

<b>17 March 2016</b>	<b>ITEM: 7</b>
<b>Cleaner, Greener, Safer Overview and Scrutiny</b>	
<b>Local Air Quality Management</b>	
<b>Report of:</b> Dean Page, Air Quality Pollution Officer	
<b>Wards and communities affected:</b> West Thurrock and South Stifford Aveley and Uplands	<b>Key Decision:</b> Key
<b>Accountable Head of Service:</b> Lucy Magill, Head of Resident Services	
<b>Accountable Director:</b> Steve Cox, Director of Environment and Place	
<b>This report is</b> to update Members on the local air quality management process. This is a statutory process under the provisions of the Environment Act 1995. To inform of a Declaration two New Air Quality Management Area's	

## **Executive Summary**

Work carried out in 2013/14 led to concerns that there were problems with air quality in parts of Aveley and Purfleet. Follow-up investigation confirmed the annual average air quality for nitrogen dioxide (NO<sub>2</sub>) was likely to be above 40 micrograms per cubic metre (µg m<sup>3</sup>).

Further monitoring and modelling work confirmed it was likely the Air Quality Objective would be exceeded in specific parts of Aveley along part of Aveley High Street and Ship Lane. Also a smaller area in Purfleet along the Purfleet By-Pass was found to likely be above Air Quality Objective. There is a need for two new Air Quality Management Areas (AQMA's) to be declared along Aveley High Street / Ship Lane and for the Purfleet By-Pass.

The Cleaner, Greener Overview and Scrutiny Committee, agree that these AQMA's should be declared, and recommend that Cabinet approve the declaration of these AQMA's.

### **1. Recommendation(s)**

**1.1 To recommend that Cabinet approve the declaration of two new Air Quality Management Area's along Aveley High Street / Ship Lane and for the Purfleet By-Pass.**

### **2. Introduction and Background**

**2.1** The system of Local Air Quality Management started in 1998 as a result of the Environment Act 1995. It requires local authorities to identify and take action

to tackle local air quality problems arising from the following pollutants: sulphur dioxide, nitrogen dioxide, fine particles (PM<sub>10</sub>), benzene, 1,3-butadiene, carbon monoxide and lead.

- 2.2 Local authorities have a statutory duty to assess the levels of these pollutants against air quality standards and objectives laid out in the Air Quality Regulations 2000. These objectives are based on how these pollutants effect health. If it is considered the objectives are unlikely to be met, the authority is obliged to declare an AQMA followed by completing an Action Plan, detailing how the council intends to improve air quality for the health of residents.
- 2.3 In April 2001 Thurrock Council declared 20 AQMAs as air quality modelling for NO<sub>2</sub> and PM<sub>10</sub> showed these areas were above the air quality objectives. The main contributor to the high levels of pollutants in these areas is directly related to road traffic emissions, in particular Heavy Goods Vehicles. This then led to the development of an Air Quality Action Plan in summer 2002.
- 2.4 In October 2003, as part of the council's ongoing review and assessment the next air quality report concluded there had been sufficient changes in air quality to warrant a more detailed assessment. This was for nitrogen dioxide, benzene, particulates and sulphur dioxide in specific locations. It was completed in October 2004 and the number of AQMAs was reduced from 20 to 15 and a revised Air Quality Action Plan was produced which led to the production of an Air Quality Management Order in 2005 listing the then 15 AQMAs.
- 2.5 In 2013 the council declared a one further AQMA (AQMA 24) for NO<sub>2</sub> in Tilbury along part of Dock Road, Calcutta Road and St Chad's Road, this was confirmed by both monitoring data and also from detailed dispersion modelling at these locations. This meant that the total number of AQMA's was now 16.
- 2.6 The 2013 and 2014 Air Quality Progress Report's identified a potential exceedence of the annual mean objective for nitrogen dioxide (NO<sub>2</sub>) at monitored locations in parts of Aveley and along the Purfleet By-Pass.
- 2.7 The 2014 Detailed Assessment Report was undertaken to assess in more detail if there was still an exceedence at locations within Aveley and along the Purfleet By-Pass. The report formally identified and confirmed that these two area's were likely to breach the annual mean objective for NO<sub>2</sub>, this was proved by the use of detailed dispersion modelling which was then verified by the monitoring data. The first location identified was along the main high street within Aveley, Aveley High Street and also part of Ship Lane which is an area mainly comprised of retail and residential premises. The second location identified was a residential development close to the Purfleet By-Pass.

(Figure 1 and Table 1) found in the appendix of this report – lists all 16 current AQMA's and also shows the two new proposed AQMA's for Purfleet & Aveley).

The two proposed AQMA's from this report are shown in the appendices of this report in (Figures 2 & 3).

### **3. Issues, Options and Analysis of Options**

- 3.1 Thurrock Council should declare two AQMA's for NO<sub>2</sub> along Aveley High Street / Ship Lane and for the Purfleet by-pass. This will require the formulation of an Air Quality Action Plan to try and improve air quality within these areas. These actions will need to be focused around transport.
- 3.2 The Secretary of State will have to be informed of progress on these measures annually.
- 3.3 Declaration of the two new AQMA's for Aveley and Purfleet will lead to recommendations and actions to improve overall air quality and health for residents.

### **4. Reasons for Recommendation**

- 4.1 Having reviewed all the relevant air quality monitoring and modelling data for this area it is clear the annual average objective for NO<sub>2</sub> is in breach at relevant areas of public exposure. Under Section 83 of the Environment Act 1995 the council has a legal obligation to declare these two AQMA's.

### **5. Consultation (including Overview and Scrutiny, if applicable)**

- 5.1 As part of the declaration of these AQMA's the council will liaise with the Secretary of State, the Environment Agency, the Mayor of London, surrounding local authorities and those members of the public who will be situated within these AQMA's.
- 5.2 These consultees will be advised a review of air quality in Aveley and Purfleet has been completed along with recommendations for declaration of an AQMA. This is required by Sections 83 and 84 of the Environment Act 1995.

### **6. Impact on corporate policies, priorities, performance and community impact**

- 6.1 Declaring these two AQMA's, will highlight issues with air quality and lead to positive action to improve air quality and the general environment.

## **7. Implications**

### **7.1 Financial**

Implications verified by: **Michael Jones**  
**Management Accountant**

All costs associated with these reports can be contained within the relevant revenue budget for Environmental Protection. There will be no financial implications as a result of the declaration of a new Air Quality Management Area.

### **7.2 Legal**

Implications verified by: **Chris Pickering**  
**Principal Solicitor, Employment & Litigation**

The declaration of AQMA's, the formulation of action plans and assessment of air quality are statutory duties of the council under the provisions of Part IV of the Environment Act 1995.

The council is obliged to undertake regular monitoring of air quality and to make an Air Quality Management Order when thresholds are breached and are unlikely to be met within a reasonable timescale.

Following the implementation of an AQMAO the Council has a duty to implement an Air Quality Action Plan which makes recommendations for improving air quality within the AQMA.

By pursuing this course of action the council will seek to update and amend the current AQMAO 2005 and subsequent amendment in 2013 to reflect the proposed revisions within the Detailed Assessment Report 2014.

### **7.3 Diversity and Equality**

Implications verified by: **Natalie Warren**  
**Community Development and Equalities**  
**Manager**

The introduction of two new AQMA's within Aveley & along the Purfleet By-Pass will support the wellbeing of some vulnerable members of the local community including those suffering from health conditions affecting the upper-respiratory system. An AQAP will tackle existing air quality problems and help to bring down levels of nitrogen dioxide which may reduce the number of health impacts for people living and working in and around these AQMA's.

The council will engage members of the public who will be situated within the AQMA and will have due regard to the Equality Act 2010 through this process.

Action will be taken to mitigate any risk of negative community impact highlighted through the engagement process.

**7.4 Other implications** (where significant) – i.e. Staff, Health, Sustainability, Crime and Disorder)

Under the Health and Social Care Act 2012, local authorities have a statutory duty to improve and protect the health of their population.

It is recognised that exposure to consistently high levels of air pollution can have an adverse impact on health, particularly in those with heart or lung problems, especially if they are elderly.

The declaration of this new Air Quality Management Area, which covers residential and retail premises, will lead to the development of a specific Air Quality Action Plan that identifies ways in which the levels of nitrogen dioxide can be reduced in this specific area.

In declaring these new AQMA's the appropriate officers in Thurrock Council will be better informed to provide advice for preventing or mitigating against any new developments that could worsen air quality, or introduce additional exposure in this area.

***Ian Wake, Director of Public Health***

**8. Background papers used in preparing the report** (including their location on the Council's website or identification whether any are exempt or protected by copyright):

**References**

- Defra, (2009). Local Air Quality Management, Technical guidance LAQM.TG09. Defra, London.
- Defra, (2009). Local Air Quality Management, Policy Guidance LAQM. PG09. Defra, London.
- Thurrock (2013). Local Air Quality Management – Air Quality Progress Report 2013
- Thurrock (2014). Local Air Quality Management – Air Quality Progress Report 2014
- Thurrock (2014). Local Air Quality Management – Detailed Assessment For NO<sub>2</sub>. 2014

<https://www.thurrock.gov.uk/air-quality/air-quality-monitoring>

All Reports can be provided if needed

## **9. Appendices to the report**

- Appendix 1 - Summary of existing Thurrock Air Quality Management Areas & proposed (in Grey)
- Appendix 2 - Map of Air Quality Management Areas in Thurrock (with AQMA designations)
- Appendix 3 - New proposed Air Quality Management Area {AQMA 25}: Aveley: Aveley High Street / Ship Lane
- Appendix 4 - New proposed Air Quality Management Area {AQMA 26}: Purfleet: Purfleet By-Pass

### **Report Author Contact Details:**

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