn.

Implications for Wiltshire

The legislation requires local authorities to work towards the air quality objectives; however DEFRA in the recent plan states that it is the responsibility of authorities to develop innovative proposals for their local area that will bring pollution levels within the *legal* limits in the "*shortest time possible*". Note the shift and merging of their EU legal obligations with LAs duties to work toward UK objectives. This is significantly increasing the pressure on LAs. We need to consider a wide range of options, explore new technologies in our vehicle fleet (e.g. retrofitting technologies, alternative fuels, and low emission vehicles) and seek to support the Government's industrial strategy so that we can deliver in a way that best meets the needs of our communities and local businesses.

Wiltshire is viewed by DEFRA as part of the EU South West Non-Agglomeration zone (region) which impacts on how our areas of poor air quality are prioritised on a national basis.

Direct funding from DEFRA has been restricted to the councils listed in the 2017 plan with the most severe exceedances which, while including Bath and North East Somerset and

Southampton, excludes Wiltshire Council. Not receiving the additional funding however does not exclude the council from having to deliver improvements in air quality in the eight AQMAs in the county.

In a number of our AQMAs the problem results from vehicles travelling on major through routes. This is particularly relevant in Salisbury (A36 Wilton Road trunk road), Westbury (A350 Warminster Road and Haynes Road) and Marlborough (A346).

Current position

Progress on air quality to date includes:

- Establishment of community air quality action groups in areas with AQMAs
- Publication of Wiltshire Air Quality Action Plan linking to community groups and area boards
- Dedicated air quality website with real time data
- Introduction of text alert system for poor air quality
- Active travel group
- Funding and support of car clubs
- Beat the street – Public health project with local schools
- Promotion of the Home Run phone app to reduce school run traffic
- Local Plan policies on air quality including Core Policy 55 'Air Quality', Wiltshire Core Strategy (see Appendix 2) and complimentary policies such as those relating to transport and green infrastructure.
- Bus emissions programme
- Support of Salisbury Reds in their bid for cleaner bus technology
- Tree planting schemes
- Improvements in Salisbury (e.g. park & ride sites and variable signage, Real time Bus passenger information, SCOOT traffic management system, way finding totems, cycle paths)
- Air quality identified as an issue in evolving Transport Strategy for Salisbury
- Close collaboration with Spatial planning on Air Quality and Site allocations for Chippenham.
- Electric vehicle charging infrastructure being sought through Development Control system

Other issues

2. Northacre Renewable Energy Ltd planning application for Advanced Thermal Treatment Facility

The planning application (18/03816/WCM) for an Advanced Thermal Treatment (ATT) facility was refused permission in July this year. Any operation of an ATT plant would require a permit from the Environment Agency (EA) under the provisions of the Environmental Permitting Regulations 2016, which embraces the EU Waste Incineration Directive (WID) and Industrial Emissions Directive (IED). The council is conscious that if a planning permission were to be granted environmental emissions and impacts from the gasification process and those from the ancillary waste handling activities will be governed by the conditions stipulated in that permit with regard to emissions to air, soil and water. These regulations require the operator to use the 'best available technology' to ensure that impacts from the site are minimised and are compliant with UK and EU air quality and emissions standards. This would form the principle environmental regulatory control over the site and its operations.

HGV traffic associated with any proposed such development would have the potential to increase both NO₂ and PM₁₀ and measures would be required to reduce and mitigate these impacts. In addition a scheme to address any offensive odours from any development would be required if any permission were to be granted in the future.

A new planning application (18/09473/WCM) for a proposed Advanced Thermal Treatment facility was submitted on 8 October, and is currently the subject of consultation.

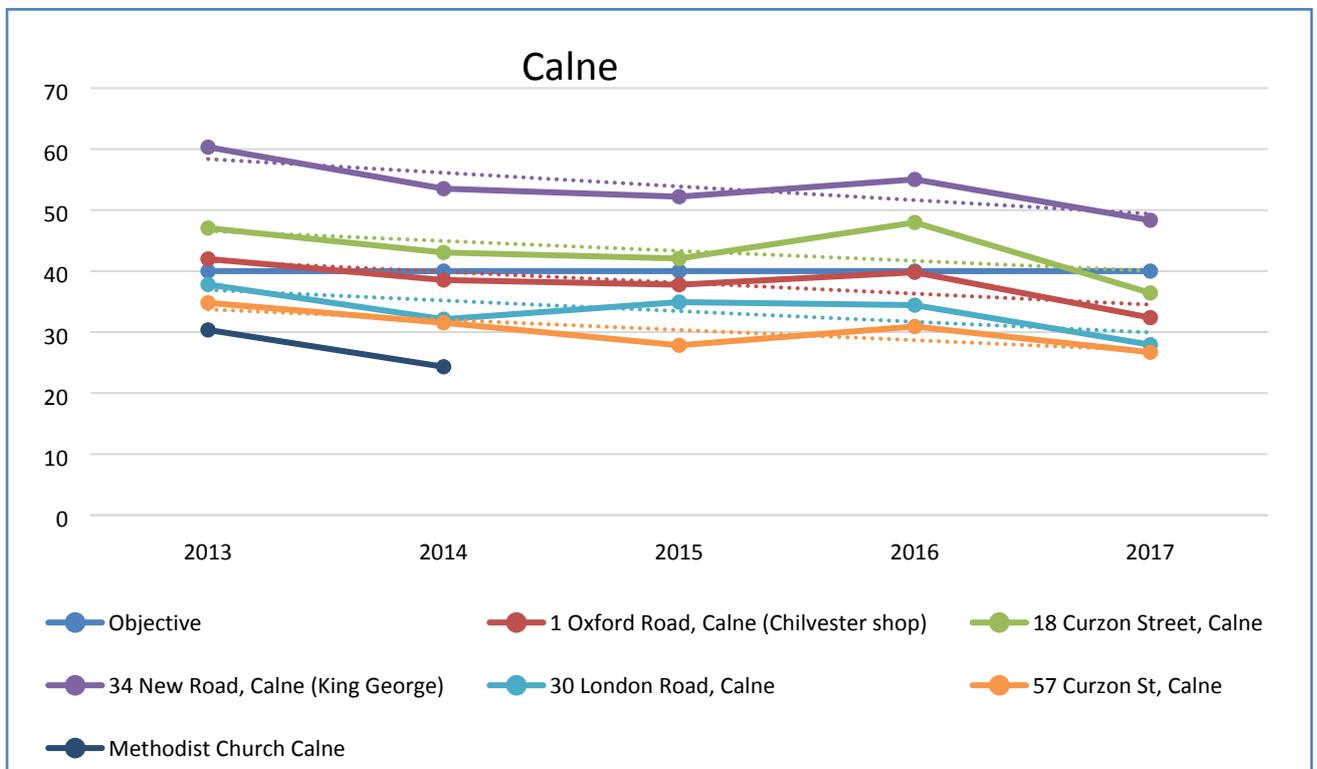
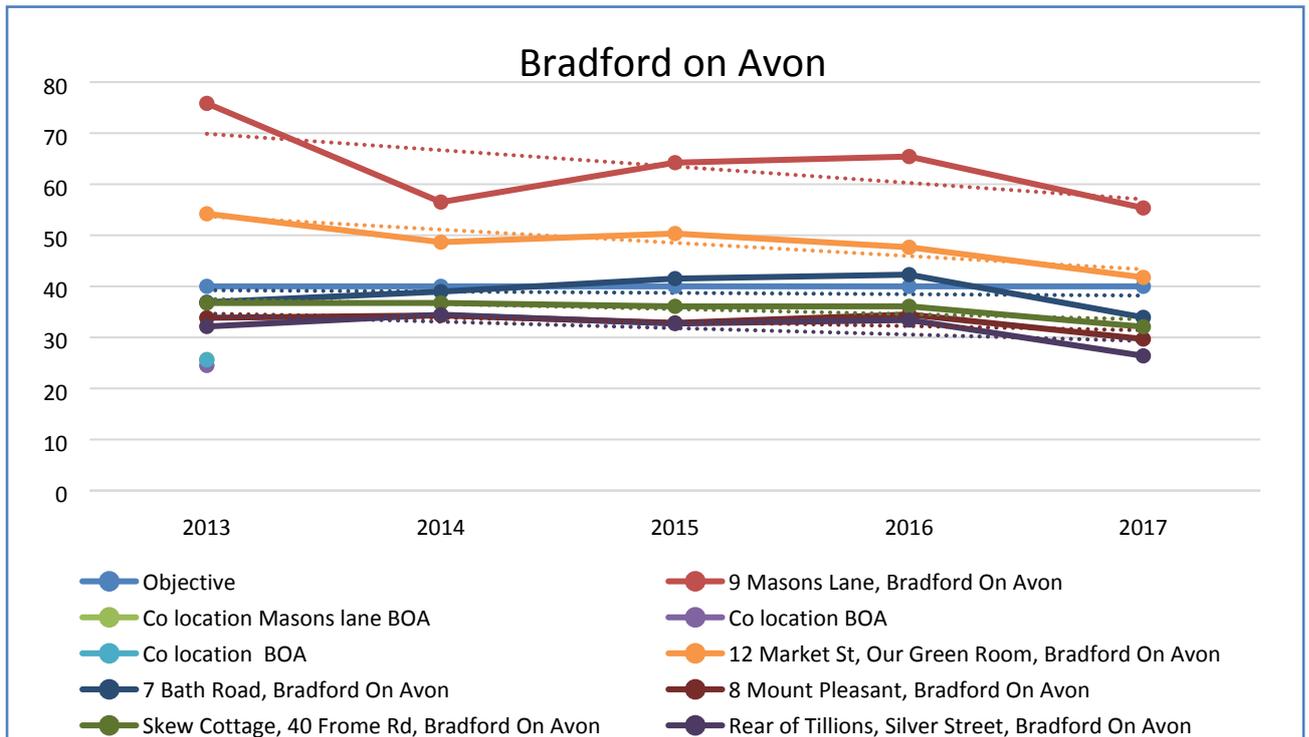
3. ECO Board

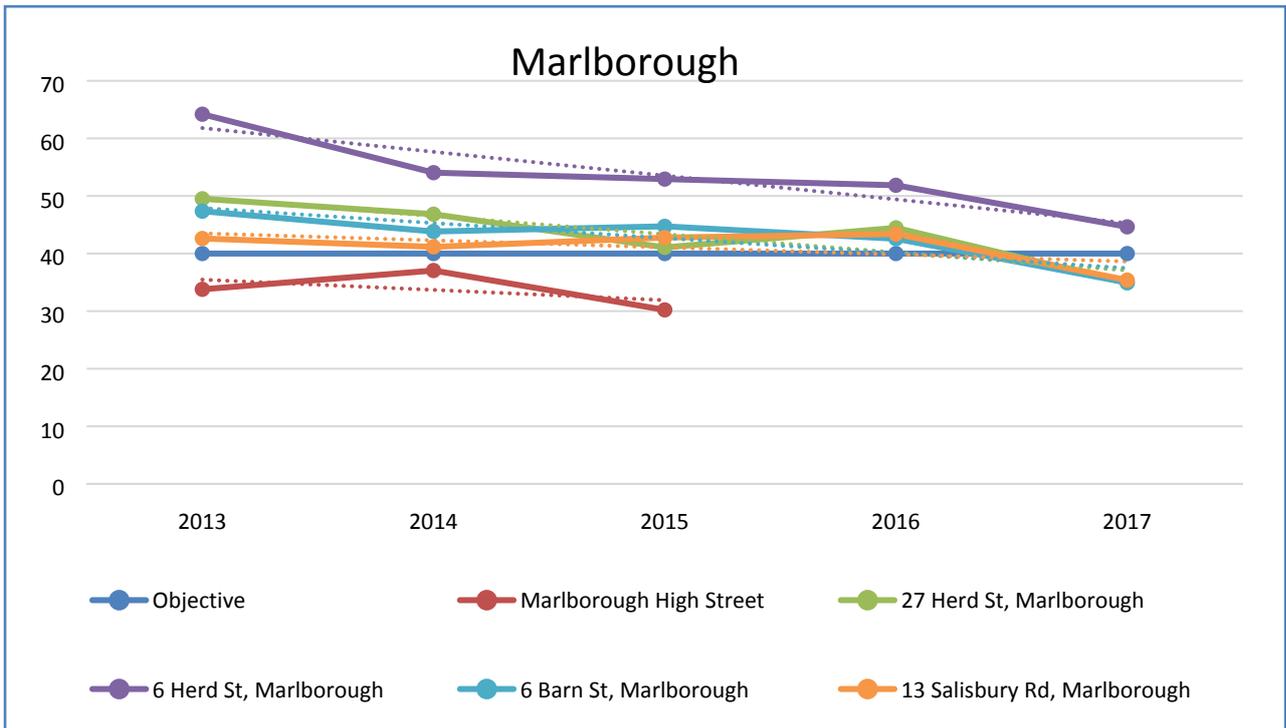
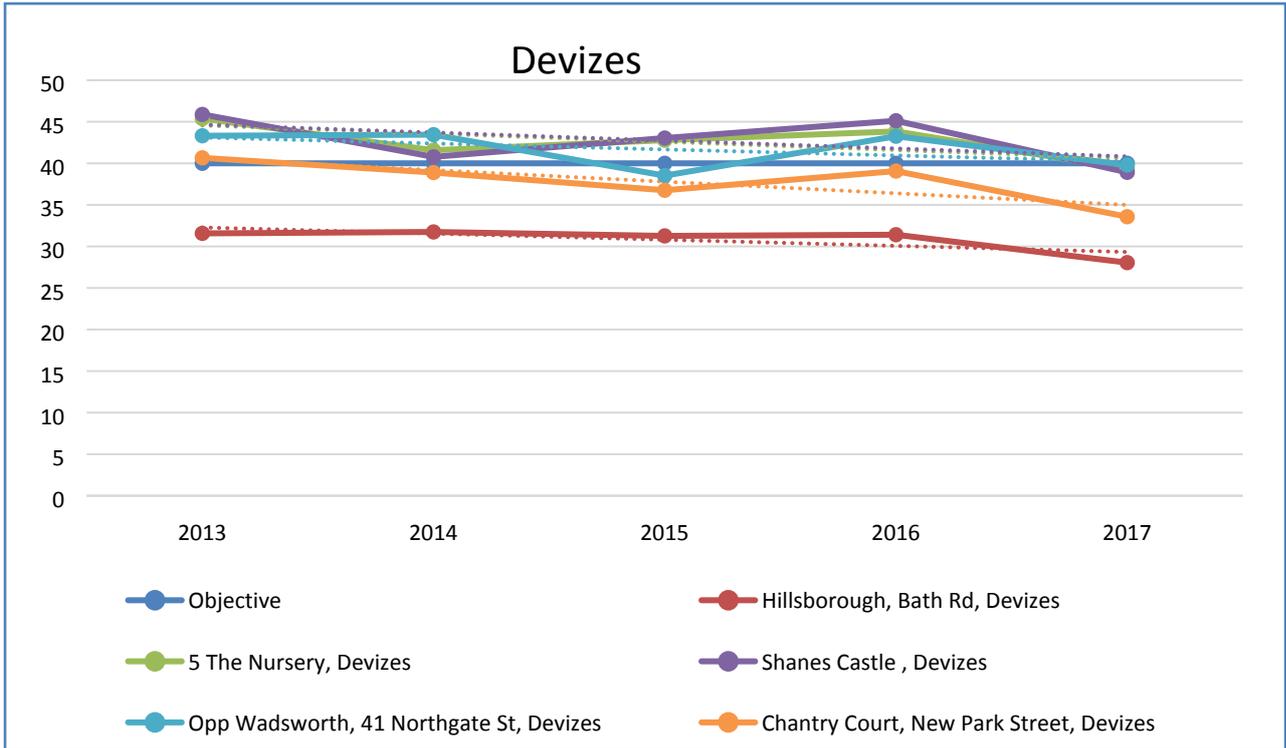
The council's ECO board considers climate change impacts across a wide range of activities. As part of its energy resilience plans the following tasks have been included in a climate local action plan:

- To implement the Wiltshire Council Travel Strategy for the three main council hubs
- Develop the Connecting Wiltshire website as a one-stop shop for sustainable travel advice
- Promote and support the use of travel plans within businesses, schools and new developments
- Promote active travel, including walking, cycling and use of public transport, through information and initiatives
- Develop sustainable transport infrastructure for cycling, walking and public transport
- Work with partners to secure funding to promote bus travel and service quality improvements
- Support the development of community-led sustainable transport initiatives
- Seek the provision of charge points through the planning system in new residential developments, retail and key employment sites
- Deliver Clean Bus Technology Fund project to implement flywheel hybrid technology on 19 existing buses

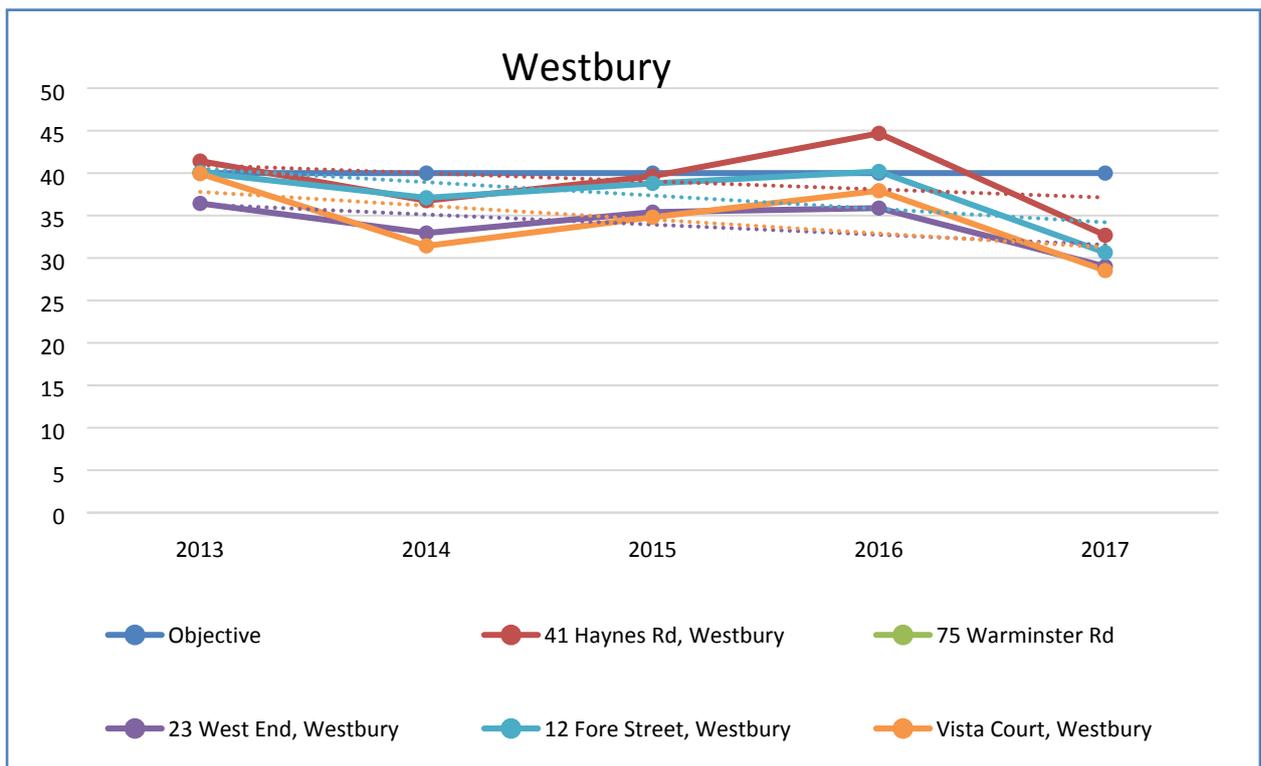
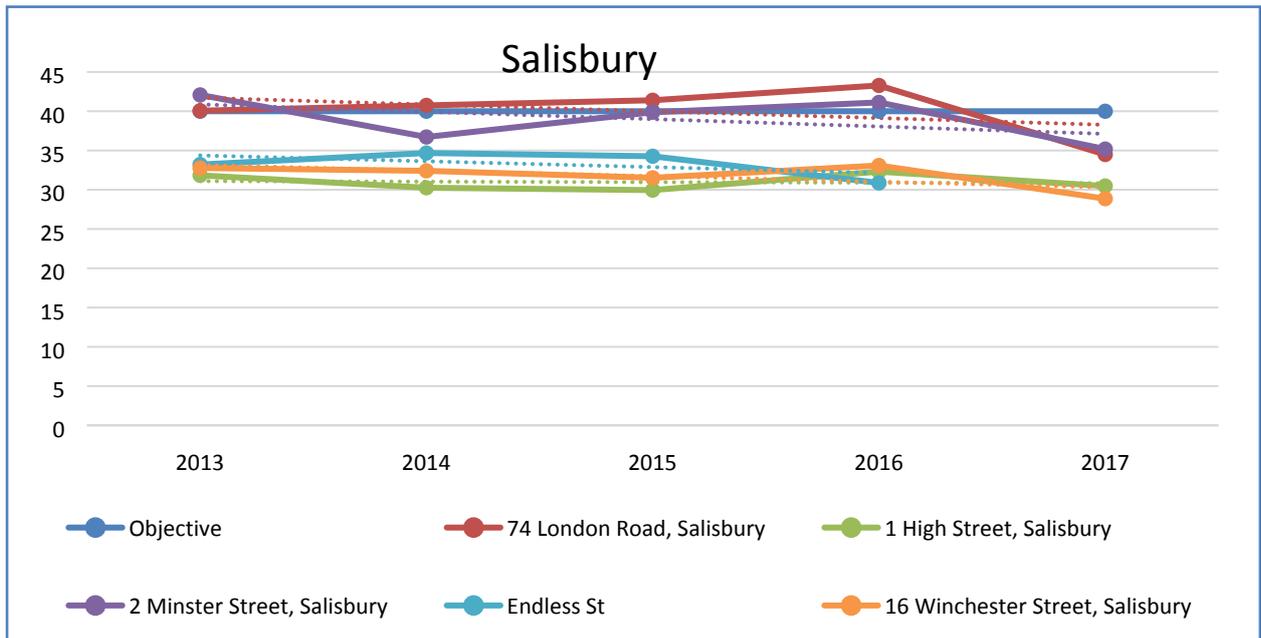
Appendix 1

NO₂ air quality monitoring trends in Wiltshire

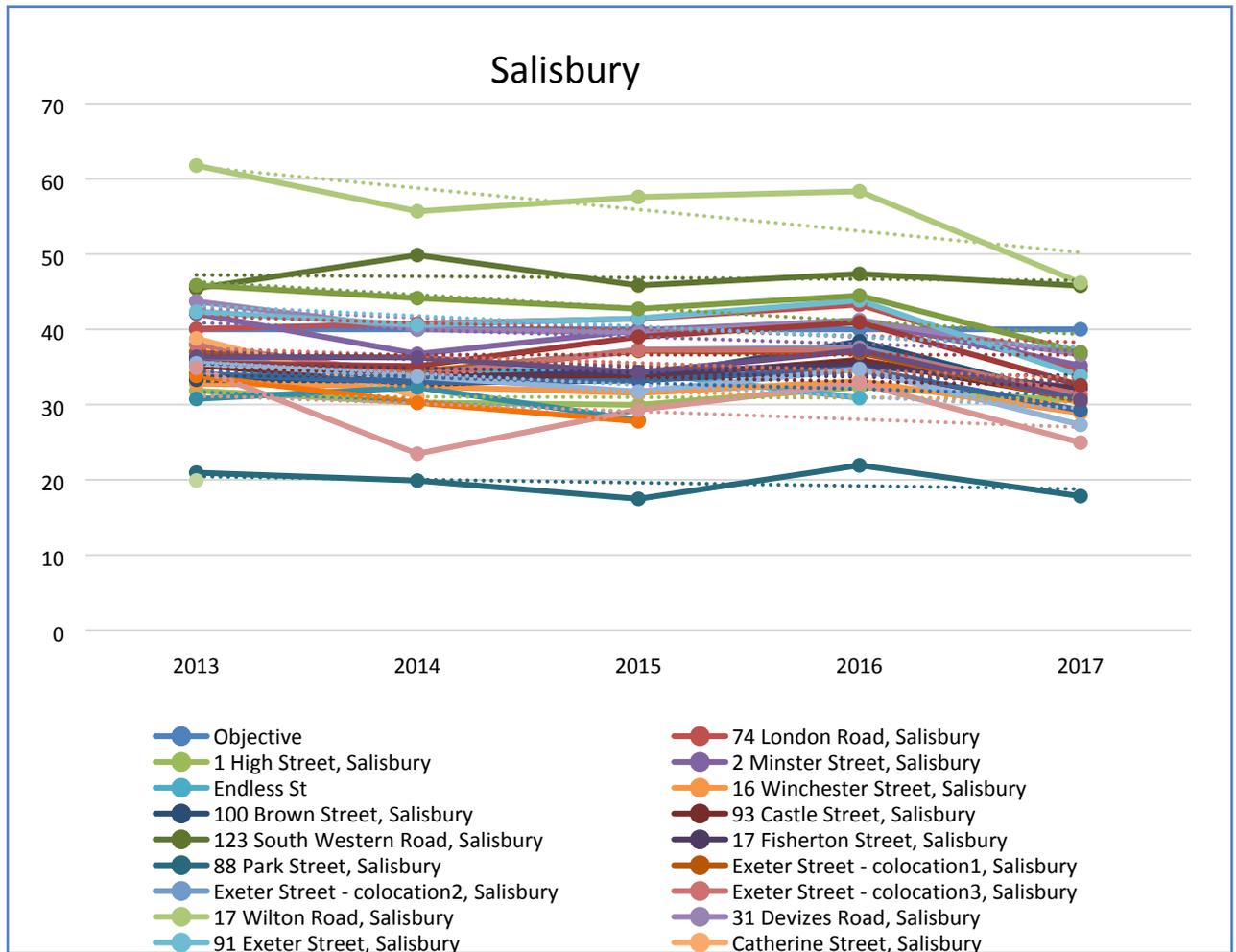




Salisbury - selected sites



Salisbury (all sites)



Appendix 2

National and Local Planning Policy Context

National Policy

Planning policies should sustain compliance with and contribute towards EU limit values or national objectives for pollutants, taking into account the presence of Air Quality Management Areas and the cumulative impacts on air quality from individual sites in local areas. Planning decisions should ensure that any new development in Air Quality Management Areas is consistent with the local air quality action plan.

(Paragraph 124, National Planning Policy Framework)

Local Plan - Wiltshire Core Strategy

Strategic Objective 5 (Wiltshire Core Strategy)

Good air quality will have been maintained and significant progress will have been made in treating areas of risk through the implementation of air quality management plans.

Core Policy 55: Air Quality (Wiltshire Core Strategy)

Development proposals, which by virtue of their scale, nature or location are likely to exacerbate existing areas of poor air quality, will need to demonstrate that measures can be taken to effectively mitigate emission levels in order to protect public health, environmental quality and amenity. Mitigation measures should demonstrate how they will make a positive contribution to the aims of the Air Quality Strategy for Wiltshire and, where relevant, the Wiltshire Air Quality Action Plan. Mitigation may include:

- i. landscaping, bunding or separation to increase distance from highways and junctions
- ii. possible traffic management or highway improvements to be agreed with the local authority
- iii. abatement technology and incorporating site layout/separation and other conditions in site planning
- iv. traffic routing, site management, site layout and phasing
- v. where appropriate, contributions will be sought toward the mitigation of the impact a development may have on levels of air pollutants.