

Title of Report	UPDATE ON AIR QUALITY	
Presented by	Paul Sanders Head of Community Services	
Background Papers	None	Public Report: Yes
Financial Implications	None – all costs are covered within allocated budgets	
	Signed off by the Section 151 Officer: Yes	
Legal Implications	There are no direct legal implications arising from this report.	
	Signed off by the Monitoring Officer: Yes	
Staffing and Corporate Implications	None	
	Signed off by the Head of Paid Service: Yes	
Purpose of Report	<p>To update Community Scrutiny on:</p> <ol style="list-style-type: none"> 1. The recent air quality work completed by the Environmental Protection team 2. The proposal to revoke the Copt Oak Air Quality Management Area (AQMA) 3. The Annual Status Report (ASR) for submission to the Department for Environment, Food and Rural Affairs (DEFRA). 	
Recommendations	<p>THAT COMMUNITY SCRUTINY PROVIDES COMMENTS ON THE FOLLOWING AHEAD OF CONSIDERATION BY CABINET ON 22 OCTOBER 2024:</p> <ol style="list-style-type: none"> 1. THE UPDATE ON AIR QUALITY 2. THE PROPOSED REVOCATION OF THE COPT OAK AIR QUALITY MANAGEMENT AREA 3. THE CONTENTS OF THE ANNUAL STATUS REPORT FOR SUBMISSION TO DEFRA. 	

1.0 BACKGROUND

- 1.1 All councils have a statutory responsibility to assess the present and future air quality of their area in relation to the requirements of the National Air Quality Strategy, and to identify the main sources of the pollutants affecting air quality.

- 1.2 Air pollution is a complex mix of particles and gases. Particulate Matter (PM) and Nitrogen Dioxide (NO₂) are major components of urban air pollution, and are the pollutants affecting the air quality in North West Leicestershire.
- 1.3 The Council has a duty to monitor NO₂ under the Part VI of the Environment Act 1995. This is carried out using diffusion tubes. There are thirty five tubes around the District. A map of these locations can be found at **Appendix 1A and 1B**.
- 1.4 The Government sets the targets for air quality, which is monitored by officers to determine if the targets will be met. If officers do not think a target will be met, the Council declares an Air Quality Management Area (AQMA). The current AQMAs declared for exceeding the annual mean air quality standard for NO₂ are:
 - a. Bondgate, Castle Donington (as shown in Appendix 1A)
 - i. This applies to domestic properties along Bondgate
 - b. Copt Oak (as shown in Appendix 1B)
 - i. This applies to four domestic properties at Corner Farm.
- 1.5 PM_{2.5} is Particulate Matter with an aerodynamic diameter of 2.5µm or less, and there is evidence that this has a significant impact on human health. While there is no statutory duty for the Council to monitor PM_{2.5}, local authorities are expected to work towards reducing emissions and/or concentrations of PM_{2.5}. There are five 'Low Cost Automatic Monitors' called Zephyrs for officers to use for this aspect. These are located across various parts of the District as shown on the map at Appendix 1B and are used to gather air quality data on a number of pollutants.
- 1.6 In the financial year 2023/2024, the Air Quality and Contaminated Land Officer commented on two planning applications providing three comments in relation to air quality and gave pre-application advice on four sites.
- 1.7 Each year, the Council has to submit an Annual Status Report (ASR) on a standard DEFRA template to report on progress in achieving reductions in concentrations of emissions. The 2024 ASR can be found in **Appendix 2** which details the 2023 data.

2.0 BONDGATE, CASTLE DONINGTON AQMA

- 2.1 The Bondgate, Castle Donington AQMA came into operation on 9 January 2009 pursuant to the North West Leicestershire District Council Air Quality Management Area Order 2008 (No 1).
- 2.2 There are three diffusion tube locations within the AQMA, and six other nearby locations.
- 2.3 The Castle Donington Relief Road was opened in 2020, which was a priority to address the nitrogen dioxide air quality objective exceedance and to try to reduce emissions of both nitrogen dioxide and PM_{2.5}. This will have diverted some traffic out of the AQMA, reducing congestion.
- 2.4 Although the annual mean objective has been met in 2020, 2021, 2022 and 2023 the readings show considerable variation and it is not clear at this stage if this is as a result of Covid-19 restrictions on movement or the relief road.
- 2.5 Leicestershire County Council is currently planning to install traffic calming measures on High Street and Bondgate as part of the North and South of the Park Lane development. These will be constructed in October 2024. These measures should

further incentivise the use of the Relief Road leading to a further reduction in traffic along Bondgate.

2.6 The Air Quality Action Plan (AQAP) was approved by DEFRA in 2023.

3.0 COPT OAK AQMA

3.1 The Copt Oak AQMA came into operation on 30 July 2009 pursuant to the North West Leicestershire District Council Air Quality Management Area Order 2009 (No 1).

3.2 There is one diffusion tube location within the AQMA and two locations outside the AQMA.

3.3 A location on the kerb of the M1 exceeded acceptable tolerances, however, there are no relevant receptors linked to this location.

3.4 All receptor locations were substantially lower than the standard and have been for an extended period of time, therefore, the Council is confident that the air quality standard is being achieved at relevant receptors.

3.5 It is recommended that this location be revoked. Further detail in respect of this is provided in Appendix 2.

4.0 IBSTOCK

4.1 During 2022, along Melbourne Road, the Council recorded an exceedance of the Annual Mean Air Quality Standard for NO₂.

4.2 As a result of the 2022 readings, the Council expanded the monitoring network and installed additional diffusion tube monitoring locations and a zephyr. The Council also commissioned a Detailed Air Quality Assessment in order to establish if an AQMA needed to be declared.

4.3 However, monitoring in 2023 did not exceed the Annual Mean. The detailed assessment also did not predict any exceedances of the air quality standard. These findings support the fact that the declaration of an AQMA was not necessary.

4.4 It is currently unknown what caused the exceedance recorded in 2022. To ensure that the air quality standard is being met the monitoring network will be maintained.

5.0 ZEPHYR

5.1 Currently the Council has five zephyr analysers, at the locations shown in Appendices 1A and 1B.

5.2 It is proposed to reinstall a zephyr analyser in Ibstock to provide additional data and ensure the air quality standard is being met.

5.3 Two analysers are in the vicinity of Bardon Quarry.

5.4 Two analysers were in Oakthorpe and Donisthorpe as part of the DEFRA grant project.

5.5 The Council is currently reviewing and identifying locations for future monitoring

6.0 DEFRA PROJECT

- 6.1** The Council, along with Harborough District Council, was successful in securing DEFRA grant funding to undertake a project from April 2022 to the end of December 2023. The objective of the project was to increase the level of knowledge of the effects of solid fuel burning on PM2.5 (particularly related to health), and ultimately reduce PM2.5 emissions by changing attitudes to solid fuel burning, resulting in behaviour change.
- 6.2** The project included communication with residents of both councils around solid fuel burning, questionnaires and air quality monitoring.
- 6.3** The analysis undertaken of the monitoring did not identify any clear influences from solid fuel burning in the vicinity of any of the monitors. The plots produced indicate periods of higher concentrations, at times, during colder temperatures, during the evening and over the weekend, which could be interpreted from the questionnaire outcomes as times when residents are more likely to be burning solid fuel; however, variations in PM2.5 can occur for multiple reasons, due to source, meteorology, chemistry or measurement method. In the absence of a clear signal from the monitoring data and its subsequent analysis, it is not possible to draw a firm conclusion as to what is driving these elevated concentrations.
- 6.4** The report can be found in **Appendix 3**.

Policies and other considerations, as appropriate	
Council Priorities:	- Developing a clean and green district
Policy Considerations:	Undeclaring an AQMA.
Safeguarding:	No safeguarding issues to consider.
Equalities/Diversity:	No impact on equality or diversity. EIA completed.
Customer Impact:	EIA completed.
Economic and Social Impact:	Improvement to local air quality.
Environment, Climate Change and zero carbon:	This work has a positive impact on the environment, climate change and zero carbon.
Consultation/Community Engagement:	The ASR is published. An air quality project was delivered in 2022 which included district-wide consultation and local community consultation.
Risks:	No known risks identified.
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