



Air Quality Strategy

‘A Breath of Fresh Air’

2023 -2030

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1. EXECUTIVE SUMMARY

This Air Quality Strategy outlines the approach Hartlepool Borough Council (hereafter referred to as 'the Council') will take to help protect and, where possible, improve air quality in the Borough.

Air pollution is associated with a number of adverse health impacts and it is recognised as a contributing factor in the onset of heart disease and cancer. Additionally, air pollution particularly affects the most vulnerable in society and often has a strong correlation with equalities issues because less affluent areas are often those with poorest air quality.

Air pollution comes from many sources and pollutants can travel long distances and combine with each other to create different pollutants. Emissions from distant and local sources can build up into high local concentrations of pollution.

The Council monitors air pollution in the Borough in order to fulfil its statutory duties under the Environmental Act 1995 (Part IV Local Air Quality Management) and publishes an Air Quality Status Report each year. These reports have consistently concluded that air quality in the Borough is good.

As part of its commitment to protecting and improving air quality in the Borough, the Council has introduced a range of initiatives and actions across departments, and in partnership with external organisations, which will help to reduce pollution and maintain good air quality. The majority of these actions and initiatives are to reduce the environmental impact of traffic on the roads and encourage healthier, alternative methods of transport.

An integral part of the strategy are the statements of intent which have been defined and developed by officers from relevant service areas across the Council. Actions to help achieve the aims of the strategy will be developed and collated and an Action Plan produced.

The Council has a unique role in achieving and maintaining good air quality through a combination of enforcement, education and partnership working. The Council is ideally placed to interact with the general public, statutory and voluntary organisations and local businesses to develop partnerships which will assist in identifying and implementing initiatives necessary to achieving the aims of the Strategy.

2. INTRODUCTION

Air pollution has a significant effect on Public Health in the United Kingdom (UK) and clean air is extremely important for the health and wellbeing of people who live in the Borough. It is also essential for making sure that Hartlepool is a welcoming place to visit and work and every one of us deserves to breathe air free from harmful levels of air pollutants.

Air pollution is a mixture of particles and gases in the air which impacts on the health of people or has other harmful environmental effects. Air pollution has been linked to many long term health conditions, including respiratory and cardiac disease, cancer and more recently associated with changes linked to dementia.¹ Between 2017 and 2025, the total cost to the NHS and social care of air pollution is estimated to be £1.60 billion for Particulate Matter (PM^{2.5}) and Nitrogen Dioxide (NO²) combined. This figure increases to £5.6 billion if diseases are included for which there is currently less robust evidence for an association.²

It is estimated that long-term exposure to air pollution in the UK has an annual effect equivalent to 28,000 to 36,000 deaths and research indicates that eliminating air pollution could increase the life expectancy of people in the UK by 6 months.³

The effects of air pollution are often worse in the most vulnerable in our communities, including children, the disabled, individuals with existing respiratory disease and the elderly. Furthermore the health impacts of air pollution disproportionately impacts those who live in less affluent areas, exacerbating health inequalities. In her Annual Report of 2017 the (then) Chief Medical Officer Professor Dame Sally C. Davies stated 'There are strong geographical differences in the occurrence and concentration of pollutants. Analysis shows that these patterns, which vary by pollutant type, are related to measures of socioeconomic status, with pollution sources and higher concentrations of ambient pollution typically found in more socially disadvantaged areas'.⁴

Whilst air quality has improved significantly in recent decades, and will continue to improve due to national policy decisions, there are some areas where local action is needed to improve air quality further. The Council has, over many years, delivered local initiatives to improve health and the environment and this work will continue to be developed and implemented where possible.

The Council is committed to improving air quality across the Borough and minimising pollution levels which will bring significant and positive effects to the local environment and

on health, quality of life and the local economy. The Council will work collaboratively within and external to the Council to bring about meaningful improvements in air quality.

3. AIMS OF THE AIR QUALITY STRATEGY

The Strategy enables the Council to respond to the increasing recognition nationally of the impact of air pollution on public health and the importance of good air quality.

The Strategy aims to raise local awareness of the importance of air pollution and emphasise the role of the Council in maintaining and improving air quality.

The Council is committed to openness and transparency. The Strategy will be regularly reviewed and progress monitored and reported on the Council's website. This will provide re-assurance to the general public that the Council is meeting its statutory obligations, has put its 'Own House in Order' and is leading by example.

The Strategy highlights current initiatives and strategies which help to deliver cleaner air. Furthermore it proposes statements of intent which will help to further demonstrate the Council's commitment to improving air quality and provides a framework for partnership working.

4. AIR QUALITY IN THE UK

Air pollution and its effects on population health became an increasingly serious problem in the early 19th Century when, as a result of the Industrial Revolution, there were an increasing number of factories burning fossil fuels and the population was rapidly growing resulting in increased air pollution from coal burning fires. During unfavourable weather conditions in the 1950's and 60's, these pollutants formed the infamous 'smogs' which sources suggest that, when they were particularly bad events, caused thousands of premature deaths of susceptible people.⁵

These smogs, and the effects they had on population health, resulted in the first Clean Air Act of 1956, and by 1961 the UK had established the world's first co-ordinated national air pollution monitoring network. The Clean Air Acts of 1956 and 1968 were later consolidated into the Clean Air Act 1993⁶ which allowed the establishment of designated Smoke Control Areas to improve air quality through the use of alternative fuels and authorised appliances.

Since the introduction of successful (Domestic, European Union (EU) and internationally driven) legislation and the introduction of cleaner fuels and technologies, there has been a dramatic decline in levels of harmful pollutants and current concentrations of many recognised pollutants are now at their lowest since measurements began. Between 1970 and 2020 (the most recent year for which data are available), UK estimated emissions of nitrogen oxides have fallen by 76%, UK estimated emissions of PM¹⁰ particulate matter have fallen by 80% and UK estimated emissions of PM^{2.5} particulate matter have fallen by 85%.⁷

Notwithstanding this, air quality remains high on the Government's agenda and the UK has set stringent targets to cut national emissions of five air pollutants (fine particulate matter, ammonia, nitrogen oxides, sulphur dioxide, and non-methane volatile compounds) by 2020 and 2030 with the goal to reduce the harm to human health from air pollution by half. The Clean Air Strategy published in 2019 sets out the comprehensive actions necessary to meet the goal and acknowledges that effective action is needed at all levels of government and that neighbouring local authorities and other public bodies need to work collectively to tackle air pollution.⁸ The Environment Act 2021 received Royal Assent on 9th November 2021 and introduced a requirement for the Secretary of State to set a target for an annual mean concentration level of fine particulate matter (PM_{2.5}) in ambient air. The proposed target is a maximum concentration of 10µg/m³ to be met across England by 2040. A further target has also been proposed of a 35% reduction in population exposure by 2040 (compared to a base year of 2018).⁹ The Act also enables local authorities to take more effective, co-ordinated actions to achieve their air quality objectives and deliver improvements to public health.

5. AIR QUALITY IN HARTLEPOOL

5.1 Main Sources of Air Pollution

Hartlepool has a strong industrial heritage and, in the past, this has often made a significant contribution to poor air quality in the area and, early air quality monitoring within Hartlepool and neighbouring councils was specifically targeted to industrial sources of pollution. Many of the old industrial plants have now closed and regulation has improved significantly over the decades. The closure of plants and better regulation has resulted in industrial air pollution at ground level being greatly reduced.

Hartlepool has an extensive coastline and at times of strong north-easterly weather, there can be high levels of natural particulates which may have health effects for some members

of the public. Although not frequent events, Hartlepool does experience foam storms. Sea foam can hold algal toxins or surface-active pollutants in its bubbles which, when released into the air can pose a health risk for individuals with pre-existing health conditions and may cause irritation to the eyes.

Over recent years there has been an increase in the use of solid fuel stoves as a source of heating for domestic properties potentially further increasing the emission of harmful environmental pollutants. Most residential properties in the Borough of Hartlepool are included in a smoke control area where the solid fuels used are restricted to those approved by DEFRA or fuels burned in a DEFRA approved appliance in order to reduce emissions to the atmosphere.¹⁰ The Air Quality (Domestic Solid Fuel Standards) (England) Regulations 2020 tightened the standards relating to the sale of wood and other fuels which can be burnt in a domestic property and ensures that the sale of wood for combustion in domestic properties includes a 'ready to burn' mark.

Although there are several factors which affect air quality, it is pollution from road traffic, that is now of greatest concern to public health. Within Hartlepool through traffic is generally light and is channelled onto the main A689 and A179 through-route leading to the main A19 trunk road which passes well to the west of the town, through rural areas. The main impact on public health is along commuter roads, and it is in this area that most action needs to be targeted to alleviate air pollution. Fortunately, most housing along these roads is low rise, and set back from kerbside so that there is good dispersion of air pollutants compared with older UK cities and towns. The focus for current air quality monitoring within Hartlepool is on potential pollution from road traffic.

5.2 Local Air Quality Monitoring

The Environmental Protection Team at the Council monitor air pollutants at a range of locations across the Borough using both automatic and non-automatic (diffusion tubes) monitoring stations. The monitoring is undertaken to check compliance against current UK air quality objectives, guidelines and limits¹¹ and also to assess trends in air quality and thereby the effectiveness of policies and local interventions to improve air quality.

Monitoring results across the Borough are generally good and are consistently below objective levels set by Government.

Annual Air Quality Status Reports (ASR) are produced and published on the Council's website to raise awareness and provide re-assurance to the public of local air quality.

The current focus of monitoring across the Borough is to obtain reliable, accurate data for nitrogen dioxide and PM¹⁰. PM^{2.5} data will be collated from 2023.

5.3 Environmental Enforcement

Local Authorities regulate small industries which can cause air pollution. Operators must obtain an environmental permit from the local authority, which sets out air quality standards. Once the permit is obtained, premises are inspected on a regular basis to ensure compliance. The permitting system operates in England and Wales through the Environmental Permitting (England and Wales) Regulations 2016.

The Council has enforcement powers under the Environmental Protection Act 1990 and the Clean Air Act 1993 which can be used if people allow smoke from bonfires and chimneys to cause a statutory nuisance and, subject to some exemptions, allow the emission of dark smoke from industrial or trade premises.

6. CURRENT INITIATIVES

The National Institute for Health and Care Excellence (NICE) has produced guidelines (NG70) and a quality standard which covers road-traffic related air pollution and its impacts on health and is supported by a number of organisations including Public Health England and the British Lung Foundation and is endorsed by the Department of Health and Social Care.¹² The guidelines recommend a number of actions which, when taken together, are likely to cumulatively produce significant change.

The Council acknowledges and welcomes the NICE guidelines and key areas of actions which the Council are progressing include reducing emissions from public sector transport services and vehicle fleets, smooth driving and speed reduction, active travel and awareness raising.

7. FUTURE PLANS AND POLICIES

The Council is committed to protecting and improving air quality in the Borough and will continue to develop relationships with partners to achieve positive air quality outcomes.

The Environmental Protection Team will increase the level of non-automatic monitoring in 2022/2023 in order to gain a stronger understanding of the air quality issues within the Borough.

Officers have agreed the inter-departmental statements of intent below which will help ensure that air quality is an integral part of the Councils remit.

	Statement of Intent
1.	The Council will continue to fulfil its statutory duties under the Environmental Act 1995 Part IV Local Air Quality Management and meet the target deadlines for reporting as set by Defra.
2.	The Council will ensure the Air Quality Strategy and Air Quality Status Reports are available on the Council website.
3.	The Council will continue to work closely with local industry and businesses to reduce pollution and, in particular, help improve air quality through the regulation and permitting of installations in accordance with the Environmental Permitting (England and Wales) Regulations 2016.
4.	The Council will continue to promote activities to raise the profile of air quality in the Borough.
5.	The Council will continue to address its own energy usage within Council buildings through adoption of efficient energy practices and use of the best available technology to deliver energy savings.
6.	The Council will develop and implement a Net Zero and Climate Change Strategy by 2023.
7.	The Council will continue to work with neighbouring Local Authorities together with Tees Valley Combined Authority on sustainable transport issues within the Borough and encourage more sustainable transport modes to the car to protect and improve local air quality.
8.	The Council will continue to work with local schools to secure air quality improvements through the development of School Travel Plans and encouragement of sustainable practices.
9.	The Council will ensure that emissions from Council fleet vehicles will be fully considered.
10.	The Council will continue to fulfil its statutory duties with respect to waste management build upon its current achievements and strive to meet the recycling and composting targets.
11.	The Council will review its procurement policies and procedures and implement a Procurement Strategy that includes appropriate consideration of environmental and sustainability impacts and appraisal.
12.	The Council acknowledges the link between air quality and health and will continue to promote and implement health initiatives and environmental improvements to secure public health benefits. The Public Health Strategy

	will emphasise the link between air quality and health to raise awareness of the impacts of poor air quality.
13.	The Council will support householders in the Borough to access a range of energy efficiency measures to reduce use of fossil fuels and help reduce heating costs.
14.	The Council will ensure that environmental impact legislation is adhered too and that the planning process ensures the effects on air quality of proposals are duly considered.
15.	The Council will continue to work in partnership with external organisations and help to progress initiatives which have a positive impact on air quality.
16.	The Council will ensure that the aims of the Air Quality Strategy are integrated into all relevant Council's policies and strategies.

8. PARTNERSHIP WORKING

The Council acknowledges its key role in maintaining and improving air quality in the Borough and is committed to effectively tackling air quality issues within its control. However, we recognise that there are Local, Regional and National organisations which have an impact on air quality and are outside of our influence. In addition to local organisations, we will continue to work in partnership with regional and central government on policies and issues which are beyond the Council's influence.

GLOSSARY OF TERMS

Abbreviation	Description
DEFRA	Department for Environment Food and Rural Affairs
DfT	Department for Transport
EU	European Union
NICE	National Institute for Health and Care Excellence
(NO ²)	Nitrogen Dioxide
(PM ^{2.5})	Particulate Matter 2.5 (particles less than 2.5 µm)
(PM ¹⁰)	Particulate Matter 10 (particles less than 10 µm)
Smog	A mixture of smoke, gases and chemicals, especially in cities, that makes the atmosphere difficult to breathe and harmful for health.
(SO ²)	Sulphur Dioxide
UK	United Kingdom

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