



**SOUTH  
KESTEVEN  
DISTRICT  
COUNCIL**



Environment Overview and Scrutiny  
Committee

Date: 23 November 2022

Report of Councillor Annie Mason  
Cabinet Member for People and Safer  
Communities

## Annual Air Quality Status Report

### Report Author

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### Purpose of Report

To provide the Annual Air Quality Status Report (ASR 2022) and to propose that a review of Air Quality Management Area No.6 (AQMA) is considered to remove the pollution declaration of 1-hour NO<sub>2</sub> mean exceedances, through an amendment to the AQMA order.

### Recommendations

That the Environment Overview and Scrutiny Committee:

1. Note the content of the Annual Air Quality Status Report (ASR 2022).
2. Recommend to the Cabinet Member for People and Safer Communities, that public consultation be undertaken to consider reviewing the existing Air Quality Management Area (Order No.6) (AQMA) to remove the pollution declaration of 1-hour NO<sub>2</sub> mean exceedances through an amendment to the AQMA Order.

## Decision Information

Is this a Key Decision?	<b>Yes</b>
Does the report contain any exempt or confidential information not for publication?	<b>No</b>
What are the relevant corporate priorities?	<b>Clean and sustainable environment</b>
Which wards are impacted?	<b>All</b>

## 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 The Council's current air quality monitoring and reporting programme is carried out within existing budgets which are reviewed annually.

Richard Wyles, Chief Finance Officer

### Legal and Governance

- 1.2 The Local Air Quality Management ("LAQM") regime was introduced by the Environment Act 1995. The Council's duties under the Environmental Act 1995 are mandatory. The duties imposed on the Council are, to review air quality from time to time and, under Part IV of the Act, to develop and implement an air quality action plan to tackle air pollution.
- 1.3 Under the Environment Act 1995, local authorities are not under a duty to revoke an Air Quality Management Area once the air quality objectives have been met. The Act gives local authorities the discretion to revoke if as a result of a review it appears to them that air quality objectives are likely to be met.

Reviewed by Graham Watts, Assistant Director of Governance and Deputy Monitoring Officer

### Equality Impact Assessment

- 1.4 An equality impact assessment will be completed following public consultation.

## Climate Change

- 1.5 South Kesteven District Council's declared an Air Quality Management Area which was primarily relates to the exceedance of Nitrogen Dioxide (NO<sub>2</sub>), one of a number of greenhouse gases contributing to an accelerated changing climate. The principal source of NO<sub>2</sub> derives from the volume of vehicle traffic travelling through the centre of Grantham. Actions included within the Air Quality Action Plan which seek to reduce the need to travel and to reduce car traffic overall will have a simultaneous impact of reducing carbon emissions.  
Reviewed by Serena Brown, Climate Change 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 South Kesteven District Council declared an AQMA in 2013 encompassing the main roads in the town centre of Grantham (see Appendix 1, figure 2). The main pollutant of concern is Nitrogen Dioxide (NO<sub>2</sub>), which is largely attributable to road transport emissions, with cars being the dominant source within the AQMA.
- 2.3 Local air quality in South Kesteven is managed via an extensive diffusion tube monitoring network comprising fifty-eight passive 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.
- 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 200µg/m<sup>3</sup> not to be exceeded more than 18 times a year.
- 2.5 An Air Quality Action Plan (AQAP) (see Appendix 2) was approved in 2016 and since then progress has been made against the identified measures. Implementation of the actions is monitored as part of an Annual Air Quality Status Report (ASR) (Appendix 3) which the Council is required to produce. The 2022 ASR a contains monitoring data from 2021 and trends relating to data captured.
- 2.6 The 2022 ASR has identified that during 2021 there were no exceedances of the 1 hour mean objective when using annual mean as a proxy for hourly mean, this has

- been consistent for the last 5 years. The Department for Environment, Food and Rural Affairs (DEFRA) Local Air Quality Management Policy Guidance 22 (LAQM) suggests that for revocation to be considered, Local Authorities should demonstrate that air quality objectives are being met and be confident that the improvements will be sustained. Typically, this is after at least 3 years compliance and representative of long-term trends.
- 2.7 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 is also reported and has been consistent for the last two years.
- 2.8 The highest reported concentration of NO<sub>2</sub> was 36.6µg/m<sup>3</sup> at diffusion tube monitoring location SK33,34 which is located on A607 Manthorpe Road, Grantham. It has shown an overall decline in concentrations between 2020- 2021 at this site.
- 2.9 Within the 2022 ASR, Figure A.1 to Figure A.3 presents graphs showing the annual mean NO<sub>2</sub> concentrations between 2017 and 2021. The graphs demonstrate a general trend of reduction of NO<sub>2</sub> over this 5 year period. The significant decreases in 2020 are likely to be attributed to changes in behaviour due to Covid-19 restrictions impacting on travel.
- 2.10 The 2022 ASR recommends within the '*conclusions and priorities*' section of the report 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'.
- 2.11 The 2022 ASR has been appraised by Food DEFRA. The full response is provided with Appendix 4 of this report. Within DEFRA's response the feedback identifies that the overall trend is decreasing concentrations of NO<sub>2</sub> at those monitored locations, however, there has been a slight increase observed in concentrations from 2020 to 2021, as traffic levels within the area are starting to return to pre-pandemic levels.
- 2.12 Whilst there is a gradual reduction in NO<sub>2</sub> emissions noted over the last five years, there are 3 sites within the AQMA which have only been under the objective levels for the last 2-3 years, this includes 2020 where results are not considered typical. In accordance with LAQM Policy Guidance 22, there would need a significant downward trend in concentrations and certainty that these could be sustained in the future. for the full revocation of the AQMA to be considered. In this case, there is some uncertainty in future year concentrations due to the delay in the completion of the Southern Relief Road. However, the long term and continuing compliance with

the 1hour objective indicates that this element of the Order could be considered for potential revocation.

- 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.

### **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, there has been a slight increase observed in the concentrations from 2020 to 2021, as traffic levels within the area are starting to return to pre-pandemic levels.
- 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 predicted for over 5 years, therefore an amendment for this particular objective within the AQMA may be appropriate.
- 3.3 With or without the AQMA declaration amendment, the AQMA Action Plan will require updating to remove completed measures, review the remaining measures and consider whether any new measures are required. It is anticipated that this will be completed following the decision on any variation of the existing Order.
- 3.4 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.

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

- 4.1 To continue with the existing AQMA Order No.6 without amendment.
- 4.2 Revoke the AQMA in its entirety.

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

- 5.1 The 2022 ASR identifies that the general trend shows that concentrations of NO<sub>2</sub> are decreasing in the AQMA. The 1 hour mean has been predicted to be below the air quality objective for the previous 5 years and the Council can therefore be reasonably certain that this will not be exceeded in the future. All sites have only been below the annual mean air quality objective since 2020. Although levels are declining, the impact of Covid-19 on travel is likely to have resulted in a “low pollution year” as the 2022 report showed a slight increase in measured levels during 2021. Monitoring of several more years is required to give confidence that that reduced annual mean levels can be sustained.

## **6. Consultation**

- 6.1 The Local Air Quality Management (LAQM) P22 Guidance details the process to be followed. Where an Order is amended a copy of the revocation or amendment Order should be submitted to DEFRA and other statutory consultees and made publicly available to ensure the public and local businesses are aware of the situation.
- 6.2 It is expected that the local authority will take the relevant action imposed by the Order within four months following receipt of comments from Defra.
- 6.3 It is expected that the Council will inform and consult with residents living within/ in close proximity to the AQMA on any proposed amendments to an AQMA order. Amendments to the AQMA order are required to be notified in the local press.
- 6.4 In addition to local consultation with residents, Schedule 11 of the Environment Act 1995 requires that the following persons must be consulted in relation to, air quality reviews, assessments of air quality, air quality standards, or the preparation or revision of an action plan:
1. The Secretary of State
  2. The Environment Agency
  3. The Highway authority
  4. .Every local authority that is contiguous to the authority's area
  5. The County Council
  6. Such other public authorities as we may consider appropriate
  7. Bodies which appear to be representative of business interests in the area to which the review or action plan relates
  8. Such other bodies or persons as we consider appropriate.

## **7. Background Papers**

- 7.1 [Cabinet Report 18 February 2013](#)  
ENV 577- Proposal to extend the existing AQMA along Manthorpe Road and Wharf Road to include High Street and London Road, Grantham.
- 7.2 [Cabinet Report 4 April 2016](#)  
ENV 639 -Approval for implementation of the 2016 AQMA Action Plan.
- 7.3 The Local Air Quality Management – P22 Guidance:  
[LAQM-Policy-Guidance-2022.pdf \(defra.gov.uk\)](#)

## **8. Appendices**

8.1 List any Appendices.

Appendix 1: AQMA Order No. 6

Appendix 2: The Air Quality Action Plan (AQAP)

Appendix 3: The Annual Air Quality Status Report (ASR 2022)

Appendix 4: DEFRA ASR Appraisal Report- July 2022