

Climate Change, Environment and Growth Executive Advisory Panel Date 22nd November 2022

Report Title	Air Quality Review – North Northamptonshire
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Appendix 1: **NNC Air Quality Annual Status Report (ASR) 2022**

1. **Purpose of Report**

To provide a further position statement to the Climate Change, Environment and Growth Executive Advisory Panel on:

- 1.1 DEFRA's Appraisal of the 2022 submitted Air Quality Annual Status Report (ASR)
- 1.2 Update on progress of the Public Health Funding Bid and the Joint Strategic Needs Assessment (JSNA)
- 1.3 Revised Local Air Quality Management (LAQM) Statutory Policy and Technical Guidance for England

2. **Executive Summary**

- 2.1 In June 2022 North Northamptonshire Council (NNC) submitted its first ASR (Appendix 1) to DEFRA for the new unitary authority, as part of the Review & Assessment process required under the Environment Act 1995 and subsequent Regulations.
- 2.2 DEFRA determined that based on the evidence presented by NNC the conclusions reached are acceptable for all sources and pollutants and that a further ASR should be submitted in 2023. The report was highlighted as being well structured, detailed, and providing the information specified in the Guidance. Several comments designed to help inform future reports were provided and these will be implemented and taken on board for the next ASR.

- 2.3 North Northamptonshire Council do not have any declared Air Quality Management Areas (AQMAs).
- 2.4 Non-automatic (passive) monitoring of NO₂ was conducted at 100 sites during 2021. During 2021, no monitoring site exceeded the annual mean air quality objective for NO₂ of 40µg/m³.
- 2.5 As there are no AQMAs within North Northamptonshire Council no Air Quality Action Plan (AQAP) is required to be produced, however a number of measures to improve air quality have still been implemented (see para 5.1.4 below). This was commended by DEFRA and it was outlined that measures to improve air quality should continue to be developed and reported.
- 2.6 The Public Health team have been consulted on and have approved the ASR 2022 and it will soon be published on the council website once accessibility requirements have been fully met.

3. Recommendations

The Climate Change, Environment and Growth Executive Advisory Panel (EAP) is asked to support the following considerations:

- 3.1 To continue with the current arrangements of monitoring air quality in line with the National Air Quality Objectives.
- 3.2 To note the acceptance of the ASR 2022 by DEFRA and their appraisal report findings.
- 3.3 To note an update on the Public Health Funding Bid and the JSNA application.
- 1.4 To note Revised Local Air Quality Management (LAQM) Statutory Policy and Technical Guidance for England.

Reasons for recommendation

To ensure the Council continues to maintain its commitment to monitoring, reviewing and taking measures to improve local air quality, whilst at the same time using funding to implement extra projects to assist with further measures.

4. Report Background

- 4.1 NNC continues to monitor NO₂ concentrations by a network of diffusion tubes which are replaced each month and sent off to the lab for analysis. A draft consolidated ASR of all former sovereign areas was submitted to DEFRA by the deadline of 30th June 2022 (appendix 1).
- 4.2 Air quality levels are monitored through analysis of compliance against the NO₂ annual mean air quality objective of 40µg/m³. There are no AQMA's across

North Northamptonshire, due to a history of non-exceedances and subsequently there have been no AQAP's produced to date.

- 4.3 Despite not having a formal AQAP, North Northamptonshire has taken forward a number of direct measures in pursuit of improving local air quality.

5. Issues and Choices

5.1 DEFRA'S Appraisal Report

A summary of the findings of this report are as follows:

- 5.1.1 On the basis of the evidence provided by the local authority the conclusions reached are acceptable for all sources and pollutants. Following the completion of this report, North Northamptonshire Council should submit an Annual Status Report in 2023.
- 5.1.1 The highest recorded annual mean NO₂ concentration was 33.4µg/m³ occurring in Rothwell. Overall NO₂ concentrations across the local authority have been decreasing since 2017, however between 2020-2021 there were some increases and some decreases which is likely due to the effects of vehicle traffic numbers varying following the COVID-19 patterns of lockdown and easing of restrictions Overall data capture was good for all monitoring locations in 2021, with only one monitoring location requiring annualisation.
- 5.1.2 The diffusion tube mapping is comprehensive and clearly demonstrates the monitoring network. The ASR provides a clear breakdown of historical data (and maps) of each monitoring site. Trends are clearly presented and discussed and a robust comparison with air quality objectives is provided.
- 5.1.3 The report contains only a small amount of discussion on existing measures to improve air quality that would also act to reduce PM_{2.5} emissions. It is considered that many of the measures implemented or proposed will help to reduce PM_{2.5} emissions however these are not discussed in detail within the required section. Future ASR's should include additional measures and link to the climate change strategy and transport plan to review measures that have the potential to improve PM_{2.5} emissions.
- 5.1.4 Despite there being no AQMAs within North Northamptonshire Council and as such no AQAP produced, a number of measures to improve air quality have still been implemented. These measures derive from the Northamptonshire Transportation Plan (2012) and the Northamptonshire Climate Change Strategy (2020-2023). Some of the key measures include, promoting transport alternatives, low carbon vehicles promoted through taxi age policy, company vehicle procurement scheme, the Voi Scooter project expanding electric scooter use which between April 2021 and March 2022 replacing 244,081 car trips In addition, East Northamptonshire Greenway Project is ongoing to create walking

and cycling routes and new planning applications are directed by the requirements of the EMAQN 'Air Quality and Emissions Mitigation - Guidance for Developers'.

5.1.5 The additional report containing a review of LAQM within the former administrative areas of Corby, East Northamptonshire, Kettering and Wellingborough is provided. Future ASR's should address these recommendations which include extending the network, inclusion of particulate monitoring and continuing to develop measures to improve air quality. Additional monitoring should be employed on Silver Street, Wellingborough. Alternatively there are a number of monitoring locations where NO₂ concentrations have consistently been below the annual mean objective, these monitoring locations could instead be relocated to areas of greater concern.

5.2 Public Health

5.2.1 A successful bid was submitted for Public Health funding and a grant of £80k was awarded for two Air Quality Project Officers to undertake project work to improve air quality across North Northamptonshire, by carrying out a package of different measures/innovations. The Environmental Protection Team are finalising details relating to monitoring and sustainability, prior to the grant being implemented. It is hoped that the project officers will be in post by the end of the financial year. The Air Quality Project Officers will actively work to improve the air quality within North Northamptonshire by working with the Environmental Protection Team, Planning, Highways and Public Health Colleagues in addition to external agencies by:

- Working with internal and external partners to publicise more sustainable methods of travel including walking, cycling, e-scooters/bikes.
- Source and utilise any grant funding available to work with the local taxi trade to switch to electric vehicles and encourage other stakeholders to look at early replacement of diesel taxis with electric and hybrid alternatives.
- Work closely with Highways to collect better monitoring data from traffic flows and wider air quality monitoring beyond current NO_x tube network to allow better targeting of activity. Look at strategies such as those pertaining to buses.
- Produce future bids for DEFRA air quality grant work.
- Conduct work on The Air Quality (Domestic Solid Fuel Standards) (England) Regulations in association, to work on any new PM_{2.5} objectives as a result of legislative introductions.

- Raise more awareness via national campaigns and working with education to campaign against idling at schools and through events such as National Clean Air Day. Engage with School Streets campaign, to promote traffic/emission free zones around schools and promote walking children to school, especially in built up areas. Encourage employers/businesses to adopt Cycle2Work schemes, promote cycling through Cycling Northants, improve cycling signage and networks. Look into enhanced street cleaning practices to reduce particulate matter present on busy streets.
- Survey of all industrial sites to identify any new or existing units that may require an Environmental Permit under the Environmental permitting regime, e.g. paint sprayers & waste burners.
- Review of existing Smoke Control Areas and consider implementing further areas in light of an increased use of solid fuel burners and assessment of poorer economic areas to determine if there is an increase in solid fuel burning in light of increases in energy/gas prices.
- Liaise with Planning for the adoption of the East Midlands Air Quality Network document as a North Northamptonshire Council Supplementary Planning Document (SPD).

5.2.2 Environmental Protection are continuing to work with colleagues in WNC and the Public Health team in terms of JSNA and the Integrated Care Partnership ICP Emerging outcomes framework and proposed local area partnerships to ensure that the importance of air quality as a determinant of health is recognised. A JSNA is a process that looks at the current and future health, care and wellbeing needs of Northamptonshire residents to inform and guide the planning and commissioning of health, wellbeing and social care services. The JSNA uses the Healthy Assets and Hazard Index (AHA) as a way of looking at the impact of air quality (AQ). AQ is recognised as a JSNA health determinant based on AQMA'S. It has been recommended to public health that compliance with the national air quality objectives/limits could be assessed, as a determinant with the caveat that the limits do not as yet recognise the importance of particulate matter but that this is changing as a result of the Environment Act 2021. It was also recommended to include the existing DOI – mortality from particulate matter already in the Public Frameworks indicator.

Environmental Protection

5.3 LAQM Policy and Technical Guidance

5.3.1 In August DEFRA published a revised Local Air Quality Management (LAQM) Statutory Policy Guidance document for England (attached). This guidance sets out what local authorities should do and the legal duties with which they must comply to improve local air quality. The document was produced following a consultation process which ran for 10 weeks until 6th June 2022. This is the first update to the LAQM policy guidance since 2016.

5.3.1 The revised policy guidance reflects the strengthened LAQM framework provided for by Schedule 11 of the Environment Act 2021 (the Act) which enables local authorities to take more effective, co-ordinated actions to achieve their air quality objectives and deliver improvements to public health. The review also includes the introduction of new areas for local authority consideration, which reflect new research, policies and priorities in the field of local air quality these include air quality disparities, community engagement, air quality and climate change.

5.3.2 An updated version of the LAQM Technical Guidance has also been produced which corresponds to updates in the policy guidance. Key updates relevant to NNC include:

- An updated study on assumptions for exceedances of short term NO₂ objectives has affirmed that at concentrations above 60 µgm³ as an annual average, there is the potential for exceedances of the 1-hour objective.
- From 2023 in England, local authorities are required to produce an Air Quality Strategy where they have declared no AQMA's. It is proposed that the air quality project officers will commence work on the NNC Air Quality Strategy once in post.
- The Act introduces the concept of 'Air Quality Partners' – including neighbouring local authorities and the Environment Agency as well as designated 'relevant public authorities'.
- The designation of National Highways as a 'relevant public authority' – it is aimed to lay the designation in Autumn, this will require the National Highways to collaborate with local authorities to improve air quality – becoming an 'air quality partner' where locally relevant.
- There is no target for PM currently, though it is recognised that this is as important as PM and NO₂. The Environment Act 2021 requires that a limit for PM_{2.5} is set, and there has just been a consultation on how this will be achieved. There are 2 suggestions:
 1. Annual Mean Concentration Target ('concentration target') – a target of 10 micrograms per cubic metre (µg m⁻³) to be met across England by 2040

2. Population Exposure Reduction Target ('exposure reduction target') – a 35% reduction in population exposure by 2040 (compared to a base year of 2018)

It is proposed that this can either be managed nationally by DEFRA by a combination of monitoring through the national (Automatic Urban and Rural Network) AURN monitoring stations and modelling or that this is undertaken by local authority, the former is viewed to be the preferred option. PM monitoring and modelling is resource intensive, the equipment and software is expensive, most local authorities do not undertake this currently and requires technical expertise.

6 Implications (including financial implications)

6.1 Resources and Financial

- 6.1.1 A small number of officers within the Environmental Protection teams across Regulatory Services, are trained and equipped to carry out air quality monitoring assessments. An Air Quality consultant is paid annually to analyse all the data from each sovereign area and to write and produce the Annual Air Quality Status Report. Accordingly, no additional resources or finances are required for the work that is carried out, but additional staffing resources via the two public health funded Air Quality Officers will assist the team to progress, implement and maintain measures and actions to address local air quality.

6.2 Legal

- 6.2.1 The Council must continue to meet its requirements under Part IV of the Environment Act 1995.

6.3 Risk

- 6.3.1 There are no significant risks to note arising from the proposed recommendations in this report, but to do nothing places the Council at risk of not meeting the requirements of the Environment Act 1995, reducing air quality and therefore increasing the likelihood of an AQMA being declared.

6.4 Consultation

- 6.4.1 Internal Officer consultation has taken place to inform the drafting of this report and its recommendations. There is no legal requirement upon the Council to undertake any form of formal consultation in respect of air quality, but the council will continue to raise awareness of local air quality through wider engagement and education.

6.5 Climate Impact

- 6.5.1 It is considered that the implementation of the recommendations would have a positive impact on climate change. To ensure the Council have no potential AQMA's in the future, it is recommended that monitoring is continued.

6.6 Community Impact

- 6.6.1 It is considered that there are no community impacts associated with this report. LA's may however be asked to prioritise actions to ensure that they are maximising the beneficial impact on vulnerable groups/those at higher risk of poor air quality, with a policy area under the National Air Quality Strategy assessing air quality disparities.

7 Background Papers

- 7.1 North Northamptonshire Council Annual Status Report 2022
- 7.2 DEFRA Appraisal Report
- 7.3 AECOM Review Report 2022
- 7.4 Local Air Quality Management PG(22)
- 7.5 Local Air Quality Management TG(22)
- 7.6 Local Air Quality Public Health Funding Bid