



Tuesday, 10 December 2024

Report of Councillor Rhea Rayside -  
Cabinet Member for People &  
Communities

## Air Quality Annual Update

### Report Author

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### Purpose of Report

To provide the Annual Air Quality Status Report (ASR 2024) and to provide an update on the Air Quality Action Plan (AQAP) as part of the Air Quality Management Area (order No.6) (AQMA).

### Recommendations

#### The Committee is recommended to:

1. Note the content of Annual Air Quality Report (ASR 2024).
2. Note the update on the status of the Air Quality Action Plan (AQAP).

### Decision Information

Does the report contain any exempt or confidential information not for publication? No

What are the relevant corporate priorities? Sustainable South Kesteven

Which wards are impacted? All Wards

## **1. Implications**

Taking into consideration implications relating to finance and procurement, legal and governance, risk and mitigation, health and safety, diversity and inclusion, safeguarding, staffing, community safety, mental health and wellbeing and the impact on the Council's declaration of a climate change emergency, the following implications have been identified:

### ***Finance and Procurement***

- 1.1 There are no specific financial implications arising from this report.

*Completed by: Richard Wyles, Deputy Chief Executive and s151 Officer*

### ***Legal and Governance***

- 1.2 The Council's legislative requirements and responsibilities are set out in the body of the report. The report is for noting and there are no significant legal or governance implications of the Council.

*Completed by: Graham Watts, Monitoring Officer*

### ***Climate Change***

- 1.3 South Kesteven District Council previously declared an Air Quality Management Area which primarily relates to the exceedance of Nitrogen Dioxide (NO<sub>2</sub>), one of the numerous greenhouse gases contributing to the acceleration of climate change. The principal source of NO<sub>2</sub> derives from high-temperature combustion processes such as road transport and associated traffic emissions. Actions included within the Air Quality Action Plan seek to limit the need to travel and to reduce the overall level of vehicle traffic in Grantham. This will have the simultaneous impact of reducing carbon emissions while improving public health.

*Completed by: Louise Case, Sustainability Project Support Officer*

## **2. Background to the Report**

- 2.1 Under the Environment Act 1995 and the associated Local Air Quality Management Framework, local authorities have a duty to review and assess air quality against National Air Quality Standards. When a pollutant fails to comply with an objective and there is relevant public exposure, an Air Quality Management Area (AQMA) must be declared and an Air Quality Action Plan (AQAP) prepared, detailing measures which will be implemented to improve air quality in the designated area.

2.2 Local air quality in South Kesteven is managed via an extensive diffusion tube monitoring network comprising fifty-eight passive Nitrogen Dioxide (NO<sub>2</sub>) diffusion tubes at thirty five separate locations (some have triplicate/duplicate tubes at one location). The diffusion tube network is used to monitor NO<sub>2</sub> concentrations across the District, identify potential new areas of concern and monitor at known hotspot areas. Tubes are located in Stamford and Grantham, in addition to a recent three month set of tubes in Bourne. These tubes are used to monitor the annual mean objective of 40µg/m<sup>3</sup> of NO<sub>2</sub>.

### **Grantham Air Quality Management Area (AQMA) and Air Quality Action Plan (AQAP)**

2.3 South Kesteven District Council declared an AQMA in 2013 encompassing the main roads in the town centre of Grantham (see Appendix 1). The main pollutant of concern is NO<sub>2</sub>, which is largely attributable to road transport emissions, with cars being the dominant source within the AQMA.

2.4 The Air Quality Strategy Objectives for England pertinent to the current AQMA designation are as follows:

- NO<sub>2</sub> annual mean objective of 40µg/m<sup>3</sup>
- NO<sub>2</sub> 1 hour mean objective of 60µg/m<sup>3</sup>

2.5 When an AQMA is in place, an Air Quality Action Plan (AQAP) is required to be produced every five years. The last AQAP (for the AQMA in Grantham) was approved in 2016 and needs updating as part of the legislative requirements. To meet this requirement an updated AQAP has been drafted and was previously considered by the Environment overview and scrutiny Committee in February 2024. The final version of the AQAP is included in Appendix 2. The AQAP is currently out for the statutory consultation period prior to final submission to The Department for Environment, Food and Rural Affairs (DEFRA) and cabinet for Approval.

2.6 Implementation of the actions contained within the existing AQAP are monitored as part of an Annual Air Quality Status Report (ASR) (Appendix 3) which the Council is required to produce.

### **Annual Status Report (ASR 2024) for the District**

2.7 The 2024 ASR contains monitoring data from 2023 and trends relating to data captured (Appendix 3)

2.8 The 2024 ASR has identified that during 2023 there were no exceedances of the 1 hour mean objective when using annual mean as a proxy for hourly mean. This is a positive and supports the overall improvement in air quality.

2.9 The ASR reports that there is compliance with the annual mean objective for nitrogen dioxide NO<sub>2</sub> at all fifty eight passive monitoring tubes across the thirty-five monitoring locations. This is a continuing trend since 2019.

2.10 The highest reported concentration of NO<sub>2</sub> was at diffusion tube monitoring location SK33,34 which is located on A607 Manthorpe Road, Grantham which was within 10% of exceedance . It has shown an overall decline in concentrations between 2022- 2023 at this site in comparison to the previous years data.

2.11 Within the 2024 ASR, Figure A.1 to Figure A.4 presents graphs showing the annual mean NO<sub>2</sub> concentrations between 2019 and 2023. The graphs demonstrate a general trend of reduction of NO<sub>2</sub> over this five year period. The significant decreases in 2020 are likely to be attributed to changes in behaviour due to Covid-19 restrictions impacting on travel.

2.12 Within the ‘conclusions and priorities’ section of the 2024 ASR report it recommends that the Council continue to use the passive monitoring network to monitor air quality levels, and to ensure that compliance is maintained throughout the District. The report recommends two key priorities (in order to comply with the AQS objectives): : -

- Continue passive monitoring within the AQMA to ensure the NO<sub>2</sub> concentration remains below 40 µg/m<sup>3</sup>
- Continue to consider amending AQMA No.6 to remove the pollution declaration of 1- hour NO<sub>2</sub> mean exceedances and potential revocation of the AQMA’.

2.13 The LAQM Policy Guidance 22 identifies that Authorities that wish to reduce or revoke an AQMA must demonstrate that air quality objectives are being met and have confidence that the improvements will be sustained. It advises that long term, rather than short term, compliance should be considered.

2.14 Given that monitoring site SK33,34 is within 10% of exceedance and is demonstrating a decline in levels from the previous years it is still uncertain as to whether the trend will continue in the future due to the delay in the completion of the Southern Relief Road. It is not recommended that the AQMA be revoked in its entirety at present, but consideration should be given to revoking the NO<sub>2</sub> 1-Hour objective.

2.15 In summary the 2024 ASR demonstrates a overall continual improvement in the levels of NO<sub>2</sub> across the district which is a positive but it is recommended that it is still premature to consider revocation of the AQMA in its entirety.

### **3. Key Considerations**

- 3.1 Overall, the general trend shows that concentrations of NO<sub>2</sub> are decreasing, with all sites being below both the hourly and annual objective levels. However, monitoring location SK33, 34 is still within 10% of exceedance of the annual objective.
- 3.2 There are no recorded exceedances of the hourly mean objective for nitrogen dioxide, when using annual mean as a proxy for hourly mean. Exceedances of this objective have not been observed for over 7 years, therefore an amendment for this particular objective within the AQMA may be appropriate.
- 3.3 If the Council was to amend the AQMA Order No. 6 to remove the pollution declaration of the 1-hour NO<sub>2</sub> mean, the annual mean requirement would remain and the diffusion tube monitoring network would continue to be monitored.
- 3.4 An updated AQAP (for the AQMA in Grantham) is in the final stages and will be submitted to DEFRA in December ensuring that the Council is compliant in its requirements.
- 3.5 The NO<sub>2</sub> monitoring data for 2024 will be reported in the ASR for 2025 next year.

### **4. Other Options Considered**

- 4.1 None as the report is for noting only.

### **5. Reasons for the Recommendations**

- 5.1 To provide an overview of the current NO<sub>2</sub> levels within the district against the national air quality objectives.
- 5.2 To provide a progress update regarding the AQAP (which relates to the AQMA in Grantham) to ensure compliance with the legal requirements.

### **6. Background Papers**

- 6.1 The Local Air Quality Management – P22 Guidance:  
[LAQM-Policy-Guidance-2022.pdf](https://www.gov.uk/government/publications/local-air-quality-management-p22-guidance)
- 6.2 [Environment Overview and Scrutiny Report February 2024](https://www.gov.uk/government/publications/environment-overview-and-scrutiny-report-february-2024)  
Draft Air Quality Action Plan

### **7. Appendices**