

NORTH WEST LEICESTERSHIRE DISTRICT COUNCIL

CABINET – TUESDAY, 22 OCTOBER 2024



Title of Report	AIR QUALITY UPDATE	
Presented by	Councillor Michael Wyatt Communities and Climate Change Portfolio Holder PH Briefed <input type="checkbox" value="yes"/>	
Background Papers	Community Scrutiny Minutes Agenda for Community Scrutiny Committee on Thursday, 19th September, 2024, 6.30 pm - North West Leicestershire District Council (nwleics.gov.uk)	Public Report: Yes
		Key Decision: Yes
Financial Implications	There are no direct financial implications arising from this report.	
	Signed off by the Section 151 Officer: Yes	
Legal Implications	There are no direct legal implications arising from the report.	
	Signed off by the Monitoring Officer: Yes	
Staffing and Corporate Implications	There are no direct staffing or corporate implications arising from the report.	
	Signed off by the Head of Paid Service: Yes	
Purpose of Report	To: <ol style="list-style-type: none"> 1. Update Cabinet on the air quality work completed by the Environmental Protection team 2. Seek Cabinet’s agreement to revocation of the Copt Oak Air Quality Management Area (AQMA) 3. Update Cabinet on the Annual Status Report (ASR) to be submitted to the Department for Environment, Food and Rural Affairs (DEFRA) 	
Reason for Decision	To seek approval to revoke the Copt Oak AQMA.	
Recommendations	THAT CABINET: <ol style="list-style-type: none"> 1. NOTES THE AIR QUALITY UPDATE 2. NOTES THE COMMENTS FROM COMMUNITY SCRUTINY 3. AGREES TO THE PROPOSED REVOCATION OF THE COPT OAK AQMA 4. NOTES THE ANNUAL STATUS REPORT (ASR) TO 	

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 Part VI of the Environment Act 1995. This is carried out using diffusion tubes which are plastic tubes located at selected areas and changed every month. They have a gauze inside that is analysed to show the level of NO₂ collected during that month. There are 35 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 PM2.5. 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 on 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. An example of a relevant receptor includes schools, hospitals and the façade of residential buildings. This is where there is long term exposure to NO₂ and not short duration exposure e.g. people waiting at a bus stop or shopping on a High Street.
- 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.

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 pilot 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 PM_{2.5} (particularly related to health), and ultimately reduce PM_{2.5} 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 PM_{2.5} 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 An important part of the pilot was the transfer of knowledge and this took the form of publishing the project on the DEFRA website, sharing the results with the Health and Wellbeing working group at Leicestershire County Council. The results were also shared at the Countywide Environmental Health Managers group.
- 6.5 PM_{2.5} monitoring does not form part of the local air quality monitoring regime, it is a national target set by DEFRA and the Council works towards reducing exposure by working collaboratively with the Health and Wellbeing working group at the County Council. The pilot project was around obtaining data, knowledge and information on PM_{2.5} in off gas areas. The results do not suggest that any changes are required to the Council's approach to air quality and monitoring. However, the information does support the continued education of people that use solid fuel to use seasoned wood and seek where possible seek alternative fuel/methods to heat properties e.g. ground source heat pumps, solar etc.
- 6.6 The report can be found in **Appendix 3**.

7.0 COMMUNITY SCRUTINY COMMENTS

- 7.1 A report was presented to Community Scrutiny on 19 September 2024. The report and draft minutes from the meeting can be found in the background papers to this report.

The Chair noted that the Committee specifically asked that the Cabinet consider applying for further rounds of DEFRA funding for air quality studies, as and when opportunities to do so arose.

7.2 The Environmental Protection team continually review all funding/grant opportunities and if appropriate submit a bid.

Policies and other considerations, as appropriate	
Council Priorities:	- Clean, green and Zero Carbon
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/Tenant 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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