



**Hinckley & Bosworth
Borough Council**

FORWARD TIMETABLE OF CONSULTATION AND DECISION MAKING

SCRUTINY COMMISSION

13 September 2018

WARDS AFFECTED: ALL WARDS

ENVIRONMENTAL HEALTH (POLLUTION) AIR QUALITY MANAGEMENT

Report of Director (Environment and Planning)

1. PURPOSE OF REPORT

- 1.1 To inform members of the work undertaken by the Environmental Health (Pollution) service on Local Air Quality Management under the Environment Act 1995.

2. RECOMMENDATION

- 2.1 The report is for information only

3. BACKGROUND TO THE REPORT

- 3.1 Air pollution has risen significantly in the political agenda in recent years due to an increasing awareness of the social, environmental and economic impacts of poor air quality.
- 3.2 Air pollution used to be a more visible problem in the UK due to extensive domestic and industrial combustion of fossil fuels emitting large amounts of smoke and its associated pollutants. Today, the air we breathe is visibly cleaner; however, major, but much less visible, problems still persist and Environmental Health (Pollution) continues to work to assess the air quality of the borough. The major threat to clean air is now posed by traffic emissions. Petrol and diesel-engine motor vehicles emit a wide variety of pollutants but the main pollutant of concern is nitrogen dioxide.
- 3.3 Under the Environment Act 1995, local authorities are required to carry out regular reviews and assessments of air quality in their area. In addition, Environmental Health (Pollution) also regulates certain industrial processes that cause air pollution and fall within the Environmental Permitting regime. We also provide advice and guidance to businesses and the public on how to control air pollution and have enforcement tools should legislation, emission limits or operating conditions be breached. We also work in partnership with the Planning services of both the borough and county council and transport planning to ensure new development takes account of air quality.

3.4 Health impact

- 3.4.1 Poor outdoor air quality results in around 40,000 premature deaths annually in the UK (Royal College of Physicians 2016). There is evidence of the contribution of poor air quality to illnesses such as cancer, stroke, asthma and heart disease and there are also strong associations with obesity, dementia and diabetes.
- 3.4.2 The effects are especially evident in vulnerable people and in the UK, air pollution costs businesses and health care services in excess of £20 billion annually (Royal College of Physicians 2016).

3.5 Local Air Quality Management

- 3.5.1 Local Authority responsibilities under the Local Air Quality Management (LAQM) process is set out in Part IV of the Environment Act (1995), the Air Quality Strategy for England, Scotland, Wales and Northern Ireland 2007 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 exceedances are considered likely, the local authority must then 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 pursuit of the objectives.

3.6 Air Quality Objectives

- 3.6.1 The Air Quality (England) Regulations 2000 set national objectives for local authorities in England. At the core of LAQM delivery are three pollutant objectives; these are: Nitrogen Dioxide (NO₂), Particulate Matter (PM₁₀) and Sulphur Dioxide (SO₂). The objectives for these pollutants are shown in Appendix 1. All current Air Quality Management Areas (AQMAs) across the UK are declared for one or more of these pollutants.

3.7 Changes to LAQM

- 3.7.1 The LAQM system across the UK changed in 2016. A new streamlined approach has been adopted which places greater emphasis on action planning to bring forward improvements in air quality and to include local measures as part of EU reporting requirements. Changes have also been made to the reporting requirements with the introduction of an air quality Annual Status Report (ASR) which replaces several documents previously required. HBBC ASR's are available to view on the HBBC website.
- 3.7.2 A new role for local authorities has been introduced to work towards reducing levels of Particulate Matter _{2.5} (fine particulate matter). The PM_{2.5} role has not been defined in detail so as to allow each local authority the flexibility to set its own approach in contributing towards PM_{2.5} reductions. Research has shown that much of the (relatively low) levels of PM_{2.5} generated within the borough potentially come from industrial sites controlled by the Pollution Prevention and Control regime. DEFRA is satisfied with the work carried out by HBBC, as outlined below, in fulfilling this new role.
- 3.7.3 The principal pollutant of concern in the borough is nitrogen dioxide.

3.8 National Setting

- 3.8.1 In 2017, there were nearly 600 AQMA's in England. Of these, the vast majority (over 90%) are related to road traffic emissions, specifically nitrogen dioxide. By

comparison, there are very few AQMAs associated with domestic, industrial or other transport-related emissions.

- 3.8.2 The UK is currently subject to legal proceedings for failing to meet European Limit Values for nitrogen dioxide. This is due in part to the failure of vehicle standards to deliver the expected benefits in terms of reductions in emissions from diesel vehicles.

3.9 Local Setting

- 3.9.1 Hinckley and Bosworth Borough Council currently has no Air Quality Management Areas and air quality is generally good across the borough. Appendix 2 shows the current AQMA's in Leicestershire which in general can be seen to coincide with the larger built up areas surrounding the city of Leicester.

- 3.9.2 Our borough is located within what is known as The Golden Triangle of Logistics which, with access to several major motorways provides access to over 90% of the UK population within 4 hours. The Golden Triangle has close to 14 million m² of warehouse space; more than twice the combined warehousing activity of London, Scotland and Wales. The borough is effectively bounded by major roads. All these roads are part of the East Midlands road network and are heavily trafficked. These communication routes attract a strong desire for B8 (Storage or Distribution) development which, while bringing in clear economic benefits does present challenges to air quality on the local road network.

3.10 Monitoring

- 3.10.1 Environmental Health (Pollution) currently operates 16 monitoring sites within the borough. Monitoring is carried out using diffusion tubes to measure nitrogen dioxide over 1 month periods (see appendix 3 for an example of a diffusion tube location). Diffusion tubes allow monitoring to be carried out over a geographical area. Our monitoring sites can be seen in appendix 4. Appendix 4 also shows the annual mean monitoring results for each site. The results show that no sites across the borough indicated exceedances of the Air Quality Objectives in 2017.

- 3.10.2 A detailed assessment was carried out on the area surrounding the monitoring location on the roundabout on Shaw Lane, Markfield in 2015. The results of the detailed assessment showed that the Air Quality Objective Values were not exceeded and an Air Quality Management Area was not declared. The Detailed Assessment was accepted by DEFRA. Subsequent monitoring in 2016 and 2017 has again shown levels of nitrogen dioxide within the Objective Values. This site will remain closely monitored and Environmental Health will continue to liaise with Leicestershire County Council regarding improvements to the road network in that area which forms part of the "Coalville Growth Corridor".

- 3.10.3 Changes to the road layout in Hinckley surrounding the Crescent development in 2015 have seen a new set of traffic lights installed on Rugby Road. Two Diffusion Tube monitoring sites have been located along Rugby Road to monitor air quality in this area. One tube is directly adjacent to the new traffic lights at the entrance of the car park to the Crescent; the second was located adjacent to the Hinckley Hub on Rugby Road. The results from both 2016 and 2017 show both sites are within the guidelines.

3.11 Management of Air Quality

- 3.11.1 In addition to LAQM the following work is carried out by Environmental Health (Pollution) to reduce air pollution arising in the borough and to help improve air quality.

3.12 Pollution Prevention and Control

- 3.12.1 We issued 51 industrial processes with an Environmental Permit under the Pollution Prevention and Control regime (Environmental Permitting (England and Wales) Regulations 2016). This includes brickworks, quarries, petrol stations, some incinerators, dry cleaners and paint-shops amongst other facilities. Regular inspections monitor compliance with the Environmental Permit for the site and ensure that emissions to atmosphere are adequately controlled.
- 3.12.2 We work with industry to ensure that best available techniques are used to improve air quality through this regime. As an example of this Triumph Motorcycles Ltd have recently invested around £750,000 on technology to abate emissions from the paint shop which has significantly reduced emissions of volatile organic compounds, particulate matter and other pollutants to air. Should there be sufficient interest Environmental Health can facilitate a visit to the plant to see the paint-shop and new abatement plant working.

3.13 Development Control

- 3.13.1 Air quality is a material planning consideration and as such we are consulted on all applications to ensure that air quality is adequately protected through the planning process at both construction and operational phases.
- 3.13.2 Air quality has been given improved status in the borough's planning process with the adoption of The Site Allocations and Development Management Policies (SADMP) Development Plan in 2016. Policy DM7 'Preventing Pollution and Flooding' requires that adverse impacts from pollution and flooding will be prevented by ensuring that development proposals demonstrate that it will not contribute to poor air quality.

3.14 Complaints

- 3.14.1 Environmental Health (Pollution) investigates complaints relating to some aspects of air quality including the emissions of dark smoke from trade premises and chimneys, statutory nuisance from bonfires and dust from industrial, trade or business premises. In 2017 119 complaints were investigated relating to smoke from bonfires and chimneys and 14 complaints relating to dust and particulates were investigated.

3.15 Partnership working

- 3.15.1 We continue to work in partnership with other agencies including all other Leicestershire local authorities including the County Council, Highways England, the Environment Agency and Public Health England to promote air quality. Officers attend the Leicestershire Air Quality Forum where professionals from various agencies meet to discuss air quality issues in the region and share knowledge, experience and best practice.

4. EXEMPTIONS IN ACCORDANCE WITH THE ACCESS TO INFORMATION PROCEDURE RULES

- 4.1 Open Session

5. FINANCIAL IMPLICATIONS [AG]

- 5.1 None

6. LEGAL IMPLICATIONS [AR]

- 6.1 Contained within the body of this report.

7. CORPORATE PLAN IMPLICATIONS

- 7.1 The report shows how the work of the Environmental Health (Pollution) Service meets its statutory obligations and works towards the corporate plan: People - Helping people to stay healthy, active and protected from harm
People - Take measures to reduce crime and anti-social behaviour and protect people from harm
Places - Creating clean and attractive places to live and work

8. CONSULTATION

- 8.1 None

9. RISK IMPLICATIONS

- 9.1 It is the Council's policy to proactively identify and manage significant risks which may prevent delivery of business objectives.
- 9.2 It is not possible to eliminate or manage all risks all of the time and risks will remain which have not been identified. However, it is the officer's opinion based on the information available, that the significant risks associated with this decision / project have been identified, assessed and that controls are in place to manage them effectively.
- 9.3 The following significant risks associated with this report / decisions were identified from this assessment:

Management of significant (Net Red) Risks		
Risk Description	Mitigating actions	Owner
None compliance with legal obligations relating to Local Air Quality Management	Ensure adequate resources are provided to meet obligations.	Simon Smith

10. KNOWING YOUR COMMUNITY – EQUALITY AND RURAL IMPLICATIONS

- 10.1 The work detailed in this report promotes good air quality for all.
- 10.2 Many of our processes that hold Environmental Permits e.g. Cliffe Hill Quarry and Caterpillar are within the rural community and as such promote compliance with air quality standards for the residents of our rural communities.
- 10.3 An Equality Impact Assessment is not relevant.

11. CORPORATE IMPLICATIONS

- 11.1 By submitting this report, the report author has taken the following into account:
- Community Safety implications
 - Environmental implications
 - ICT implications
 - Asset Management implications
 - Procurement implications
 - Human Resources implications
 - Planning implications
 - Data Protection implications

- Voluntary Sector

Background papers: Hinckley and Bosworth Borough Council Air Quality Annual Status Report – April 2016 http://www.hinckley-bosworth.gov.uk/downloads/download/95/air_quality_progress_report_2010
Hinckley and Bosworth Borough Council Air Quality Annual Status Report June 2018- Currently awaiting appraisal by DEFRA

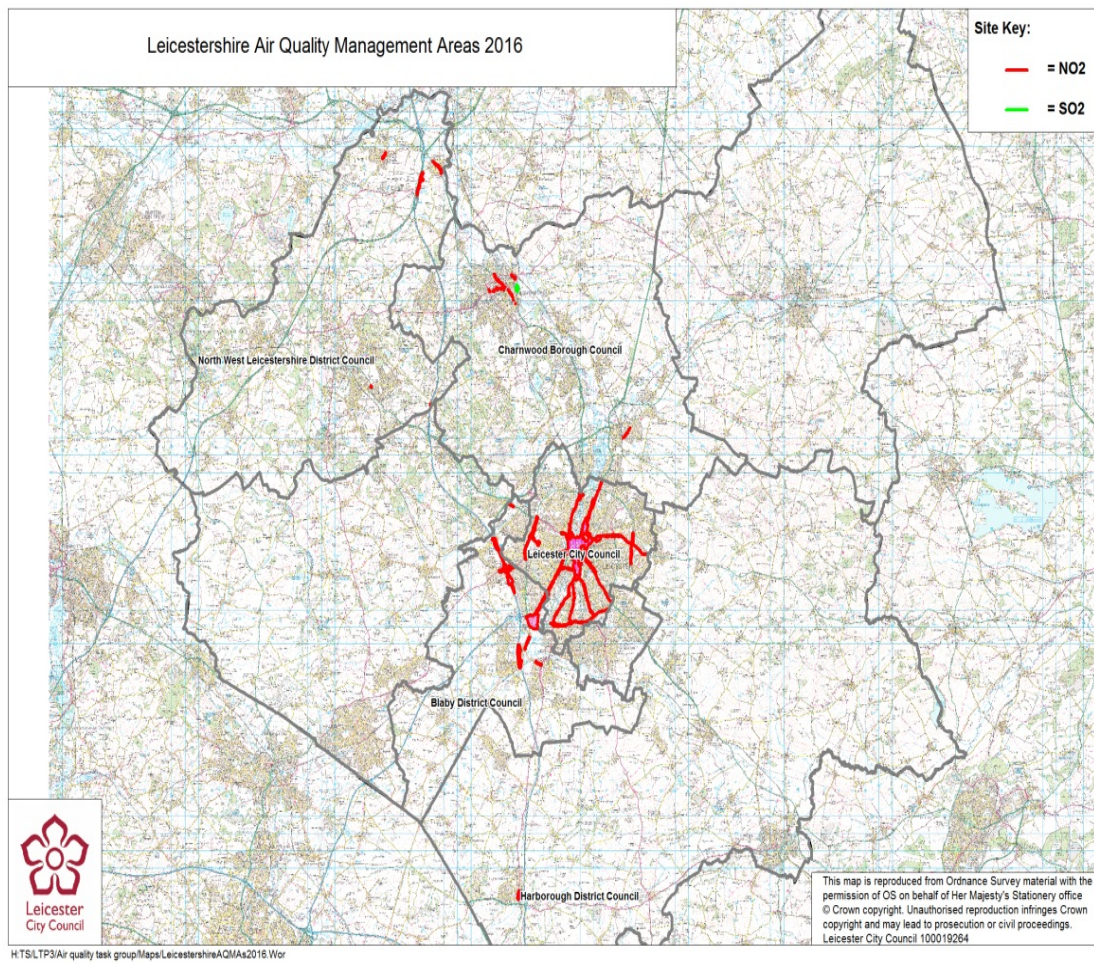
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Executive Member: Councillor K Morrell

Appendix 1 – UK Air Quality Objectives

Pollutant	Air Quality Objective	
	Concentration	Measured as
Nitrogen Dioxide (NO ₂)	200 µg/m ³ not to be exceeded more than 18 times a year	1-hour mean
	40 µg/m ³	Annual mean
Particulate Matter (PM ₁₀)	50 µg/m ³ , not to be exceeded more than 35 times a year	24-hour mean
	40 µg/m ³	Annual mean
Sulphur Dioxide (SO ₂)	350 µg/m ³ , not to be exceeded more than 24 times a year	1-hour mean
	125 µg/m ³ , not to be exceeded more than 3 times a year	24-hour mean
	266 µg/m ³ , not to be exceeded more than 35 times a year	15-minute mean

Appendix 2 - Leicestershire AQMA's



Appendix 3 - Example of a diffusion tube location



Appendix 4 - Monitoring sites and 2017 results

Site ID	Site Name	Annual Mean Average of Results 2017 ($\mu\text{g}/\text{m}^3$)
1	Trinity Lane	25
2	1 Rufford Close	28
3	562 Coventry Road	25
4	Lester House A5	24
5	Wheldon A5	23
6	207 Rugby Road	23
7	66 London Road	24
8	Earl Shilton Bypass	18
9	Wood Street earl Shilton	24
10	6 Shaw Lane Markfield	39
11	216 Markfield Road, Groby	25
12	6 Shaw Lane Markfield	40
13	Shaw Lane Lamp post 41	31
14	6 Shaw Lane Markfield	38
15	93 Rugby Road, Hinckley	36
16	171 Rugby Road, Hinckley	26