

A Summary of Consultation Responses - Air Quality Management Area in Saltford

In fulfillment of Part IV of the Environment Act 1995 Local Air Quality Management

Draft July, 2012

Report Author	Dr N Courthold
Checked by	Mr A Jones

Department	Environmental Monitoring and					
	Licensing					
Address	Lewis House					
	Manvers Street					
	Bath					
	BA1 1JG					
Telephone	01225 477557					
e-mail	Environmental_monitoring@bathnes.gov.uk					

Report	R4CR2012
Reference	
Number	
Date	July 2012

Executive Summary

This Consultation Report forms part of the on-going review and assessment of air quality within Bath and North East Somerset. Local Authorities are required under Part IV of the Environment Act 1995 to periodically review and assess the air quality in their area. Present and likely future quality of the air is compared to air quality objectives. The guidance issued by Department for Environment, Food and Rural Affairs (DEFRA) on how this should be approached has been followed in this assessment.

This report details the consultation which has taken place relating to the extent of the proposed AQMA.

The consultation shows that 44% of the responses prefer Option 2 – Bath Road for the proposed AQMA. It is therefore recommended based on monitoring data and the consultation that an AQMA be declared for Saltford along the A4 Bath Road extending from the junction of Beech Road to the Southern extent of Saltford as detailed in Figure 3.

Table of Contents

Executive Summary	. 3
1 Introduction	. 5
2 Saltford	. 5
3 The Consultation	. 7
4 Responses	. 8
5 Conclusions and Recommendations	. 9
6 References	. 9
Appendix 1: Air Quality Objectives	11
Appendix 2: Copy of the Leaflet and Questionnaire	12
Appendix 3: Glossary	15
Appendix 4: Responses received	16
Table of Figures	
Figure 1: Saltford photo, looking East	. 7 ! –
Table of Tables	
Table 1: Current air quality objectives	

1 Introduction

This report forms part of the on-going review and assessment of air quality within Bath and North East Somerset. Local Authorities are required under Part IV of the Environment Act 1995 ⁽¹⁻²⁾ to periodically review and assess the air quality in their area. Present and likely future quality of the air is compared to air quality objectives (levels of pollutants which are to be met by a certain date), these are shown in Appendix 1. The Department for Environment, Food and Rural Affairs (DEFRA) has issued guidance on how this should be approached ⁽³⁻⁴⁾.

Following a detailed assessment in 2010, results showed that monitored levels exceeded the Government's Objectives for annual average Nitrogen Dioxide (NO₂) concentrations. This identified that an Air Quality Management Area (AQMA) was required along the A4 Bath Road, Saltford.

Setting the boundaries of an AQMA involves an element of judgement as to the extent of the exceedence based on monitoring data, sources, receptors and other local factors. An AQMA must encompass all known and predicted areas of exceedence where there is relevant exposure.

Objective	Concentration	Relevant Exposure
Annual Mean NO ₂	40 μg/m ³	All locations where members of the public might be regularly exposed. Building facades of residential properties, schools, hospitals, care homes etc. Not offices, gardens of residential properties or Kerbside sites
1-hour NO ₂	200 μg/m³ with 18 exceedences per year. Guidance indicates that an annual mean NO₂ concentration greater than 60 μg/m³ may indicate an exceedence of the 1- hour objective.	As above plus hotels, gardens, any outside location where members of the public might reasonably be expected to spend 1 hour or longer.

This report details the consultation which has taken place relating to the extent of the proposed AQMA.

2 Saltford

Saltford is a large village located on the West side of Bath on the A4 between Bristol and Bath. Traffic levels on the A4 are in the region of 27,500 vehicles per day with 6% HGVs and buses.

The majority of residential premises in Saltford are set back from the main road so are not exposed to high levels of NO₂. There is one potential sensitive property close

Bath and North East Somerset, Round 4 – Detailed Assessment, Consultation Report

to the main road which is a children's day nursery in the centre of the village. However, monitoring at this location (Tiddlers Nursery) has shown that this site is well below the Government's objective for NO₂.

There are pinch points in the village at the junction of the A4 Bath Road, with the Shallows (562 Bath Road) where there are properties adjacent to the road and there is another pinch point in the centre of the village where there is a crossroads with pedestrian crossings either side.

The traffic related pollution is exacerbated by peak commuter traffic passing through the village at the times when children are using the pedestrian crossing points to cross the road to go to, and from, school.

The site at The Crown may also be made worse by a bus stop close to the site and a Waste Oil Burner at the garage at 502 Bath Road.



Figure 1: Saltford photo, looking East

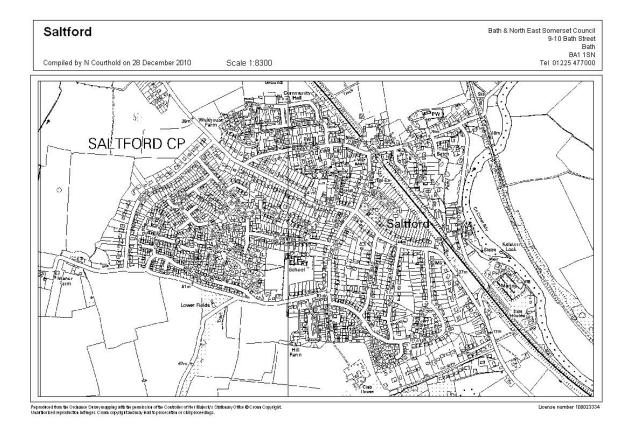


Figure 2: Map of Saltford

3 The Consultation

A leaflet and questionnaire was delivered to all houses along the A4 Bath Road, Saltford and several houses back on the side roads (approx. 190 houses). Further leaflets were left in Saltford Library and sent to the Parish Council. Details were also posted on our website and sent electronically to all Statutory Consultees (list was taken from PG(09)):

- The Secretary of State
- Environment Agency
- The Highways Authority
- All neighbouring local authorities
- The County Council (if applicable)
- Any National Park Authority
- Other public authorities as appropriate
- Bodies representing local business interests and other organisations as appropriate

A copy of the leaflet and questionnaire are included in Appendix 2.

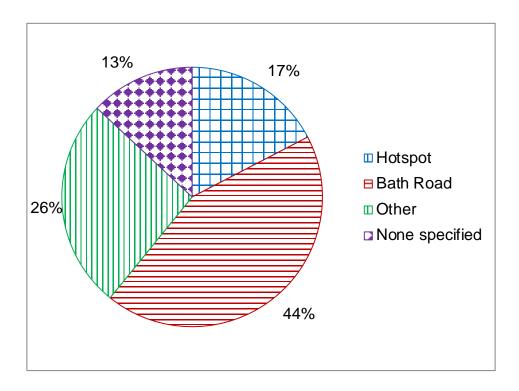
Two members of Environmental Monitoring attended the Parish Council meeting on 7th February 2012 to give a presentation on the proposed Air Quality Management Area (AQMA).

4 Responses

We had 22 responses to the consultation (approx. 10% response rate).

Q1: Which Air Quality Management Area do you prefer?

Option	Number of respondents selecting each option
Hotspot	4
Bath Road	10
Other	6
None specified	3



Where the other option was selected a description of the proposed area was given. Other Descriptions:

- 1. Bath Road, extend Blue area to beyond Norman Road
- 2. Whole of the Bath Road to Grange Road
- 3. Extend the blue area (Bath Road) to include the Beech Road/Manor Road junction, ie from The Glen to Tiddlers nursery
- 4. The Bath Road area should be extended towards Bristol possibly as far as Norman Road
- 5. The area coloured orange of enclosed map (Length of A4 through Saltford). What is the reading at the Norman Road junction at peak times and also the readings at The Glen and 562 Bath Road?
- 6. Continue the Bath Road (blue area) to include the whole length of A4 through Saltford

Question 2: Improving Air Quality; Please give any ideas on how to improve air quality in Saltford.

Question 3: Further Information; Would you like an air quality Officer to contact you to discuss your comments in more detail?

Responses to questions 2 and 3 are given in Appendix 4 along with any other comments given and our responses.

5 Conclusions and Recommendations

The consultation shows that 44% of the responses prefer Option 2 – Bath Road for the proposed AQMA. It is therefore recommended based on monitoring data and the consultation that an AQMA be declared for Saltford along the A4 Bath Road extending from the junction of Beech Road to the Southern extent of Saltford as detailed in Figure 3.

6 References

- 1. HM Government (1995). Environment Act 1995 (Part IV). London HMSO.
- 2. Department for Environment, Food and Rural Affairs (2007) The Air Quality Strategy for England, Scotland, Wales and Northern Ireland. DEFRA, London.
- 3. Department for Environment, Food and Rural Affairs (2009a) Part IV of the Environment Act 1995, Local Air Quality Management, Technical Guidance LAQM.TG(09). DEFRA, London.
- 4. Department for Environment, Food and Rural Affairs (2009b) Part IV of the Environment Act 1995, Local Air Quality Management, Policy Guidance LAQM.PG(09). DEFRA, London.
- 5. Bath & North East Somerset Council (2010) 2010 Air Quality Progress Report for Bath and North East Somerset Council
- 6. Bath & North East Somerset Council (2009a) 2009 Air Quality Updating and Screening Assessment for Bath and North East Somerset Council
- 7. Bath & North East Somerset Council (2011) 2010 Detailed Assessment of Saltford for Bath and North East Somerset Council
- 8. Department for Environment, Food and Rural Affairs: http://laqm1.defra.gov.uk/review/tools/no2/baf-national.php
- 9. AEA Technology: http://www.airquality.co.uk/

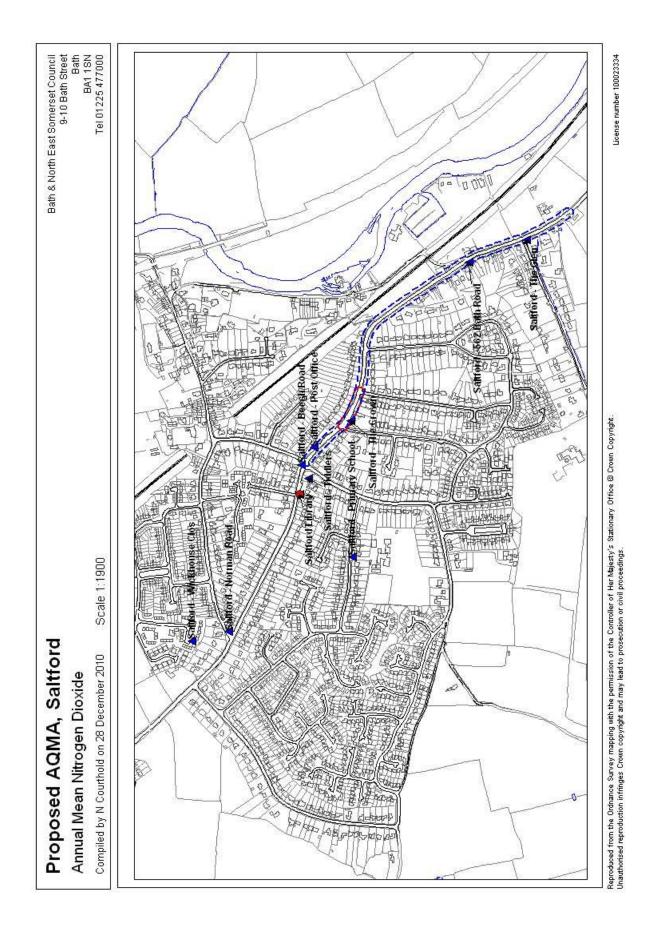


Figure 3: Proposed AQMA for Saltford, Option 1 – Hotspot (red area), Option 2 – Bath Road (blue area)

Appendix 1: Air Quality Objectives

Table 1: Current air quality objectives

Pollutant	Concentration	Measured as	Compliance
Benzene	16.25 μg/m ³ (5 ppb)	Running annual mean	31.12.2003
	5 μg/m³ (1.5 ppb)	Annual mean	31 Dec 2010
1,3 Butadiene	2.25 µg/m³ (1 ppb)	Running annual mean	31.12.2003
Carbon Monoxide	10 mg/m ³ (8.6 ppm)	Running 8-hour mean	31.12.2003
Lead	0.5 μg/m ³	Annual mean	31.12.2004
	0.25 μg/m ³	Annual mean	31.12.2008
Nitrogen Dioxide	200 μg/m³ (104.6 ppb)	1 hour mean	31.12.2005 (max 18 exceedences)
	40 μg/m³ (21 ppb)	Annual mean	31.12.2005
Fine Particles (PM ₁₀)	50 μg/m ³	24-hour mean	31.12.2004 (max 35 exceedences)
	40 μg/m ³	Annual mean	31.12.2004
Sulphur Dioxide	266 μg/m ³ (100 ppb)	15 minute mean	31.12.2005 (max 35 exceedences)
	350 μg/m ³ (131 ppb)	1 hour mean	31.12. 2004 (max 24 exceedences)
	125 μg/m ³ (46.8 ppb)	24 hour mean	31.12.2004 (max 3 exceedences)
Polycyclic aromatic hydrocarbons	0.25 ng/m ³ B[a]P	Annual mean	31.12.2010
Fine Particles (PM _{2.5})	25 μg/m³	Annual mean	2020
Exposure Reduction	Target of 15 % reduction in concentrations at urban background	Annual mean	Between 2010 and 2020
Ozone	100 μg/m ³	8 hour mean	31.12.2005 (max 10 exceedences)

Appendix 2: Copy of the Leaflet and Questionnaire

Somerset Council Bath & North East

We Want To Know What You Think

We are seeking your views on the extent of the Air Quality

Management Area.

Please complete the enclosed questionnaire or send a letter or

Bath & North East Somerset Council

Please respond to:

Environmental Monitoring Environmental Services FREEPOST (BA1458)

A Consultation on Air Quality

and your help improving it Saltford's air quality

Please return this form or any other correspondence by

Email: environmental_monitoring@bathnes.gov.uk

Tel: 01225 477557

BA1 1ZZ Bath

Friday 17th February 2012.

This document can be made available in a range of languages, large print, braille, on tape, electronic and accessible formats from 01225 477495. **Pollution Prevention through Control**

Ě

Local authorities are required under Part IV of the Environment Act 1995 to periodically review and assess the air quality in their area in line with guidance issued by the Department for Environment, Food and Rural Affairs (DEFRA). Present and likely future quality of the air is compared to the National Air Quality Objectives, in particular for nitrogen dioxide (NO2). Where exceedances of these objectives are identified in areas of public exposure, an Air Quality Management Area (AQMA) must be declared.

MONITORING

The Council maintains a monitoring network that records average concentrations of nitrogen dioxide. There are 10 monitoring sites at locations in Saltford (as shown by the blue triangles on the adiacent map).

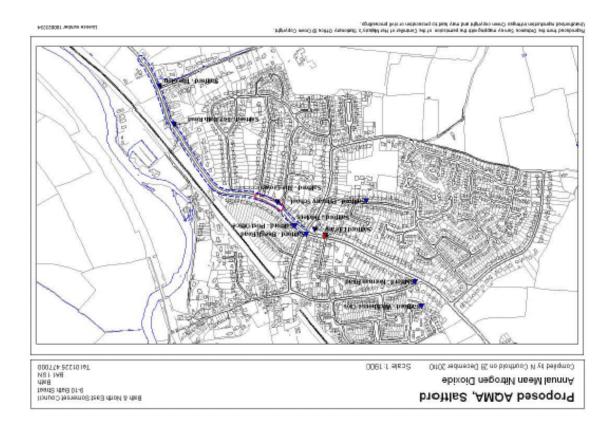
The average nitrogen dioxide concentration at The Crown diffusion tube location on the Bath Road exceeded the National Air Quality Objective for nitrogen dioxide (40µg/m³ as an annual average) at 44 in 2010. As a result, Bath and North East Somerset Council must declare an Air Quality Management Area (AQMA).

AQMA AREA

The adjacent map shows possible boundaries of the proposed Air Quality Management Area. The boundary is open to judgement and can include areas that don't exceed the air quality objectives, but may be relevant in terms of measures that will help air quality objectives to be met in the areas of exceedance.

SOLUTIONS AND THE PROCESS

There are a number of potential solutions that will be explored at a later date when the 'Air Quality Action Plan' is drawn up - 12 to 18 months following declaration of the Air Quality Management Area.



Bath & North East Somerset Council

Saltford Air Quality Management Area Consultation Questions 2011

	rea) ribe, or outline on map)
Improving Air Quality; Please can be improved in Saltford.	e give any ideas on how air quality
Further Information; Would contact you to discuss your \(\sum Yes \) If yes please give contact def] No tails
ease return by ^{rth} February 2012 to:	Bath & North East Somerset Council Environmental Monitoring Environmental Services FREEPOST (BA1458) Bath BA1 1ZZ

Appendix 3: Glossary

Annual Mean: The average of the concentrations measured for one year

AEAT: AEA Technology Ltd

AQMA: Air Quality Management Area

AQS: Air Quality Strategy

AURN: Automatic Urban and Rural Network

DEFRA: Department for Environment, Food and Rural Affairs

DETR: Department of the Environment, Transport and the Regions

DMRB: Design Manual for Roads and Bridges

EU European Union

GIS: Geographical Information System LAQM: Local Air Quality Management

LSO: Local Site Operator

mm Millimetres

NETCEN: National Environmental Technology Centre (part of AEA

Technology Ltd.)

NO₂: Nitrogen Dioxide NO_x: Oxides of Nitrogen

Objective: Target values set by the Government for the key air pollutants

that are required to be achieved by a set date.

OS: Ordnance Survey

PM₁₀: Particulate Matter with diameter less than 10 µm

QA/QC: Quality Assurance/Quality Control

TG: Technical Guidance Note

UKAS: United Kingdom Accreditation Service

μg/m³: Microgrammes per cubic metre

WASP: Workplace Analysis Scheme for Proficiency

WHO: World Health Organisation

Appendix 4: Responses received

Table 2: Response from the Consultation

No.	AQMA	Description	Improving AQ	Further Info Y/N	Other Comments	Response
1	Bath Road	Please note map not in colour	Stop all HGV's through Saltford, bypass Saltford	у	This leaflet is almost gobbledegook - I almost dismissed it - what about plain English?	Letter sent with further info and a more detailed map, not sure of why map not in colour.
2	Bath Road	Slow traffic on the hill provides large emissions giving high readings by The Glen	Bypass the village, there are no alternative routes for traffic which will only increase with limits on lorries on A36 in Bath and south of Bristol Road	у		Phoned and went to parish council meeting
3	Other	Continue the Bath Road (blue area) to include the whole length of A4 through Saltford	Make the Norman Road junction a mini roundabout. This would reduce the vehicle emissions by reducing the standing traffic in Norman Road and excessive exhaust when vehicles accelerate when turning right onto the A4	n		
4	Bath Road		Bypass to Saltford	n		
5	Hotspot	and Bath Road	The only way is to build a bypass. Bus drivers who idle outside CROWN PUB to make up time must be told to switch off engine	у	to next Parish Council meeting	Went to PC meeting
6	Hotspot		Lower speeds 20mph Saltford Hill to Grange Road. Open Saltford Station	n		
7	Bath Road		Reduce A4 traffic through Saltford - Bypass	n		

No.	AQMA	Description	Improving AQ	Further Info Y/N	Other Comments	Response
8	Bath Road		By reducing traffic on A4 through Saltford	n		
9	Bath Road		Stop smoking outside the Crown Pub. Better traffic management at junction of Bath Road with Manor Road, Beech Road and Crescent outside shops. Build a bypass to allow smoother flow of traffic	n		
10	Bath Road		Bypass for traffic between Bristol and Bath. Also concern of air above Saltford from pollution of air traffic from Lulsgate Airport	n		
11	Hotspot		Build a Saltford Bypass road. Divert air traffic to Bristol Airport	n		
12	Other	The area coloured orange of enclosed map (Length of A4 through Saltford). What is the reading at the Norman Road junction at peak times and also the readings at The Glen and 562 Bath Road	It is unlikely in the foreseeable future that vehicle emissions will reduce, as is the volume of traffic during daytime hours the solution is to ease/diminish the traffic using the A4 through Saltford eg bypass as recent survey of Saltford residents has recorded.	у		Email sent with data requested.
13	Other	The Bath Road area should be extended towards Bristol possibly as far as Norman Road	Any traffic measures to keep vehicles moving rather than stop/start. Also double yellow lines on one side of Beech Road & Manor Road would give steady flow on these roads (also safety feature).	n		

No.	AQMA	Description	Improving AQ	Further Info Y/N	Other Comments	Response
14	Hotspot	On the bend towards Saltford just after 528 Bath Road	Heavy lorrys be diverted away from Saltford Hill on A4	у	(By phone) A4 discussions been going on for 50 years. Past Cllr said HGV diverted from Saltford Hill (local) via weight limit. Traffic backs up down hill to The Globe, both morning and evening. Golf club won't allow bypass. Lived there for 12-15yrs. HGV some A39 to A4 to A4174. Willing to be active member of a committee.	phoned to discuss and sent some monitoring data.
15	Other	Extend the blue area (Bath Road) to include the Beech Road/Manor Road junction, ie from The Glen to Tiddlers nursery	Instruct bus companies' drivers to switch off engines when idling at bus stops at The Crown and the shops. Suggest a by-pass for Saltford	n		Already attended PC meeting
16	Bath Road		Bypass. Car sharing. One way system (partial bypass)	у	No-body stops to let you cross the road in the mornings. 5 mins waiting on island. (comments by phone)	phoned.
17	Bath Road		By-pass would reduce the traffic volume leading to less pollution and reduce speed limit to 20mph	n		
18	Other	Whole of the Bath Road to Grange Road	Less traffic! Bypass	n		
19	Other	Bath Road, extend Blue area to beyond Norman Road	Have sensors embedded near Norman Road/Bath Road junction so cars will stop there waiting onto main road could trigger traffic lights nearby to change to red.	n		
20	Bath Road	I assume being the larger are it would have more overall impact on the whole of Saltford.	I am also in favour of the re- opening of Saltford Train Station in the hope that this would reduce traffic and pollution in Saltford.	n		

Bath and North East Somerset, Round 4 – Detailed Assessment, Consultation Report

No.	AQMA	Description	Further Info Y/N	Other Comments	Response
21				Buses wait at The Crown when they are ahead of schedule. She wanted to make a point that the air quality is only slightly above the national objective at The Crown and not the whole area. She was concerned that some have painted a picture of doom to strengthen their case for a bypass. She doesn't want a bypass.	

No.	AQMA	Description	Improving AQ	Further Info Y/N	Other Comments	Response
22					Thank-you for your presentation on establishing the Saltford Air Quality Management Area to the Saltford Parish Council yesterday at our Feb meeting. I am optimistic that some highways solutions may be possible to find to abate the NO2 measurements on the A4 in Saltford, particularly in the vicinity of the Glen and the Crown. The profile of traffic does change over time. I have been looking at the detailed figures for traffic counts on the A4 in Saltford by totals, type and time of day over the period 1998-2011 (no data was collected 2006-2008). The peak year was 2002 with a 5-day average count of 31075 vehicles and a 7-day average count of 29511 vehicles. The figures for 2011 were 5-day average 28952 and 7-day average 27234 vehicles (the lowest figure recorded). The drop from the peak is 6.8% for the 5-day average and 7.7% for the 7-day average. The 5-day average has been below 29000 for the past two years and the 7-day average has been below 28000 for the past three years. Of course, the figures remain high. Comparing 2001 with 2011, it would seem that at the peak time in the morning roughly the same number of cars travel eastbound, and similarly for westbound at the peak time in the afternoon - but fewer cars travel westbound in the morning and eastbound in the afternoon. And the morning peak has moved from 8am to 7am. I have just compared 2002 with 2011 and found the same picture - reduction in Westbound commuter traffic from Bath to Bristol in the morning peak (142 vehicles)) and Eastbound Bristol to Bath in the afternoon peak (127 vehicles).	