

# HEALTH AND ADULT SOCIAL CARE OVERVIEW AND SCRUTINY COMMITTEE 15 OCTOBER 2019

# IMPACT OF DEVELOPMENT IN MEDWAY, WITH A FOCUS ON AIR QUALITY

Report from: Richard Hicks, Director Regeneration, Culture,

**Environment and Transformation and Deputy Chief** 

Executive

Author: Dave Harris, Head of Planning

Lucy Kirk, Environmental Protection Team Leader Stuart Steed, Environmental Protection Officer

# **Summary**

All new development in Medway is assessed by the planning department against various criteria, including air quality. The Environmental Protection team uses the Local Plan (Policy BNE24) and Medway's Air Quality Planning Guidance 2016 to ensure that developments, which meet certain criteria, consider air quality and ensures that relevant mitigation measures are put in place. These mitigation measures are usually secured by relevant planning conditions being placed on the permission. Screening checklists in the guidance, and professional judgement, are used to determine the extent to which air quality needs to be considered.

The Planning department and Environmental Protection team have been requested to provide a general update on the impact of development in Medway, with a focus on air quality, to the Committee.

#### 1. Budget and Policy Framework

National Planning Policy is set out in the National Planning Policy Framework 2019, which has a section on Climate Change although no specific reference to air quality. However, there is National Planning Guidance on Air Quality (2014) which sets out clearly the Governments aspirations for air quality considerations in the Planning process, including Plan Making and processing planning applications. The Medway Local Plan, 2003, while an aging plan in many respects, includes a policy on localised amenity considerations (BNE2) and a specific policy on Air Quality (BNE24). To assist in the assessment of proposals pursuant to these policies and building on more recent National Planning Guidance, Medway Council has adopted Air Quality Planning Guidance in 2016.

- 1.2 The Council has a statutory duty under the requirements of the Environment Act 1995 to review and assess the air quality in the area periodically.
- 1.3 Air quality in general terms features in the Local Plan 2003 and Policy BNE24 deals with air quality. Air quality is referenced within the Local Transport Plan under Priority 2 To support a healthier natural environment by contributing to tacking climate change and improving air quality, and Transport Objective 4 Encouraging active travel and improving health. This objective links to air quality legislation.
- 1.4 The measures to improve air quality in Medway are explained in the Air Quality Action Plan 2015. There is a requirement to supply the Department of Environment Food and Rural Affairs (Defra) with an annual report on the plan's progress. The 2018 annual report can be found in Appendix 1; we are currently awaiting feedback and approval from Defra of the 2019 annual report.

# 2. Background

2.1 The Medway Health and Adult Social Care Overview and Scrutiny Committee agreed at the August Committee for the Planning department and the Environmental Protection team to provide an update on the impact of development in Medway, with a focus on air quality.

# 3. Advice and Analysis

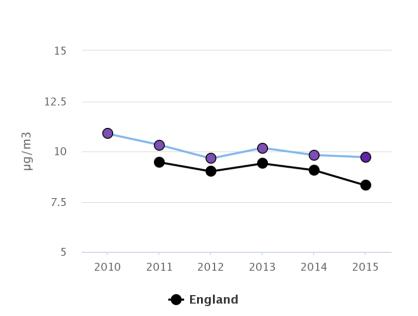
- 3.1 Air pollution is estimated to be largest environmental risk to public health in England. Small particles and other substances polluting the air increase the risk of deaths from lung cancer, cardiovascular disease and respiratory disease. Air pollution has a direct impact on the quality of life of everyone, but more so for vulnerable people. These include the very young, older adults and people living with underlying health conditions, such as asthma or chronic obstructive pulmonary disease. Air quality in Medway is generally good and meets government objectives, however partners are committed to working together to maintain and improve local air quality.
- 3.2 There are many pollutants in the air. Particulate matter and nitrogen dioxide are the pollutants of most concern and cause the most harm to health. Particulate matter consists of small particles that can be breathed deep into the lungs. This type of pollution can come from road transport (e.g. the products of braking and tyre wear on road surfaces), industry or household fires/wood burning stoves. It can also be caused by chemical reactions in the air. Both short and long term exposure to high levels of particulate matter can be harmful to health. Short term exposure exacerbates respiratory problems, such as asthma and bronchitis, leading to coughing and wheezing. Long term exposure (over many years) shortens life expectancy by increasing the risk of cardiovascular disease and other respiratory diseases. Nitrogen dioxide at high concentrations can also cause breathing problems and impact on lung function.
- 3.3 It has been estimated that poor air quality in the UK causes more than 50,000 deaths per year, and probably causes more mortality and morbidity than passive smoking, road traffic accidents or obesity. Particulate air pollution

alone in the UK has been estimated to reduce the life expectancy of every person by an average of 7-8 months, with estimated equivalent health costs of up to £20 billion each year. Latest estimates from Public Health England suggest that in Medway there are 125 deaths each year that are attributable to particulate pollution.

- 3.4 In England, transport is a major source of air pollution, particularly nitrogen dioxide. In Medway, this is made worse by high volumes of slow moving traffic. Medway is affected by air pollution from major roads such as the M2, A2 and other major A roads. Town centre congestion in Medway also contributes to air pollution. This is because slow moving vehicles produce a higher proportion of emissions relative to moving traffic. In Medway in 2016, it is estimated that 6.3% deaths can be attributed to long term exposure to small particles polluting the air. This compares with an average of 5.3% of deaths in England.
- 3.5 Air quality in Medway is generally good and meets national air quality objectives. However, similar to many urban areas in the UK, Medway has some areas of poor air quality. Four areas across Medway have been identified where levels of air pollution do not meet the annual mean objective for nitrogen dioxide (one of the national air quality objectives):
  - Pier Road, Gillingham
  - High Street, Rainham
  - Central Medway
  - Four Elms Hill, Chattenden

These four areas have been declared as Air Quality Management Areas.

3.6 The Public Health Outcomes Framework indicator 3.01 (The fraction of mortality attributable to particulate air pollution) shows an improvement over the last 5 years as the chart below demonstrates.



Air pollution: fine particulate matter - Medway

- 3.7 The Medway Air Quality Action Plan (AQAP) has been established to ensure the Council is able to monitor progress and, through a partnership approach, address any issues around air quality locally. The action plan has a particular focus on reducing nitrogen dioxide, but also contributes to reducing other pollutants including particulate matter.
- 3.8 There key measures in the AQAP are:
  - Improve freight management (e.g. lorries)
  - Encourage the increased use of public transport
  - Improving taxi emissions
  - Traffic management
  - Promotion of cycling walking
  - Eco driving (driving in a smooth, controlled way reduces fuel use and air pollution)
  - Procurement (work to ensure that services procured by the Council also support good air quality)
  - Travel planning (e.g. supporting school travel plans)
  - Promote health awareness and air quality issues
  - Feasibility studies to tackle specific local issues
  - Development planning
  - Development of an Air Quality Communications Strategy
  - Working with the Planning Authority to embed air quality guidance into the new Local Plan
- 3.9 Air pollution is an issue that affects everyone and the best way to improve it is by individuals, communities and partners working together. One key issue identified within the Medway AQAP was the need to raise awareness of things that cause air quality and actions that can be taken by local people to improve the quality of air in Medway. The Council's Environmental Protection team have collaborated with the Public Health department to develop an air quality communications strategy. The aim of this strategy is to engage with residents, businesses and other stakeholders to get them to tackle the things that cause air pollution. The development of the Strategy has been truly innovative. It focusses on specific communities and people who are most affected by poor air quality, as well as those who could provide solutions to help reduce air pollution in Medway. It also supports local people to be informed about ways in which they can reduce their own contribution to air pollution. Key target groups include residents that live in an AQMA, older people, parents of young children, people with respiratory disease or cardiovascular disease, and people who drive regularly (including taxi and lorry drivers).
- 3.10 The key messages to be promoted to individuals include:
  - Don't leave your car engine running when the vehicle is stationary. This
    pollutes the air, causes unnecessary noise and costs money. Switching off
    your engine is an easy way to help improve air quality and the health of
    people in Medway.
  - Walking or cycling instead of driving can improve your health as well as reducing air pollution. To get started, why not sign up for a health walk or cycle? Find out details on Medway Council's A Better Medway website.
  - Reduce the number of car journeys you make. Car sharing, cycling, walking or using public transport can help reduce the number of vehicles on the road in Medway and contributes to reducing air pollution.

- Keeping your car well maintained can reduce the amount of pollution it produces. Make sure it's regularly serviced/checked.
- Consider switching to an electric or hybrid vehicle. Recharging an electric vehicle is much cheaper than buying fuel.
- Sign up to the free air pollution forecasts on the KentAir website. You will
  receive an email when there are likely to be raised levels of air pollution,
  so you can take measures to reduce your exposure if you are in a
  vulnerable group.
- 3.11 In terms of other partners and stakeholders, the following actions have been identified:
  - Through the Air Quality Communications Strategy, partners in Medway should continue to raise awareness to all residents of the potential health impacts from air pollutants and what measures they can take to reduce the impact and the level of poor air quality in Medway
  - Partners in Medway should increase the number of Medway residents signed up to receive the KentAir pollution forecasts.
  - Through the Air Quality Communications Strategy, partners in Medway should work with local employers, service providers, and voluntary and public sector organisations to raise awareness of air pollution, its impact and actions that can be taken to reduce it.
  - Health professionals should continue to raise awareness of air pollution, such as ways in which people can reduce air pollution and exposure to it, among people with respiratory conditions and cardiovascular disease.
- 3.12 Medway, as Local Planning Authority, receives approximately 1500 planning applications a year not including other applications, such as prior notifications and condition discharge applications. These applications will raise a wide range of planning issues depending on the nature of the proposal, scale and location. The starting point for the consideration of the planning issues is the Development Plan, and in this instance that is the Medway Local Plan, its relevant policies and supporting planning guidance. To assist the Planning case officer in the assessment of any application there are a number of statutory and non-statutory bodies and internal departments that are consulted on applications (depending on the nature of the application) that then provide input into the consideration of the planning issues.
- 3.13 The Environmental Protection team is a consultee in the planning process and provide advice to the Planning department on new developments with respect to noise, air quality and contamination issues.
- 3.14 When considering air quality, the Environmental Protection team assesses the impacts new developments may have on air quality within the area and the impacts that existing levels of air quality may have on the users of the developments, together with consideration of any relevant cumulative impacts associated with other developments.
- 3.15 The Local Plan 2013 includes policy BNE24 which deals with air quality and all new proposed developments in Medway are considered against this policy and the Medway Air Quality Planning Guidance.

#### 3.16 POLICY BNE24: AIR QUALITY

Development likely to result in airborne emissions should provide a full and detailed assessment of the likely impact of these emissions. Development will not be permitted when it is considered that unacceptable effects will be imposed on the health, amenity or natural environment of the surrounding area, taking into account the cumulative effects of other proposed or existing sources of air pollution in the vicinity.

- 3.17 In addition, to Policy BNE24, the Environmental Protection team has also produced air quality planning guidance, adopted in April 2016. The guidance assists with implementing policy BNE24 by setting out how air quality assessments are to be undertaken and emphasises the mitigation of impacts using a damage costs approach. Medway took the lead in producing the guidance on behalf of the Kent & Medway Air Quality Partnership, with the aim of promoting a consistent approach to developments across the county. Medway was an early adopter of the new guidance, which requires the implementation of standard mitigation measures for certain types of developments, and more comprehensive mitigation schemes for larger developments. This includes, amongst other things, the installation of electric vehicle charging points, low NOx gas fired boilers, car club provision, travel plans, green infrastructure, cycling infrastructure and cycle storage.
- 3.18 Producing this guidance was a high priority following adoption of the Medway Air Quality Action (AQAP) in 2015 and addresses Measure 10: Development Planning. The guidance draws on best practice guidance produced by Forest of Dean Council, the Sussex Air Quality Partnership and the West Yorkshire Low Emissions Strategy Group.
- 3.19 Medway's Air Quality Planning Guidance is used to ensure that developments which meet certain criteria consider air quality and ensures that relevant mitigation measures are put in place, as outlined in 3.5 above. These mitigation measures are usually secured by relevant planning conditions being placed on the permission. Screening checklists in the guidance, and professional judgement, are used to determine the extent to which air quality needs to be considered.
- 3.20 There are good examples of where this guidance has been used, such as:
  - Rochester Riverside: Air quality damage costs of the development were valued at £708,493. An extensive mitigation scheme was approved valued at over £1.8 million. The scheme includes a travel plan, car club, cycle storage, installation of low NOx gas fired boilers and more than 600 electric vehicle charging points.
  - Berengrave Nursery Rainham: Air quality damage costs of the development were valued at £90,340. A mitigation scheme was approved valued at over £94,000. The scheme includes more than 90 electric vehicle charging points, installation of low NOx gas fired boilers, tree planting, cycle storage and contributions towards walking, cycling and public transport infrastructure.
- 3.21 The Environmental Protection team also considers the impact that the construction of the development will have on the air quality in the local area,

for example due to fugitive dust emissions. This, where necessary, can be dealt with by a condition being placed on the planning permission to ensure that the developer produces a Construction Environmental Management Plan, and includes the provision of dust control measures.

- 3.22 The new Local Plan, which is currently being developed, will have a strong air quality policy, which will be supported by the requirements of the Medway Air Quality Planning Guidance.
- 3.23 Medway has an extensive network of monitoring sites that is used to assess the ongoing trends in air quality across Medway, with a particular focus on the four Air Quality Management Areas (AQMAs). This network of monitoring sites is reviewed regularly, for example in response to developments coming forward or large infrastructure projects that could have an impact on air quality in Medway (for example the Lower Thames Crossing).
- 3.24 Medway undertook monitoring of nitrogen dioxide at 40 locations during 2018. This consisted of two continuous automatic monitoring stations, and 38 passive diffusion tube sites. Measured concentrations at both automatic monitoring stations were below the annual mean objective for nitrogen dioxide in 2018. Measured concentrations were also below the annual mean objective at 34 out of 38 passive diffusion sites during 2018, when distance corrected to represent relevant exposure. All measured exceedances of the objectives were within the current AQMAs. Likewise, measured concentrations of particulate matter have also remained below the air quality objectives.
- 3.25 The ongoing trends in air quality across the whole of Medway are reported through the Annual Status Report (ASR) which is submitted to Defra. The general trend in Medway is that air quality has been improving. This will continue to be monitored through the air quality monitoring network in Medway. Because pollutant levels can vary year to year due to prevailing climatic conditions, guidance recommends that trends should be considered where there is at least 5 years of monitoring data available. The latest 2019 ASR includes more information and an update on the trends in Medway up until the end of 2018, and will be published upon approval from Defra.
- 3.26 Both automatic monitoring stations show a weak overall trend of decreasing annual mean concentrations from 2011 to 2018. This trend is also apparent in the measured concentrations at passive diffusion tube sites, however, some sites do exhibit a stronger trend of decrease over this period. The trend for particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>) also shows a general decline in concentrations since 2011. Measured concentrations in more recent years (2016-2018) have shown some increases in particulate matter, however this is thought to be attributable to changes in monitoring equipment at the end of 2016 which may have had some influence on measured concentrations in 2017 and 2018 due to the different monitoring techniques employed.

# 4. Risk Management

Risk	Description	Action to avoid or mitigate risk
Not fulfilling Statutory Duty  (This poses both a reputational and financial risk to the Council)	The Environment Act 1995 gives local authorities duties and responsibilities that are designed to secure improvements in air quality, particularly at the local level.	To ensure that all new development which comes forward in Medway does not have a negative impact on air quality which causes air quality objectives to be exceeded and thus additional air quality managements areas to be declared.
		Produce and obtain approval for the Action Plan for Four Elms Hill Air Quality Management Area and continue to work towards implementing the Air Quality Action Plan measures.
Infraction fines being passed down to the local authority by Central Government  (This poses both a reputational and financial risk to The Council)	The European Commission has launched infraction proceedings against the UK for breach of nitrogen dioxide limit values under the EU Air Quality Directive and a final warning was issued in February 2017. Central Government is seeking to work with local authorities to avoid the fines. However, discretionary power in Part 2 of the Localism Act enables the Government to require responsible authorities to pay all or part of an infraction fine. If the Council does not fulfil its statutory duties under the Environment Act 1995, they will not be able to show that they are working towards improving the air quality and reducing nitrogen dioxide levels within the area and could be liable for these fines.	To ensure that all new development which comes forward in Medway does not have a negative impact on air quality which causes air quality objectives to be exceeded and thus additional air quality managements areas to be declared.

# 5. Financial Implications

5.1 There are no financial implications to Medway Council arising directly from the contents of this report.

# 6. Legal Implications

- 6.1 Any planning decision made by the Council has the possibility of being challenged, either through the appeal system against decisions to refuse or to approve subject to conditions; or, more relevant here, through the courts by way of a Judicial review (JR) in relation to a decision to approve. Where such JR's are successfully this would normally relate to where a LPA has not properly and fully considered a material planning consideration, such as air quality, or made a decision which having considered the facts is "Wednesbury unreasonable" in other words no reasonable person having considered the facts could have reached the decision made.
- 6.2 The Environment Act 1995 gives local authorities duties and responsibilities that are designed to secure improvements in air quality, particularly at the local level. This is carried out under the Local Air Quality Management regime. It includes the review and assessment of key pollutants in the local area on an annual basis. If it appears that any of the air quality objectives set by Government are not likely to be achieved, resulting in members of the public being exposed to the pollution, the local authority must by order designate any part of its area so affected as an AQMA. It must then prepare and implement a remedial Action Plan of measures to reduce air pollution levels in the AQMAs.
- 6.3 UK Government is currently in breach of EU air quality limit values for annual average nitrogen dioxide and the European Commission has formally launched infraction proceedings and a final warning was issued in February 2017. Central Government is seeking to work with Local Authorities to avoid the fines. However, it should be noted that discretionary power in Part 2 of the Localism Act enables the Government to require responsible authorities to pay all or part of an infraction fine. Guidance on the procedures is set out in a policy statement published by Department for Communities and Local Government. It is unclear at this time if or how this could affect Medway Council.

#### 7. Recommendations

7.1 That the Committee notes and accepts this report as an update from the Planning department and Environmental Protection on the impact of development in Medway, with a focus on air quality, to the Committee.

#### **Lead Officer Contact**

Dave Harris, Head of Planning

Telephone: 01634 331575 E-mail: dave.harris@medway.gov.uk

Lucy Kirk, Environmental Protection Team Leader

Telephone: 01634 333062 E-mail: lucy.kirk@medway.gov.uk

# **Appendices**

Appendix 1: 2018 Air Quality Annual Status Report (ASR): Medway Council

# **Background Papers**

Environment Act (1995) <a href="http://www.legislation.gov.uk/ukpga/1995/25/contents">http://www.legislation.gov.uk/ukpga/1995/25/contents</a>

Medway Council Air Quality Action Plan 2015 <a href="http://www.medway.gov.uk/pdf/%20Medway%20AQAP%20December%202015.pdf">http://www.medway.gov.uk/pdf/%20Medway%20AQAP%20December%202015.pdf</a>