



REPORT FROM: DIRECTOR OF PLACE

TO: POLICY AND RESOURCES COMMITTEE

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AIR QUALITY STATUS REPORT 2020-2021

PURPOSE OF REPORT

To provide an update to Members on Air Quality Management in Pendle, covering the years 2020 and 2021.

RECOMMENDATION

The Committee is asked to note the Air Quality Status Report for 2020-2021, with the progress made against the Air Quality Action Plan.

REASON FOR RECOMMENDATION

(1) To provide Members with an update on Air Quality monitoring undertaken across the Borough of Pendle and action taken to improve air quality.

(2) In 2019 the Borough of Pendle Council officially recognised climate change as an emergency.

ISSUE

1. CLIMATE EMERGENCY

In 2018, the UN Intergovernmental Panel on Climate Change (IPCC) published a report on the impacts of global warming, of 1.5°C above pre-industrial levels. Scientists suggest that the threshold to avoid even more catastrophic impacts, including extreme heat, flooding, drought, and climate-related poverty is 1.5°C. The report warned that the risk of catastrophic impacts would significantly increase unless global warming was kept to a maximum of 1.5°C. Following the report, in 2019, Pendle Council declared a climate emergency and introduced the Climate Emergency Action Plan (2020 to 2025). The plan aims to reduce carbon emissions across all service areas and encourage partners, organisations and the public to take action.

The IPCC's latest report found that greenhouse gas emissions continued to rise, and current plans to address climate change are not ambitious enough to limit warming. The Met Office reported that 2022 was the sixth warmest consecutive year since 1850 and the ninth consecutive year equalling or exceeding 1.0 °C above the pre-industrial period.

In the UK, individuals cause 40% of CO₂ emissions, primarily from energy used in the home, driving and air travel. A significant proportion of outdoor air pollution is associated with road traffic. The primary traffic-related pollutants of concern are nitrogen dioxide (NO₂) and particulate matter 2.5 (PM 2.5).

2. HEALTH EFFECTS

Air pollution is associated with several adverse health effects. It is recognised as a contributing factor in the onset of cancer and heart disease. Effects include respiratory and cardiovascular complications, congenital disabilities, sudden infant deaths and childhood asthma cases. Recent research suggests that air pollution adversely affects cognitive function and is associated with cognitive impairment and increased risk of dementia. Links have been identified between acute exposure to air pollution, with lower exam results in students.

Furthermore, air pollution particularly affects the most vulnerable in society: children, the elderly and those with existing heart and lung conditions. In 2013 for the first time in the UK, air pollution was identified as a cause of death. A nine-year-old girl with severe asthma was exposed to NO₂ and particulate matter over WHO guidelines. A coroner concluded that failure to reduce pollution levels to legal limits was a factor in the death of Ella Kissi-Debrah.

3. BACKGROUND TO REPORT

- 3.1 Pendle Borough Council has a statutory responsibility under Part IV of the Environment Act 1995, and associated Air Quality Management Framework; to review and assess air pollution against the National Air Quality Standards. Where an air pollutant fails to meet the Air Quality Standards, an Air Quality Management Area (AQMA) must be declared. Along with an Air Quality Action Plan (AQAP) detailing implementation to improve air quality within the designated area.
- 3.2 An AQMA was declared in 2011, covering the main road around the Town Centre of Colne. At the time, the main air pollutant of concern was Nitrogen Dioxide (NO₂), which was in excess of the Air Quality Standards, with the cause attributed mainly to road transport emissions.
- 3.3 The AQAP was first published 2015, since then progress has been made against a number of actions. Implementation and progress of such actions are monitored as part of the Air Quality Status Report (ASR). The Council is also statutory required to submit the ASR to Defra. The ASR also details monitoring data and data trends of NO₂ captured for 2021 and 2022.

4. MONITORING DATA AND TREND

- 4.1 Passive monitoring of NO₂, using diffusion tubes were undertaken at 50 locations across the Borough of Pendle in 2020 and 2021, as detailed within the ASR.

- 4.2 There are two calculations used to provide accuracy and assurance of non-continuous monitoring across the Borough. The bias adjustment calculation when applied to the annual mean average of NO₂, provides greater statistical accuracy of data. The second calculation relates to occasions where diffusion tubes go missing from their location site. Where the percentage of missing tubes is less than 75% collected, an annualisation calculation of the site data is used in determining the likely average of NO₂ for the individual site.
- 4.3 Trend data over the last five years indicates that levels of NO₂ have generally reduced. With the results from the 2020 and 2021 ASR, show no areas of exceedance of the National Air Quality Standards and Objectives within the Borough; including within the Colne Designated Air Quality Management Area. On the basis of these results we will look over the next couple of years to revoke the AQMA. Subject to the results continuingly and consistently decreasing.
- 4.4 On the whole there is a similar picture across the remaining monitoring location sites across the Borough, whereby the levels of NO₂ are reducing.

5. PROGRESS AGAINST ACTIONS

- 5.1 Following declaration of an AQMA, the Council has a statutory duty to produce and adopt an Air Quality Action Plan, to improve air quality within the management area.
- 5.2 The main actions in the current Air Quality Action Plan to improve air quality are based upon:
- Improving traffic flow, easing congestion and reducing traffic idling.
 - Encouraging modal shift away from car use, promoting alternative methods of transport.
 - Working in partnership with the Planning Department to ensure where possible air quality/climate change actions are considered during the development stage.
 - Working with partners to install car charging points across the Borough and in Council car parks.
 - Contribute to and influence forthcoming development policies in partnership with Lancashire County Council (LCC).
 - Work with LCC and other partners to increase uptake and implement action on travel plans.
- 5.3 There is regular monitoring of the actions contained within the Action Plan, with progress contained within the yearly ASR.

6. CHALLENGES AND OPPORTUNITIES

- 6.1 While work continues with partners to provide coordinated approach between the two tiers of Pendle Borough Council and Lancashire County Council (LCC). With the Pendle managing local air quality and transport managed by LCC.
- 6.2 Great news for Pendle residents is that over the last five years, the trend data overall shows that NO₂ levels are reducing across the borough, including The Colne Designated Air Quality Management Area. The Covid pandemic has affected monitoring results in previous years. However, activities across the region have now returned to a more normal pattern, which should improve the monitoring results' accuracy. The Council will look to revoke the AQMA in Colne if the results continue to indicate that NO₂ levels are

significantly below the National Objective value. Providing a cleaner air quality for residents of Pendle, whilst reducing ill health.

IMPLICATIONS

Policy: None directly arising from this report

Financial: None directly arising from this report

Legal: The Local Air Quality Management (“LAQM”) regime was introduced by the Environment Act 1995. The Borough Councils 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.

Risk Management: There are no implications for adopting an ASR however failure to work towards completion of the Air Quality Action Plan may instigate DEFRA and Secretary of State Involvement.

Health and Safety: None directly arising from this report

Sustainability: None directly arising from this report

Community Safety: None directly arising from this report

Equality and Diversity: None directly arising from this report

APPENDICES

Appendix 1- Pendle Council Air Quality Annual Status Report (ASR) 2020-2021

LIST OF BACKGROUND PAPERS