

**Classification:** Public

**Key Decision:** No

### Gravesham Borough Council

**Report to:** Operational Services Cabinet Committee  
**Date:** 20 March 2024  
**Reporting officer:** Debbie Wilders, Environmental Protection Team Leader  
**Subject:** Local Air Quality Management (LAQM)

**Purpose and summary of report:**

To advise Members of the recent revocation of the Northfleet Industrial Air Quality Management Area Order 2002.

**Recommendations:**

1. None – this report is for Member information only.

<b>Key Implications:</b>	
<b>Item</b>	<b>Implications</b>
<b>Legal</b>	<p>Part IV of the Environment Act 1995 (now amended by the Environment Act 2021) sets out the Local Air Quality Management (LAQM) regime for which Defra has issued statutory guidance on a fairly regular basis the most recent being:</p> <ul style="list-style-type: none"><li>• Local Air Quality Management Policy Guidance (PG22) August 2022</li><li>• Local Air Quality Management Technical Guidance (TG22) August 2022</li></ul> <p>The guidance requires the review and assessment of air quality across the borough, the declaration of AQMAs where exceedances occur, the continuous monitoring of specific pollutants where there are, or are suspected to be, exceedances and the revocation of AQMA declarations once there are no exceedances for the minimum continuous period of 5 years.</p> <p>The council must follow the statutory guidance and as such was recently in a position where it was appropriate to revoke the said AQMAs or be subject to criticism and possible sanctions by the Department of Environment, Food and Rural Affairs (Defra).</p> <p>Section 1.13B.17 within Annex 1.13B of the Constitution delegates the Council’s powers and duties in respect of pollution control and general public health functions, including in respect of the Environment Act 1995, to the Director (Communities &amp; Inclusive</p>

	Growth). Legal Services confirmed that this delegation provides the Director (C&IG) with authority to authorise revocation of an AQMA.
<b>Finance and Value for Money</b>	There were no costs associated with the administrative process of the revocation. Decommissioning of the associated analysers negates the need for continuous monitoring to remain in the area, realising annual savings of approx. £6610.
<b>Corporate Plan</b>	There are direct links to the following objectives:  <b>One Borough / Protected Environment / Cleaner Environment</b> – the LAQM process seeks to improve the living environment for all residents and visitors to the borough  <b>One Borough / Progressive place / Sustainable development</b> – the LAQM process and particularly the Northfleet Industrial AQMA has been a material consideration in the plans to regenerate the brownfield/industrial areas of the borough without causing a detrimental impact on the air quality of those nearby and to ensure that occupiers of new residential properties are not impacted by poor air quality.
<b>Climate Change</b>	There are no direct links to climate change in that the pollutant for which the AQMA is declared is not a pollutant linked with climate change.

## 1. Introduction

- 1.1 Local authorities have a statutory duty to review, assess and manage air quality within their area and to take into account the guidance issued by Department for Environment Food and Rural Affairs (Defra).
- 1.2 The National Air Quality Strategy objectives are primarily based on health effects. Air pollution is associated with a number of adverse health impacts. 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: children and older people, and those with heart and lung conditions. There is also often a strong correlation with equalities issues because areas with poor air quality are also often the less affluent areas.
- 1.3 At relatively high concentrations, Nitrogen dioxide (NO<sub>2</sub>) causes inflammation of the airways. There is evidence to show that long-term exposure to NO<sub>2</sub> may affect lung function and that exposure to NO<sub>2</sub> enhances the response to allergens in sensitised individuals.
- 1.4 The National Air Quality Strategy objective for particulate matter (PM10) is also primarily based on health effects. Fine particles can be carried deep into the lungs where they can cause inflammation and a worsening of heart and lung diseases.

## 2. Background

- 2.1 The first stage of the Local Air Quality Management review included the establishment of the air quality monitoring network, with two air stations being installed in 1998 at the locations where the levels of pollution were suspected to be highest. Continuous monitoring analysers were installed to measure both PM10 and NO<sub>2</sub> at Lawn Road School for the industrial area and Painters Ash School which was alongside the carriageway of the A2 Trunk Road.

- 2.2 The review and assessment process confirmed the two main sources of pollutants as follows:
- 2.2.1 The Northfleet Cement Works were a major source of fine particles referred to as Particulate Matter (PM10) i.e. particles of a size less than 10 microns which is small enough that it can be breathed into the lungs. The responsible regulatory agency for the cement works was the Environment Agency.
  - 2.2.2 The A2 Trunk Road was a major source of both Nitrogen dioxide (NO<sub>2</sub>) and Particulate matter (PM10), both from traffic emissions. The responsible regulatory and management agency for the Trunk Road was, at that time, the Highways Agency and is currently National Highways.
- 2.3 The high levels of fine particles in the Northfleet industrial area and the Nitrogen dioxide along the corridor of the A2 Trunk Road exceeded the relevant air quality objectives as such the council progressed to the declaration of both areas as Air Quality Management Areas (AQMAs). This was completed in 2001 with the declaration of the two AQMAs both coming into force on 01 February 2002:
- Northfleet Industrial Air Quality Management Area (PM10) (Industry) (2002)
  - A2 Trunk Road Air Quality Management Area (NO<sub>2</sub> & PM10) (Traffic) (2002)

### **3. Air Quality Action Plan for Northfleet Industrial and A2 Trunk Road AQMAs**

- 3.1 Following the declaration of the first two AQMAs the council adopted the Gravesham Final Action Plan in July 2004. The Action Plan committed the council to implementing various measures with the aim of improving air quality in the two AQMAs. As the council is not the responsible agency for regulating or managing the pollution sources within the two AQMAs the role of the council was that of lobbying and working with the Environmental Agency and the Highways Agency so that they actioned appropriate measures to improve air quality. The following measures from the Action Plan have been completed:
- The closure of the Northfleet cement works.
  - The realignment of the A2 Trunk Road away from the residential areas.
  - Variable speed limits on the A2 during peak time in order to smooth the flow of traffic.
  - The opening of the Ebbsfleet A2 junction and link road.
- 3.2 The Action Plan included additional measures which were the responsibility of the council e.g. using the planning process to improve air quality and to ensure new developments were not impacted on by existing levels of air pollution, the publishing of monitoring results, etc.

### **4. Further Rounds of Review and Assessment**

- 4.1 Further statutory rounds of the review and assessment of air quality were carried out focusing on smaller road junctions which resulted in the declaration of a further five AQMAs and the adoption of the dedicated Air Quality Action Plan - Urban Area AQMAs (July 2006) as follows:
- A226 One-way system Gravesend (NO<sub>2</sub>) (Traffic) (2005)
  - B262/B261 Pelham Arms Junction (NO<sub>2</sub>) (Traffic) (2005)
  - A227/B261 Wrotham Road/Old Road West Junction (NO<sub>2</sub>) (2005)
  - Parrock Street (NO<sub>2</sub>) (Traffic) (2010)
  - Echo Junction (NO<sub>2</sub>) (Traffic) (2010)

## 5. Improvements in Air Quality in Gravesham

- 5.1 The declaration of the seven AQMAs has proven to be beneficial in the pursuance of an improvement in air quality in Gravesham. This is because the council's partners, for example, the Environment Agency, National Highways, Kent County Highways and also developers, wishing to take part in the regeneration of the urban area, have had to pay due consideration to the existence of the AQMAs and assist the council to pursue an improvement in air quality.
- 5.2 The Planning process has been a powerful tool in the influencing of the partners. Planning conditions and Section 106 Town and Country Planning Act 1990 agreements have been invaluable in not only securing development that does not worsen air quality, but in replacing significant sources of pollution with less polluting sources and requiring the provision of ventilation in homes to provide clean air to the occupiers. Without the LAQM regime air quality in the borough would not have improved and it is likely that further development would have worsened it.
- 5.3 Improvements in air quality in the borough resulted in the following AQMAs being revoked in 2018:
- B262/B261 Pelham Arms Junction (NO<sub>2</sub>) (Traffic) (2005)
  - Parrock Street (NO<sub>2</sub>) (Traffic) (2010)
  - Echo Junction (NO<sub>2</sub>) (Traffic) (2010)

## 6. Defra Appraisal Report for Annual Status Report (ASR) 2023

- 6.1 Each year all councils with AQMAs must submit an Annual Status Report to Defra summarising all monitoring data and an update on the progress made on the measures in the council's action plans. The council's ASR 2023 was submitted to Defra in June. Defra's final appraisal report of the ASR, dated 30 November 2023, made specific reference to the Northfleet Industrial AQMA as follows:

*“Gravesham Borough Council have 4 active air quality management area (AQMAs), within their jurisdiction. These are the A2 Trunk Road AQMA, Northfleet Industrial Area AQMA, A226 One-way system in Gravesend AQMA and A227/B62 1 Wrotham Road/Old Road West Junction AQMA.*

*The revocation of an AQMA should be considered following three consecutive years of compliance with the relevant objective as evidenced through monitoring. Where there have been no exceedances for the past five years, local authorities must proceed with plans to revoke the AQMA. The LAQM Technical Guidance 2022 is clear in this respect:*

*"There should not be any declared AQMAs for which compliance with the relevant objective has been achieved for a consecutive five-year period." (Point 3.57, page 50).*

*Please be aware that unless a likely exceedance has been identified in the area, Defra will not appraise AQAPs for AQMAs that have been in compliance for five years. Local Authorities will instead be advised to revoke the AQMA.*

*The Northfleet AQMA has shown compliance for PM10 at the automatic monitoring site of ZG3 for 5 years (2018-2022) for both the annual mean PM10 and 24hour mean PM10. As per the above guidance, this AQMA should be revoked.”*

## **7. Northfleet Industrial AQMA - Evidence to Support Revocation**

- 7.1 The cement works were closed by the Environment Agency (EA) in 2008 as it could not comply with increasingly restrictive legal requirements. It was in part replaced by a cement terminal with a very high capacity to store cement powder. The level of PM10 did not reduce straight away and it became apparent that the cement works were not the only source of PM10 in the area.
- 7.2 There were proposals to regenerate the Northfleet industrial area mixing employment uses with residential areas. Once levels of PM10 had reduced to below the objective for the requisite period, at that time the required period was 2 years, there was sufficient concern that developers would take advantage of this and consider it acceptable to apply for permission to build developments that had a detrimental impact on local air quality, although not sufficiently so to cause an exceedance. They viewed it more as a ceiling rather than taking on board the council's duty to seek to continue to improve air quality year on year, and the cumulative impact was therefore a real concern.
- 7.3 These concerns resulted in the Northfleet Industrial AQMA declaration being retained in place for a further 13 years despite it being possible to revoke it. This was permissible under the guidance in place at that time i.e. the AQMA declaration being retained for planning purposes. This approach was however updated in the 2022 guidance which requires the revoking of an AQMA once there have been no exceedances for 5 continuous years.
- 7.4 As there had been a total of 15 years of no exceedances with the levels of PM10 having continued to reduce year on year, it was considered appropriate to revoke the declaration. This was confirmed in the monitoring results reported in the Annual Reports submitted to Defra between 2008 and 2023.
- 7.4.1 The annual mean objective for PM10 is 40 ( $\mu\text{g}/\text{m}^3$ ). The levels monitored at Lawn Road Air Station can be seen in Table 1 in Appendix 1. The level had fallen from 34( $\mu\text{g}/\text{m}^3$ ) in 2008 to 22.5 ( $\mu\text{g}/\text{m}^3$ ) in 2022.
- 7.4.2 Table 2 in Appendix 1 shows the number of days the PM10 24-hour mean objective (50  $\mu\text{g}/\text{m}^3$ ) had been exceeded in each year. It is not to be exceeded more than 35 times a year otherwise the objective is breached. The had fallen from 68 occasions in 2007, 48 occasions in 2008 to zero in 2022.
- 7.5 Defra's LAQM helpdesk confirmed that a public consultation was not required for the revocation of an AQMA Order and that it would be permissible for the council to arrange for the decommissioning of the analysers at the air station at Lawn Road following the revocation due to the number of years of monitoring that demonstrate that the levels are not likely to increase above the objective again.

## **8. Improvements in Air Quality Along the A2 Trunk Road Corridor**

- 8.1 The Air Quality monitoring continued along the A2 corridor and in 2011 a Further Assessment (FA) of the levels of pollutants in the A2 Trunk Road AQMA, following the realignment of the route of the carriageway south away from the residential area, confirmed the significant reduction in levels of Nitrogen dioxide and Particulate matter PM10 in those residential areas along the corridor.
- 8.2 The area of exceedance for NO2 had reduced significantly which led to the amendment of the AQMA Order to reduce the size of the AQMA in January 2012. There were more than 1200 homes in the original area of exceedance however the

levels of NO<sub>2</sub> had improved so much that that there were only approx. 90 in the amended area.

- 8.3 The FA confirmed that the area was no longer in exceedance of the PM<sub>10</sub> objective which resulted in the revocation of the declaration for PM<sub>10</sub> exceedances in January 2012, however its declaration for NO<sub>2</sub> remains.
- 8.4 The levels of Nitrogen dioxide and Particulate matter (PM<sub>10</sub>) continue to be monitored at Painters Ash Air Station and at various locations along the corridor. It is not yet appropriate for this AQMA to be revoked as there still are residential properties in the area of exceedance.

## **9. Revocation of the Northfleet Industrial AQMA**

- 9.1 Following consideration of a report setting out the above matters on 23 January 2024, Management Team approved the revocation of the Northfleet Industrial AQMA Order, and a Statement of Individual Officer's Decision was published to this effect.
- 9.2 The Northfleet Industrial Air Quality Management Area Revocation Order 2024 was subsequently signed and sealed by Legal Services, formally revoking the AQMA with effect from 30 January.
- 9.3 The decommissioning of the analysers at Lawn Road Air Station followed in February.

## **10. Appendices**

10.1 The following documents are to be published with the report:

- 10.1.1 Appendix 1 – Table 1 & 2 - Northfleet Industrial AQMA Monitoring Results
- 10.1.2 Appendix 2 - Northfleet Industrial Air Quality Management Area Revocation Order 2024

## **11. Background Documents**

11.1 There are no background documents.

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<b>Secondary Implications</b>	
<b>Risk Assessment</b>	Not revoking the AQMA declaration would not have been harmful to health however it would have invited criticism from Defra and an explanation as to why we were not following the statutory guidance.
<b>Data Protection Impact Assessment</b>	<p><i>A data protection impact assessment (DPIA) should be carried out at the start of any major project involving the use of personal data or if you are making a significant change to an existing process.</i></p> <p>a. Does the project/change being recommended through this paper involve the processing of <a href="#">personal data</a> or <a href="#">special category data</a> or <a href="#">criminal offence data</a>? A definition of each type of data can be found on the Information Commissioner's Office website via the above links. No</p> <p>b. If yes to question a, have you completed and attached a DPIA including Data Protection Officer advice? N/A</p> <p>c. If no to question b, please seek advice from your nominated DPIA assessor or the Information Governance Team at <a href="mailto:gdpr@medway.gov.uk">gdpr@medway.gov.uk</a>. N/A</p>
<b>Equality Impact Assessment</b>	<p>a. Does the decision being made or recommended through this paper have potential to cause adverse impact or discriminate against different groups in the community? If yes, please explain answer. No</p> <p>b. Does the decision being made or recommended through this paper make a positive contribution to promoting equality? If yes, please explain answer. No</p> <p><i>In submitting this report, the Chief Officer doing so is confirming that they have given due regard to the equality impacts of the decision being considered, as noted in the table above</i></p>
<b>Crime and Disorder</b>	No direct impact
<b>Digital and website implications</b>	The Digital Team were required to make minor web-content changes to publicise the revocation.
<b>Safeguarding children and vulnerable adults</b>	No direct impact.