

**SOUTH STAFFORDSHIRE COUNCIL****WELLBEING SELECT COMMITTEE – 10<sup>TH</sup> OCTOBER 2023****AIR QUALITY****REPORT OF THE ENVIRONMENTAL HEALTH AND LICENSING MANAGER****PART A – SUMMARY REPORT****1. SUMMARY OF PROPOSALS**

To update on Air Quality across South Staffordshire District Council, and to advise on work, and proposed future work in relation to air quality.

**2. SUMMARY IMPACT ASSESSMENT**

POLICY/COMMUNITY IMPACT	Do these proposals contribute to specific Council Plan objectives?	
	Yes	Vibrant communities – providing a quality environment that we can all be proud of.
	Has an Equality Impact Assessment (EqIA) been completed?	
	No	No negative impact identified
	Has a Data Protection Impact Assessment been completed?	
	No	
SCRUTINY POWERS APPLICABLE	No	
KEY DECISION	No	
TARGET COMPLETION/ DELIVERY DATE	12 months	
FINANCIAL IMPACT	None	
LEGAL ISSUES	None	
OTHER IMPACTS, RISKS & OPPORTUNITIES		Opportunity to improve air quality across South Staffordshire District
IMPACT ON SPECIFIC WARDS	None	

## **PART B – ADDITIONAL INFORMATION**

### **3. INFORMATION**

#### **3.1 Background**

- 3.1.1 Air quality has improved in England over recent decades; however it continues to be an environmental risk to public health with children, the elderly and the already vulnerable most affected. Poor air quality also has consequences for crop yields and impacts for the natural environment and biodiversity. Local government has a key role to play in delivering cleaner air for communities and nature.

#### **3.2 Air pollutants of particular concern**

- 3.2.1 Historically, the main air pollution problem in both developed and rapidly industrialising countries has typically been high levels of smoke and sulphur dioxide emitted following the combustion of sulphur-containing fossil fuels such as coal, used for domestic and industrial purposes.
- 3.2.2 Three pollutants have the majority of impact - fine particulate matter, nitrogen oxides and ammonia. Other pollutants include non-methane volatile organic compounds which are found in many household products and can impact on indoor air quality.

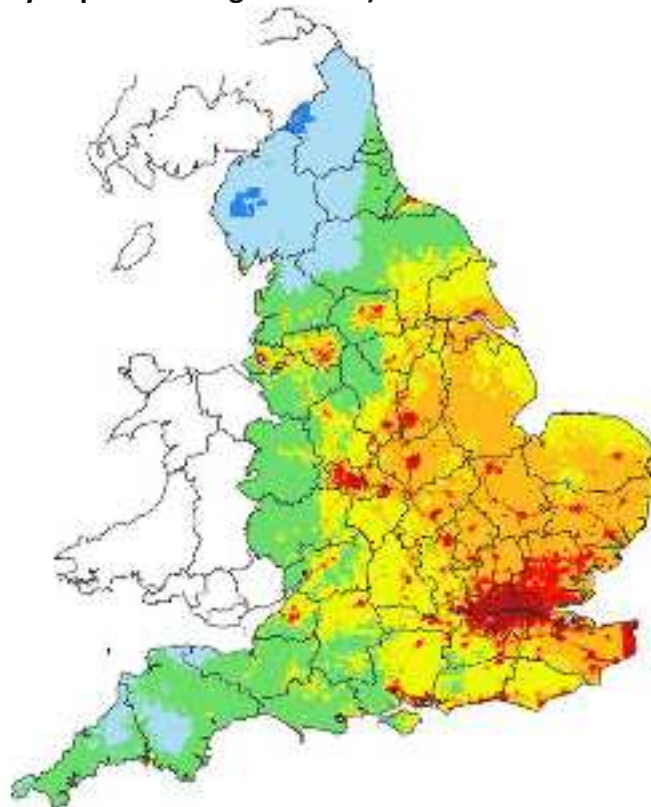
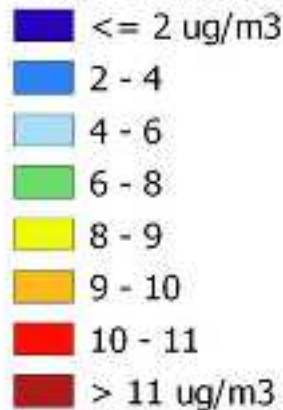
#### **3.3 Fine particulate matter**

- 3.3.1 Particulate matter is everything in the air that is not a gas. The size of airborne particles governs their behaviour. The legislation encompasses both PM10 (particles under 10 micrometres comprising both fine and coarse particulate matter) and PM2.5, (particles under 2.5 micrometres or fine particulate matter).
- 3.3.2 Primary PM2.5 is emitted from human activities, like burning fuels, braking and various industrial processes, as well as from natural sources like sea spray and dust.
- 3.3.3 A portion of the PM2.5 present in our air originates in other countries, with southeast England particularly affected. Correspondingly, some PM2.5 emitted in the UK travels abroad.

Map of modelled PM2.5 concentrations across England in 2018, the base year for the PM2.5 targets (produced by Imperial College London).

### PM2.5 Conc.

Total\_PMf\_B2018



Concentrations range from the lowest (in blue) to the highest (in red). Key features in the map are:

- the gradient from southeast to northwest across the country is due to the difference in natural and transboundary contributions which are higher in the southeast due to emissions from the European continent and shipping
- the highest concentrations are in large urban areas, due to emissions from activities within major towns and cities

## 3.4 Nitrogen oxides – NOx

3.4.1 Nitrogen oxides are gases which are generally emitted from high-temperature combustion processes. We deal with nitrogen dioxide and nitric oxide together as “NOx” because they convert between each other in the air very quickly. The main sources of NOx in the UK are road transport (27% in 20213) and other transport (aviation, rail, shipping) (14% in 20213).

3.4.2 NOx can impact human health, usually recognised for exacerbating asthma and other respiratory diseases. It also damages biodiversity by depositing reactive nitrogen into plants and soil.

### **3.5 Current Air Quality Position in South Staffordshire**

- 3.5.1 As a local authority we monitor air quality within the district under the Local Air Quality Management regime which has been in place for many years. We fulfil the requirements of Local Air Quality Management (LAQM) as set out in Part IV of the Environment Act (1995), as amended by the Environment Act (2021), and the relevant Policy and Technical Guidance documents.
- 3.5.2 The LAQM process places an obligation on all local authorities to regularly review and assess air quality in their areas, and to determine whether or not the air quality objectives are likely to be achieved. Where an exceedance is considered likely the local authority must declare an Air Quality Management Area (AQMA) and prepare an Air Quality Action Plan (AQAP) setting out the measures it intends to put in place in order to achieve and maintain the objectives and the dates by which each measure will be carried out.
- 3.5.3 This Annual Status Report (ASR) is an annual requirement showing the strategies employed by South Staffordshire Council to improve air quality and any progress that has been made. Our previous reports are available on the website.
- 3.5.4 South Staffordshire's previous reviews and assessments have proved sufficient evidence to be satisfied that the Council's area is only likely to see exceedances of the NO<sub>2</sub> annual mean objective. This was further confirmed in April 2019 when the council commissioned Air Quality Consultants to carry out a review of air quality across the district and to scrutinise a Development Consent Order application for a Strategic Rail Freight Interchange Hub known as the West Midlands Interchange. This work resulted in the consultants being satisfied that the district's air quality is good. It flagged a couple of areas of concern, along the A449 in Penkridge and Huntington where additional air quality monitoring tubes were put out. These have since shown demonstrated NO<sub>2</sub> levels well below objective. The consultants also drew attention to the possibility of dust issues around our quarries and chicken farms in terms of PM<sub>10</sub> and PM<sub>2.5</sub>.
- 3.5.5 Over the last 2 years we have purchased and started using a dust monitor to measure particulate matter. However, the equipment has not been providing us with consistent data to report on.
- 3.5.6 We also respond to concerns from the local community and have placed air quality tubes out on this basis. One has been deployed in Wombourne for the past 12 months and 3 in Cheslyn Hay. All have demonstrated NO<sub>2</sub> levels well below the objective level.
- 3.5.7 The two additional tubes were located at roadsides in Cheslyn Hay due to concerns of traffic pollution. These tubes have shown NO<sub>2</sub> levels well within the objective level. Last year they measured 14.2µg/m<sup>3</sup>, 19.1µg/m<sup>3</sup> and 15.6µg/m<sup>3</sup> respectively.
- 3.5.8 South Staffordshire Council works in partnership with a number of adjacent councils: Stoke, Cannock, Staffordshire Moorlands, East Staffordshire, Tamworth, Lichfield and

Staffordshire as part of the SAQF – Staffordshire Air Quality Forum. This is a chance for us to discuss issues and ideas and also work together e.g. the ECOSTars project. This is where a DEFRA grant was used to employ a consultant to begin signing up HGV's over the district and those who travel through it to employ green techniques, such as low emissions HGV's, electric vehicles to use in their fleets to help bring down traffic emissions.

### **3.6 Proposed work**

3.6.1 The Environment Act 2021 established a new framework for environmental targets for England. The Environmental Targets (fine particulate matter) (England) Regulations 2023 set targets under this framework for fine particulate matter (PM2.5). The two targets, both to be met by 2040 are:

- Annual mean concentrations of PM2.5 to be 10 µg m<sup>-3</sup> or lower
- Population exposure to PM2.5 to be reduced by 35% compared to 2018 levels

3.6.2 The two targets are designed to work together to drive actions that both reduce concentrations where it is highest and reduce the pollution that everyone in the country experiences.

3.6.3 We propose to employ air quality consultants early next year to again model the air quality across the district with the latest information and data, and then develop a measurement and improvement plan if required focused on the new air quality strategy.

### **4. IMPACT ASSESSMENT – ADDITIONAL INFORMATION**

4.1 Not applicable.

### **5. PREVIOUS MINUTES**

5.1 None

### **6. BACKGROUND PAPERS**

#### **7. RECOMMENDATIONS**

7.1 Contents of report of noted by members.

Appendix – Annual Status Report 2023

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PROTECTION AND LICENSING