

Environment & Sustainability Committee



Date of meeting 23rd January 2024

Title	<i>Review of the Coverage of the Spelthorne Air Quality Management Area</i>
Purpose of the report	To make a Key Decision
Report Author	<i>Dr Claire Lucas, Principal Pollution Control Officer, Environmental Health</i>
Ward(s) Affected	All Wards
Exempt	No
Exemption Reason	Not applicable
Corporate Priority	Environment
Recommendations	<p>Committee is asked to:</p> <ol style="list-style-type: none"> 1. <i>Note the proposed change in the coverage of the Air Quality Management Area (AQMA).</i> 2. <i>Make a decision as to whether to act upon the advice of Defra to reduce the coverage of the Spelthorne AQMA, in line with Local Air Quality Management guidance.</i>
Reason for Recommendation	<p><i>Local air quality management is a statutory process introduced by the Environment Act 1985 (Part IV), which places a legal duty on all local authorities to regularly review both the current and future air quality within their areas.</i></p> <p><i>Defra have advised Spelthorne Borough Council that due to improvements in local air quality, the coverage of the Borough wide Spelthorne AQMA established in 2003 needs to be reviewed in line with technical guidance from Defra.</i></p> <p><i>To ensure that the Council complies with statutory obligations.</i></p>

1. Summary of the report

What is the situation	Why we want to do something
<ul style="list-style-type: none"> • As part of Spelthorne Borough Council's statutory local air quality 	<ul style="list-style-type: none"> • This is a statutory requirement as advised by Defra.

management duties Defra require the coverage of the Air Quality Management Area (AQMA) to be reduced from the current borough wide AQMA on the basis of improved air quality monitoring data.	
This is what we want to do about it	These are the next steps
<ul style="list-style-type: none"> The coverage of the AQMA must be reduced in line with statutory requirements and guidance from Defra. 	<ul style="list-style-type: none"> To achieve Committee approval of a reduced AQMA boundary in order to progress updates the borough's Air Quality Action Plan which legislation requires to be focussed on the coverage of the AQMA.

1.1 This report seeks to inform Members of the instructions to the Council from the Department for Food and Rural Affairs (Defra) to review the coverage of the borough wide Air Quality Management Area which is a crucial step in completing updates to the Air Quality Action Plan.

1.2 A technical review of the coverage of the AQMA has been undertaken in line with Local Air Quality Management guidance, and options for a proposed amended AQMA boundary are presented for consideration.

2. Key issues

2.1 Spelthorne currently has a borough wide Air Quality Management Area (AQMA), that was declared for nitrogen dioxide primarily attributable to pollutant emissions from traffic in 2003. Since the declaration in 2003 there have been improvements to local air quality meaning that the boundary of the AQMA can be modified. Air quality monitoring data shows that there is no longer borough wide exceedance of the statutory air quality objectives for nitrogen dioxide air pollution.

2.2 Sustained improvements in local air quality have been achieved in some areas of the borough and maintained over a 5-year period (excluding years with pandemic related travel restrictions). Defra guidance requires the coverage of the Air Quality Management Area, (AQMA), to be reviewed.

2.3 An Air Quality Action Plan (AQAP) provides the mechanism by which local authorities, in collaboration with national agencies and others, will state their intentions for working towards achieving the air quality objectives through the use of the powers they have available. AQAP's are focussed on improving the air quality within a declared AQMA's, thus the coverage of the AQMA must be refined to focus on areas of the borough that remain at risk of exceedance before the AQAP can be updated.

2.4 The motion passed by the Council on 14/10/21 to advocate for the WHO Global Air Quality Guidelines (WHO AQG's), is noted. Defra considers that working towards the WHO AQG's helps to safeguard local air quality when

the coverage of an AQMA is reduced and the motion will be included amongst the actions of the Council within the AQAP, however the coverage of the AQMA must be considered in line with Defra guidance which considers the statutory objectives set out in the Air Quality Standards Regulations 2010 and not the WHO AQG's.

3. Options analysis and proposal

- 3.1 The existing AQMA boundary is presented in Appendix 1, Figure 1.
- 3.2 Two alternative options for a revised coverage Air Quality Management Area are presented in Appendix 1, Figure 2 and Figure 3. The revision options are conservative considering nitrogen dioxide (NO₂) air quality monitoring data (see Appendix 2, Figures 1 and 2), and a borough wide air pollutant dispersion modelling exercise for 2017 which indicated areas of concern were associated with the strategic road network, (see Appendix 2 Figures 3 and 4). Further consideration has been given to Defra air pollution background mapping which is based on modelling and provides a pollutant concentration per 1km grid square.
- 3.3 In December 2023 Defra advised that Spelthorne should amend the boundary of the AQMA to exclude air quality monitoring sites that have been 10% below the objective since 2019 in line with the Defra guidance note FAQ 142 – Three or More Years of Compliance with Air Quality Objectives. Based on this advice the proposed new boundary is based upon the worst years monitoring data from 2019 onwards, which was 2019 when there were 9 Spelthorne monitoring locations exceeding the statutory objective for NO₂ set out in the Air Quality Standards Regulations 2010 and an additional 2 monitoring locations at the kerbside on the A316 where National Highways conducted monitoring. Refer to Figures 1 and 2 in Appendix 2.
- 3.4 The conservative revised coverage Option 2 also considers the need to safeguard air quality in the borough's high streets, and in areas that are subject to large developments which are not fully open at this point in time such as Shepperton Studios, so where a degree of traffic growth may occur, or where construction traffic may route over an extended period of time in relation to potential future developments such as the River Thames Scheme and development at Heathrow Airport.
- 3.5 More extensive coverage is given in the north of the borough in reflection of the most recent and only measured exceedance within the 2022 annual air quality monitoring dataset being on Stanwell Moor Road. The suggested coverage also reflects the uncertainty over potential for boundary impacts due to the London ULEZ extension, and the influence of Heathrow Airport and related industries on traffic. The borough to the north of the A308 retains extensive coverage within the revised AQMA boundary options which is consistent with the proximity to neighbouring London borough AQMA's which remain borough wide.
- 3.6 Coverage of the strategic road network and associated junctions has been maintained as well as coverage of the approach routes to Walton Bridge which experience traffic congestion. A buffer distance of 200m has been applied to major road sources based upon the principal that air pollution from a road source returns to near background levels within 200m, reducing with distance from the road.

- 3.7 It should be noted that revising the footprint of the AQMA does not have any implications for the boroughs Smoke Control Areas.
- 3.8 There is an implication for the threshold of vehicle flow changes that require an air quality assessment in accordance with the Institute of Air Quality Management Guidance on Land-Use Planning & Development Control: Planning for Air Quality. A higher threshold of vehicle flow change would apply to areas that are no longer within the AQMA before a detailed air quality assessment was required, however areas that are adjacent to the boundary where traffic will travel to into the AQMA would retain the current thresholds and the guidance still allows the Local Planning Authority to consider cumulative impacts in policy and decision making. The guidance is caveated to allow higher thresholds to be applied for whole borough AQMAs when monitoring indicates compliance with statutory objectives, so in reality this is not a significant change from the current situation, the guidance states that *“Where whole authority AQMAs are present and it is known that the affected roads have concentrations below 90% of the objective, the less stringent criteria are likely to be more appropriate”*.
- 3.9 Air quality monitoring will continue, and Spelthorne can reinstate areas back into the AQMA if needed in the future if air quality monitoring data demonstrates exceedance beyond the coverage of the revised AQMA. Annual reporting on the status of local air quality to Defra takes place each year, and as part of that process the AQMA coverage can be adjusted. This is a data driven process and decision making must be based upon technical data only.
- 3.10 The Committee are asked to make a decision as follows;
- Option 1 to not recommend adoption of a proposed modified AQMA boundary, against the advice of Defra. This Option would retain the existing boundary set out in Appendix 1. Figure 1.
 - Option 2 to recommend adoption of the proposed more conservative modified AQMA boundary detailed in Appendix 1, Figure 2.
 - Option 3 to recommend adoption of the proposed less conservative modified AQMA boundary detailed in Appendix 1. Figure 3.
- 3.11 It should be noted that it is a statutory requirement, based on air quality monitoring data that the coverage of the AQMA is reduced. Defra have identified this requirement which the Council are obliged to facilitate as part of the organisations statutory local air quality management duties, therefore Option 1 is not recommended in accordance with legislation.

4. Financial implications

- 4.1 The work to review the coverage of the AQMA was undertaken by an Officer who is a full member of the Institute of Air Quality Management and has prior Principal Consultant level experience in industry as an air quality specialist. This has presented a saving on the cost of sourcing an external specialist to undertake the AQMA review.

5. Risk considerations

- 5.1 Environmental Health’s provision of the Councils statutory air quality management duties was subject to an internal audit in autumn/winter 2022. Internal Audit’s assurance opinion is ‘Reasonable Assurance’ (there is a

generally sound system of governance, risk management and control in place).

- 5.2 At audit risks to the delivery of an updated AQAP were identified. To help mitigate the risk of competing resource demands a specialist consultant will be appointed to help deliver the updated AQAP.
- 5.3 Failure to modify the AQMA boundary in line with Defra guidance would present a risk to the delivery of the updated Spelthorne AQAP. There is risk of scope creep through the addition of non-statutory requirements to the AQAP process. This will be mitigated through rigorous application of the Defra guidance and the Defra AQAP template with recognition as to the regulatory roles and responsibilities of other government bodies where these are applicable such as the Environment Agency. Acting outside of the Council statutory jurisdiction will risk the updated AQAP not being accepted by Defra who have powers of audit over the AQAP as set out in the Air quality strategy: framework for local authority delivery and the Local Air Quality Management Framework underpinned by the Environment Act 1995 and the Air Quality (England) Regulations 2000 (as amended in 2002).

6. Procurement considerations

- 6.1 The AQMA review was undertaken in house at no additional cost.
- 6.2 The Consultant resource for updating the AQAP will be funded from existing budget as per the Update on the Air Quality Action Plan report presented to the Environment & Sustainability Committee on the 21st November 2023.
- 6.3 The appointment of a specialist consultant is being undertaken in line with the Councils exemption to Contract Standing Orders, with the assistance of the Procurement and Legal Teams.

7. Legal considerations

- 7.1 Local air quality management is a statutory process introduced by the Environment Act 1985 (Part IV), which places a legal duty on all local authorities to regularly review both the current and future air quality within their areas.
- 7.2 These air quality reviews must follow Government guidance that sets health-based objectives, which are based on what is considered acceptable given the known effects.
- 7.3 Paragraphs 3.9 and 3.11 of the report set out the statutory position and the legal position in terms of decision making.

8. Other considerations

- 8.1 There are none.

9. Equality and Diversity

- 9.1 The AQMA is intended to help secure improvements to local air quality which benefit all members of the community, particularly those who are considered most vulnerable to the health impacts of poor air quality.
- 9.2 Air pollution is known to disproportionately affect less economically affluent communities, often these communities have lower levels of car ownership and a greater level of poor respiratory health. Actions to improve air quality can benefit these communities. Reducing the coverage of the AQMA to focus

resource onto the areas of the Borough with poor air quality will help to improve equality in terms of public health.

10. Sustainability/Climate Change Implications

10.1 Updating the Borough's Air Quality Action Plan is an important step in seeking to reduce the Borough's emissions in terms of air pollutants. Actions and policies to reduce air pollutant emissions from traffic will also help to reduce traffic related greenhouse gas emissions.

11. Timetable for implementation

11.1 The review of the AQMA coverage is presented to this committee for a decision on whether to adopt the proposed revised AQMA boundary. The decision on the AQMA coverage must be undertaken before revisions to the AQAP can commence.

11.2 The timeline in its current form for progressing the AQAP updates is given in Appendix 3.

12. Contact

12.1 Please contact the Pollution Control team at Pollution.Control@spelthorne.gov.uk for queries relating to this paper.

Background papers:

There are none.

Appendices

There are 3 appendices to this report as follows.

- Appendix 1 Options for Revised Coverage of the Air Quality Management Area
- Appendix 2 Supplementary Figures Containing Technical Data Utilised in Determining the Revised AQMA Coverage Options
- Appendix 3 Timeline for Progressing the Air Quality Action Plan.

Appendix 1 contains a series of drawings illustrating the current AQMA and the options for revised AQMA coverage.

Option 1 is the current borough wide AQMA boundary.

Option 2 is a more conservative option which includes greater coverage in the south of the borough to take account of routes that may experience an increase in traffic due to the opening of the Shepperton Studios development and areas that may be impacted by construction traffic in relation to developments with long construction periods such as the River Thames Scheme.

Option 3 is a less conservative option that still retains extensive coverage in areas of concern, but that is based strictly on the Defra guidance and does not include the routes described above that are included in Option 1.

Both options for a revised AQMA are meeting the requirements of guidance and would be adequate to safeguard air quality within areas of recent exceedance.

The figures presented in Appendix 1 are as follows.

- Appendix 1, Figure 1 *Current Borough Wide AQMA Boundary Option 1*
- Appendix 1, Figure 2 *Proposed AQMA Boundary Conservative Option 2*
- Appendix 1, Figure 3 *Proposed Less Conservative AQMA Boundary Option 3*

Appendix 2 contains supplementary figures containing technical data used in determining the revised AQMA coverage options as follows.

- Appendix 2, Figure 1 and 2 *Proposed AQMA Boundary Options presented with 2019 Nitrogen Dioxide Monitoring Data*
- Appendix 2, Figure 3 and 4 *Proposed AQMA Boundary Options presented with 2017 Nitrogen Dioxide Dispersion Modelling Data*

It should be noted that in the most recent complete annual monitoring dataset for 2022 the only exceedance of the objective is on Stanwell Moor Road, and that in 2021 and 2020 there were no monitored exceedances, therefore monitoring data is presented for the worst year of 2019 out of the years that Defra required to be reviewed.

The 2019 monitoring data is presented in Appendix 2 Figure 1 and 2. Note that the monitoring data is presented on the figures in the context of the criteria set by Defra of a 10% threshold below the point of exceedance as $\geq 36 \mu\text{g}/\text{m}^3$ and exceedance as $>40 \mu\text{g}/\text{m}^3$.

In addition, illustration is provided in Appendix 2, Figure 3 and 4 of borough wide air pollutant dispersion modelling undertaken in 2017, which highlights the contribution of strategic roads to local air pollution which has also been considered in the proposed AQMA coverage.

Appendix 3 presents a draft timetable for production of the updated Air Quality Action Plan to follow on from the decision on the Coverage of the Air Quality Management Area which must be made before progressing with the updated Air Quality Action Plan. The context of the Air Quality Action Plan work was presented to the Environment & Sustainability Committee on the 21st of November 2023. The timetable presented in Appendix 3 is to update Members. The timeline is subject to agreement with Defra.

Appendix 1. Options for Revised Coverage of the Air Quality Management Area

Figure 1 Current Borough Wide AQMA Boundary Option 1

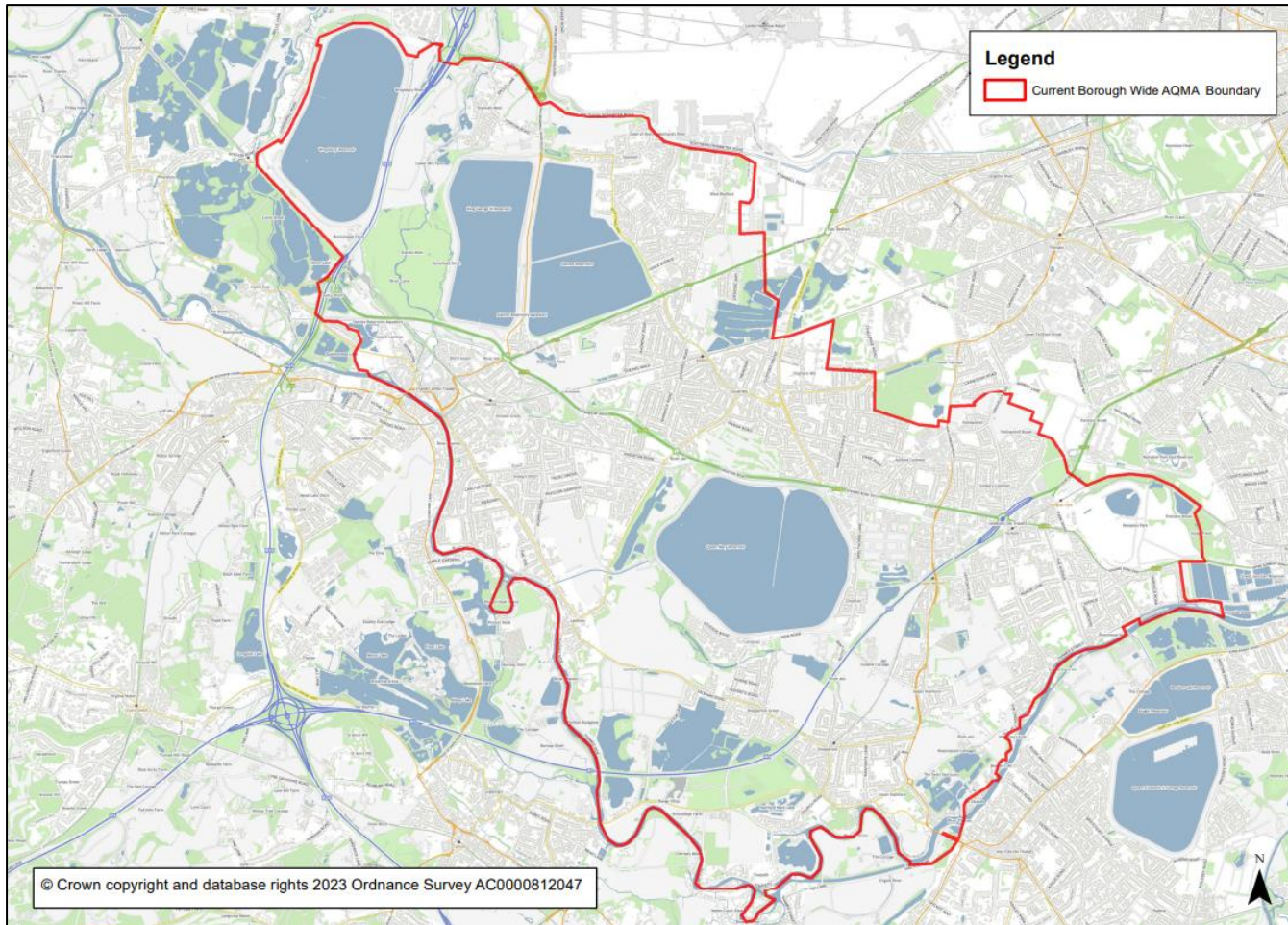


Figure 2 Proposed AQMA Boundary More Conservative Option 2

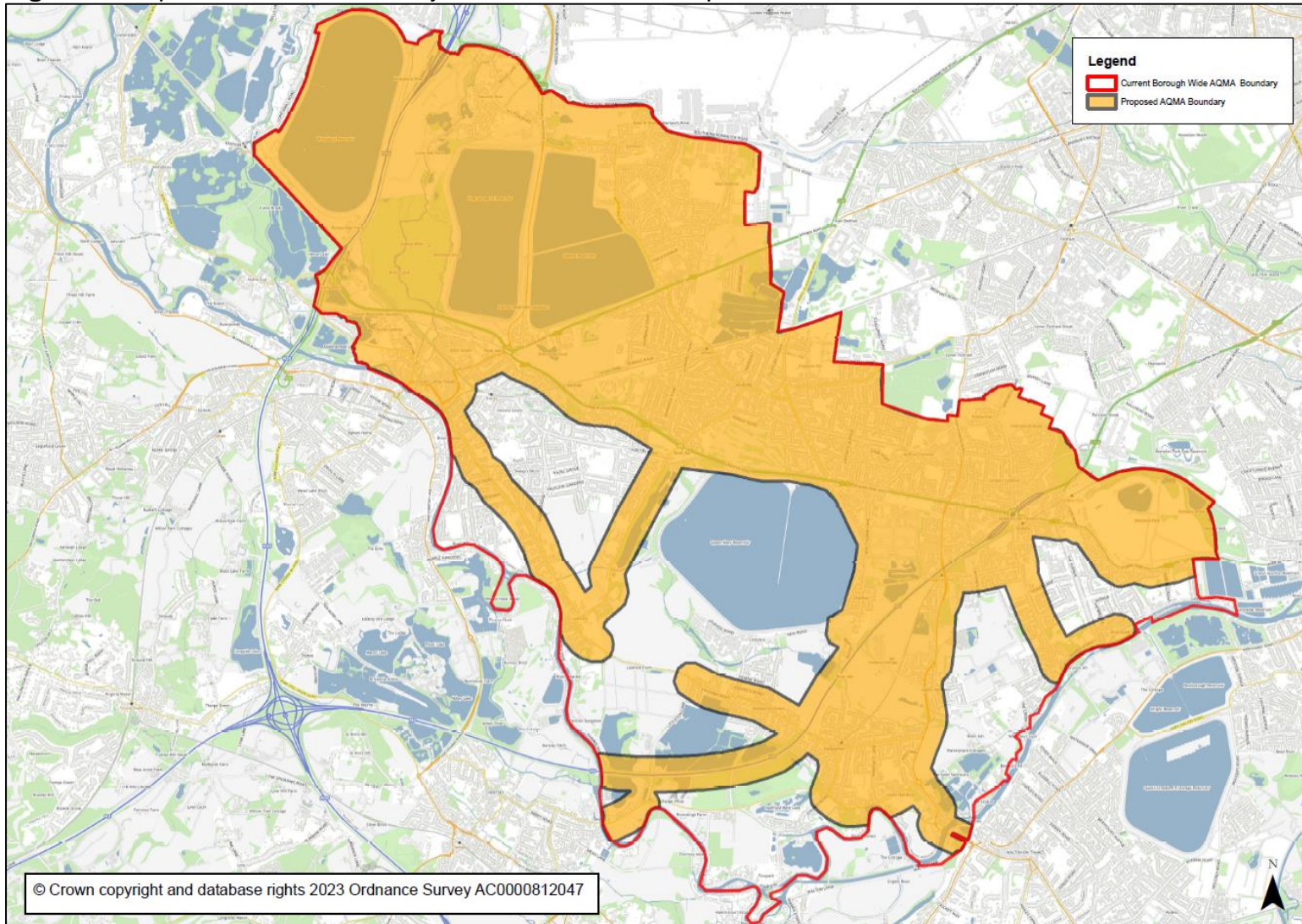
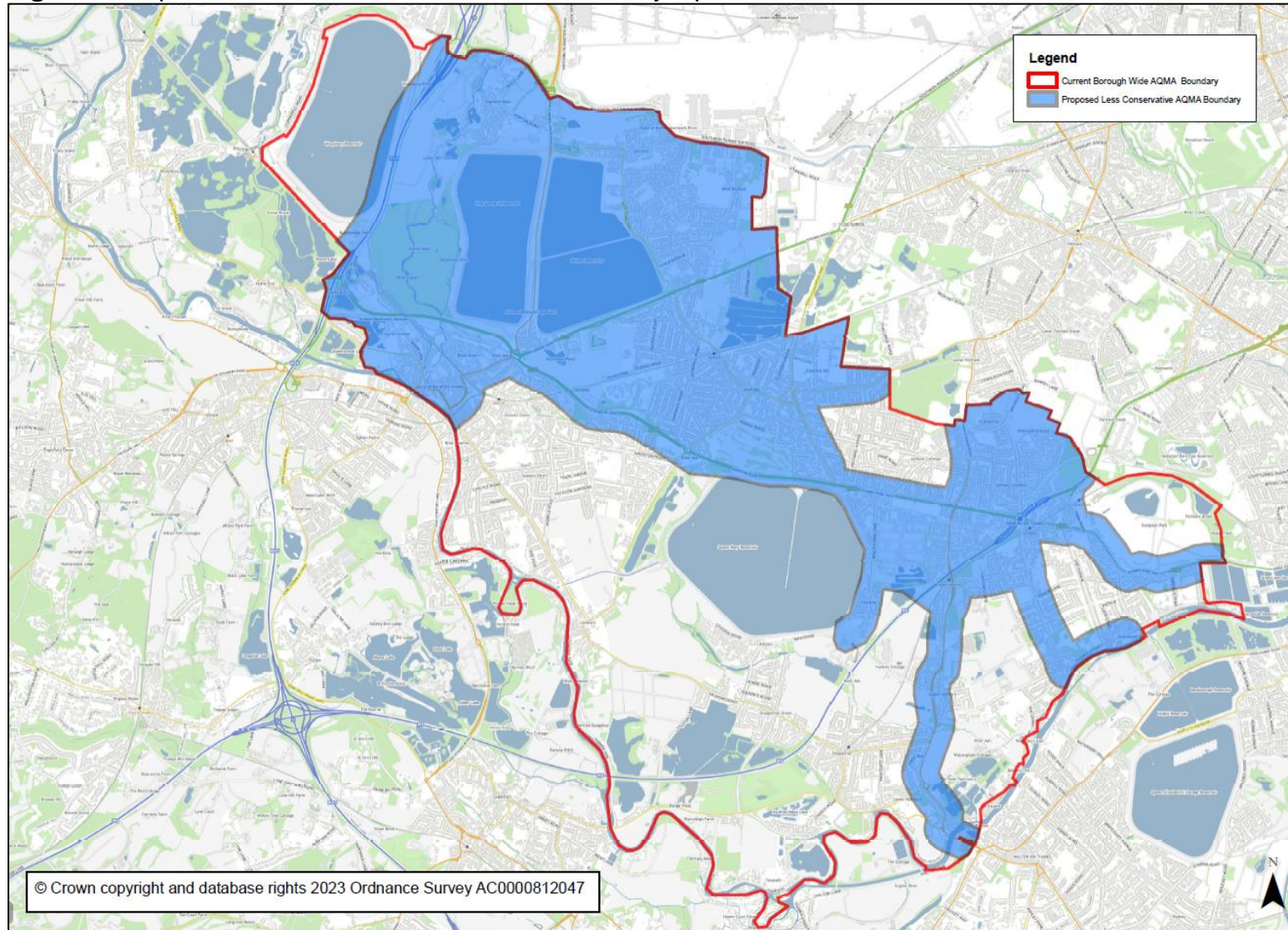


Figure 3 Proposed Less Conservative AQMA Boundary Option 3



Appendix 2. Supplementary Figures Containing Technical Data Utilised in Determining the Revised AQMA Coverage Options

Figure 1 Proposed AQMA Boundary Option 2 with 2019 Nitrogen Dioxide Monitoring Data

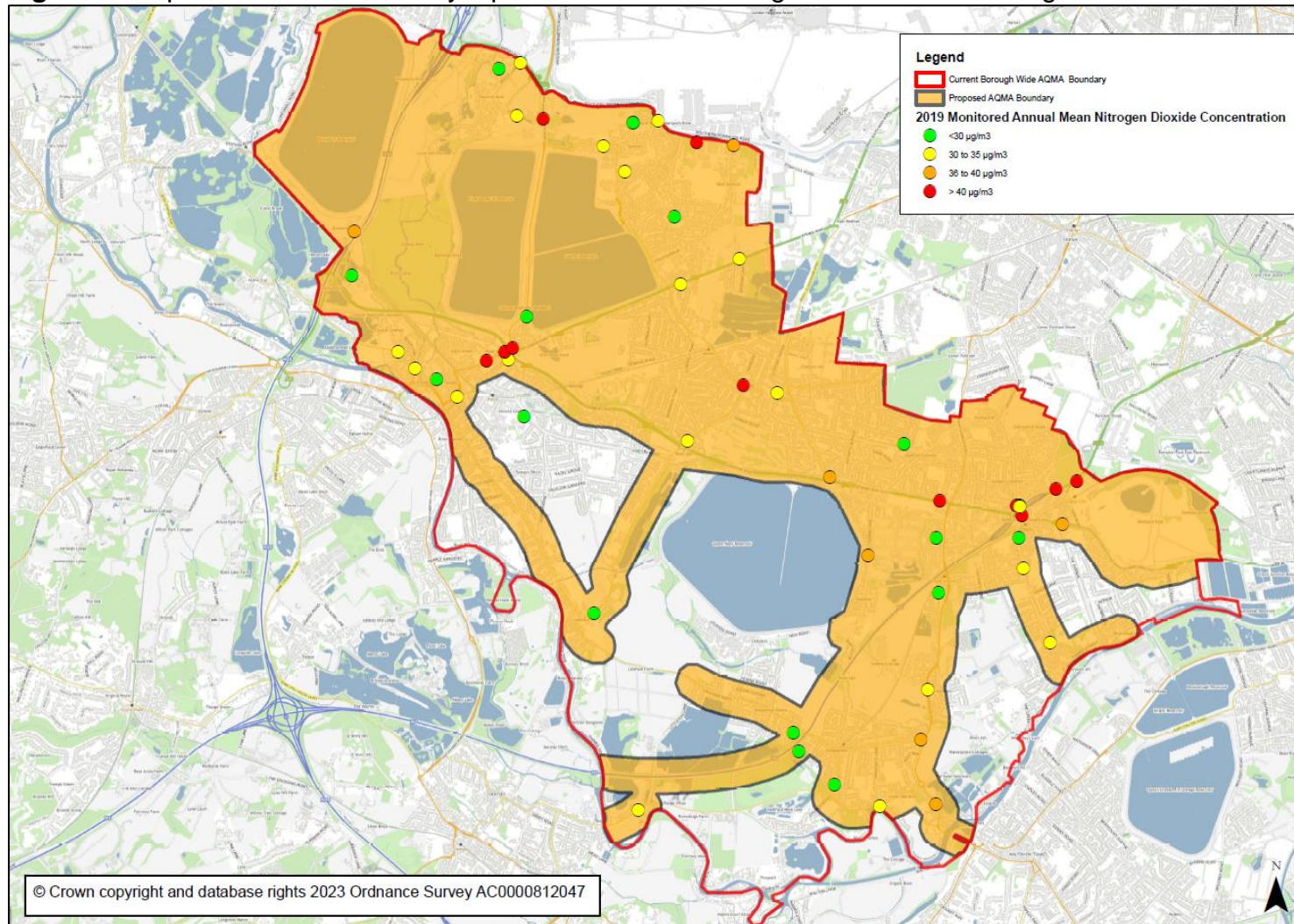


Figure 2 Proposed AQMA Boundary Option 3 with 2019 Nitrogen Dioxide Monitoring Data

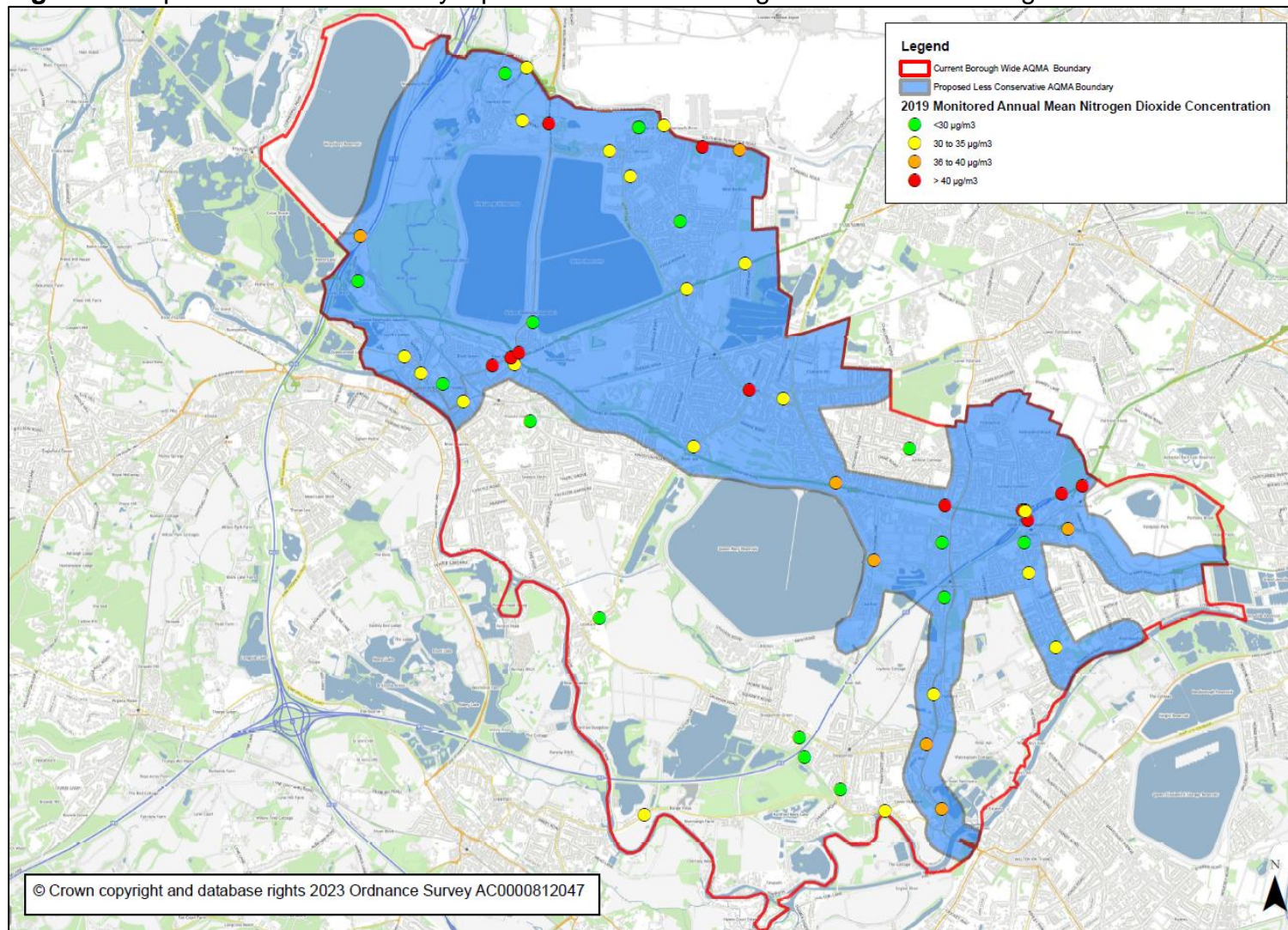


Figure 3 Proposed AQMA Boundary Option 2 with 2017 Nitrogen Dioxide Dispersion Modelling Data

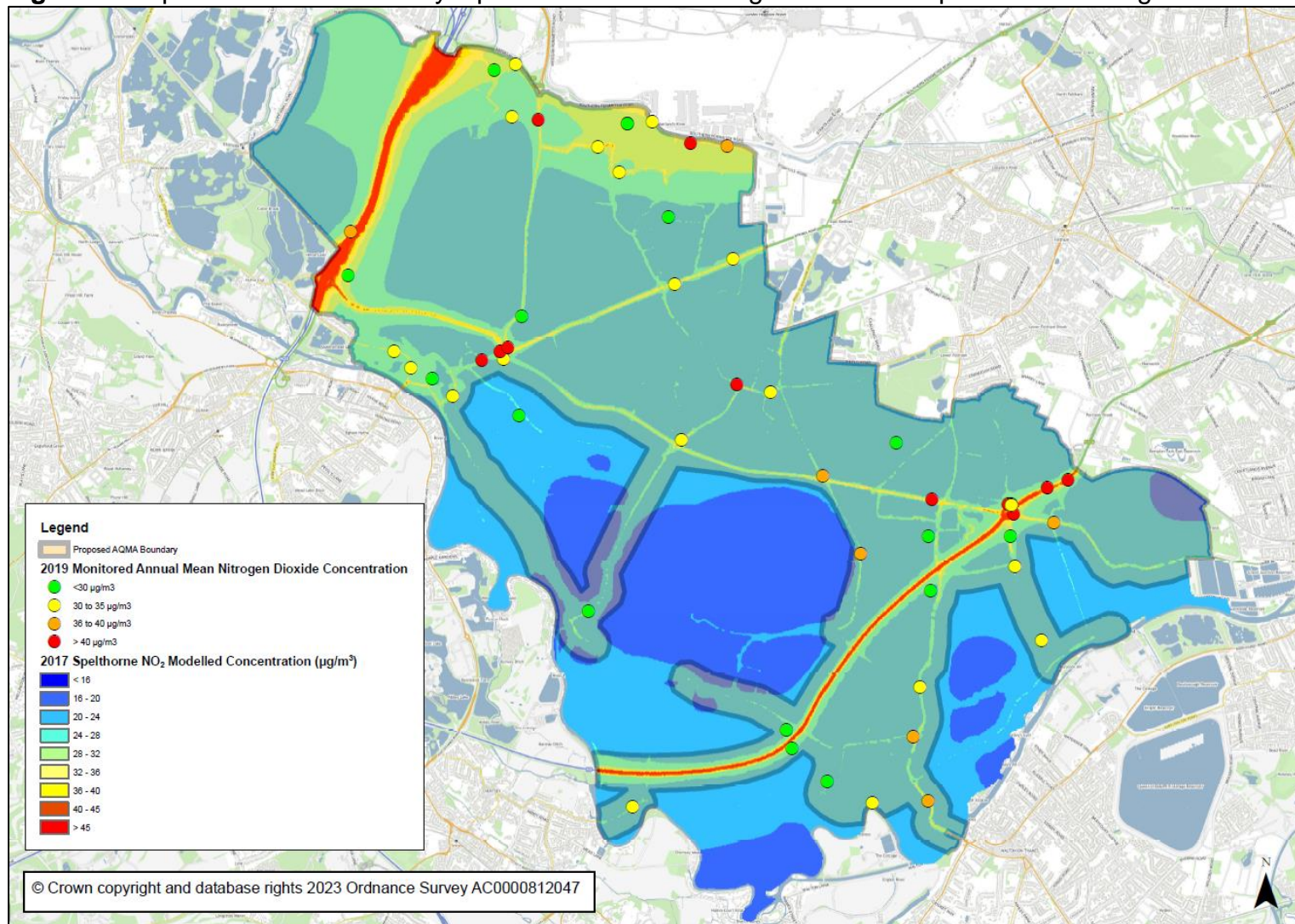
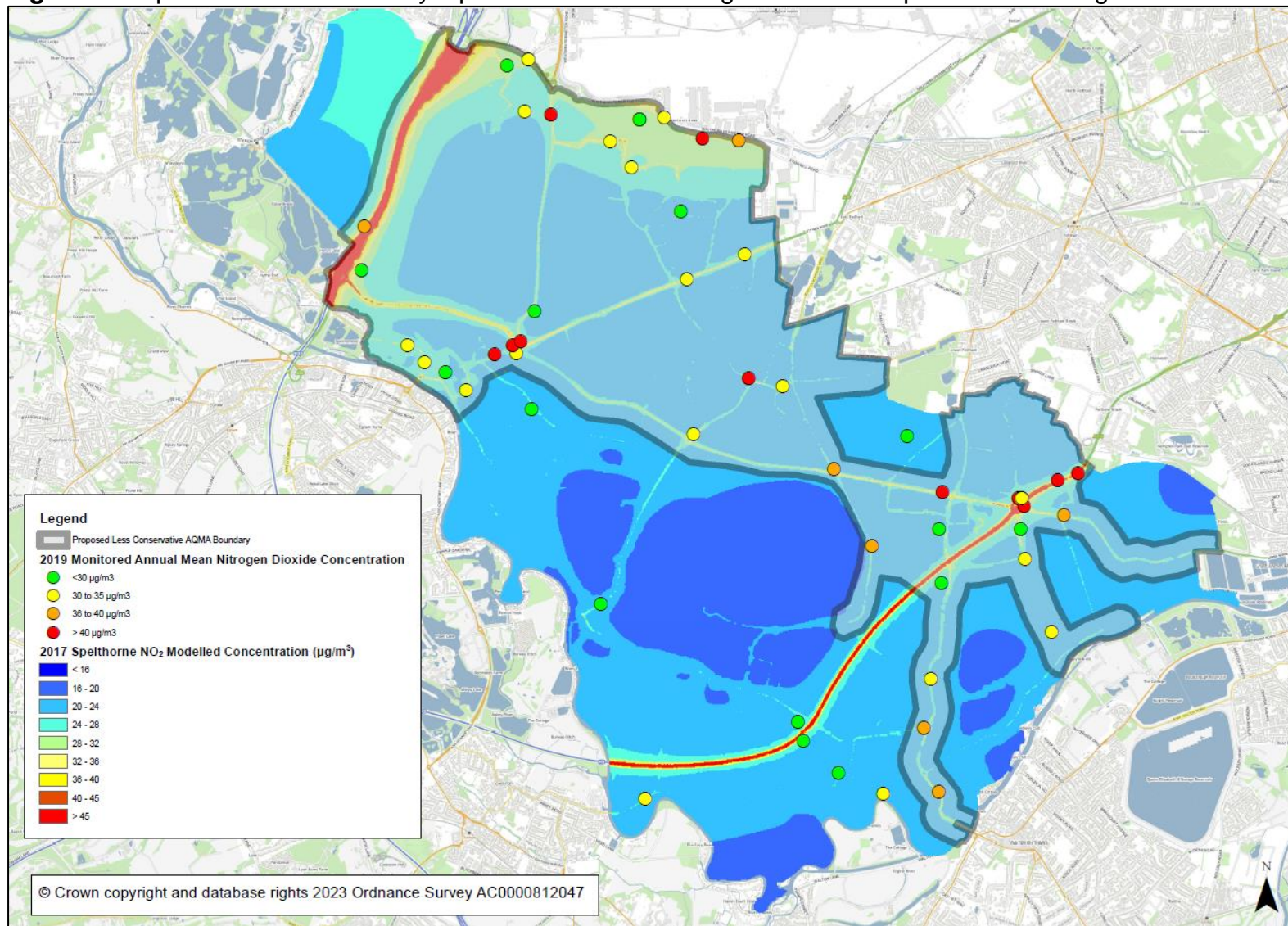


Figure 4 Proposed AQMA Boundary Option 3 with 2017 Nitrogen Dioxide Dispersion Modelling Data





Appendix 3. Timeline for Progressing the Air Quality Action Plan

Note that updating the coverage of the AQMA needs to be agreed before the updates to the Air Quality Action Plan can progress.

The timeline remains subject to changes, in agreement with Defra at the time of writing.

Timetable for Revisions to the AQMA boundary

Stage	Timeline
Briefing of Environment & Sustainability Committee Chair and Vice Chair.	10 th January 2024.
Report presented to Environment & Sustainability Committee for a decision on AQMA coverage.	23 rd January 2024.

Timetable for Production of an Updated AQAP

Stage	Timeline
Appointing a specialist consultant to support the remaining process of updating the AQAP. Note the source apportionment and modelling to explore measures that would secure compliance is already complete.	The tender period is underway and will close on the 17 th of January 2024. Tender responses to be reviewed 18 th January 2024. Contract award decision 31 st January 2022 following input from legal and procurement teams. Target commencement date for Consultant 31 st January 2024.
Update to Chief Executive, Monitoring Officer and Chair and Vice Chair of E&S Committee on progress.	4 th January 2024. 23 rd January 2024. 22 nd February 2024. 21 st March 2024. 18 th April 2024. 16 th May 2024. 13 th June 2024. 11 th July 2024. 8 th August 2024. 5 th September 2024.

Revised stakeholder engagement restricted to:

- The transport authority Surrey County Council as a key air quality partner.
- National Highways as a key air quality partner.
- The Environment Agency as a key air quality partner. Considered less crucial than the highways authorities, therefore we will proceed with consulting them at the public engagement stage if they can't meet our timescales.

The highways engagement must be retained in order to produce a meaningful AQAP as Spelthorne Borough Council are a Tier 2 authority so responsibility for roads sits with the County Council and road sources are the predominant focus of the AQAP for Spelthorne. Spelthorne is traversed by a number of strategic roads including the M25, A30, and M3 therefore National Highways are also a key partner.

Public Health actions will be captured from regular dialogue with Surrey's Public Health team over air quality through the Surrey Air Alliance consortium and the consortium workplan.

Heathrow's air quality policy and environmental team are accessible to Officers who are part of the Council for the Independent Scrutiny of Heathrow Airport (CISHA) Air Quality Working Group, therefore we will capture actions from published documentation and confirm by email with Heathrow to save time.

Consultation with neighbouring boroughs will be reserved for the

Requests for engagement meetings to be sent by 10th January in advance of Consultant being appointed.

Meetings to be scheduled for the week of 5th February and will be focused on agreeing measures for the AQAP actions table, noting that SBC and SCC already have a number of measures in progress.

Review of Heathrow and Public Health policies and actions to be undertaken in the week of 5th February.

public consultation period to save time.	
Consultation focus group with members following statutory consultee feedback.	13 th February 2024.
Post Member consultation amendments to draft AQAP by Consultant.	14 th February to 23 rd February 2024.
Internal review of the draft AQAP by Climate and Sustainability officers, Strategic and Development Planning, Environmental Health and Management Team. Draft AQAP to be shared with Surrey County Council. Dependent on availability within the timeline advice from APSE will be sought.	26 th February to 11 th March 2024.
Amendments to Consultant.	13 th March 2024.
Amended draft AQAP report received from Consultant.	22 nd March 2024.
An accompanying report for the Environment and Sustainability Committee will be required in order to present the item to Committee,	To be written whilst consultant is amending the draft AQAP. Draft AQAP to be attached as an Appendix.
Pre-Committee mandatory report circulation to internal Group Heads.	26 th March 2024 Report circulation prior to Management Team meeting.
Management Team meeting	2 nd April 2024.
Environment & Sustainability Chairs Briefing	10 th April 2024.
Presentation of draft AQAP to Members for approval to proceed to public consultation and submission of the draft AQAP to Defra.	Extraordinary E&S 16 th April 2024.
Public Consultation period to include consultation with neighbouring authorities as stakeholders and submission of draft AQAP Defra.	1 st May 2024.
The Council will confirm to Defra in writing when the consultation begins)	1 month consultation period following draft AQAP approval by Committee. The public consultation is estimated to run in May 2024.

Updates to the AQAP post consultation.	June 2024.
Internal review of changes to the AQAP.	July 2024.
Writing accompanying report in order to present the final AQAP to the Environment & Sustainability Committee.	July & August 2024.
Presentation of the Committee item to Management Team.	August 2024.
Presentation of the final AQAP to the Environment & Sustainability Committee. (The Council will confirm to Defra in writing when the amended post consultation AQAP has been accepted for presentation at Committee)	September 2024. <i>Committee dates unpublished, potential election may alter timetable.</i>
Adoption by full Council	October 2024. <i>Committee dates unpublished, potential election may alter timetable.</i>