

# Air Quality Strategy for Stafford Borough

# 2017-2021

July 2017

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#### Cabinet Member Foreword.

Residents, businesses and visitors to Stafford Borough all enjoy the extensive areas of green open space and unspoilt countryside, and this includes our good air quality.

In order to ensure that the good quality of the air that we breathe in our towns and villages continues, we need to ensure effective monitoring of air quality and also to plan ahead. Improvements to air quality can be slow to deliver so actions need to take place now so that we can all benefit.

Stafford Borough is in a period of unprecedented economic growth which although has many benefits could also threaten the quality of the air that we breathe. The increasing dependence we all have upon motor vehicles, whether for pleasure or business and transportation of goods creates the issues associated with transport related pollution. The challenge is to secure the benefits of economic growth whilst minimising the health problems caused by this pollution.

This strategy recognises that no one single agency, department or community has all the answers; improvements to air quality can only be achieved by taking an integrated, collaborative approach. It acknowledges that economic growth and improving the local environment are not mutually exclusive.

The document provides an overview of air quality across Stafford Borough and focuses on key areas where air quality could and should be improved.

I am delighted to commend this strategy as a key step towards tackling our areas of traffic related pollution to safeguard the health of those who live, work or visit Stafford Borough.



Cllr F Finlay Cabinet Member for Environment and Health

#### **Executive Summary**

The Council is committed to making the Borough a great place to live, study and work and recognises that good air quality is an essential part of achieving this.

This strategy sets out how Stafford Borough Council will continue to work towards improving air quality in the Borough.

• The Strategy will inform the decision making processes around significant infrastructure projects such as HS2a, a new HS2a link station, large housing developments and town centre changes.

Stafford Borough is semi-rural in nature and the air quality complies with the EU standards throughout the Borough.

 Our air quality is being challenged because the Borough population is growing, as it lies between the large conurbations of Stoke on Trent, Manchester and Birmingham and has major transport links such as the M6 motorway, A50, A500 and the A34. Regional Air pollution issues associated with the West Midlands may result in EU fines for the Nation which may be passed on to local authorities, the actions contained in this strategy will mitigate against the potential fines.

Officers from various Council services consider air quality issues within the Council's Environment Management Group. The group works with partners, neighbouring authorities and government agencies when considering air quality issues and improvements.

• Community involvement and cohesion is the key to the future success of the strategy and collaborative working with such groups will build sustainable local solutions.

In summary, the Council will:

- Consult with partners and stakeholders with regard to air quality.
- Consider all the options available to reduce pollutants.
- Use both regulatory and non-regulatory powers to improve air quality.
- Consider the wider economic, social and environmental air quality impacts of new developments.
- Annually produce an Air Quality Report as required by statute.
- Annually produce an Air Quality Action Plan.

#### 1 Introduction

#### 1.1 Air Quality Strategy

#### Vision.

To maintain good air quality in the Borough for all and to ensure a healthy environment for our futures.

This strategy sets out the aims and objectives as to how the Council will continue to work towards improving air quality in the Borough by:

- Adopting a corporate approach.
- Considering all the options available.
- Using both regulatory and non-regulatory powers.
- Considering the wider economic, social and environmental impacts.
- Engaging with communities to build sustainable solutions.

#### **1.2 Air Quality in Stafford Borough.**

#### a) Effects on Health.

Air pollution is associated with a number of adverse health impacts. It is recognised as a contributing factor in the onset of heart disease and cancer.

Air pollution particularly affects the most vulnerable in society, children and older people, and those with existing heart and lung conditions. There is also often a strong correlation with equalities issues, because areas with poor air quality are also often the less affluent areas. A report published by Public Health England in 2016 highlighted the increase in mortality risk associated with poor air quality and estimated the Local Mortality Burden in all local authority areas. In 2013 there were 62 deaths attributable to exposure to poor air quality in the Stafford Borough Council area.

The annual health cost to society of the impacts of particulate matter alone in the UK is estimated to be around £16 billion. Air quality is an important consideration for our communities when people choose where to live, study and work. Good air quality is linked to the choices for schooling, training, the workplace environment and housing.

Deaths - all causes persons 30+ Deaths - all causes Deaths - all cau		2011			2012			2013		
Stafford 1178 4.7% 55 1195 4.6% 55 1261 4.9% 62   East Staffordshire 972 4.9% 48 966 4.8% 46 1097 5.1% 56   South Staffordshire 1009 4.9% 49 1162 4.8% 56 1102 5.1% 56   Lichfield 902 5.1% 46 953 5.0% 47 1050 5.1% 54   Staffordshire Moorlands 927 4.4% 41 1020 4.2% 43 1085 4.7% 51   Cannock Chase 766 5.0% 38 844 4.8% 41 787 5.1% 40   Tarworth 532 5.4% 29 553 5.2% 29 592 5.5% 33   Stoke-on-Trent 2252 5.2% 117 2386 4.9% 117 2412 5.2% 124	District/County/UA	causes	Percentage*	attributable	causes	-	attributable	causes	Percentage*	Estimated attributable deaths
East Staffordshire 972 4.9% 48 966 4.8% 46 1097 5.1% 56   South Staffordshire 1009 4.9% 49 1162 4.8% 56 1102 5.1% 56   Lichfield 902 5.1% 46 953 5.0% 47 1050 5.1% 54   Staffordshire Moorlands 927 4.4% 41 1020 4.2% 43 1085 4.7% 51   Cannock Chase 766 5.0% 38 844 4.8% 41 787 5.1% 40   Tarworth 532 5.4% 29 553 5.2% 29 592 5.5% 33   Stoke-on-Trent 2252 5.2% 117 2386 4.9% 117 2412 5.2% 124	Newcastle-under-Lyme	1187	4.8%	57	1218	4.6%	56	1295	4.9%	63
South Staffordshire 1009 4.9% 49 1162 4.8% 56 1102 5.1% 56   Lichfield 902 5.1% 46 953 5.0% 47 1050 5.1% 54   Staffordshire Moorlands 927 4.4% 41 1020 4.2% 43 1085 4.7% 51   Cannock Chase 766 5.0% 38 844 4.8% 41 787 5.1% 40   Tarnworth 532 5.4% 29 553 5.2% 29 592 5.5% 33   Stoke-on-Trent 2252 5.2% 117 2386 4.9% 117 2412 5.2% 124	Stafford	1178	4.7%	55	1195	4.6%	55	1261	4.9%	62
Lichfield 902 5.1% 46 953 5.0% 47 1050 5.1% 54   Staffordshire Moorlands 927 4.4% 41 1020 4.2% 43 1085 4.7% 51   Cannock Chase 766 5.0% 38 844 4.8% 41 787 5.1% 40   Tamworth 532 5.4% 29 553 5.2% 29 592 5.5% 33   Stoke-on-Trent 2252 5.2% 117 2386 4.9% 117 2412 5.2% 124	East Staffordshire	972	4.9%	48	966	4.8%	46	1097	5.1%	56
Staffordshire Moorlands 927 4.4% 41 1020 4.2% 43 1085 4.7% 51   Cannock Chase 766 5.0% 38 844 4.8% 41 787 5.1% 40   Tamworth 532 5.4% 29 553 5.2% 29 592 5.5% 33   Stoke-on-Trent 2252 5.2% 117 2386 4.9% 117 2412 5.2% 124	South Staffordshire	1009	4.9%	49	1162	4.8%	56	1102	5.1%	56
Cannock Chase 766 5.0% 38 844 4.8% 41 787 5.1% 40   Tarnworth 532 5.4% 29 553 5.2% 29 592 5.5% 33   Stoke-on-Trent 2252 5.2% 117 2386 4.9% 117 2412 5.2% 124	Lichfield	902	5.1%	46	953	5.0%	47	1050	5.1%	54
Tanworth 532 5.4% 29 553 5.2% 29 592 5.5% 33   Stoke-on-Trent 2252 5.2% 117 2386 4.9% 117 2412 5.2% 124	Staffordshire Moorlands	927	4.4%	41	1020	4.2%	43	1085	4.7%	51
Stoke-on-Trent 2252 5.2% 117 2386 4.9% 117 2412 5.2% 124	Cannock Chase	766	5.0%	38	844	4.8%	41	787	5.1%	40
	Tamworth	532	5.4%	29	553	5.2%	29	592	5.5%	33
Staffordshire County 7473 4.9% 366 7911 4.7% 372 8269 5.0% 417	Stoke-on-Trent	2252	5.2%	117	2386	4.9%	117	2412	5.2%	124
	Staffordshire County	7473	4.9%	366	7911	4.7%	372	8269	5.0%	417

\* Fraction of annual all-cause adult mortality attributable to anthropogenic (human-made) particulate air pollution (measured as fine particulate matter, PM2.5\*)

#### b) Air Pollution Sources.

#### i) Local

The Stafford Borough Council area does not have any Air Quality Management Areas (AQMA's) but is still affected by air pollutants. The main roads in the Borough such as the M6 motorway A50, A500 and A34 all generate significant traffic pollution in the form of nitrous oxides and particulate matter. The traffic hotspots for nitrogen dioxide concentrations are continuously monitored around the M6 junctions and trunk roads Monitoring evidence indicates that the pollutants arising from traffic on these routes is not increasing year on year. (please see Graph 1 below).



Industrial sources of air pollution (in particular combustion activities) are regulated by the Council or the Environment Agency, no industrial sources have been found to be likely to cause a breach of the air quality standards.

#### ii) Regional Air Pollution Sources

Stafford Borough Council is a member of the Staffordshire Air Quality Forum (SAQF) which includes representatives of all of the Staffordshire Local Authorities including Staffordshire County Council and National bodies such as Highways England, the Environment Agency and Public Health England. Partnering with these organisations ensures that changes to existing conditions such as cross boundary air quality management strategies, new or altered routes, new technology and public advice in Stafford Borough is current and meaningful.

#### c) Future Air Quality Challenges.

Stafford Borough Council is undergoing a time of considerable housing growth and commercial investment including the accommodation of military personnel and potentially a new HS2a link station. The local traffic that this growth will generate is estimated to be 2000 additional vehicle movements per day and needs to be properly managed so that the burden of extra vehicles does not result in a significant deterioration of the local air quality. All planning applications for new housing receptors are assessed for the air quality impacts and it remains an air quality priority.

Stafford Borough Council does not have any Air Quality Management areas however it remains important that improvements to air quality are pursed wherever possible particularly through planning design. Stafford Borough Council has important regional motorway and trunk routes and as a result is keen to pursue opportunities that will improve transboundary pollution levels.

New provision of electric vehicle charging points at new and existing car parks and a park and ride scheme are examples of traffic pollution management schemes and will be addressed in a future policy.

The development of sustainable transport links to enhance cycling and walking options throughout communities as well as the promotion of the healthy enjoyment of our open spaces will remain important considerations as the Borough develops.

#### **1.3 A Mandate for Air Quality Management.**

The Council is committed to making Stafford a great place to live, study and work and recognise that good air quality is an essential part of achieving this. Air Quality is good in our area and there is no current need for a statutory Air Quality Management Area, it is however important that air quality issues are formally proactively addressed because of the significant future growth challenges facing us.

The Council has corporate priorities that are relevant to achieving these goals:

- 1. Health and Wellbeing
- 2. Clean, Green and Safe.
- 3. Prosperity.

The Strategy consolidates the principles of the priorities in corporate decision making and performance monitoring.

# 2. Legislative Background.

#### 2.1 Clean Air Acts of 1956, 1968 and 1993

During the 1950s national government decided that action was needed to drastically reduce the number of deaths resulting from smog (a combination of smoke and fog). The government introduced legislation to reduce the amount of smoke produced from industrial and domestic properties, by introducing the Clean Air Acts 1956 and 1968.

These Acts, together with other associated clean air legislation, were repealed and consolidated by the Clean Air Act 1993 which, together with regulations and Orders made under the Act, provide the current legislative controls. Control of smoke emissions may also help reduce emission of a wide range of other pollutants such as particles, sulphur dioxide, polycyclic aromatic hydrocarbons (PAH) and polycyclic dioxins and difurans (PCDD/F) all of which may be present in smoke.

#### 2.2 Environment Act 1995

While the Clean Air Acts focused on emission sources, the Environment Act has a different approach by setting standards or targets for specific pollutants in air.

The Environment Act 1995 part IV section 80 requires the Secretary of State to prepare and publish a National Air Quality Strategy containing policies with respect to the assessment or management of air quality and include statements with respect to:

- Standards relating to the quality of air;
- Objectives for the restriction of the levels at which particular substances are present in the air; and measures which are to be taken by local authorities and other persons for the purpose of achieving those objectives.
- Section 82 of the Act requires each local authority to review air quality in its area from time to time and to report both current and likely future air quality.
- Section 83 requires local authorities to designate an Air Quality Management Area (AQMA) where air quality objectives are not being achieved.
- Section 84 requires local authorities who have declared an AQMA to prepare an Air Quality Action Plan (AQAP) which sets out what actions it will take to work toward achieving air quality standards and objectives in the designated area.

#### 2.3 UK Air Quality Strategy

The current Air Quality Strategy for England, Scotland, Wales and Northern Ireland sets out air quality objectives and policy options to further improve air quality in the UK now and into the future. The strategy sets out a way forward for work and planning in air quality issues. It details the standards and objectives to be attained for various pollutants and suggests measures to be considered to help achieve them.

#### 2.4 Air Quality (England) Regulations 2000 amended 2002

These regulations implement the objectives of the Air Quality Strategy and state the concentration of each pollutant, the relevant time period (as prescribed by regulations) and the date by which they should be achieved.

## **3 Working together to Improve Air Quality**

#### 3.1 Environment Management Group.

The Environment Management Group is made up of officers from various Council services with responsibility for:

- Corporate Priorities and Environmental Management Group
- Planning Policy & Design
- Environmental Health
- Health and Wellbeing
- PR & Communications
- Communities

The group works to ensure that air quality in the Borough improves from direct and indirect actions.

In particular the group:

- Consult with partners and stakeholders with regard to Air Quality Action Plans.
- Consider all the options available to reduce pollutants.
- Use both regulatory and non-regulatory influence to improve air quality.
- Consider the wider economic, social and community impacts of air quality.
- Require relative contributions to action from industry, transport and individuals that are cost-effective and proportionate.

#### **3.2 Council Partners and Neighbouring Authorities**

Stafford Borough Council will continue to work with partners and neighbouring authorities to:

- Ensure that actions taken by the council do not result in worsening of air quality in our own or neighbouring authorities.
- Consider the joint benefit for communities, partners and neighbouring authorities of actions that are proposed to improve air quality.
- Aim to ensure relative contributions to a solution that are cost-effective and proportionate for partners and neighbouring authorities.

#### 3.3 Consultation

The Council will exchange data and aim to consult with the following when writing or amending Air Quality Reports:

- The Secretary of State
- The Environment Agency
- The Highways Agency
- The County Highways Authority
- Neighbouring local authorities
- Local businesses
- Local communities and residents groups
- The Primary Care Trust

Consultation periods will last no less than four weeks, to ensure that all consultees have the opportunity to review the proposals and respond with comments for consideration.

## 4 Local Air Quality Management (LAQM).

#### 4.1 Review and Assessment

The Council began the process of LAQM in 1998, by assessing which pollutants were most likely to be of concern and which pollutants could be "screened out" because sources of those pollutants were not present in the Borough.

Once it had been established which pollutants needed to be monitored to assess whether national objectives were being met, monitoring was and continues to be carried out in accordance with guidance from the Department for the Environment, Food and Rural Affairs (Defra).

Local authorities are not required to meet the air quality objectives due to the influence of factors outside their control, but must demonstrate that they are working towards them through local actions. Periodically, each authority must also review and re-assess air quality in their area and report on the findings and the outcomes from their actions to Defra.

Where air quality does not meet the objectives set in the Air Quality (England) Regulations, an Air Quality Management Area (AQMA) is declared. The Air Quality Action Plan (AQAP) becomes the mechanism for improving the local air quality and the plan forms the statutory element of the local air quality management process. Once an AQMA has been declared there is a statutory duty for the local authority to produce an AQAP to pursue achievement of the relevant air quality objective(s).

The main pollutant of concern in Stafford Borough is nitrogen dioxide (NO2). Nitrogen dioxide is mostly associated with emissions from road vehicles. Nitrogen

oxides are formed at high temperature during combustion processes from the oxidation of nitrogen in the air and any nitrogenous components of the fuel or other material being burned. NO2 is an irritant gas that can aggravate the respiratory system through inflammation of lung tissue and the airways. The groups of people most vulnerable to these effects are young children and asthmatics.

The council have undertaken all stages of the LAQM process and published results which are available on the authority's website.

#### 4.2 Air Quality Action Plans.

An Air Quality Action Plan (AQAP) has to be published for each Air Quality Management Area (AQMA) declared in the borough and will be subject to an annual review process. Currently Stafford Borough has not breached the Air Quality Standards and therefore has no AQMA's. Where necessary an AQAP details:-

- The pollutants to be reduced.
- An indication of the source of each pollutant.
- What the Council and other agencies will do to reduce the pollutant.
- The emission reductions expected, including concentration, if possible.
- The timescale for implementing each proposal.

Whilst AQAPs contain specific actions, it is recognised that some of the success in improving air quality involves lifestyle changes and personal commitment to live, work and travel in different ways. There is on-going support for the principles to encourage less car usage, reduce congestion, promote walking, cycling and the use of public transport

It is a requirement of the action planning process to regularly review and report progress and achievements to the Department for Environment, Food and Rural Affairs (Defra).

# Environment Management Action Plan Priorities.

Priority	Timescale	Lead	Outcome
Year 1 2017/18			
SBC Waste Fleet Procurement	2017/18	Group Manager – Operational Services	1-4% reduction in NO2 and Pm10
Schools involvement in monitoring and 'school run' trips.	2017/19	Environmental Protection Lead Officer	Protect vulnerable locations
HS2a background impact monitoring	2017/26	Group Manager – Regulatory Services / Environmental Protection Lead Officer	Manage growth impact
Set an urban NO2 target.	2017/18	Group Manager – Regulatory Services / Environmental Protection Lead Officer	Improve local environments
Year 2 2018/19			
SBC grey fleet audit.	2018/19	Environmental Protection Lead Officer	Understand Council impacts
ECO Stars commercial HGV audit	2018/19	Environmental Protection Lead Officer	50% of local operators to be audited
Policy for electric vehicle charging stations	2019	Policy and Improvement Manager	Future growth managed
Year 3 2019/20	1	1	
HS2a station infrastructure and travel plan	2019	Group Manager – Regulatory Services / Environmental Protection Lead Officer	Ensure urban target met
Taxi and bus idling policy	2019	Group Manager – Regulatory Services	Ensure urban target met
Park and Ride options appraisal	2020	SCC/SBC	Future growth managed

### 5. Monitoring and Evaluation.

The Council will monitor progress against this strategy on an annual basis. The priorities identified in the table above will be incorporated into the on-going work of the Environmental Management Group. Performance will be reported by exception and annual reports provided for Cabinet and Scrutiny. Methods of evaluation will be determined by non breaches of Air Quality Standards.

Stafford Borough Council will continue to operate an air quality monitoring regime and fulfil Defra's reporting requirements. The council will publish copies of reports on-line. Environmental and Health Services will take the lead in measuring improvements in air quality and continue to work with colleagues in other council departments, partner agencies, communities and neighbouring authorities, with the overall aim of improving air quality.

### Environmental and Health Stafford Borough Council

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All information correct at time of going to print.

