

Central Policy and Resources Group

Part III of the Environment (Northern Ireland) Order 2002

Local Air Quality Management Policy Guidance – LAQM PGNI (09)

June 2010



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This document is available on the Northern Ireland Air Quality website:

www.airqualityni.co.uk

Published by the Department of the Environment

CONTENTS

Part 1: Local Air Quality Management- Overview of processes and principles

Introduction

- Chapter 1 Local air quality management process – an overview
- Chapter 2 Local air quality strategies
- Chapter 3 Air quality management areas
- Chapter 4 Air quality action plans – legal framework, principles and processes
- Chapter 5 Consultation
- Chapter 6 Transport
- Chapter 7 Air quality and related areas.

Part 2: Further practical guidance

- 1 Further advice
- 2 Practice guidance

Annex A: Model AQMA order

Annex B: Recommended format of an Action Plan Progress Report

Annex C: Economic Principles for the Assessment of Local Measures to Improve Air Quality

Annex D: Practice Guidance to Local Authorities on Low Emissions Zones

Annex E: Practice Guidance to Local Authorities on Measures to Encourage the Uptake of Low Emissions Vehicles

Annex F: Practice Guidance to Local Authorities on Measures to Encourage the Uptake of Retro-Fitted Abatement Equipment on Vehicles

Annex G: Worked Examples for the Practice Guidance

Local Air Quality Management Guidance - Part III of the Environment (Northern Ireland) Order 2002

Part 1: Local Air Quality Management - Overview of processes and principles

Introduction

What is this guidance for?

This policy guidance is principally for district councils in Northern Ireland to have regard to in carrying out their local air quality management (often shortened to LAQM) duties under Part III of the Environment (Northern Ireland) Order 2002 (the Order). This guidance is intended to enable district councils to improve on the service they already provide in tackling poor air quality.

Part 1 of this Policy Guidance provides an overview of the local air quality management system and the various considerations that district councils should bear in mind. Part 2 points the reader towards other sources of advice, as well as Practice Guidance on some of the more effective and ambitious measures that district councils may wish to consider. This guidance complements the revised Technical Guidance, LAQM TG (09).

Throughout the next round of Review and Assessment, it should be possible for the UK Government to demonstrate the impact that many local measures have on air quality. The UK is legally required to meet EU limit values for a number of pollutants, and local measures are one of the most important means by which the UK Government can meet these limit values. More importantly, improved air quality has significant health benefits, and district councils together with relevant authorities are best placed to improve air quality at localised hotspots and deliver both health benefits and improved quality of life.

This policy guidance and the previously issued Technical Guidance are the primary guidance to which district councils should have regard when managing local air quality. Some of the other sources of guidance to which district councils may or should have regard are referenced in these guidance documents. This guidance replaces the local air quality management Policy Guidance LAQM PGNI(03) and the Progress Report Guidance which were published in 2003.

Under the Environment (Northern Ireland) Order 2002, District Councils have a duty to cause a review of air quality in their districts. Subsequently an assessment must be made of whether air quality standards and objectives are, or are likely to be achieved. Where it is likely that the standards and objectives are not being achieved, then the council has a duty to designate an Air Quality Management Area (AQMA) for that area. Following designation of an AQMA, the district council must prepare an Action Plan which sets out

proposals to bring about compliance of the relevant air quality standards and objectives in that area.

This guidance recognises that proposals to meet AQ standards and objectives by other relevant Competent Authorities may be a necessary part of any Action Plan (as outlined in Regulation 2 of the Air Quality Regulations (Northern Ireland) 2003).

Therefore, chapters on transport and planning should be taken into account by those competent authorities as set out in Regulation 2 of the above regulations.

These competent authorities are:

The Department for Regional Development; the Department for Social Development; the Department of Enterprise, Trade and Investment; The Department of Health, Social Services and Public Safety; The Department of the Environment; District Councils; The Northern Ireland Authority for Energy Regulation; and the Northern Ireland Housing Executive.

This guidance is also relevant to those authorities involved with policy development affecting land use or transport planning, for example: authorities involved with economic development, and with regional transport planning.

In the light of current Government policy, it is particularly important that climate change and air quality policies are joined up. There will be situations where policies to reduce greenhouse gas emissions will have benefits for air quality, and vice-versa. However, there may be situations where potential actions and policies do not necessarily achieve these win:win situations. For example it is essential that alternative energy technology used to reduce greenhouse gas emissions is used in the right place, and not in an area where such technology will impact on the ability of the district council to pursue the achievement of air quality objectives.¹

District councils are at the forefront of public service, and should continue to set priorities according to local need. They have the opportunity to demonstrate leadership in improving local air quality by introducing measures which go beyond the minimum required.

Why air quality matters

Air quality and health

As stated in the current Air Quality Strategy for England, Scotland, Wales and Northern Ireland², poor air quality reduces life expectancy in the UK by an

¹ For example, see chapter 5 of the UK Biomass Strategy, which can be found at - http://www.decc.gov.uk/en/content/cms/what_we_do/uk_supply/energy_mix/renewable/explained/bioenergy/heat_power/heat_power.aspx

² Published on 17 July 2007 - <http://www.defra.gov.uk/environment/quality/air/airquality/strategy/index.htm>

average of 7 – 8 months, with equivalent health costs estimated to be up to £20 billion a year. Improvements between 1990 and 2001 have helped avoid an estimated 4,200 premature deaths a year, and 3,500 hospital admissions a year. The UK Air Quality Strategy aims to reduce the affect on life expectancy to 5 months by 2020. It should be remembered that health effects do not relate solely to the direct impacts of air pollution. By encouraging the use of non-motorised means of transport, such as cycling and walking, as a means of reducing local emissions of pollutants, measures in air quality action plans can help directly improve the health and fitness of local populations. In turn, this may also help individuals to be more resilient to direct ill-effects from air pollution.

Air quality and climate change

The UK Air Quality Strategy acknowledges that there will often be co-benefits for air quality and climate change policies where certain measures are taken. All measures should be given careful consideration to ensure that the benefits for local air quality and climate change are maximised, where possible. Without proper consideration, there is the possibility that some policies to mitigate climate change will have a negative impact on air quality and vice-versa. Where practicable, synergistic policies beneficial to both air quality and climate change should be pursued.

Air quality and the environment

Poor air quality also impacts on the environment, harming ecosystems and biodiversity. It should however also be noted that measures to tackle air quality can have undesirable consequences, for example speed restrictions, may also have an impact on noise pollution, and vice-versa.

This illustrates the importance of developing integrated policies and the need for co-ordination between district councils and relevant Northern Ireland authorities in tackling air pollution.

Chapter 1: Local Air Quality Management process – an overview

This chapter provides an overview of the local air quality management process and the procedures that district councils should follow when carrying out their duties under Part III of the Environment (Northern Ireland) Order 2002 (the Order). The Technical Guidance on local air quality management should be consulted for detailed information on Updating and Screening Assessments, Detailed Assessments, Progress Reporting and Further Assessments and Action Plans.

The UK Air Quality Strategy established the system of local air quality management (sometimes shortened to LAQM), which commenced in 2002.

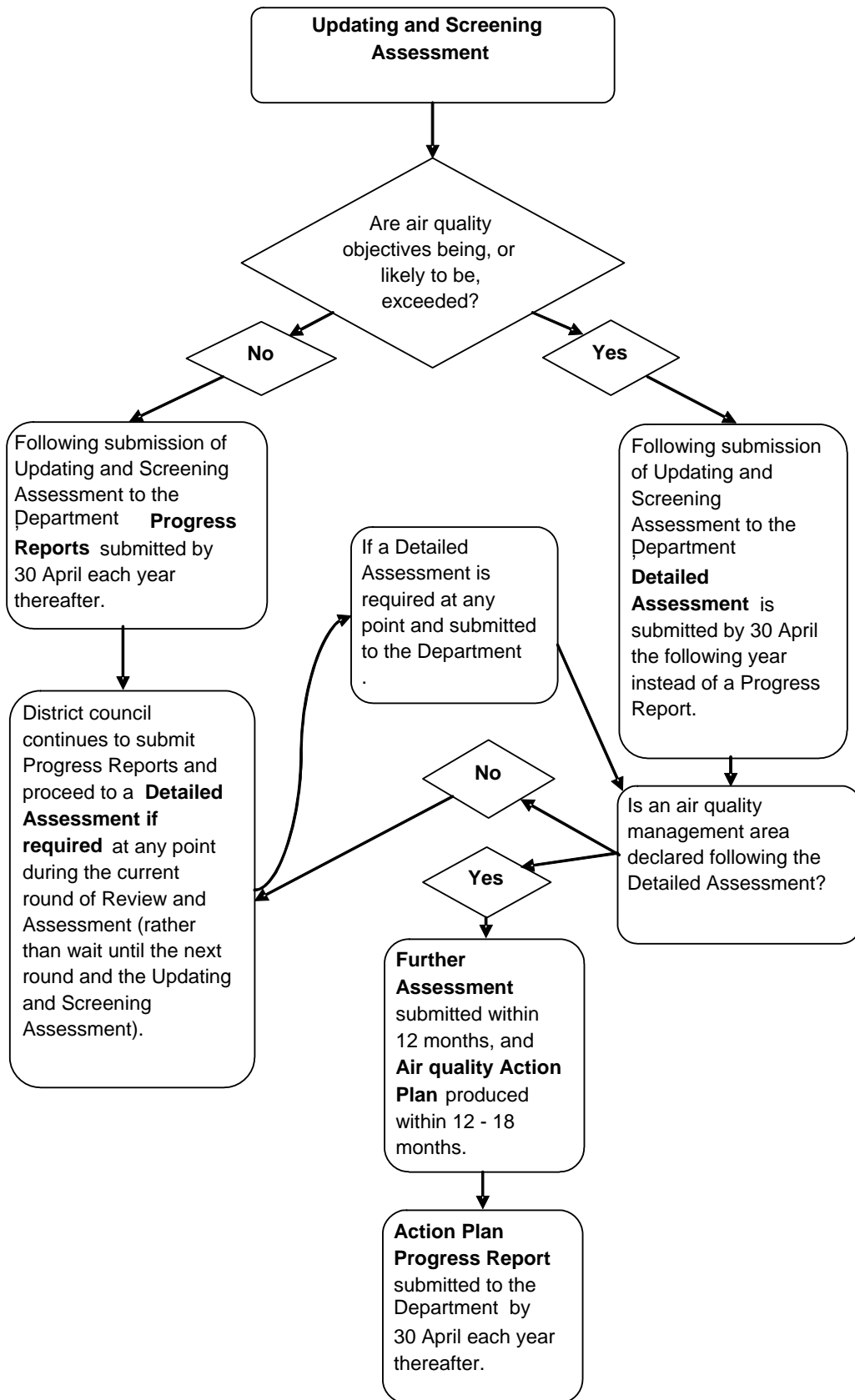
Air quality objectives

The Air Quality (Northern Ireland) Regulations 2003 (the Regulations), provide the statutory basis for air quality objectives which are required to be achieved under local air quality management (see **Table 1**). The Regulations are derived from European Directives and also prescribe the dates by which the air quality objectives should be met.

Not all of the objectives contained in the Air Quality Strategy are included within the local air quality management system, for example the new limit value for PM_{2.5} contained in EU Directive 2008/50/EC on ambient air quality. Although district councils are not being asked to work towards the achievement of a PM_{2.5} objective, measures to reduce emissions and concentrations of PM₁₀ will also reduce levels of PM_{2.5}.

Article 11 of the Order provides that every district council shall review the air quality within its area at the present time and assess the likely future quality. Article 12 requires district councils to designate an air quality management area where air quality objectives are not being achieved, or are not likely to be achieved within the relevant period, as set out in the Regulations. Article 13 then requires a district council to develop an Action Plan for the air quality management area.

Further detail on local air quality strategies, air quality management areas and Action Plans is contained in subsequent chapters within this guidance document.



Note that a Detailed Assessment is only required where an air quality objective is, or is likely to be, exceeded outside an existing air quality management area (AQMA) and there is relevant exposure, or where a significant amendment or revocation of the AQMA order is required. If a new source of

pollution has been identified or concentrations have changed significantly within an existing AQMA, the district council is required to carry out a Further Assessment rather than a Detailed Assessment.

Table 1: Air quality objectives

Pollutant	Air Quality Objective		Date to be achieved by
	Concentration	Measured as	
Benzene	16.25 $\mu\text{g}/\text{m}^3$	running mean annual	31.12.2003
	3.25 $\mu\text{g}/\text{m}^3$	running mean annual	31.12.2010
1,3 Butadiene	2.25 $\mu\text{g}/\text{m}^3$	running mean annual	31.12.2003
Carbon monoxide	10.0 mg/m^3	maximum daily running 8-hour mean	31.12.2003
Lead	0.5 $\mu\text{g}/\text{m}^3$	annual mean	31.12.2004
	0.25 $\mu\text{g}/\text{m}^3$	annual mean	31.12.2008
Nitrogen dioxide	200 $\mu\text{g}/\text{m}^3$ not to be exceeded more than 18 times a year	1 hour mean	31.12.2005
	40 $\mu\text{g}/\text{m}^3$	annual mean	31.12.2005
Particles (PM₁₀) (gravimetric)	50 $\mu\text{g}/\text{m}^3$ not to be exceeded more than 35 times a year	24 hour mean	31.12.2004
	40 $\mu\text{g}/\text{m}^3$	annual mean	31.12.2004
Sulphur dioxide	350 $\mu\text{g}/\text{m}^3$ not to be exceeded more than 24 times a year	1 hour mean	31.12.2004
	125 $\mu\text{g}/\text{m}^3$ not to be exceeded more than 3 times a year	24 hour mean	31.12.2004
	266 $\mu\text{g}/\text{m}^3$ not to be exceeded more than 35 times a year	15 minute mean	31.12.2005

Review and Assessment reporting cycles

A Review and Assessment of air quality is the first step in the local air quality management process. District councils have to consider the current and likely future air quality in their areas, and assess whether the objectives as set out in the Air Quality Regulations are, or are likely to be exceeded. Where the objectives are unlikely to be met, the local authority has a duty to declare an Air Quality Management Area, and to consult with relevant authorities in developing an Action Plan to deal with the exceedence. District councils also have a duty to continue to meet the air quality objectives beyond the deadlines set out in the regulations. An objective, for example, which was due to be met by 2005 must be met each subsequent year.

All district councils are expected to carry out a Review and Assessment every 3 years and in doing so should undertake the following 2-step approach:

Step 1 - Updating and Screening Assessment. All district councils are required to undertake an **Updating and Screening Assessment** (sometimes shortened to **USA**). Where this identifies a risk that an air quality objective will be exceeded at a relevant location³ the district council is required to proceed to Step 2. Note that in the years when they are not carrying out an USA district councils are required to prepare **Progress Reports** (PR).

Step 2 - Detailed Assessment. If following the conclusion of step 1 it has been identified that there is a risk that an air quality objective will be exceeded then a Detailed Assessment (DA) is required to be undertaken. This is not required where a new source has been identified or concentrations have changed significantly within an existing air quality management area, in which case a district council is required to carry out a Further Assessment where a DA is being undertaken, it should include a short PR for those areas not covered by the DA.

Note: this differs from previous rounds of review and assessment, where authorities proceeding to a Detailed Assessment were not required to submit a Progress Report in the same year.

Where a new air quality management area is required, or an existing air quality management area needs to be significantly amended or revoked, the Detailed Assessment should also clearly identify areas of exceedence (or where there was formerly an exceedence) and possible boundaries for the new or amended air quality management area.

For the fourth, fifth and sixth round of Review and Assessment, district councils should carry out their local air quality management duties according to the timescales in **Table 2**.

³ The air quality regulations require that likely exceedences of the objectives should be assessed at locations which are situated outside of buildings or other natural or man-made structures, above or below ground and where members of the public are regularly present. See the Technical Guidance for further advice.

Table 2: Timescales for Review and Assessment			
Year	Updating and Screening Assessment	Progress Report	Detailed Assessment
Round 4 – Completion Dates			
2009	30 April 2009	-	Whenever necessary
2010	-	30 April 2010	Whenever necessary
2011	-	30 April 2011	Whenever necessary
Round 5 – Completion Dates			
2012	30 April 2012	-	Whenever necessary
2013	-	30 April 2013	Whenever necessary
2014	-	30 April 2014	Whenever necessary
Round 6 – Completion Dates			
2015	30 April 2015	-	Whenever necessary
2016	-	30 April 2016	Whenever necessary
2017	-	30 April 2017	Whenever necessary

^a Detailed Assessments are due 12 months from the date they are initiated, which can be at any time.

If following a Detailed Assessment a district council considers that one or more of the air quality objectives for each of the seven pollutants is not being met, they must declare an **Air Quality Management Area (AQMA)**. The **AQMA must** cover the full extent of the area where the exceedence is expected and the district council must then prepare and implement a remedial **Action Plan** to tackle the problem.

If at any time during the reporting years a district council identifies a risk of air quality objective exceedences, it should proceed to carry out a DA to formally identify the need to declare an AQMA and its appropriate size and location. District councils in this situation should not delay until the next full round of Review and Assessment.

Article 13(1) of the Order requires district councils to carry out a **Further Assessment (FA)** of existing and likely future air quality in an AQMA. Following designation of an AQMA, an **air quality Action Plan** should be completed within **12 months** of the date of designation. Once a district council has produced its final action plan, a first **Action Plan Progress Report** must be submitted by the end of the following April.

District councils are required to submit all relevant air quality reports to the Department and other statutory consultees⁴ **by 30 April in each reporting year.**

Appraisal process

If the Department does not accept the conclusion of a district councils report, then the council will be invited to provide written comments justifying their decision within a specified deadline set out in the appraisal letter. This will be a short deadline in keeping with the need to complete the process as quickly as possible.

Helpdesks for district councils

District councils who wish to seek clarification on the findings of the appraisal process should in the first instance contact the relevant **air quality helpdesk** for further help. The helpdesks established by Defra and the Devolved Administrations can discuss the details of individual cases and can provide advice on responding to any points raised in the appraisal. The helpdesks can also provide advice on Review and Assessment, monitoring, emissions data, modelling and action planning see details provided in the table below.

Helpdesk	Operated by	Contact Details
Monitoring, Modelling, Emissions Inventories and Action Planning	AEA	0870 1906050 lasupport@aeat.co.uk www.laqmsupport.org.uk
Review & Assessment	University of the West of England and Air Quality Consultants	0117 328 3668 aqm-review@uwe.ac.uk

Further information is available from the Air Quality Archive at:

www.airquality.co.uk/archive/laqm/helpline.php

and the Defra website at:

<http://www.defra.gov.uk/environment/quality/air/airquality/local/support/index.htm>

⁴ Statutory consultees are those set out in Schedule 2 (1) of the Environment (Northern Ireland) Order 2002.

Chapter 2: Local air quality strategies

Strategies for improving local air quality can be quite simple and short documents outlining fundamental principles as agreed with other departments within a district council and with other relevant authorities. These proposals could also be incorporated into other strategies, particularly those on climate change and/or transport. The Department of the Environment would endorse such a strategic approach to managing air quality. It is recommended that all councils, particularly those that have not had to designate air quality management areas (or do not expect to do so in future), but who have areas close to the exceedence levels, should consider drawing up a local air quality strategy.

Why develop a local strategy?

Developing a local air quality strategy, or including air quality management as part of another strategy (perhaps a strategy for reducing CO₂ emissions), will help councils to deliver services in an integrated manner. A strategy can provide over-arching principles, agreed at a high-level, that will ensure a wider range of benefits and risks are considered when implementing different policies. This provides a consensus on which to develop individual plans, such as air quality Action Plans, containing measures that are 'proofed' to avoid policies in one area creating unwelcome or unintended impacts upon another. It is for this reason that district council officers and Northern Ireland Environment Agency officers leading on the management of industrial pollution should work closely together to ensure that environmental permitting considers the risks to local air quality in a holistic manner.

A local strategy could, or may need to, also involve neighbouring district councils, and a regional air quality strategy developed between a number of district councils will often be useful, or indeed required, to manage the impact of pollutants in one area upon another.

Developing a strategy

District councils are free to develop strategies in the manner considered most appropriate to them. However, it is recommended that a steering group be established for the purpose. Furthermore, strategies should be developed in a multi-disciplinary manner involving all relevant departments, such as planning and transport, those leading on climate change and any other district council departments that are to be involved in the strategic approach. Other external organisations that are relevant and organisations in the Local Strategic Partnership should also be consulted.

Format of a Local Air Quality Strategy

District councils are free to determine the format that their strategy takes, but as a minimum it is expected that the following general rules would apply:

- Strategies should be concise, containing fundamental principles that have been adopted by all parties involved with the full understanding of the legal and other drivers behind these principles;
- Strategies should outline the management structure for delivering on air quality improvements, and identify consultation groups that will be engaged;
- Agreement on integration of functions, such as transport, land use planning and air quality action planning.

The fine detail will be included in air quality and other plans. When deciding on whom to engage with, key partners such as Health Care Trusts, the Northern Ireland Environment Agency, the Department of Regional Development Roads Service, local schools, businesses and community groups should be included.

Learning exchange is also a useful tool for district councils to develop strategic approaches to improving air quality, and a number of regional and national groups have been established. More information is available on the Air Quality Archive at:

www.airquality.co.uk/archive/laqm/ap_learningexchange.php

Chapter 3: Air Quality Management Areas

District councils have a duty under article 12(1) of the Environment (NI) Order 2002 (the Order) to officially designate by means of an 'order' those areas, where the air quality objectives are **unlikely** to be, or are not being met, as air quality management areas (AQMA). These areas have to be designated.

Setting the boundaries of Air Quality Management Areas

Setting the boundary of an AQMA involves an element of judgement, considering the extent of the predicted areas of exceedence, locations of relevant receptors, the nature and location of relevant sources, and other local factors. In some cases this has resulted in the designation of the entire administrative area, isolated buildings, single streets, road networks or parts of motorway or trunk road junctions. A number of councils have chosen to designate more than one individual AQMA. In short, it is for district councils to draw on their own expertise when designating an AQMA but it **must** encompass **all known and predicted areas of exceedence where there is relevant exposure**. Advice may also be provided as part of the consultation that district councils are required to carry out in relation to air quality reviews, Action Plans and Action Plan revisions under schedule 2 (1),(2) of the Order.

In deciding where to draw the boundaries of an AQMA, district councils 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 air quality management area are drawn, it is likely that the Action Plan will need to cover a wider area;
- Designating a number of smaller air quality management areas, rather than one single large area, can allow a council to demonstrate progress by 'ticking off' individual areas as air quality improves there;
- Declaring smaller, individual air quality management areas may provide a clear focus on the hot spot locations within a district council. This may prove particularly important for informing district council and relevant authority planning processes of the sensitivities involved and the appropriateness of any proposed future development; and
- A more focussed approach to declaring air quality management areas may provide a better indication of where resources need to be allocated in terms of equipment and overall effort.

District councils should work in partnership with each other where a joint air quality management area is proposed. They will also need to explain and

justify their proposed boundaries to the Department of the Environment (the Department)

What should an Air Quality Management Area order look like?

The exact wording to be included in an AQMA Order is at the discretion of the individual district council, although a model example of an AQMA Order can be found in Annex A of this guidance. It is recommended that district councils include a map showing the area to be designated and include a description of the area. For example, a larger AQMA may be described according to its boundaries near to major roads/motorways. A smaller AQMA may need a more detailed description listing individual streets or other physical features. In some cases it may be appropriate to list the individual properties affected, but there is no legal requirement to do so.

The AQMA Order should include the date on which it is intended that the AQMA should come into force and a list of the pollutants and the **actual objective/s** for which it has been designated. District councils should notify the Department as appropriate by submitting a copy of the AQMA Order.

District councils should also ensure that the information on the AQMA Order and its objectives is readily accessible to enquirers.

Further Assessment of air quality within an Air Quality Management Area

Article 13(1) of the Environment (Northern Ireland) Order 2002 (the Order) requires district councils to carry out a Further Assessment of existing and likely future air quality within an air quality management area. Under article 13(3) of the Order, District councils are required to report on the Further Assessment to the Department and each relevant authority before finally determining the content of an action plan. They must also consult on it as part of the Action Plan and make it available in accordance with the requirements of schedule 2 article 1(2) of the Order. Detailed advice on Further Assessment is provided in the Technical Guidance.

The Department does not consider the preparation of further assessments within AQMAs to be an onerous or difficult task, as they should form an integral part of the more detailed assessment required under Article 11(2) of the Order. Much of the information required will already have been gathered as Councils by this stage will have already identified which sources are responsible for the problem, and calculated how much of an emissions reduction from each would be necessary to achieve compliance with the prescribed objectives. AQMA assessments should be taken forward in parallel with the development of air quality action plans, and might usefully be seen as a technical annex to the action plan, providing a scientific justification for the measures in the main body of the plan.

Article 13 of the Order also requires that a report of the results of the further assessment shall be completed. The Department advises that district councils

should forward AQMA assessment reports with the action plan and submit them within 12 months following the designation of any AQMAs. Reports on AQMA assessments should also be made available to the public.

Amendments to, and revocations of, Air Quality Management Areas

District councils are able to amend or revoke the terms of an existing AQMA at any time as set out under article 12(4) of the Order. Where it is considered necessary to do so, the Department expects the council to consult all relevant authorities in accordance with schedule 2 article 1 (2) of the Order.

However where it is proposed to make a significant amendment or revoke an AQMA the district council is required to submit a Detailed Assessment report. The report should clearly outline the evidence supporting changes in the likelihood of exceedence of the AQMA objectives occurring and demonstrating the cause of these changes. For example it may be due to a change to the source of the pollution and/or better monitoring/modelling information.

A full Detailed Assessment is not required for minor amendments such as the addition of another measure for a pollutant already covered by the AQMA Order. However if a new source has been identified or concentrations have changed significantly within an existing AQMA, the district council is required to carry out a Further Assessment rather than a Detailed Assessment. In cases where an existing AQMA is to be varied by a more substantial change, such as moving to a whole borough designation, the authority will be expected to undertake a more comprehensive Further Assessment.

District councils should submit to the Department, for appraisal and comment, their revised Detailed / Further Assessments containing the monitoring results and other evidence to justify their decision to take action. Where it is accepted by the Department that the revocation or amendment is justified, district councils will be expected to take the relevant action **within 4 months** of receipt of comments from the Department.

Where an AQMA is revoked, district councils should consider drawing up a local air quality strategy to ensure air quality issues maintain a high profile locally and to respond to any public expectations. See chapter 2 of this guidance.

Notification of amendment or revocation of an Air Quality Management Area Order

Once an amendment or revocation has been introduced, the district council should submit the AQMA Order to the Department for information. District councils should also notify statutory consultees and publicise the amendment or revocation widely through the local media to ensure that the public and local businesses are fully aware of the changes made.

Chapter 4: Air quality Action Plans – legal framework, principles and processes

Where possible, air quality Action Plans should include a quantified projected outcome with timescales for reporting progress against. A low emissions zone is a good example of a scheme on which quantified progress could be reported in terms of the reduction in emission levels. However, it is likely that for many of the measures contained in an Action Plan progress cannot easily be quantified. In these cases, qualitative information, along with any quantifiable information as far as is possible, will be expected. For example, it may not be possible to calculate the impact on concentrations of PM₁₀ and NO₂ that a permitting scheme to encourage low emission vehicles will have. In this case the definition of low emission vehicle that is used (relevant Euro standards, for example) and the number of permits issued will be useful information to report. While it is clear that this and other measures, such as car sharing or encouraging cycling, may be impossible to quantify in a meaningful way, this should not dissuade a local authority from implementing such measures.

Air quality Action Plans

An air quality Action Plan must include the following:

- quantification of the source contributions to the predicted exceedences of the relevant objectives; this will allow the Action Plan measures to be effectively targeted;
- evidence that all available options have been considered.
- how the district council will use its powers and also work in conjunction with other organisations and relevant authorities in **pursuit** of the air quality objectives;
- clear timescales in which the district council and other relevant authorities propose to implement the measures within its plan;
- where possible, quantification of the expected impacts of the proposed measures and an indication as to whether the measures will be sufficient to meet the air quality objectives. Where feasible, data on emissions could be included as well as data on concentrations where possible; and
- how the district council intends to monitor and evaluate the effectiveness of the plan.

Action Plan timing

While the Environment (Northern Ireland) Order 2002 does not prescribe any timescale for preparing an Action Plan, the Department expects them to be completed within **12 months following the designation of any air quality management areas**. Air quality officers should take a joined up approach towards air quality management, working with others within their district council and with relevant authorities. The legal imperative to protect air quality should not be displaced with political imperatives if this means the district council is not working towards compliance with the Air Quality Regulations (Northern Ireland) 2003, as amended.

Some district councils may need to work with each other due to the nature of the air quality problem they face, or because measures they wish to take may have a knock-on effect elsewhere. Such an approach is welcomed, and indeed often necessary, and therefore it is recommended that district councils consider drawing up regional air quality action plans where appropriate.

Setting up a steering group

District councils may wish to set up a steering group to take forward the development and implementation of an Action Plan. The steering group can also play a key role in formulating the annual Action Plan progress report. The members of the steering group should include district council and relevant authority officers. The steering group would decide on how to consult with, and gain support from, other outside bodies, businesses and local community groups to take the process forward.

Other relevant authority departments should be constructively engaged in agreeing measures to improve air quality and meet the legal requirement to work towards air quality objectives. In particular the relevant authorities prescribed under the Air Quality Regulations (Northern Ireland) 2003, should be involved in establishing and acting on measures to improve air quality:

- Department of Enterprise, Trade and Investment;
- Department for the Environment
- Department of Health, Social Services and Public Safety
- Department of Regional Development;
- Department of Social Development
- Northern Ireland Authority for Energy Regulation
- Northern Ireland Housing Executive;

The involvement of the district council Chief Executive, or equivalent, with these meetings would help ensure a fully corporate approach.

A number of commercially available models exist to help local authorities to develop integrated action plans. Details of these are held by the relevant helpdesks found at www.laqmsupport.org.uk who can advise on their applicability and relevance to district council/relevant authority individual circumstances.

Format of the Action Plan

The introduction to the Action Plan does not need to include a lengthy description of the district council's duties under Part III of the Order. It is enough to simply state that 'this Action Plan has been developed in recognition of the legal requirement on the district council to work towards air quality objectives under the Environment (Northern Ireland) Order 2002 and relevant regulations made under it', or words to that effect. The Action Plan itself should take a practical approach focussing on what really matters – the detailing of measures to improve air quality and quantifying, as far as possible their impact over time.

Impact assessment

An Action Plan should include quantification, where possible, of the improvement to air quality that each measure, proposed or implemented, is expected to have over time, with a clear date for meeting this target. For example, within the AQMA an 'x' per cent reduction in emissions from 2009 levels by 2011, with the reduction in concentration of pollutants concerned if this is possible. It is recognised that for, many measures it will not be possible to accurately quantify benefits but it is important that district councils continue to implement measures which are known to have benefits in terms of air quality and climate change goals and in this case, detailed information on implementation targets should be provided. Examples would include schemes to encourage car sharing and / or cycling or the use of cleaner vehicles. Taking the latter of these the provision of information in the Action Plan on say a measure to encourage the uptake of cleaner vehicles through differentiated parking charges, the Euro standard(s) or the vehicle type that the measure is linked to, and the number of vehicles that are expected to be covered by the measure would be appropriate.

Guidance on the impact assessment of certain measures that a district council/relevant authority may wish to take forward is contained in **section 2 of this guidance**.

In developing and assessing an Action plan district councils and relevant authorities should consider wider economic, social and environmental impacts, bearing in mind other legal requirements and policy drivers from central Government.

Chapter 5: Consultation

The Order provides the statutory basis for consultation and liaison in respect of local air quality management. In order to address and improve local air quality the Department expects district councils to comply with the Order and continue to work closely with other district councils/relevant authorities, agencies, businesses and the local community. District councils need to exchange data with other relevant authorities, agencies and neighbouring district councils.

Schedule 2 of the Order requires district councils to consult:

- the Department;
- each district council whose district is contiguous to the council's district;
- such competent authorities exercising functions in, or in the vicinity of, the council's district as the council may consider appropriate;
- such bodies or persons appearing to the council to be representative of persons with business interests in the district to which the review or action plan in question relates as the council may consider appropriate;
- such other bodies or persons as the council may consider appropriate.

For the purposes of the Order, district councils must consult on their:

- air quality review and assessment;
- further air quality assessment in an air quality management area; and
- preparation or revision of an air quality action plan.

District councils are also expected to consult on the declaration, amendment or revocation of any air quality management areas.

Consultation on Reviews and Assessments

On the **Updating and Screening Assessments**, district councils will need to consult the Department and other statutory consultees as set out in Schedule 2 of the Order. Although district councils should use their own judgement to determine whether there is a need for a full public consultation they should, in any case, make these assessments available to the public.

On the **Detailed Assessments**, district councils will need to consult the Department and the other statutory consultees. They should also consult the public, local businesses and other appropriate stakeholders and relevant authorities more fully at this stage. They may also choose to disseminate copies within the other district councils for information.

On the **Review and Assessment Progress Reports**, district councils need to submit these to the Department for appraisal. District councils may choose who they wish to circulate these reports but it would be good practice to make copies available to the public, local stakeholders, the Agencies, relevant authorities and the other district council departments for information. For

those councils with air quality management areas, it is advised that where possible, Review and Assessment Progress Reports are submitted in a single report at the same time as the action planning Progress Reports. **Similarly, with the Review and Assessment Progress Reports, district councils may wish to make the action planning Progress Reports available to local stakeholders and the general public for information.**

Consultation on air quality Action Plans

District councils must consult on their preparation of an air quality Action Plan. This is best undertaken when the district council consults on the completion of the further assessment of air quality in the designated area as it provides an opportunity to consult on a draft Action Plan at the same time. This in turn would allow district councils to finalise the plan in the light of consultees' comments. Action Plans may operate over long timescales and councils may only be able to specify broad proposals in the first draft. It is an important principle, therefore, that they carry out a further consultation if they revise their initial proposals while carrying out the plan.

Consultation on a draft Action Plan should include:

- details of which pollutants the council will be taking action on, and an indication of the pollutant emission source/s;
- what other relevant authorities are doing or will need to do to meet the action plan's objectives;
- the timescales for implementing each proposed measure and the emissions (and concentration, if possible) reductions expected by the end of the relevant review and assessment round (or by the specified date in the 2003 Regulations); and
- details of other individuals, bodies or agencies whose involvement is needed to meet the plan's objectives and what the council is doing to encourage their co-operation.

District councils should decide the timescale for consultation. While best practice would suggest that twelve weeks would be appropriate, it is recommended that no consultation exercise should last for less than eight weeks.

Exchanging information is important throughout the local air quality management process. Many district councils have successfully established local steering groups to oversee the process.

Where appropriate, these steering groups should include:

- district council/ relevant authority representatives, including transport and land use planners;
- the Northern Ireland Environment Agency;
- representatives of local businesses and community groups;
- representatives of Health Boards; and
- any other local interest groups and local residents.

Consultation and liaison across district council departments

It is very important to ensure there is effective consultation and liaison across district councils and relevant authority departments. Steering groups and committee meetings should have the support of the Chief Executive or equivalent if possible. This is to ensure that air quality is dealt with consistently across the departments, with a clear understanding as to what the legal requirements and policy drivers are.

Co-operation between authorities

Co-operation between authorities can be greatly helped by the establishment of regional air quality groupings. These groupings can assist with the sharing of experiences and good practice.

Consultation with the Department of Regional Development Roads Service

The Roads Service is committed to the local air quality management process and appreciates fully the importance of working with district councils and other relevant authorities. When consulting the Roads Service on air quality management issues, district councils should continue liaising with established contacts made during the first phase of Review and Assessment or seek advice for new contacts.

Consultation with the Northern Ireland Environment Agency

The Northern Ireland Environment Agency continues to provide a range of support to district councils. The Agency's Industrial Pollution and Radio Chemical Inspectorate can be contacted for data, information, advice and consultation by phoning (028) 9056 9296 or by emailing enquires to ipri@doeni.gov.uk

Consultation with the public, local business and other stakeholders

District councils should look for innovative ways of engaging local stakeholders, including residents and community groups, as well as local businesses. If people feel personally involved in air quality issues, they are more likely to change their behaviour and support proposed measures to improve air quality locally.

Effective consultation may involve the following:

- Providing user-friendly information so the recipients can fully understand the situation and how they can become involved with the process;
- Involving the local stakeholders at an early stage in the whole process;
- Making full use of existing networks or local community groups and, where possible, extending those networks to capture a diverse range of stakeholders; and

- Setting up participative workshops or forums to make the stakeholders feel part of the consultation process.

It is important that district councils provide information on local air quality in a clear and accessible way. District councils are ideally placed to inform the public about the causes and effects of air pollution. Many district councils have experience of health education and they should consider exploring links with the Health Boards. They should use their contacts with local newspapers, radio and libraries, to reach as wide an audience as possible. Some local authorities have already developed local air quality information strategies and provide regular information. They publish and make monitoring reports available to the public or publish data in local newspapers.

Within the Order there is provision for public access to information. As well as the Review and Assessment reports on which they are required to consult, district councils should proactively make available copies of:

- Orders designating an air quality management area;
- Action plans;
- Other relevant authorities proposals for measures to be included in the action plan; and
- Any directions given to the council by the Department.

District councils may wish to consider publicising such information on the internet.

Action Plan Progress Reports and review of Action Plans

District councils have a duty to keep their Action Plans up to date. Section 13 (6) of the Order states that a district council may from time to time revise an Action Plan. Whenever an Action Plan is revised, district councils must consult the Department and each relevant authority.

In order to ensure that measures within an Action Plan are implemented by the timescales indicated, the Department expect district councils to submit annual Progress Reports. These Progress Reports list the measures within the Action Plan and include the timescales by when they are/were due to be implemented and give an update on progress in terms of implementing or developing them. Where possible the quantifiable impacts of the measures undertaken should be included.

Action planning Progress Reports should be submitted by **30 April** each year. It is strongly advised that district councils submitting Action Plan Progress Reports should, where possible produce a single Progress Report covering progress on both the Review and Assessment and Action Plan.

Chapter 6: Air Quality and Transport

Introduction

Road transport is a source of local air pollution, and in urban areas contributes significantly to the total emissions of nitrogen dioxide (NO₂) and particulate matter (PM₁₀) – the pollutants for which targets are the hardest to meet.

There were approximately 1,024,396 vehicles licensed in Northern Ireland at 31 December 2006. Of these, 84% were Private Light Goods (PLG) vehicles (cars, lights vans, taxis etc). Over the period from 1992 to 2008 licensed vehicle stock in Northern Ireland increased by 77%, compared with 42% in Wales, 41% in Scotland and 34% in England. The car is the predominant travel mode for households: The Travel Survey for Northern Ireland 2006 - 2008 reports that 81% of the total distance travelled in Northern Ireland was by car. The car's flexibility and convenience enables more people to travel further, with a corresponding increase in vehicle usage.

District council measures

Emissions from road vehicles are the most common reason for the designation of Air Quality Management Areas. In Northern Ireland currently 17 of the 24 AQMAs list pollutants from roads (traffic) as the main source of poor air quality. Reducing the contribution of road transport emissions is therefore a key part of local air quality management. There are a number of practical measures that councils can consider implementing to reduce levels of pollutants from vehicles. However it should be remembered that while reducing pollution from road based transport is a significant factor in the improvement of air quality road transport is not the only source of pollution and a balanced approach to tackling air quality should be adopted.

Council officers dealing with air quality duties will therefore need to liaise fully at all stages of air quality assessment and action planning with Roads Service, Planning Service and public transport operators where the pollution arises from roads and traffic.

National context

The national policy framework has already led to significant improvements in local air quality policy and will continue to lead to further improvements. Key transport initiatives include: -

- Regulatory measures and standards to reduce vehicle emissions and improve fuels;
- Tax based and other financial measures that encourage people to supply and use cleaner fuels and also encourage them to buy more environmentally-friendly vehicles; and

- Aviation and shipping policies and regulations.

Regulatory measures to cut vehicle emissions

The vehicles on our roads are becoming progressively cleaner due to the tighter EURO standards on both vehicles and fuels imposed by the European Union's auto-oil programme, which was set up in partnership with the oil and motor industries. These standards alone helped reduce emissions of PM10 and NOx from road transport by 50% between 1990 and 2000 and are expected to lead to a further reduction of some 30% by 2010 (UK-wide figures). The trend of declining emissions is expected to slow down considerably from about 2010 as engine and fuel improvements are offset by continuing traffic growth.

To make sure that vehicles do not produce excessive emissions, new vehicle standards are backed up by emissions tests as part of the MOT. In addition the Driver Vehicle Agency carry out around 1000 vehicle emissions checks each year as part of their roadworthiness enforcement check programme. To improve emissions performance still further, all new cars and light goods vehicles since 2007 have had to be fitted with on board diagnostic systems which will immediately alert the driver to any irregularities in the vehicle's emissions.

Tax-based measures

The UK Government continues to use tax-based measures to reduce vehicle emissions. They include:

- Fuel duty differentials to encourage people to use cleaner fuels, including alternative fuels such as bio diesel, liquefied petroleum gas (LPG), and natural gas.
- Since 1 April 2001, Vehicle Excise Duty (VED) for cars has been graduated according to the level of carbon dioxide (CO₂) emissions, with the least polluting paying less in road tax.
- A similar CO₂-based system for taxing company cars has been in place since April 2002, linking the tax charge on the benefit of a company car to the level of its CO₂ emissions. This is intended to incentivise the purchase of more efficient vehicles.
- In December 2001 the Government implemented a new structure of Vehicle Excise Duty for goods vehicles, reflecting more closely the environmental impacts and road wear that different types of goods vehicle cause. The Reduced Pollution Certificate, under which goods vehicles and buses meeting stringent standards for particulate emissions pay a lower rate of VED, continues in force. Further discounts under both the Company Car Tax and VED regimes are available for alternatively powered vehicles, such as electric, hybrid and LPG/natural gas.

The majority of these measures have been aimed primarily at tackling emissions of CO₂, one of the major greenhouse gases contributing towards climate change. However, air quality considerations have also been taken into account and it is expected that these changes will also have a beneficial effect on local air quality by encouraging the purchase of cleaner, more efficient vehicles.

The latest VET tax based measures can be found at http://www.direct.gov.uk/en/Motoring/OwningAVehicle/HowToTaxYourVehicle/DG_4022118

Transport information and guidance programmes

The Department for Transport in England and Wales provides funding to the Energy Saving Trust (EST) for their work in reducing CO₂ emissions from transport. EST advice centres provide information and guidance to consumers on smarter driving and greener vehicle choices as well as advice to businesses on their transport operations including:

- * Green Fleet Reviews
- * Motorvate
- * Small fleet services
- * Smarter Driving

The advice centres to businesses listed above are funded by DFT (England and Wales only) or the Scottish Government and as such do not currently run in Northern Ireland. Local funding would be required to provide these services in NI.

Regional context - Regional Transportation Strategy for Northern Ireland 2002 – 2012

The Northern Ireland Assembly approved the strategic direction and underlying principles of the Regional Transportation Strategy (RTS) 2002 – 2012 (RTS) in July 2002. This 10 year strategy, with a funding requirement totalling £3500 million, presents a clear framework for action to facilitate implementation of a range of initiatives aimed at bringing about a step change in the quality of transport infrastructure and services.

The level of public expenditure for the RTS will be determined and reviewed through the normal ongoing budgetary process. However, the Assembly's approval confirms a level of commitment to providing the sustained investment that is designed to deliver the outcomes set out in the RTS.

Delivery of the RTS is progressed through 3 Transport Plans (Belfast Metropolitan Transport Plan, Sub-Regional Transport Plan and Regional Strategic Transportation Network Transport Plan) that were informed by comprehensive transport studies undertaken, where timescales allowed, in conjunction with the local Development Plans. These transport studies

considered a wide range of transportation measures fashioned to local needs and objectives.

Transport Plans and Air Quality Action Plans (AQAP)

Transport Plans identify proposed measures for walking, cycling, public transport and highway infrastructure. Transport studies which play a key role in informing the Transport Plans consider the potential air quality impacts of the proposals in appropriate detail and can support the development of Air Quality Action Plans (AQAP) as necessary. Published Transport Plans can provide a framework for delivery of measures within an AQAP.

In developing an AQAP where vehicular traffic has been shown to be a major pollution source, the AQAP will likely involve the use of one or more transportation measures from the 'toolkit' available to the traffic engineer / transport planner.

The following local 'toolkit' measures generally reduce traffic volumes directly:

- Traffic regulation orders – e.g. restricting vehicular access to particular streets;
- Traffic calming schemes – e.g. schemes which would dissuade traffic 'rat-running' through residential streets;
- Reallocation of road space – e.g. reducing carriageway width for general vehicles and reallocating to buses;
- Pedestrian areas – restricting vehicular access from one or more streets to create a pedestrian only area;

The following local 'toolkit' measures seek to change other traffic characteristics to reduce emissions:

- Parking controls – e.g. modification of existing parking restrictions for on-street parking and – where appropriate – set parking charges to discourage long-stay parking and maximise the use of short stay spaces in order to dissuade traffic from circulating in search of parking spaces.
- Traffic control systems – e.g. linked signal controlled junctions to reduce traffic queuing at junctions.

The following local 'toolkit' measures seek to encourage a shift to alternative less polluting modes of travel:

- Improved facilities for walking;
- Improved facilities for cyclists;
- Safer routes to schools;
- Car share;
- Car clubs;

- Improved bus services;
- Park and ride;
- Park and share; and
- Road user charging and workplace parking levy;

In selecting from the local 'toolkit' and preparing a detailed design, attention will be needed to ensure that a balance is struck between:

- Localised improvements in air quality in the area of immediate interest;
- Changes in air quality outside the area of immediate interest; and
- The safety and efficiency of the transport networks.

The local "toolkit" covers some of the methods which can be used to reduce transport related emissions and improve air quality but there are other ways our travel patterns can be influenced. These include personalised travel planning, teleworking, teleconferencing availing of public transport and other travel information (Trafficwatchni.com, radio messages, recorded telephone alerts and emails alerts) which can reduce the need for travel, avoid congestion, or change our mode of travel when we do need to make a journey

Further details on each of the local 'toolkit' measures and some additional possible other local measures are given below.

Local Toolkit Measures

Traffic regulation

Article 4 of the Road Traffic Regulation (NI) Order 1997 gives Roads Service extensive powers to make traffic regulation orders (TROs). TROs can prohibit, restrict or regulate traffic or particular types of vehicle on any part of a road, a single road, or a number of roads and may be in force for a specified time period or permanently.

The Environment (NI) Order 2002 allows the Department for Regional Development (DRD) to make TROs in pursuit of air quality objectives.

Restrictions should be carefully planned and should be fully and accurately signed, preferably indicating suitable alternative routes to avoid generating congestion and pollution elsewhere on the network.

Traffic calming

Traffic calming schemes may include a number of separate measures including road humps, central islands, build-outs, chicanes, mini-roundabouts and priority junctions.

The objective of traffic calming schemes is to improve driver behaviour and to control speed to a level in keeping with the surrounding urban street

environment. The DRD Roads Service programme of traffic calming schemes has been directed mainly at improving safety but can also help to create an environment which encourages walking and cycling by reducing the volume and speed of traffic. Traffic calming schemes may have the effect of slowing vehicles and also deterring traffic from using residential roads as a short cut.

Article 65 of the Roads (NI) Order 1993 gives the DRD the power to construct road humps and other traffic calming works. The regulations governing the installation of traffic calming measures are the Traffic Calming Regulations (NI) 1995 and the Roads Humps Regulations (NI) 1999.

It is important that traffic calming schemes are designed in such a way that encourages a smooth driving style that avoids repeated acceleration and deceleration, which may otherwise increase vehicle emissions.

Reallocation of road space

Reallocating road space to buses, cycles and pedestrians can make these forms of transport more attractive and may lead to an increase in bus usage or in the number of trips made by cycle or on foot. The resulting reduction in car use should lower emission levels and lead to an improvement in air quality.

The DRD uses TROs under the Road Traffic Regulation (NI) Order 1997 to designate bus and cycle lanes by reallocating road space away from cars.

It is important that any road space reallocation is designed in a manner which considers and minimises the impact on air quality of any increase in congestion. Permitting certain classifications of taxi and powered two wheel vehicles to use selected bus lanes can help in this regard and a review of this approach is currently taking place.

Pedestrian / vehicle restricted areas

A pedestrianised area is a street or road where vehicular traffic is excluded (either totally or partially). Restricting vehicular access to town centres, through the use of pedestrianised areas, has not only resulted in improved air quality but has also made pedestrians feel safer moving around.

The Department for Regional Development (DRD) has the power under the Road Traffic Regulation (NI) Order 1997 to restrict vehicle access, thereby creating the pedestrianised area. Alternatively, DRD can use its powers under article 100 of the Planning (NI) Order 1991 to create a pedestrian area.

In designating pedestrian areas it is important to maintain accessibility and hence safeguard the economic viability of the area. Consideration must therefore be given to:

- Servicing requirements

- Public transport arrangements;
- Peripheral car parking;
- Facilities for cyclists and pedestrians;
- Access for taxis, where appropriate;
- Access for people with limited mobility.

Traffic restricted areas will be implemented by suitable traffic signs. If compliance with the access restrictions is an issue then physical measures may be required. Increasingly, rising bollards are being used to enforce selective vehicle access areas. Some guidance on the use of rising bollards is given in Traffic Advisory Leaflet 4/97.

Parking controls

The ability to prohibit and restrict the waiting of vehicles on a road can be a key tool in controlling the volume of traffic within towns and cities. The availability and cost of parking facilities can influence whether people choose to drive to a destination or use a more sustainable mode of transport. In addition, a significant level of traffic in town centres may comprise vehicles circulating in search of parking spaces.

The Road Traffic Regulation Order (NI) 1997 enables DRD to determine where motorists can park and how much it will cost them.

The powers for the enforcement of waiting restrictions have passed from the Police Service of Northern Ireland to DRD through the Traffic Management (Northern Ireland) Order 2005. This decriminalised parking enforcement (DPE) has been in operation since 30 October 2006 and gives the DRD significantly more control over enforcement of parking and waiting restrictions to ensure that parking strategies are effective in practice. Parking compliance surveys indicate that there has been a significant reduction in the level of illegal parking since the introduction of DPE.

Traffic control systems

Traffic control systems using electronic detection and signaling systems can reduce traffic queues and hence vehicle emissions. In particular adaptive traffic control systems, such as SCOOT⁵ and MOVA⁶, at signal controlled junctions respond automatically to changing traffic conditions and give better traffic flows than Urban Traffic Control plans or uncoordinated signal networks.

When traffic congestion causes vehicle emissions to exceed a pre-set threshold SCOOT systems can be programmed to hold queues outside the

⁵ SCOOT Split Cycle Offset Optimisation Technique

⁶ MOVA Microprocessor-Optimised Vehicle Actuation

area. This process is called gating and may be appropriate if the queue is located where relatively few people are exposed to any increased emissions. Overall journey times may well remain similar, but drivers queue for longer while approaching the area and then make faster progress through it.

The MOVA system has been developed for use at isolated, heavy-loaded traffic signal installations. In congested conditions MOVA can extend the green-times to values much longer than usual, in order to maximise capacity and therefore reduce emissions from stationary vehicles.

The powers given in The Roads (NI) Order 1993 and Traffic Signs Regulations (NI) 1997 allow the DRD to improve the road network by installing traffic signals at junctions.

Walking

Walking is an integral part of all journeys and an essential part of public transport journeys. Walking is sustainable and environmentally friendly and can provide levels of exercise to suit everyone. It is considered that many short journeys (less than one mile) currently made by car, which result in relatively high vehicle emissions, could realistically be made on foot.

DRD Roads Service recognises that walking can be made safer, easier and more pleasant and should be integrated with other modes of travel, and with health and tourism initiatives. Measures provided by Roads Service include new and widened footways, crossing facilities, measures to cater for people with disabilities and other pedestrian safety improvements. Where required the DRD uses powers under the Road Traffic Regulation (NI) Order 1997 and/or the Roads (Northern Ireland) Order 1993 to facilitate the introduction of pedestrian measures.

In April 2000 the DRD established the Northern Ireland Walking Forum. The Forum brought together major organisations and bodies having an interest in walking and published an Action Plan in 2003.

Cycling

Cycling is a healthy, flexible, inexpensive and sociable means of travel. An increase in the proportion of trips made by cycle would help to improve local air quality, personal health and social well being. It is considered that many current car journeys of less than 3 miles could realistically be made by cycle.

The Northern Ireland Cycling Strategy, published in June 2000, sets targets to increase cycle use. Through the Northern Ireland Cycling Forum, the Department for Regional Development (DRD) continues to work with other public and voluntary organisations having an interest in cycling to ensure that all elements of the Strategy are successfully implemented.

Where required the DRD uses powers under the Road Traffic Regulation (NI) Order 1997 and/or the Roads (NI) Order 1993 to provide cycling facilities.

Safer Routes to Schools

Safer Routes to Schools projects encourage and enable children to walk, cycle and use public transport to travel to school through a combined package of educational and physical measures. Where required the DRD uses its powers under the Road Traffic Regulation (NI) Order 1997 to facilitate the introduction of the physical measures on the highway network.

The benefits of Safer Routes to Schools are widespread and include fewer child casualties and road traffic accidents, safer roads for all (especially pedestrians and cyclists), healthier lifestyles and reduced congestion, resulting in reduced vehicle emissions and improved air quality.

DRD Roads Service established an inter-departmental School Travel Advisory Group in 2000 to co-ordinate the introduction of Safer Routes to Schools schemes. Responsibilities lie with the DRD, the Department of the Environment, the Department of Education and the individual schools concerned.

Car Share

Car Sharing is when two or more people who are heading to the same destination, travel together by car for all or part of a journey. Car Sharing has clear benefits for an organisation and its employees, which in turn provide wider benefits for local communities.

For an organisation, car sharing will:

- save an organisation money through the removal or reduction of car parking spaces;
- help to relieve local traffic congestion and associated pollution;
- demonstrate corporate social responsibility and contribute towards sustainability and environmental targets;
- widen potential recruitment markets.

For employees, car sharing will:

- provide significant cost savings as a result of sharing the costs of petrol, car parking and other vehicle running costs (on average, commuters that car share save themselves over £1,000 a year compared to driving alone);
- enable them to travel more securely and ensure they are less stressed on the journey to work;

- allow them to enjoy the social benefits of sharing the journey, improving work/life balance and empowering them to feel they are doing their bit for the environment.

The DRD Travelwise NI Car Share Scheme has currently over 2500 members. For more information log on to www.carshareni.com

Car Clubs

Car Clubs are a way of enjoying the flexibility of a car without having to own one. They offer affordable, flexible, convenient access to a choice of vehicles parked close to home or work. There are different models of car club operation but the basic principles are the same.

- Members pay a monthly fee and then “pay as they drive”.
- Cars can be hired for as little as an hour or for a few days.
- They are parked in reserved places where people live or work.
- Bookings can be made by phone or internet.
- Access to cars is by smart card.
- All vehicles are serviced and maintained by the Club.

More information about Car Clubs operating in Northern Ireland can be found by logging on to www.carplus.org.uk

Improved bus services

Buses can transport large numbers of people whilst occupying relatively little road space. Modern buses’ rates of emission are significantly low to ensure that the use of bus in preference to car can help improve air quality.

The operation of buses in Northern Ireland is predominately controlled by Translink but responsibility for roadside infrastructure remains with the Department for Regional Development (DRD). Translink continually monitor the performance and availability of alternative fuels and have examined the latest technological developments in the use of diesel engines. Translink’s current preference is to use low sulphur diesel in conjunction with continuous regeneration trap (CRT) exhaust systems. The CRT system renders bus exhaust emissions smokeless and odourless and gives a better result than that currently available from gas powered vehicles. However, it is anticipated that there is significant potential for the use of bio-diesel and diesel-electric engined buses.

Where appropriate, DRD Roads Service develops schemes to reallocate road space and use traffic signal technology to assist buses to maintain journey times by giving them priority over other traffic. This will encourage motorists to use buses, reduce congestion and also help cut bus emissions by reducing stop-start driving. To gain maximum benefit from bus lanes it is essential that

they are adequately enforced. Responsibility for moving traffic offences currently rests with the Police Service of Northern Ireland.

Public transport information such as using Passenger Information Points (PIPS) usually housed within Bus Shelters and the provision of journey time information on electronic message signs (EMS) have an important role to play in improving service facilities.

Park and Ride

There will always be many journeys to city-centre locations, which must commence by car because of the widespread distribution of journey origins and which cannot be served practically by bus services. However, Park and Ride can be an effective policy to assist in reducing city-centre traffic congestion by intercepting these journeys and encouraging people to complete their journey by public transport. Park and Ride schemes should be seen as just one of a number of measures making up an integrated transport policy.

Park and Ride schemes will generally be most successful where:

- They are some distance from the town centre, ideally where radial and orbital routes intersect;
- The town centre is served by a number of high quality sites on the outskirts, with lighting, staff, information for users and CCTV; and
- Bus priority measures complement park and ride services, whilst cars are restricted in the town centre.

More information about Park and Ride sites operating in Northern Ireland can be found by logging on to:

<http://www.translink.co.uk/parkandrideinformation.asp>

Park and Share

Park and share is similar to car-sharing but is aimed at commuters who travel long distances or those who live in rural areas and work in the city. The arrangements can typically involve:

- Teaming up with friends or colleagues who work with or near each other and who live in the same general direction.
- Selecting a suitable meeting point on the outskirts of the city or where the route that's common to sharers starts. Driving individually to the designated meeting spot, then sharing one vehicle to drive into the city.
- Taking it in turns to drive the city leg of the journey. This saves money on petrol as well as the tiredness associated with driving long distances every day.

Park and share need not take place every day but when operating will have an immediate impact on the number of cars driving on your route to work. More information about Park and Share sites operating in Northern Ireland can be found by logging on to

<http://www.travelwiseni.co.uk/index/commuters/parkandshare.htm>

Road User Charging and the Workplace Parking Levy

Road User Charging is a demand management measure where drivers are charged a fee when they cross a cordon and enter the city limits. Workplace Parking Levies involve businesses located within city limits being charged a fee for each employee that drives to work and parks all day.

In the face of rising car ownership and congestion, pricing instruments such as road user charging and workplace parking levies are increasingly seen as effective components in an integrated strategy to reduce traffic and raise revenue. The area-wide reduction in traffic may result in a decrease in vehicle emissions and consequently an improvement in air quality.

The Department for Regional Development (DRD) has undertaken an initial assessment of road user charging and workplace parking levy options for Northern Ireland. Various charging scheme options (including both road user charging and workplace parking levy variants) were considered for Belfast, and workplace parking levies were investigated in other Northern Ireland towns and cities.

The Regional Transportation Strategy for Northern Ireland 2002-2012 (RTS) recognises that, in the short term, Belfast is the only urban area in Northern Ireland, which could potentially be considered for road user charging. Although studies undertaken on the introduction of road user charging suggest that it is technically feasible, the Belfast Metropolitan Transport Plan has not proposed road user charging or workplace parking levies for Belfast in the period to 2015. It is important to note that the introduction of any charging scheme will require new primary legislation.

The DRD continues to monitor developments in the use of road user charging and workplace parking levies in Great Britain and Europe (including the London Congestion Charging Scheme) to contribute to an informed decision on whether proposals should be made for such charges in Northern Ireland.

Other local measures

In addition to the above 'toolkit' there are a number of other measures, which could potentially have a role in the preparation of an Air Quality Action Plan. These measures are outlined below.

Low Emission Zones

Low Emission Zones are areas where certain types of vehicles are prohibited from entering towns or cities. A low emission zone would ensure only vehicles

meeting minimum emission standards would be allowed to enter pollution hotspots. The main purpose of the zone would be to improve air quality, though it may deliver additional "liveability" and congestion benefits by reducing traffic noise and overall traffic volumes. They may however divert the more polluting vehicles elsewhere.

Home Zones

Home Zones are residential streets in which the road space is shared between drivers of motor vehicles and other road users, with the wider needs of residents (including pedestrians, cyclists, and children) in mind. The aim is to change the way that streets are used and to improve the quality of life in residential streets by making them places for people, not just for traffic. Further information on Home zones can be found at www.homezones.org

Clear Zones

The Government supports the Clear Zones initiative, which ran between 1995 and 2005, and which was designed to encourage solutions to traffic problems in towns and cities while making sure town centres retain their accessibility, vitality and economic viability. A clear focus of the initiative was to reduce congestion and improve air quality by developing an integrated transport policy to meet local needs. A number of authorities have continued to apply and develop the concept, and further information can be found at:

<http://webarchive.nationalarchives.gov.uk/+http://www.dft.gov.uk/pgr/roads/tpm/clearzones/>

DRD Roads Service will monitor developments with counterparts in GB.

High Occupancy Vehicle Lanes

High Occupancy Vehicle (HOV) lanes are, in principle, a means of using the road network more efficiently and encouraging car sharing. They work on the basis of giving priority to vehicles with more than a pre-determined number of occupants. The introduction of HOV lanes will require new primary legislation.

Rail

Within urban areas, heavy rail and light rapid transit systems are likely to be limited to radial services in the larger conurbations. They may be well suited to serving outlying residential areas, or to substituting for the private car for the final leg of the journey into the town centre through park and ride arrangements. Rail-based park and ride depends on there being enough secure off-street parking at the station. Traffic authorities will also have to consider the capacity of the road network around the station.

Heavy Goods Vehicles (HGVs)

HGVs contribute to road transport emissions and to congestion in some town and district centres. To minimise this, the DRD, the Freight Transport Association and others interested parties formed a Freight Quality Partnership

to produce “Delivering the Goods in Belfast”. HGVs are required to meet European standards and their emissions are regularly tested. Authorities can also encourage local HGV operators to apply for Government grants to retrofit pollution reduction devices.

Public health

The DRD is a member of the Northern Ireland Physical Activity Implementation Group (NIPAIG), a group facilitated by the Health Promotion Agency established to co-ordinate action on the Northern Ireland Physical Activity Strategy and associated Action Plan. The aim of the Plan is to increase levels of health related physical activity, particularly among those who exercise least.

Powered two wheel vehicles

Motorcycles and mopeds can provide an alternative means of travel when public transport is limited and where journey length makes walking unrealistic, and they may contribute to a reduction in congestion. While they have some air quality advantages over cars and their engines are small and usually fuel-efficient, their emissions are largely unregulated and the use of catalytic converters is not widespread. There may also be some concerns with regard to noise and safety.

Workplace Travel Plans

A Workplace Travel Plan is a general term for a package of measures tailored to the needs of an individual organisation or site and aimed at promoting more sustainable, cleaner travel choices and reducing reliance on the car. It involves the development of a set of mechanisms, initiatives and targets that together can assist an organisation reduce the impact of travel and transport on the environment.

Speed limits

The Road Traffic Regulation (NI) Order 1997 enables the DRD to set speed limits on roads or for particular classes of vehicle. The speed limits are set in conjunction with the Police Service of Northern Ireland, which is responsible for enforcement. Whilst the reduction of speed limits in urban areas may improve road safety and reduce severance impacts, it is unlikely that improvements in air quality will result.

Airports

All operators of airports in England and Wales with 1,000 or more scheduled and charter passenger air transport movements a year are responsible for setting up Airport Transport Forums (ATFs), whose objective is to improve surface access (including public transport) to airports, by co-ordinating the activities of various regional and local authorities, agencies and

other delivery bodies . They are also responsible for preparing airport surface access strategies (ASAS), which feed into the Local Transport Plan. ASAS should include challenging short and long-term targets for increasing the proportion of journeys made to airports by public transport; strategies to achieve these targets; and a system to oversee implementation of the strategy. ATFs should include representatives from local authorities, transport operators, local people and other interested parties.

In Northern Ireland, responsibility for strategic transport planning and for delivery of road and public transport services rests with the devolved administration. There is no requirement upon airports to establish Airport Transport Forums. Land connections to key transport gateways such as airports will be considered as part of the review of the Regional Transportation Strategy.

Partnerships between businesses and district councils

Partnerships with other Departments, Councils and private sector organisations are beneficial to DRD in it's monitoring of the effects of transportation measures and the level of service provided. Where possible the impact of transportation measures should be reduced to improve air quality and the environment.

Chapter 7: Air quality and related areas

Land Use Planning

The land use planning system can positively contribute to the improvement of Air Quality and therefore help to secure the air quality objectives set out in the Environment (Northern Ireland) Order 2002 as well as assisting District Councils in carrying out their statutory air quality management duties.

Planning Control can contribute to the realisation of air quality objectives through consideration of the location of development which may give rise to pollution, and by ensuring that other developments are, as far as possible, not affected by major existing, or potential future, sources of pollution;

The relationship between the Planning and Pollution Control regimes

The planning and pollution control systems are separate but complementary systems of control and regulation designed to protect the environment from harm as a result of development and related operations.

Planning control focuses primarily on the acceptability of the use of the land for the particular development, rather than the control of the processes or substances involved; and the regulation of the location of development in order to avoid or minimise adverse effects on people, the use of land and the environment.

The pollution control regime is concerned with the control and regulation of proposed operations and processes and their day to day operation. The objective is to ensure that operations can be carried out without endangering human health or causing harm to the environment.

Planning control, however, should not be used to duplicate other statutory controls or be used to achieve objectives relating to other legislation. Planning decisions will therefore be made on the basis that the pollution control regimes will be properly applied and enforced. The relevant expertise and statutory responsibility for pollution control rests with the relevant pollution control authorities.

Nevertheless the dividing line between each system of control is not always clear cut. Planning control is not an appropriate means of regulating the detailed characteristics of potentially polluting activities, while matters relevant to pollution control authorisation may be material planning considerations.

Close consultation is essential to a proper understanding of the scope and requirements of the two regimes. Decisions based on adequate information can minimise costly delays in the decision making process. The Department

of the Environment will continue to work closely with pollution control authorities and take their advice into account when developing policy, in decision taking and in avoiding duplication between the planning and pollution control systems.

Planning and Local Air Quality Management – information issues

The LAQM Policy Guidance requires that councils be provided with Information from the planning authority with regard to new local developments or anticipated development that might affect local air quality and hence inform ongoing assessments and progress reports to be carried out by councils. The input expected from the planning authority is summarised as follows:

- Information on new local developments that have taken place or been granted planning permission and that may affect air quality. Examples include industrial developments likely to give rise to harmful emissions, development which may result in a significant intensification of traffic in a local area, new landfill sites or quarries.
- A list of planning applications for development that has the potential to affect local air quality. This would include all applications for which an air quality assessment has been requested.
- Decisions on major planning applications, such as the location of a new bypass or airport runway.
- New regional planning policy which may impact on air quality, for example on renewable energy.

It is important that there is a two way flow of information and in this regard the provision of information on local air quality to the planning authority will assist in the delivery of planning frameworks and decisions which take appropriate account of this issue.

Planning Policy and Development Plans

The following are some of the issues that may be considered in the preparation of Planning Policy Statements and Development Plans with a view to achieving positive impacts on local air quality or curtailing the negative land use impact of poor air quality. Such issues may also be material in the consideration of individual planning applications:-

- ensuring that the land use planning system makes an appropriate contribution to the achievement of national air quality objectives;
- on the appropriate location for new development, including reducing the need to travel and promoting public transport;
- the need to identify land, or establish criteria, for the location of potentially polluting developments and the availability of alternative sites;

- the need to separate potentially polluting and other land uses to reduce conflicts, for example, by identifying, where necessary, areas around existing sources of pollution, including roads, in which other developments should be carefully considered;
- existing, and likely future air quality in an area, including any Air Quality Management Areas (AQMA) or other areas where air quality is likely to be relatively poor. The findings of air quality reviews and assessments will be important in the consideration of local air pollution problems and the siting of certain types of proposals.

The Planning (Amendment) (Northern Ireland) Order 2003 requires development plans to be in general conformity with the Regional Development Strategy 2025 (RDS). The RDS was published by the Department of Regional Development and provides the regional context for area plans. The RDS sets out 4 Strategic Guidelines in relation to the improvement of air quality (SPG-ENV 6.1).

Planning applications - air quality as a Material Consideration

Any air quality consideration is capable of being a material planning consideration in so far as it affects land use. Whether it actually is and how much weight should be attached to it will depend upon the facts of each individual case⁷.

Wherever a proposed development is likely to have significant air quality impacts, close co-operation between Planning Service and those with responsibilities for air quality and pollution control will be essential. The impact on ambient air quality is likely to be particularly important:-

- where the development is proposed inside, or adjacent to, an AQMA;
- where the development could in itself result in the designation of an AQMA;
- where the development, including associated traffic, is likely to result in the deterioration of local air quality; or
- where to grant planning permission would conflict with, or render unworkable, elements of an air quality action plan.

It is not the case that all planning applications for developments inside or adjacent to AQMAs should be refused if the developments result in a deterioration of local air quality. Such an approach could sterilise development, particularly where authorities have designated their entire areas as AQMAs.

⁷ Over the last three years this has been tested through the English courts with regard to the location of residential developments near to major roads,

Planning Service may be faced with numerous individual, small planning applications which separately might not be considered to have a significant impact on air quality but which cumulatively would have a significant impact. Each planning application should be determined on its individual merits and having regard to the development plan as a material consideration. In practice, this should mean that individual small-scale applications continue to receive approval until such time as one reaches the unacceptable mark.

All planning applications should be supported by such information as is necessary to allow a full consideration of the impact of the proposal on the air quality of the area. Circumstances might arise within an AQMA where in order to allow development to proceed the developer may bring forward measures to offset any increase in local pollutant emissions as a consequence of the proposed development, such as funding of better public transport links, or the purchase of monitoring equipment.

In considering whether a site inside an AQMA is an appropriate location for new housing development, Planning Service will seek advice from the local Environmental Health Officer and consider where, within the AQMA likely exceedences have been identified and by how great a margin the air quality objectives are currently exceeded, as well as when they are forecast to be achieved. It may be that in some cases, housing development might best be delayed until the relevant air quality objectives have been achieved or the layout modified to avoid the area of the exceedence. The Planning Service will in the course of determining the outcome on any such scheme put before them consider what weight to give such exceedences as a material consideration.

Environmental Impact Assessment and Strategic Environmental Assessment

Environmental Impact Assessment (EIA) is an important procedure for ensuring that the likely significant environmental effects (both direct and indirect) of a proposed development are fully understood and taken into account before development is allowed to go ahead. The types of development for which EIA may be required are listed in the Town and Country Planning (NI) (Environmental Impact Assessment) Regulations 1999.

These Regulations require the developer of any project which is subject to EIA to prepare an environmental statement describing the likely environmental effects of the project. Planning Service has to take account of this information before deciding the application for planning permission. The information to be included in the environmental statement is described in Schedule 4 to the Regulations. It must include a description of the development, the likely significant environmental effects (including air quality before and after the proposed development), mitigating measures envisaged, an outline of the main alternatives studied by the applicant and the reasons for his/her choice, and a non-technical summary.

DCAN 10 Environmental Impact Assessment August 1999(revised) provides guidance on the procedures to be followed

Strategic Environmental Assessment

District councils first consideration under section 13 (2)(b) of the Environment (Northern Ireland) Order 2002 is that air quality Action Plans are for the exercise of any powers exercisable by the council in the pursuit of air quality objectives. Once district councils have established what they think is needed for their Action Plan, the council should then turn to consider whether the exercise of the powers chosen would trigger a Strategic Environmental Assessment.

For stand-alone air quality Action Plans, district councils will need to determine on a case-by-case basis whether the Strategic Environmental Assessment Directive (2001/42/EC “on the assessment of the effects of certain plans and programmes on the environment”) applies to their Action Plan. District councils should have regard to the criteria set out in Directive 2001/42/EC and the Environmental Assessment of Plans and Programmes Regulations (Northern Ireland) 2004 which transpose it into UK law. Further guidance is given in the Government’s “Practical Guide to the SEA Directive”

www.communities.gov.uk/publications/planningandbuilding/practicalguidesea.

In making a decision as to whether a Strategic Environmental Assessment is required, district councils will need to consider (inter alia) whether:

- the Action Plan sets the framework for future development consent of projects, including, but not limited to, projects listed in annexes I and II of the Environmental Impact Assessment Directive 85/337/EC, as amended.
- the Action Plan’s likely effect on sites means that assessment under Article 6/7 of Directive 92/43/EEC (Habitats Directive) is required.

As a guide, district councils may like to take the following into consideration:

- Do they intend to include conditions within the Action Plan which will influence a Development Plan or other consent framework in ways which are likely to have significant environmental effects (for example, will the Action Plan require or preclude certain projects at certain locations)? If so, a Strategic Environmental Assessment will be required.
- Does the Action Plan only set out specific air quality measures such as traffic management schemes, parking controls and so, and there is no intention of including conditions to influence planning or development consents? If so, there is probably no need for a Strategic Environmental Assessment.
- Is the Action Plan integrated into another plan or programme (for example, a Local Transport Plan) which already requires a Strategic

Environmental Assessment? If so, the Strategic Environmental Assessment Directive applies to that plan or programme.

Where a Strategic Environmental Assessment is required, to ensure that the various stages of the production of an air quality Action Plan comply with the Practical Guide to the SEA Directive, district councils should:

- Consult designated Strategic Environmental Assessment Consultation NI bodies on the scope of the Action Plan (English Heritage, Natural England in England, and the Environment Agency, as well as bodies across the Welsh and Scottish borders if actions are to be near enough to have an effect here;
- Issue the Environmental Report to accompany proposals for the Action Plan at consultation stage;
- Take wider environmental issues into account when finalising the Action Plan, and produce a statement showing how this has been done;
- Monitor the environmental effects of implementing the Action Plan. The scoping proposals and Environmental Report should include proposed monitoring arrangements, and a statement at adoption of the Action Plan should confirm what these will be.

It is important to note that the Strategic Environmental Assessment process must be carried out during a plan's preparation, beginning at an early stage, and the findings taken into account when the plan is finalised and formally adopted.

Directive 2001/42/EC "Strategic Environment Assessment" or SEA Directive, which became effective in July 2004, may be relevant to air quality management. The Directive requires a formal assessment of certain plans and programmes which are likely to have significant impacts on the environment. The Directive will apply to programmes which:-

- Set the framework (in a broad sense) for future development consent of projects listed in the EIA Directive;
- Set the framework for future development consent of projects other than those in the EIA Directive which might cause the plan as a whole to have significant environmental effects;
- Have any effects on Natura 2000 sites which might make them subject to the Habitats Directive.

There will however be provisions for exempting some plans and programmes which are concerned with small areas at local level, or which are minor modifications, where these are determined not to have significant environmental effects.

The SEA Directive also requires monitoring the environmental effects of implementing plans and programmes which have been assessed.

Summary

This chapter is intended to serve only as a summary of some of the main ways in which land use planning can help deliver air quality objectives.

The planning system does not however offer any quick-fix solutions to areas of poor air quality, but it can do much to improve local air quality in the longer term through the development plan and development control processes in that :-

- any air quality consideration that relates to land use and its development is capable of being a material consideration
- the planning system has a role to play in determining the location of development which may give rise to pollution and in ensuring that other developments are, as far as possible not affected by major existing or potential sources of pollution.

The Royal Town Planning Institute (RTPI) published a good practice guide on air quality and land use planning in April 1999. This sets out in general terms the relationship between air quality issues and planning decisions. It also tries to establish how far the planning process itself can contribute to air quality objectives.

Copies of the guide can be ordered from the RTPI, 41 Botolph Lane, London EC3R 8DL (telephone: 0207 636 9107).

Combustion installations

Planning Policy Statement 18 'Renewable Energy' (PPS18) provides the policy context against which all renewable energy and heat generating schemes will be assessed. In addition to providing information on technology appropriate locations, PPS 18 requires that the *Companion Information and Best Practice Guidance to Planning Policy Statement 18 'Renewable Energy'* will be taken into account in assessing proposals. The companion guide provides bespoke information on all forms of renewable energy technologies (including combustion plants such as biomass), and provides guidance on the siting, location, design and other authorisations/consents required in developing any development proposal.

The Building (Amendment) Regulations (NI) 2006 (specifically Part L, Combustion Appliances and Fuel Storage Systems) are also relevant, as well as statutory nuisance provisions under Clean Air (NI) Order 1981 may be applicable where the combustion installation is not situated in a smoke control area. These regulations can be found at www.buildingregulationsni.gov.uk.

In smoke control areas, only appliances that are exempted from the provisions of the Clean Air (NI) Order 1981 may be used. Where the Clean Air (NI) Order 1981 applies, local authorities:

- Must take action where dark smoke is emitted from a chimney of any building (subject to certain permitted periods and exemptions);
- Must take action where dark smoke is emitted from industrial or trade premises (subject to certain exemptions);
- Can require notification of installation of industrial furnaces and approve grit and dust arrestment equipment; and
- Approve chimney heights of certain furnaces

District Councils can also designate smoke control areas under the Clean Air (NI) Order 1981 (see www.uksmokecontrolareas.co.uk). The effect of this is to:

- Require people to adapt their fireplaces to burn smokeless fuel;
- Restrict the burning of unauthorised fuels except in exempted fireplaces. Details of authorised fuels and exempted fireplaces are available at the website above;
- Restrict the sale of unauthorised fuels.

In a smoke control area, it is an offence to emit smoke from any chimney. It is also an offence to acquire for use or to sell for delivery any fuel, other than an authorised smokeless fuel, unless it is to be burned on a fireplace exempted from the smoke control order, and in accordance with the conditions of use of that fireplace.

Local officers dealing with air quality should be aware of permitted development rights and the impact that these might have when, for example, a biomass heating system is installed in a dwelling which has a flue not exceeding one metre from the highest part of a roof, among other conditions. Environmental controls, such as those under the Clean Air (NI) Order 1981, still apply, as does the power of the local authority to make 'Article 4' directions in order to withdraw permitted development rights where there is a material impact on, for example, air quality.

SECTION 2: Measures to improve air quality

Introduction

This section provides guidance to district councils and relevant authorities on some of the measures they might like to consider to make improvements to air quality. It is not an exhaustive guidance on measures, but provides practical guidance on how to implement certain measures and assess the impact that they have.

Part I: Using the planning system to reduce transport emissions

The Beacons Low Emission Strategies Working Group has produced guidance on how to use the planning system to reduce transport emissions. Defra is considering including a version of this guidance within the final version of this policy guidance.

The Beacons Low Emission Strategies Working Group comprises representatives from the four Air Quality Beacon Authorities (Croydon, Greenwich, Sefton and Sheffield), the Greater London Authority, Kensington and Chelsea Council, City of London Corporation, Cenex and Arup. The Beacon Scheme was established to disseminate best practice in service delivery across local government. Further information is available at www.beacons.idea.gov.uk.

Part II: Low Emission Vehicles, Low Emission Zones, Road Charging and retro-fitting of abatement equipment

Overview

Practice Guidance accompanies this Policy Guidance, and is available at: www.doeni.gov.uk The Practice Guidance points local authorities towards the more ambitious and effective measures that they can take, including:

- Establishing low emission zones
- Encouraging the uptake of low emission vehicles
- Encouraging the uptake of retrofitted abatement equipment on vehicles

Guidance is also provided on economic principles for the assessment of local measures to improve air quality.

It is not mandatory for local authorities to follow this Practice Guidance to its full extent. It is for local authorities to determine what will work best in their situation.

Part III: Further measures and further support

Introduction

This part of the guidance describes some further measures that district councils might like to consider. Although this part of the guidance does not include the level of detail that is provided in Parts I and II, and it may be difficult to quantify the impact that some of these measures will have. Nevertheless, the measures contained in the part of the guidance can be effective at improving air quality, and should be given equal consideration for implementation alongside other measures. Again, the examples provided here are not exhaustive.

Further measures and good practice

Further examples of measures (in addition to those throughout this guidance) and examples of good practice are available on the Air Quality Archive at www.airquality.co.uk/archive/laqm/ap_goodpractice.php. There is also a Learning Exchange section of this website, which enables local authorities to share their knowledge, at: www.airquality.co.uk/archive/laqm/ap_learningexchange.php.

Some local authorities have established regional partnerships, such as the Care4Air partnership in South Yorkshire. See www.care4air.org/ for more information.

Trees and green spaces

Another measure that relevant authorities may like to consider, and which can have benefits beyond environmental ones, is the greening of urban spaces. Trees can play an important role in the environment for a range of reasons, including having impacts on air pollution (both positive and negative), providing shade and helping cool urban areas, reducing water volume entering drainage systems during extreme rainfall events, acting as small carbon sinks and helping to promote physical and mental well-being.

Some key areas where policies regarding trees and green space might be able to integrate with air quality action plans and strategies include:

- Providing trees between pedestrian and cycle ways to help reduce pollution exposure – both by simply moving activity further away from the road, but also forming a physical barrier to block dispersion of pollutants;
- Creating green travel corridors for walking and cycling to make these travel modes more attractive; Personal safety issues should be considered in any planting design;
- Providing trees in green areas such as verges, cuttings, embankments, medians and at roundabouts to help reduce

pollution exposure. There are more opportunities to plant trees in rural areas but appropriate urban locations also exist. Tree planting must ensure that tree growth will not interfere with traffic management, road safety or underground services in its lifetime;

- Choosing tree species that might maximize pollution uptake by their leaves or needles or minimize emissions of volatile compounds that can contribute to ozone formation. Planting trees is not a "quick fix" solution. Indeed planting the wrong trees in the wrong location can lead to more air pollution at certain times of the year.

Information on green spaces within towns is available at: <http://www.naturalengland.org.uk/ourwork/planningtransportlocalgov/greeninfrastructure/default.aspx>

Particles and dust from construction and demolition

District councils can use their powers to control emissions and dust from construction and other sites, including off-road vehicles, through the powers they have available to them, such as planning controls and the Pollution Control & Local Government (NI) Order.. The Greater London Authority and the London Councils have produced Best Practice Guidance on the control of dust and emissions from construction and demolition, which is available at: <http://www.london.gov.uk/sites/default/files/BPGcontrolofdustandemissions.pdf>

Techniques in this guidance are widely applicable and district councils should actively consider whether they are appropriate.

Further support

Details of helpdesks (which also provide examples of good practice on the reporting process) and links to further information are available on the Defra website at:

<http://www.defra.gov.uk/environment/quality/air/airquality/index.htm>

The Department is currently providing funding under a Local Air Quality Grant scheme to district councils of approximately £1M per year until 2013. For further details on the scheme contact the Air and Environmental Quality Unit, telephone no (028) 90254887.

Annex A: Model Air Quality Management Area Order

The Environment (Northern Ireland) Order 2002

[Name of Council]

AQMA Order

[Name of Council], in exercise of the powers conferred upon it by Part III, Article 12(1) of the Environment(NI) Order 2002, hereby makes the following Order.

This Order may be cited/referred to as the [name of Council] Air Quality Management Area [No1, 2,3 if more than one is being designated] and shall come into effect on [date]

The area shown on the attached map in red is to be designated as an air quality management area (the designated area). The designated area incorporates [the whole borough of said Council] or [name of street/trunk road] or [stretch of road between junction X and junction Y]. The map may be viewed at the Council Offices

This Area is designated in relation to a likely breach of the nitrogen dioxide (annual mean) objective as specified in the Air Quality Regulations (NI) 2003

This Order shall remain in force until it is varied or revoked by a subsequent order.

The Common Seal of [Name of Council]
was hereto affixed on [date] and signed in the presence of /on behalf
of said Council

.....

Annex B: Recommended format of an Action Plan Progress Report

Action plan measure/target	Original timescale	Progress measure	with	Outcome to date	Comments
Roadside emissions testing					
Publicity Campaign on walking/cycling					
Park and Ride Scheme (state which area in the authority)					
Introduce revised process authorisation to limit emissions (in collaboration with the Environment Agency)					
Area speed reductions (20 mph zones in residential areas)					