

Summary of Consultation for Draft Detailed Assessment for PM_{10s} 2008

The draft Detailed Assessment was sent to the following companies and organisations:

Defra (Secretary of State).

Industry

- Banner Contracts,
- Carbon International,
- Civil Marine Ltd,
- Corus,
- Environment Agency,
- Health Protection Agency,
- Highways Agency,
- Hull and Goole Port Health Authority,
- Multiserv,
- North Lincs Primary Care Trust,
- Tarmac.

Councils and Government Departments

- North East Lincolnshire Council,
- West Lindsey District Council,
- Doncaster Metropolitan Borough Council,
- Hull City Council,
- East Riding of Yorkshire Council,
- East Lindsey District Council,
- Bassetlaw Council,
- Yorkshire Forward (Regional Development Agency),
- Government Office for Yorkshire and Humberside.

North Lincolnshire Council

- Cllr Arthur Bunyan (Ward for High Santon, Broughton and Appleby),
- Cllr Ivan Glover (Broughton and Appleby Ward),
- Cllr Tony Ellerby (Ward for Low Santon, Frodingham),
- Cllr Sandra Bainbridge (Frodingham Ward),
- Cllr Len Foster (Neighbourhood and Environment Cabinet member),
- Service Director, Highways and Planning,
- Service Director, Neighbourhood and Environment,
- Divisional Manager, Head of Communities and Environment,
- Transport Planning Manager, Highways Team.

The draft detailed assessment has also been available to view by the public on the Council's dedicated Air Quality website, www.nlincsair.info. A news item advertising this was also displayed in the news section.

The following appraisal was received from Defra:

“LOCAL AIR QUALITY MANAGEMENT: DETAILED ASSESSMENT REPORT

Thank you for consulting the Secretary of State for Environment, Food and Rural Affairs on North Lincolnshire's Detailed Assessment for PM₁₀. Please find comments on the report attached.

The Detailed Assessment Report has concluded that there is a requirement to declare an AQMA for the 2004 PM₁₀ annual objective covering the area around the Low Santon TEOM monitoring station. Defra accepts this conclusion. Since the area is covered in the Scunthorpe AQMA (declared for the daily mean objective), we recommend 2 options for dealing with the situation. You may wish to amend the current AQMA order to include the annual mean objective and then undertake a further assessment of the new area of exceedence, or declare a smaller area to include the residential properties in Low Santon. A further assessment will also be required within 12 months of designating the AQMA.

Please send us a copy of the AQMA order when it becomes available. Defra expects **AQMAs to be declared within four months of identification of the requirement for declaration.**

If you have any specific queries about the comments contained in the appraisal report, we would advise that you initially contact the help desk funded by the Department and operated by Air Quality Consultants and the University of the West of England. Details on how to contact the help desk can be found in the appraisal report.

Yours sincerely

Tutu Aluko

AIR AND ENVIRONMENT QUALITY DIVISION

“Review & Assessment Appraisal Report

Report Prepared by: **North Lincolnshire Council**

Date Review & Assessment Report Issued: **February 2008**

The Report sets out the Detailed Assessment, which forms part of the Review & Assessment process required under the Environment Act 1995 and subsequent Regulations.

It covers PM₁₀ and concludes that an Air Quality Management Area will be required for the 2004 PM₁₀ annual mean objective covering the area around the Low Santon TEOM monitoring station. This area is already within Scunthorpe AQMA, which is declared for the 2004 PM₁₀ daily mean objective. North Lincolnshire Council may simply amend the AQMA Order to include the PM₁₀ annual mean objective or declare a smaller area incorporating residential properties in Low Santon. The authority will then need to undertake a Further Assessment of the new area of exceedence.

On the basis of the evidence provided by the local authority, the conclusions reached are **accepted for PM₁₀**.

Commentary

The report is well structured and provides all of the information specified in the Guidance.”

A response from the Environment Agency was also received:

creating a better place

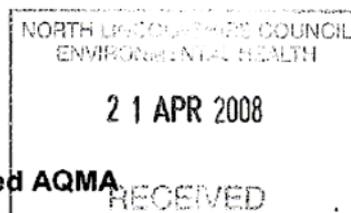


Jon Flitney
Environmental Protection
North Lincolnshire Council
PO Box 42
Scunthorpe
DN15 6XQ

Date: 16 April 2008

Dear Jon

Breach of Annual mean at Low Santon and proposed AQMA



I write in response to the consultation on this topic. These comments are on behalf of the Midlands Region East Area PPC Compliance team of the Environment Agency.

Thank you for the report, "Detailed assessment of PM₁₀, 2008". We noted the conclusion that the monitoring results in the Santon area show that the annual mean PM₁₀ objective is being breached in the area around the Low Santon TEOM monitoring station, but not in the area around the High Santon Partisol. The Low Santon area contains receptors that are relevant to the annual mean objective and thus an AQMA is required. There are no current plans to move either monitoring station in the Santon area, thus PM₁₀ results from the area will continue to be assessed as part of the Review and Assessment process.

Environmental Permitting Regulated "Part A" Processes

The monitoring evidence collected and confirmation of the above conclusion was of no surprise. In considering the extent of the Air Quality Management Area scope, as usual, several factors are balanced though I comment that the variability of meteorological conditions and inherent uncertainties in this type of monitoring, the area size should be sufficient to accommodate this. Some sensitivity analysis may be required.

As we have previously stated, as the Regulator of these processes, my colleagues and I will continue to work with both Corus and MultiServ on identifying and reducing the significance of sources of PM₁₀s. As well as the permit Improvement Conditions identified we continue to work on, we will ensure that we consider the generation of PM₁₀s and the implementation of Best Available Techniques in the planned compliance activity that we undertake and in variations to the Corus permit expected this year. We are also focusing on the Agencies "Priority Substances" of which PM₁₀ is one of these.

We will continue to support the strategic air quality management meetings and the Local Industry Forum.

Trentside Offices, Scarrington Road, West Bridgford, Nottingham, NG2 5FA.
Customer services line: 08708 506 506



In addition, we are currently working with North Lincolnshire Council on the implementation of a PM_{2.5} monitoring exercise at Low Santon. This has now move forward into the purchase of a PM_{2.5} monitor through an Agency grant to be fitted into the DEFRA Groundhog station that they maintain. It is hoped that PM_{2.5} data will increase our knowledge of the generation of particulate matter and help with source apportionment between process/vehicle sources and fine dust lift off sources. For May 2008, an Environment Agency Mobile Monitoring Unit is being located between Corus Dawes Lane Coke Ovens and Tarmac boundaries, near to Low Santon. This is designed for ambient air monitoring.

Please contact me if you have any questions in relation to our comments.

Yours sincerely

Responses were received from North East Lincolnshire Council and Yorkshire Forward (Regional Development Agency), although no comments were offered on the report.

Following this consultation no changes will be made to the Detailed Assessment.

AQMA Proposals for Annual PM₁₀ Objective

With the receipt of Defra's appraisal the Council is now required to declare an AQMA for the breach of the annual objective. There are two different aspects to consider for the AQMA:

- i.) Should there be a new AQMA or should the current AQMA be amended?
- ii.) What area to cover?

i.) New or amend?

- Option 1: Amend current AQMA.
- Option 2: New AQMA for **annual** objective.

The current AQMA has been declared for a breach of the **daily** PM₁₀ objective. It appears from Defra's appraisal that a Further Assessment (and Action Plan) will be required whether or not a new AQMA or an amendment to the current AQMA is made.

A new AQMA will allow flexibility to concentrate on any particular issues causing the exceedance of the annual objective and allow the timescales of the two AQMAs to remain separate.

The advantage of amending the current AQMA would be simplicity; an easy amendment could be made to the declaration order.

The Council would prefer option 2, to declare a new AQMA.

ii.) Size of the AQMA.

The monitoring data shows that in 2007 the annual mean was breached at the Low Santon monitoring station but not the High Santon monitoring station. Therefore those 'sensitive receptors' closest to the Low Santon monitoring station are considered at this stage, these are the three houses in the Low Santon area.

As discussed in the report the café between the two monitoring stations would not be considered a relevant receptor for the annual objective. Of course should future monitoring data ever indicate that a larger area is required the AQMA can be adjusted as necessary.

Option A: Area bounded by railway line and road.

An area bordered by Dawes Lane, the railway and the eastern embankment of Low Santon, Figure 1. The area does not need to be any greater as there are no relevant receptors (for an annual mean objective) in the vicinity. The AQMA does not quite align with the current AQMA, which follows the main rail line rather than the branch line shown in Figure 1.

Advantages: The relevant receptors for which the monitoring station was installed to represent, as well as the surrounding area, are covered. This is useful if any planning applications are submitted for this area. Man-made boundaries adequately enclose the receptors.

Uncertainties: It is being assumed that the annual mean is being breached up to the edge of the embankments in Low Santon.

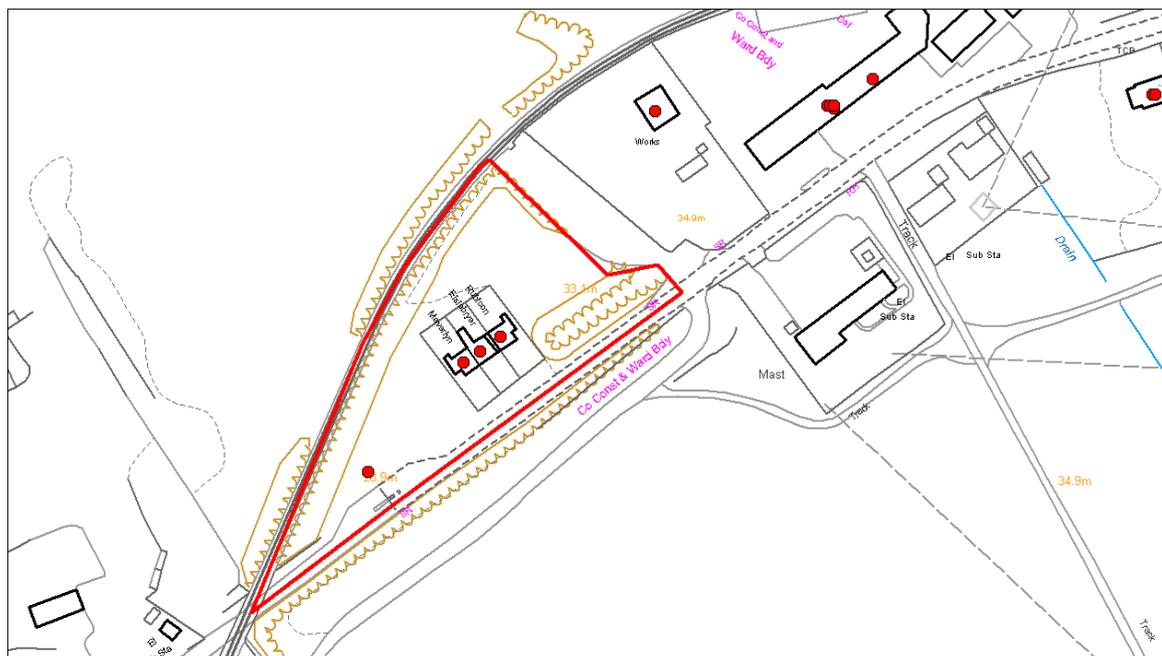


Figure 1: Proposed AQMA bounded by embankments and road.

Option B: Three houses only.

An area covering just the three houses (the facades of the buildings are particularly important) in the Low Santon area, see Figure 2.

Advantages: Clear and concise in covering the current relevant receptors in the area.

Disadvantages: This option does not cover the monitoring station where the exceedance has been recorded. In addition, the area between the houses and monitoring station is not covered which could have consequences should any new planning applications be received for that area.

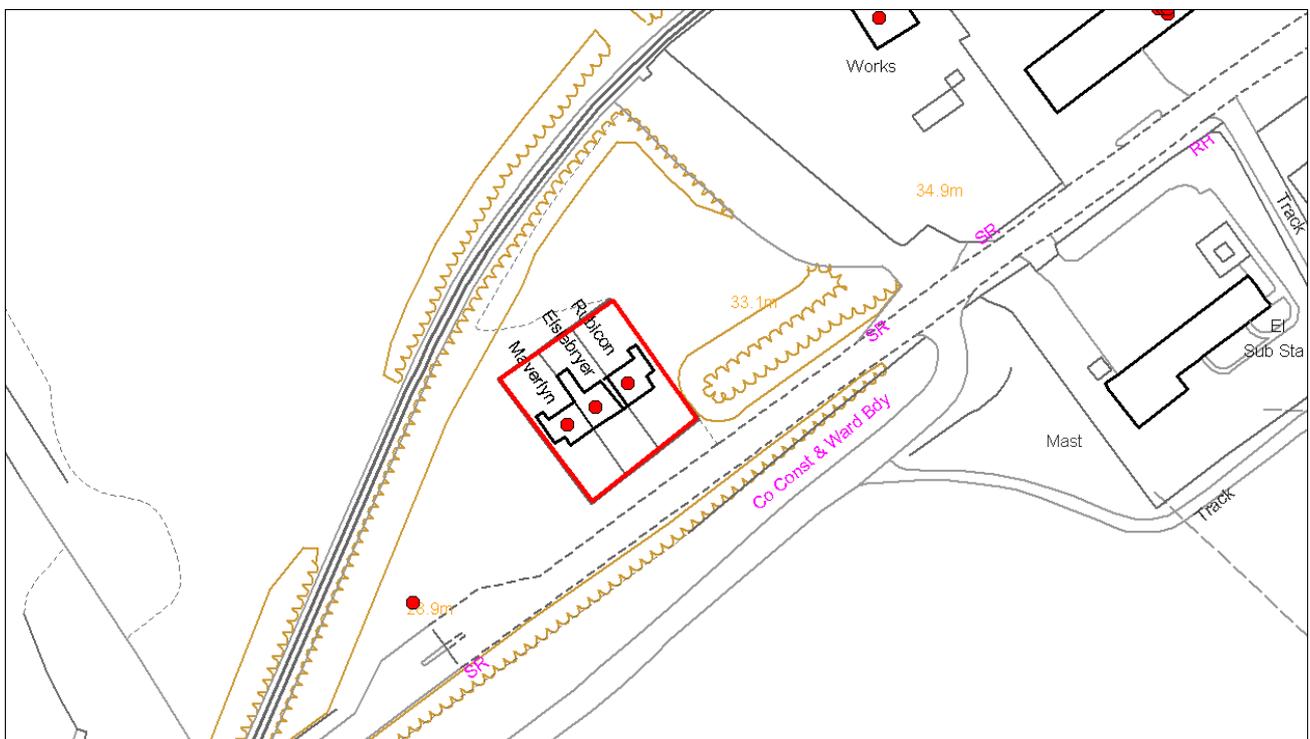


Figure 2: Proposed AQMA bounded by three houses only.

Option C: Monitoring Station only.

An area surrounding the monitoring station, as an example a circle of 5 m diameter has been drawn. See Figure 3.

Advantages: This option would be more scientifically correct as this is the specific location where the exceedance has been recorded.

Disadvantages: Does not cover any receptors or the surrounding area. It is reasonable to assume that the objective is being breached in an area further away from the monitoring station.

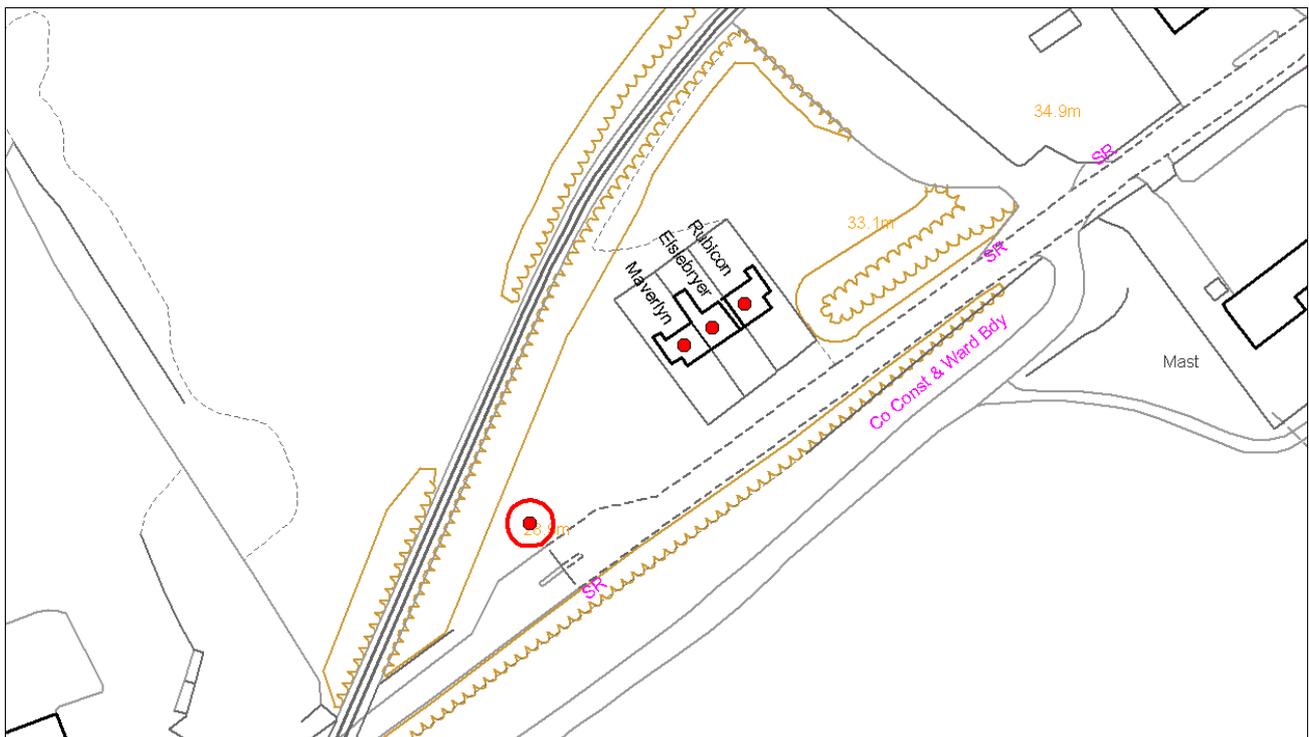


Figure 3: Proposed AQMA around the monitoring station only.

Option D: Combination of Options B and C.

An area that encompasses the monitoring station and three houses, see Figure 4.

Advantages: Covers an area linking both the monitoring station, the three houses and the area between.

Disadvantages: Still leaves the surrounding area outside the AQMA with possible planning implications.

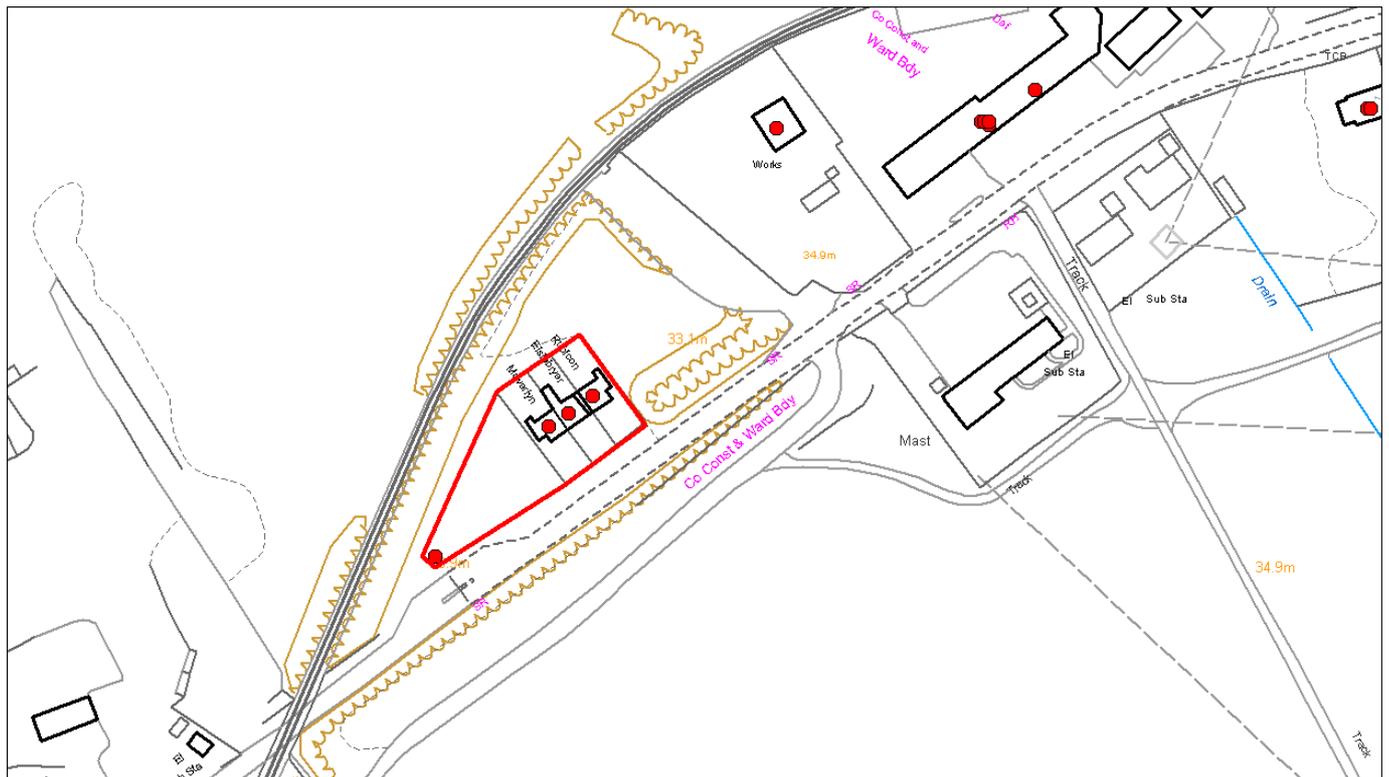


Figure 4: Proposed AQMA enclosing monitoring station and the three houses.

The Council prefers option **A** the area bounded by the embankments and the road as it adequately represents the relevant receptors and surrounding area close to the monitoring station. The embankments and road provide appropriate boundaries with which to enclose the AQMA. The café in the works to the east does not need to be considered, as it is not a relevant receptors, further east is the High Santon Partisol monitor where the annual objective was met in 2007.

For information some of the advice given to Local Authorities for declaring AQMAs is reproduced below:

2.01 Local authorities have a duty under section 83(1) of the 1995 Act to designate those areas, where the Air Quality Objectives are **unlikely** to be met on time (or beyond the deadline), as air quality management areas (AQMAs). These areas have to be designated officially by means of an 'order'.

Setting the boundaries of AQMAs

2.02 There are no hard or fast rules in determining the boundaries of an AQMA. Whilst the legislation requires authorities to designate as AQMAs only areas where Air Quality Objectives are not being achieved, or are not likely to be achieved within the relevant period, drawing boundaries on the latter basis necessarily involves an element of judgement. In some cases this has resulted in whole borough designations (for example some of the London local authorities). Other local authorities have designated isolated buildings, single streets, road networks or parts of motorway or trunk road junctions. A number of authorities have chosen to designate more than one individual AQMA in their areas – some have designated two, three or four separate areas, with over 10 and even 20 individual AQMAs in some local authorities.

2.03 In deciding where to draw the boundaries of an AQMA, local authorities might wish to consider some of the following points:

- It may be administratively much simpler to designate a wider area, based on existing boundaries and natural features. This avoids the need to draw artificially precise lines on maps;
- Wherever the boundaries of the AQMA are drawn, the action plan is likely to need to cover a wider area;
- Designating a number of smaller AQMAs, rather than one single large area, can allow an authority to demonstrate progress by 'ticking off' individual areas as air quality improves there;
- Declaring smaller, individual AQMAs may provide a clear focus on the hot spot locations within a local authority. This may prove particularly important for informing local authority planning processes as to where the more sensitive planning proposals may need to avoid; and
- A more focussed approach to declaring AQMAs may provide a better indication of where resources need to be allocated in terms of equipment and overall effort.

2.04 The ultimate decision for defining the boundaries of an AQMA is entirely up to each individual local authority either working on its own or in partnership with other authorities, where a joint AQMA is proposed. They will need to explain and justify their proposed boundaries to Defra, the Mayor of London or the National Assembly for Wales.

Defra funded Review and Assessment website states the following FAQ:

"5. What should local authorities include in an order designating an AQMA?"

Section 83 of the Environment Act 1995 and in Northern Ireland article 12 of the Environment (Northern Ireland) Order 2002 requires an authority to "by order designate as an AQMA...any part of its area in which it appears that

those...objectives are not...likely to be achieved within the relevant period". It does not, however, explicitly state what should be contained in an order.

LAQM.PG(03) recommends that the order should include a map and a description of the AQMA. The NSCA's guidance note ("Air Quality Management Areas: Turning Reviews into Action") sets out examples of descriptions as follows:- An example for a larger AQMA might be "an area bordered on the north and east by the council's own boundary, on the south by a line 50 metres to the south of the A45, and on the east by a line 50 metres to the east of the B1108". For a smaller AQMA, a more detailed description listing individual streets or other physical features might be appropriate. In some cases, it may be appropriate to list the individual properties affected, although there is no legal requirement to do this. Alternatively, it might be useful to include in the order an approximate summary of the number and type of properties affected. This information should be readily available from the review and assessment reports.

It is also recommended that the order should include the date on which it is intended that the AQMA should come into force, and a list of the pollutants and specific objectives for which the AQMA has been designated. Authorities should notify the Defra, Greater London Authority, Welsh Assembly Government or Scottish Executive as appropriate that an AQMA has been designated, and should publicise the fact widely in the local media and, where possible, on the internet. In Northern Ireland district councils are required under article 12 (3) of the Environment (Northern Ireland) Order 2002 after making an order to publish in the Belfast Gazette and once at least in each of two successive weeks in more than one newspaper circulating in the district to which the order relates a notice. This notice should specify that an order has been made and its general effect and a place in the district of where a copy of the order and any map or plan can be inspected. (23 November 2004)."