

Crieff Air Quality Management Area Consultation Report

Perth & Kinross Council

August 2013



**PERTH &
KINROSS
COUNCIL**

The Environment
Service



Contents

Executive Foreword	2
Introduction	3
Part I: Background to the Proposal	
Legal Requirements	4
The Situation in Crieff	5
The Next Steps	6
Part II: Crieff Air Quality Management Area Proposal	
Deciding the Boundary	7
Proposed Boundary	7
Map of Proposed Crieff AQMA	8
Consultation Information	9
Further Information	12



Executive Foreword

Air Quality is one of the UK Government's key headline indicators of sustainable development which provides a scale for measuring everyday concerns. Moreover, clean air is an essential ingredient for a healthy environment supporting a high quality of life.

The population of Perth and Kinross have a right to expect that the air they breathe is safe and clean and will have no harmful effects upon their health or wellbeing. This is why Perth & Kinross Council is committed to taking early action to minimise risks to health and the environment posed by air pollution, based on the best information available.

Perth & Kinross Council has been proactive in monitoring local air quality since 1990 although Review and Assessment of Air Quality has only been a statutory duty for all local authorities since 1997. Our local air quality is generally very good but there are a few locations in busy streets in Perth and Crieff where emissions from traffic cause levels of nitrogen dioxide and particulates which are above current national objectives. Many other local authorities face similar challenges, particularly where relatively narrow streets, bounded by tall buildings, form 'street canyons' which restrict air movement and can cause pollution levels to increase from time to time.

The whole of Perth City was designated an Air Quality Management Area (AQMA) in 2006 due to the elevated levels of nitrogen dioxide and particulates monitored at city centre locations and now levels of the same pollutants have been identified in areas in the centre of Crieff which exceed national objectives for the annual average for nitrogen dioxide and the annual average for particulates.

The primary cause of poor air quality in Perth and Crieff is emissions from road traffic, and sustained effort is necessary to protect our environment and public health.

Most of us contribute to air pollution in some way and therefore all of us must take some responsibility for the quality of the air we breathe. We can, collectively, make a difference to our local air quality by making small changes in the way we live and travel.

Based on the results of ongoing air quality monitoring described within this report, an Air Quality Management Area is required to be declared within Crieff and renewed efforts will be made to reach the national objective targets through the implementation of an action plan aimed at improving air quality within the designated area.

The declaration of an Air Quality Management Area gives us a strong starting position from which to tackle not only local air quality but also improve quality of life and achieve sustainable development throughout the community. Perth & Kinross Council will work in partnership with local residents, industry and other relevant public, private and voluntary bodies in achieving this aim.

This proposal is an important and defining step towards establishing a strategic framework for tackling air pollution and demonstrates our commitment to the process of local air quality management.



Introduction

This report is comprised of two parts, the first of which is a background to the proposal which includes a summary of the Detailed Assessment of Air Quality carried out in the area of the A85 in Crieff, and sets out the reasons for the declaration of an Air Quality Management Area (AQMA) in terms of our statutory obligations including the scientific evidence on which the proposal is based.

The second part proposes the boundary for the AQMA, including a map showing the proposed area and details of the organisations etc to be included in the consultation process.



Part I: Background to the Proposal

Legal Requirements

In 1997, the Government published a National Air Quality Strategy and introduced a statutory process of Local Air Quality Management (LAQM) under the Environment Act 1995. Part IV of the Act requires each local authority to periodically review air quality in its area.

Local authorities must review and assess air quality according to prescribed guidance (Technical Guidance 09), this involves the monitoring of specified pollutants and if monitoring shows there is a risk of exceeding any of the standards, the local authority are required to produce a Detailed Assessment to confirm or refute this. If, as the result of a Detailed Assessment, the objective for any pollutant is predicted to be exceeded in areas where there is relevant public exposure, local authorities have a duty under section 83(1) of the 1995 Act to declare an Air Quality Management Area by means of issuing an AQMA Order, following a process of public consultation.

As a consequence of declaring an AQMA, Further Assessment of the air quality in the area must be completed and reported on within 12 months and an Air Quality Action Plan defined within 18 months, respectively from the date of declaration.

Section 84(2)(b) of the Environment Act 1995 makes it clear that local authorities are required to act 'in pursuance of the achievement of air quality objectives in the designated areas'. Local authorities are not under a legal obligation to achieve the objectives, although they are required to show that they are doing all that they reasonably can to work towards meeting them.

The Air Quality Standards (Scotland) Regulations 2007 prescribe air quality objectives (shown at Table 1.1 in the accompanying Detailed Assessment document part of which is produced below). National objectives are derived from health based standards which have been set purely on the basis of medical and scientific evidence of how each pollutant affects human health, at appropriate levels of protection of the most sensitive members of the population. The Scottish Parliament transposed recent European Union Directives into national legislation and have set a more stringent objective for particulates (PM₁₀) than those currently specified for the rest of the UK (40 µg m⁻³).

Table 1.1: Objectives for the Purpose of Local Air Quality Management (Scotland)

Pollutant	Air Quality Objective	
	Concentration	Measured as
Nitrogen dioxide	200 µg m ⁻³ not to be exceeded more than 18 times a year	1 hour mean
	40 µg m ⁻³	Annual mean
Particulates	50 µg m ⁻³ not to be exceeded more than 7 times a year	24hr mean
	18 µg m ⁻³	Annual mean



The Situation in Crieff

Nitrogen dioxide (NO₂) levels have been measured in Crieff since 2005, using diffusion tubes, which are a passive method for quantifying levels of this pollutant in the air. NO₂ in the air travels up a tube of known length and diameter and reacts with chemicals contained at the top of the tube. The tubes are removed and replaced on a monthly basis with exposed tubes being analysed by Tayside Scientific Services to calculate the annual average levels of NO₂ at each location. This is a relatively cheap method of quantifying NO₂ in the air over an extended area using numerous individual measurement sites as part of an ongoing monitoring regime.

Levels in Crieff in 2005 were measured around 37ugm⁻³ as a maximum and thus below the 40ugm⁻³ standard, however levels have increased steadily over the years to the point where the annual average levels of NO₂ at 7 West High Street were measured as 52ugm⁻³ in 2012. It should be borne in mind that this level is at the kerb and the standards above apply at residential facades. To further examine levels in the area, 2 façade level tubes were installed in 2009 which were initially below the 40ugm⁻³ standard, but in 2010 one of these at 19 West High Street was in exceedance of the objective at a reading of 44ugm⁻³. To more accurately characterise NO₂ and particulates (PM₁₀) and inform any future modelling in Crieff, a real time monitor was installed at James Square in 2010.

Table 1.2 Diffusion Tube Trends in Crieff

Tube Address	Year							
	2005	2006	2007	2008	2009	2010	2011	2012
7 West High Street	37	37	40	50	45	54	50	52
39 High Street	35	34	36	39	35	37	39	35
9 East High Street	36	38	40	44	38	42	41	41
19 West High Street *					36	44	41	42

* façade level

It should be noted that most of the above levels are not at residential facades but at kerbside and thus the levels were extrapolated back to the residential properties until façade level tubes were installed in 2009.

As a consequence of the façade level exceedance, The Environment Service commissioned AEA Technology plc to carry out a Detailed Assessment in 2012 along the High Street corridor in Crieff, which used dispersion modelling to predict levels of both NO₂ and PM₁₀ at ground and first floor level. Modelling is used in Detailed Assessments to get a more complete picture of the exceedances and this allows prediction at first floor level which is important in the High Street area as most residential properties are at first floor level. The modelling uses traffic and meteorological data to predict pollutants levels and is fine tuned using the monitoring data.

The full Detailed Assessment is attached however in summary; the modelling predicted wide spread exceedances at both ground and first floor level along East and West High Street, Crieff, of both the NO₂ and PM₁₀ standards. The cause of the exceedances in Crieff is almost certain to be high levels of road traffic exacerbated by the narrow nature of this corridor and the high buildings either side causing a 'street canyon' effect. For this reason, only the A85 corridor in Crieff is thought to be exceeding the standards. The basis for the exceedances will be confirmed by a Further Assessment which Perth & Kinross Council are statutorily obliged to complete within 12 months of the AQMA declaration.



The Next Steps

The findings of the Detailed Assessment have been accepted by the Scottish Government and Perth & Kinross Council are now statutorily obliged to declare this part of Crieff an AQMA. This involves widespread consultation with stakeholders on the proposed area of the AQMA before the drafting of an Air Quality Management Area Order. Perth & Kinross Council will then have 12 months to complete a Further Assessment of air quality within the area concerned which has the purpose of identifying the main contributors of the pollutants causing the measured exceedances with a further 6 months thereafter to formulate an Air Quality Action Plan (AQAP), in consultation with all relevant stakeholders.



Part II: Crieff Air Quality Management Area Proposal

Deciding the Boundary

There is already one AQMA within Perth and Kinross, with the whole of Perth City being declared in 2006. The opinion at that time was that it was administratively simpler to declare the whole city an AQMA as there were a number of different sites affected and a declaration covering the whole city would ensure a holistic approach to the reduction of NO₂ and PM₁₀ levels here. The situation in Crieff is markedly different with only one corridor affected; therefore the proposed approach is simpler.

The Scottish Government gives guidance to local authorities on how to consider setting the boundaries of an AQMA in Policy Guidance PG (S) (09), eg:

- ❑ *Setting the boundary of an AQMA involves an element of judgement. Boundaries can range from isolated buildings to the entire local authority area. Some local authorities have chosen to designate several AQMAs, each covering an area of concern, whereas others have included all such areas within one overall AQMA. It is thus for local authorities to decide on the boundaries for an AQMA, taking all relevant considerations into account and consulting as appropriate.*
- ❑ *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 and also allows a more strategic approach to be taken.*
- ❑ *Designating a number of smaller AQMAs, rather than one single large area, can allow an authority to demonstrate progress by removing individual areas as air quality improves there.*
- ❑ *Wherever the boundaries of the AQMA are drawn, the action plan is likely to need to cover a wider area.*
- ❑ *Declaring smaller AQMAs may also provide a clear focus on the hot spot locations within a local authority. This may prove particularly important for informing local authority planning processes.*
- ❑ *A more focused approach to declaring AQMAs may provide a better indication of where resources need to be allocated in terms of equipment and overall effort.*

Proposed Boundary

Taking into account the Scottish Government advice above, it is therefore proposed that Perth & Kinross Council designate parts of the A85, which is defined by the Scottish Government as a Trunk Road, in Crieff as an AQMA for both nitrogen dioxide and particulates. The AQMA is to be defined as being within the following boundary line description:

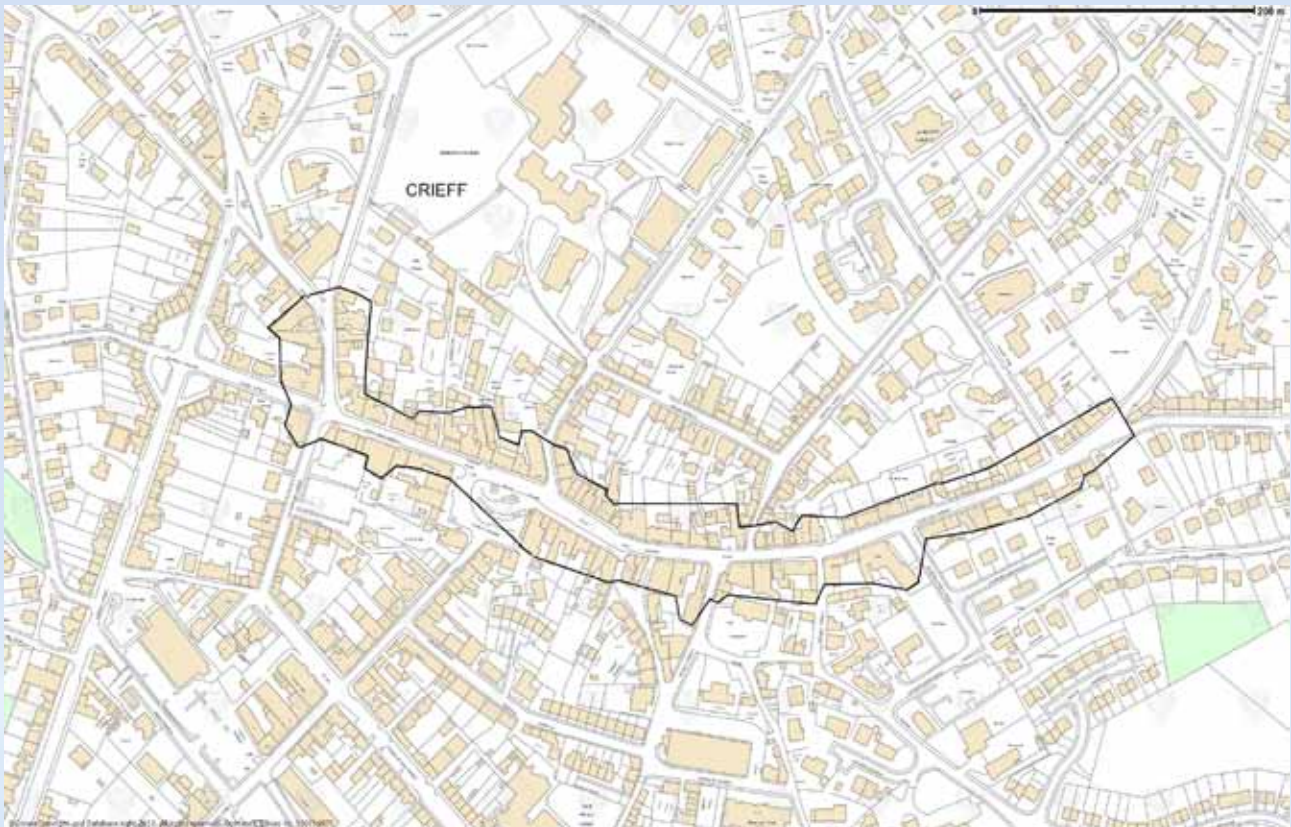
"From the point at the Y-Junction at Perth Road and Dollerie Terrace, follow the A85 east to East High Street, the Cross, High Street, James Square then on to West High Street stopping at the junction of Galvelmore Street and Lodge Street and north up Comrie Street to the Y-Junction at Coldwells Road and mid point of Comrie Street. The AQMA area will take in the whole of the buildings along East High Street/High Street/West High Street/and Comrie Street."



Proposing the AQMA boundary as described demonstrates Perth & Kinross Council's pro-active and responsible commitment to local environmental management and protection through inclusion, not only of the current areas of exceedance for each pollutant, but also those areas which are close to, and at times may exceed, the objectives.

The Air Quality Action Plan (AQAP), which has to be developed for the AQMA must consider, and assess the sustainability of, all options available to the Council for alleviation of elevated air pollution in the areas of exceedance. Designation of this part of the A85 at Crieff will facilitate implementation of the AQAP through integration with Council policies and strategies to ensure that air quality is not addressed in isolation but included in other decision making processes. The A85 is a Trunk Road and is the responsibility of Transport Scotland who will therefore of necessity be a major stakeholder.

Map of Proposed Crieff AQMA





Consultation Information

Your comments are invited on this document and the attached Detailed Assessment and any comments received will be considered and used as part of the decision making process. We reserve the right to make responses publicly available, unless prior notification to the contrary is received.

A printed copy of this consultation document has been sent to the undernoted people/organisations which are external to Perth & Kinross Council:

- all MSPs, MPs and MEPs who have Perth & Kinross Council within their constituency boundaries;*
- neighbouring Local Authorities - Dundee City Council, Angus Council, Fife Council, Clackmannanshire Council, Stirling Council and Highland Council;*
- Scottish Government;*
- Scottish Environment Protection Agency;*
- Perthshire Chamber of Commerce;*
- Scottish National Heritage;*
- Scottish Enterprise Tayside;*
- Crieff and Upper Strathearn Partnership;*
- Police Scotland, Tayside Division;*
- Visit Scotland, Perthshire;*
- Tayside Health Board;*
- Transport Scotland;*
- both National Park Authorities;*
- all Community Councils within Crieff Area;*
- all School Boards within Crieff Area.*
- public libraries.*

If you are aware of others with an interest who have not been notified, please either copy the consultation document to them or ask them to contact The Environment Service at Perth & Kinross Council on 01738 476476 and we will be happy to forward a copy.

Copies of this consultation document may be made available in large print on request and summaries may also be made available in other languages by contacting The Environment Service at Perth & Kinross Council on 01738 476476.



Comments are sought by 11 October 2013.

We would be grateful if you could clearly indicate in your response which part of the consultation paper you are responding to, as this will aid our consideration of the responses received.

Comments, in writing or by email, on the consultation should be returned to:

James Dixon

Regulatory Services Manager
The Environment Service
Perth & Kinross Council
Pullar House
35 Kinnoull Street
PERTH
PH1 5GD

Tel 01738 476471

Email JJDixon@pkc.gov.uk

If you have any issues that you wish to discuss further, then contact:

Martin Petrie

Environmental Health Officer
The Environment Service
Perth & Kinross Council
Pullar House
35 Kinnoull Street
PERTH
PH1 5GD

Tel 01738 476415

Email MartinPetrie@pkc.gov.uk

Kirsty Steven

Principal Officer (Environmental Health)
The Environment Service
Perth & Kinross Council
Pullar House
35 Kinnoull Street
PERTH
PH1 5GD

Tel 01738 476477

Email KSteven@pkc.gov.uk



Lynne Reid

Environmental Health Technical Officer
The Environment Service
Perth & Kinross Council
Pullar House
35 Kinnoull Street
PERTH
PH1 5GD

Tel 01738 476462

Email LReid@pkc.gov.uk

Ingrid Wallace

Environmental Health Technical Officer
The Environment Service
Perth & Kinross Council
Pullar House
35 Kinnoull Street
PERTH
PH1 5GD

Tel 01738 475235

Email IWallace@pkc.gov.uk



Further Information

For further information, contact the Officers listed previously or access the Perth & Kinross Council website Air Quality Pages. A copy of previous reports can also be found here:

www.pkcairquality.org.uk/

For Scotland-wide air quality information, go to:

www.scottishairquality.co.uk/

If you or someone you know would like a copy of this document in another language or format, (on occasion only a summary of the document will be provided in translation), this can be arranged by contacting Customer Service Centre on 01738 475000.

إن احتجت أنت أو أي شخص تعرفه نسخة من هذه الوثيقة بلغة أخرى أو تصميم آخر فيمكن الحصول عليها (أو على نسخة معدلة لمملخص هذه الوثيقة مترجمة بلغة أخرى) بالاتصال ب: الاسم: Customer Service Centre رقم هاتف للاتصال المباشر: 01738 475000

اگر آپ کو یا آپ کے کسی جاننے والے کو اس دستاویز کی نقل دوسری زبان یا فارمیٹ (بعض دفعہ اس دستاویز کے خلاصہ کا ترجمہ فراہم کیا جائے گا) میں درکار ہے تو اس کا بندوبست سروس ڈیولپمنٹ Customer Service Centre سے فون نمبر 01738 475000 پر رابطہ کر کے کیا جاسکتا ہے۔

如果你或你的朋友希望得到這文件的其他語言版本或形式 (某些時候，這些文件只會是概要式的翻譯)，請聯絡 Customer Service Centre 01738 475000 來替你安排。

Jeżeli chciałbyś lub ktoś chciałby uzyskać kopię owego dokumentu w innym języku niż język angielski lub w innym formacie (istnieje możliwość uzyskania streszczenia owego dokumentu w innym języku niż język angielski), Proszę kontaktować się z Customer Service Centre 01738 475000

P ejete-li si Vy, anebo n kdo, koho znáte, kopii této listiny v jiném jazyce anebo jiném formátu (v n kterých p ípadech bude p eložen pouze stru ný obsah listiny) Kontaktujte prosím Customer Service Centre 01738 475000 na vy ízení této požadavky.

Если вам или кому либо кого вы знаете необходима копия этого документа на другом языке или в другом формате, вы можете запросить сокращенную копию документа обратившись Customer Service Centre 01738 475000

Ma tha thu fhèin neo duine a dh'aithnicheas tu ag iarraidh leth-bhreacden phàipear seo ann an cànan eile neo ann an cruth eile, (aig amannan cha bhith ach gearr-chunntas a-mhàin ri fhaighinn air eadar-theangachadh) faodar seo fhaighinn le bhith a' cur fios gu: Customer Service Centre 01738 475000



Council Textphone Number 01738 442573

All Council Services can offer a telephone translation facility