

Subject:	Air Quality Progress Report		
Date of Meeting:	11th July 2012		
Report of:	Strategic Director, Place		
Contact Officer:	Name:	Samuel Rouse, Senior Air Quality Advisor	Tel: 29-2256
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Ward(s) affected:	All Wards		

FOR GENERAL RELEASE**SUMMARY AND POLICY CONTEXT:**

- 1.1 Publication of Air Quality Progress Reports containing airborne pollution monitoring results for 2011 is one of the council's statutory duties under Part IV of the Environment Act 1995 and the Clean Air Act 1993.
- 1.2 The air quality strategy limit values for the protection of human health are not aspirational but are legally binding under EU & English legislation¹. Council's are responsible for action plan measures to tackle poor air quality and have a statutory duty to deliver regular reports to Defra. The EU must see measures to improve air quality or authorities may risk incurring fines for non-compliance. The risk of fines and legal action is more likely where authorities have failed to demonstrate actions plan measures to improve air quality or it is proven that actions in practice make the problem worse. Defra has applied to the EU for compliant extensions for the NO₂ limit value; now currently required by 2013.

2. RECOMMENDATIONS:**That the Committee:**

- 2.1 Notes the Air Quality Action Plan (AQAP) set out at Appendix One.
- 2.2 Notes the Air Quality Progress Report set out at Appendix Two and instructs the Strategic Director of Place to consider further options that may be brought forward concerning local Air Quality Management measures necessary to achieve compliance with Defra objectives, targets and requirements.
- 2.3 Agrees that the Air Quality Action Plan be included as supporting evidence for the Council's City Plan and the appropriate Development Plan documents, the Local Transport Plan, and Council strategies.

¹ <http://uk-air.defra.gov.uk/air-pollution/uk-eu-policy-context>

- 2.4 Directs the Strategic Director of Place to meet appropriate Defra officials to seek clarity on Council's current liability and timescales required for compliance.

3. RELEVANT BACKGROUND INFORMATION/CHRONOLOGY OF KEY EVENTS

- 3.1 In December 2004 an Air Quality Management Area (AQMA) in Brighton and Hove was declared for non-compliance of Nitrogen Dioxide. The area included Valley Gardens, southern end of Lewes Road and London Road. The AQMA was expanded on the January 2008 to include a much larger area spanning from Black Rock and Kemptown to the Adur Boundary, and moving North to the Old Shoreham Road. In July 2011 An Air Quality Action Plan (AQAP) was published and approved by DEFRA in and is set out at Appendix One.
- 3.2 The detailed assessments for Preston Road and Rottingdean High Street are currently in progress and will shortly be sent to DEFRA for approval. These two assessments may determine a revision of the current Air Quality Management Area and may in turn affect the Air Quality Action Plan. All air quality monitoring and modelling results are reported to DEFRA in a variety of reports. DEFRA direct and define the reporting process based on the findings of our assessments and reports.
- 3.3 The latest Air Quality Progress Briefing to May 2012 shows that while there has been long-term improvement in levels of Nitrogen Dioxide outside of the city centre, concentrations of NO₂ continue to remain above the legal limit (air quality standard) within a few metres of narrow roads in central Brighton, Portslade and Rottingdean High Street.
- 3.4 Vehicle exhaust fumes affect air quality and relatively few vehicles can cause an air quality problem in a narrow street environment, but factors such as commercial and domestic heating in urban areas also contribute to local airborne pollution.
- 3.5 Local strategies include a low emissions strategy with the Sussex Air Quality Partnership, considering air quality in transport and planning, encouraging and supporting low carbon initiatives, committing to a 'One Planet' approach and working towards becoming a UN Biosphere Reserve.
- 3.6 The council has published air quality results for the past 16 years. Over the past decade results show an improving trend in Nitrogen Dioxide outside of the city centre. Combined with source reductions in lead, benzene and carbon monoxide it indicates that the air where people live is healthier than 10 or 20 years ago, as shown in Appendix 4.
- 3.7 Last years' city centre diffusion tube monitors also suggest a slight improvement compared with 2010, but central Nitrogen Dioxide (NO₂) concentrations were higher in 2011 than in 2008 and a number of sites show no improvement in the past 10 years.

- 3.8 The council links air quality into the city's Local Transport Plan (LTP) and the environmental protection team influences planning as air quality is taken into account as a material consideration for planning applications.
- 3.9 Nitrogen Dioxide pollution in central Brighton is comparable with other small cities with historical centres such as York, Oxford and Cambridge.
- 3.10 The Council's Air Quality Management Area is needed for non compliance of ambient (outdoor) Nitrogen Dioxide at roadside. For NO₂ the EU Air Quality limit value and the English air quality standard are identical (40 micrograms per m³). Therefore City Council, Defra and EU objectives are the same for this pollutant. This legal limit is also supported by the World Health Organisation (WHO) for protection of the most vulnerable members of a population, i.e. young infants and most elderly. Air quality evidence should be used to support the Council's City Plan and the appropriate Development Plan documents, the Local Transport Plan, and other Council Strategies.
- 3.11 Two of the council's key transport goals [the policy drivers] are to improve health and increase quality of life. Reducing emissions and poor air quality can contribute towards achieving those goals. Investment in a number of transport measures that help to reduce congestion (and therefore the associated idling of engines and unnecessary emissions), manage traffic and movement better, and promote and provide alternatives for some journeys will all assist in reducing the effects of pollution on people's lives and environments. Measures can come in many forms and be the responsibility of a number of different organisations, in addition to the council in its role as the Highway Authority. For example, bus companies can improve engine technology and driving styles, and offer attractive fares and ticketing arrangements. Businesses can reduce business mileage within their operational fleet or by staff. Investment in new technology enables the use of variable message information signs to reduce the unnecessary circulation associated with searching for a car parking space, or 'intelligent' traffic signals that respond to pedestrians, cyclists and vehicles to maintain an efficient and safe use of busy road junctions. Encouraging and providing for greater use of walking and cycling for shorter journeys will make those forms of transport safer and more convenient. The outcome of this combined effort and investment by partners and stakeholders working together with the council will assist in reducing the effects of poor air quality on the city's public health.

4. AIR QUALITY ACTION PLAN AND PROGRESS REPORT

- 4.1 On the 8th December 2004 an Air Quality Management Area (AQMA) in Brighton and Hove was declared for non-compliance of Nitrogen Dioxide. The AQMA was expanded on the 25th January 2008. An Air Quality Action Plan (AQAP) was published and approved by Defra in July 2011 and is set out at Appendix One. The Air Quality Progress Report dated May 2012 and set out in Appendix Two provides information and monitoring data on the current status of air quality across the City.
- 4.2 Key Action Plan Measures

The package of measures described in this Air Quality Action Plan (AQAP) can be categorised into the following headings:

- i. **Major intervention measures (long-term)** – such as road construction, road surface maintenance, road infrastructure changes, bus lanes, bus stop and carriageway position, façade distance from kerb, avoidance of building mass adjacent to road and street canyons creation, pavement width, cycle lanes, pedestrianised streets
 - ii. **Emissions reduction** – Investment in cleaner vehicles, roadside emissions testing, reduced idling, evolved changes to the local vehicle fleet, reduced dependence on diesel, promotion of alternative fuels and Best Available Techniques (BAT) especially; natural gas, bio gas, hybrid and electric.
 - iii. **Soft measures and smarter choices** – such as public transport partnerships, travels plans, IT remote working, travel avoidance, consolidated transport ticketing, real time information, walking and cycling infrastructure.
 - iv. **Education and public information-** campaigns on healthy lifestyles to include air quality (to compliment good diet, no smoking & exercise) work with local schools, PCT, colleges, universities, businesses polluter pays principal, promote quantification of health impact assessments and corporate and consumer responsibilities – presentations and website development.
 - v. **Congestion management** – such as traffic signal technology and the use of variable message signs, intelligent applications to manage vehicle flow.
 - vi. **Development Control** – ensuring that the impact on the transport network of development proposals is sufficiently integrated and that design will promote and provide for sustainable travel patterns whilst also not introducing sensitive residents to areas that continue to exceed the air quality limit values. Ensuring that air quality is a material consideration on planning applications in accordance with National Planning Policy Framework, advice given to City Plan Development Area policy.
 - vii. **Smoke Control Clean Air Act Enforcement and Statutory Nuisance** Investigation when complaints received for bonfire, stoves coal and wood burners. A Smoke and Clean Air Act awareness project is currently in progress.
- 4.3 The proportion of vehicle induced pollution can vary considerably depending on the route and heavy vehicle access. For example there are no bus routes along Viaduct Road and few private cars on sections of North Street & Western Road. Hence in some areas it is estimated that private cars contribute no more than half of roadside NO₂ pollution. In other transport corridors trucks, vans, taxis and buses can contribute up to three quarters of NO₂ pollution.

5. COMMUNITY ENGAGEMENT AND CONSULTATION

- 5.1 The 2011 Air Quality Action Plan went through a formalised twelve week consultation. A summary is set out in the action plan document.

6. FINANCIAL & OTHER IMPLICATIONS:

6.1 Financial Implications:

Air Quality investigations and action plan measures are funded by a combination of ring fenced grants from Defra and existing Environmental Health and Licensing revenue budgets The LSTF is funded by DfT with match funding from the City Council and local bus company, and includes an allocation in respect of Air Quality Measures. In the future it is possible that further measures to improve air quality might be funded by Section106, Community Infrastructure Levies or some of the surplus from parking enforcement.

Finance Officer Consulted: Karen Brookshaw

Date:22/06/12

6.2 Legal Implications:

The process of Local Air Quality Management is set out under Part IV of the Environment Act 1995 and Air Quality Regulations. The Act places the Council under a duty to prepare and revise from time to time an action plan in relation to an area designated as an Air Quality Management Area. Any modification of the Air Quality Management Area would need to be subject to full consultation

Lawyer Consulted: Elizabeth Culbert

Date: 13/06/12

6.3 Equalities Implications:

An equalities impact assessment was carried out in 2011 for the air quality action plan. A healthy environment is vital for quality of life. Deprived parts of England can suffer worse air quality. There are strong links between respiratory health, inequality and social deprivation. In England higher concentrations of NO₂ and PM₁₀ are often recorded in more deprived areas. That said a broad cross section of society is likely to be effected as property prices in Brighton & Hove remain high regardless of pollution concentrations.

6.4 Sustainability Implications:

Air Quality Action Plan linked with the city Climate Change Strategy. A key desirable for air quality and sustainability is to promote alternatives to diesel in the city centre.

6.5 Crime & Disorder Implications:

None

6.6 Risk and Opportunity Management Implications:

Dealt with elsewhere in the report.

6.7 Public Health Implications:

Air pollution has short & long term health effects including worsening the condition of those with cardiovascular² or respiratory disease; potentially inhibiting the growth of lung tissue in infants; aggravating asthma in those already diagnosed with the condition &; in the longer term, reducing life expectancy at a population level.³ Some people (especially older people) with cardiovascular & respiratory diseases can be adversely affected by day-to-day changes in air pollutants, including an increased risk of hospital admission & mortality.⁴

Long-term exposure to air pollution has a lasting effect on health, though the effects vary depending on where people live & the type of pollutant mixture that people are exposed to. Though the full extent of the health effects of air pollution are hard to quantify, it is estimated that for those born in 2008 the average loss of life expectancy from manmade air pollution is approximately six months.⁵ The impact of long term exposure on vulnerable groups is likely to be more significant.

The Joint Strategic Needs Assessment has a section on air quality. Long term or repeated exposure to air pollution has a lasting effect on health. Estimating future AQ is confounded by uncertainty regarding vehicle emission performance (CO₂, NO_x and particulate matter) and contribution from other sources (domestic and commercial space heating, coal and wood burning).

6.8 Corporate / Citywide Implications:

Automated traffic counters record a decrease in total traffic numbers in the city since 2007⁶. At the same time the council monitors a lack of air quality improvement. There is evidence for an increase in diesel fuel sold (2007-2010) and an increase in the number of diesel cars and buses on the road. On 12th June 2012 the World Health Organisation characterised diesel fumes as carcinogenic⁷. June 2012 Oxford University Press paper; "The problem with diesel", is included in the appendix.

7. **EVALUATION OF ANY ALTERNATIVE OPTION(S):**

- 7.1 The submission of air quality progress reports to Defra is mandatory. Reports are also used by Department for Energy and Climate Change (DECC) and Department for Transport (DfT). Local Air Quality Management is a statutory duty for the Council.

8. **REASONS FOR REPORT RECOMMENDATIONS**

³ COMEAP (2006) Cardiovascular Disease and Air Pollution

³ Health Protection Agency (2005) Health Protection in the 21st Century

⁴ COMEAP (2010) The Mortality Effects of Long-Term Exposure to Particulate Air Pollution in the United Kingdom

⁵ DEFRA (2010) Valuing the Overall Impacts of Air Pollution

⁶ Full Air Quality Action Plan <http://www.brighton-hove.gov.uk/index.cfm?request=c1001183>

⁷ 13th June 2012 WHO declares diesel fumes carcinogenic

http://www.google.com/hostednews/ukpress/article/ALeqM5q0fcm1_2Udb5K6AX8YOsZoFm1sVQ?docId=N0244851339530412740A

Council needs to build on current measure in the Air Quality Action Plan in order to mitigate roadside pollution to safe levels

SUPPORTING DOCUMENTATION

Appendices:

1. Air Quality Action Plan July 2011
2. Progress Report presenting air monitoring results May 2012

Documents in Members' Rooms

1. None

Background Documents

1. 2010 Air Quality Further Review and Assessment published on the council website⁸

⁸ 2010 Brighton and Hove Further Review and Assessment of Air Quality <http://www.brighton-hove.gov.uk/index.cfm?request=c1255974>

