Evaluation of Local Authority Air Quality Action Planning through Local Air Quality Management

Department for Environment, Food and Rural Affairs

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EXECUTIVE SUMMARY

Section 84 of the Environment Act 1995 requires those local authorities that have declared Air Quality Management Areas (AQMAs) within their boundaries to formulate an Air Quality Action Plan (AQAP) aimed at improving air quality in pursuit of the air quality objectives. AQAPs have been appraised by Casella Stanger and Transport Travel Research Ltd as part of the statutory consultation period required under Schedule 11 of the Act. The current report provides an evaluation of these duties and assesses the workings of the action-planning element of the Local Air Quality Management regime. This evaluation is based on a review of information obtained during the course of the contract, the appraisal reports of action plans received, up to December 2003, and through a consultation exercise.

Results of the evaluation exercise show that local authorities have had considerable success in engaging with other departments within their authority and with respect to regional working with neighbouring authorities. This has supported consideration to other environmental issues beyond that of air quality. Significant problems have arisen with respect to the engagement of external bodies outside of the local authority tier - this includes working with upper-tier authorities (County Councils) and with the Highways Agency. Where significant input into the action plan is reliant on such bodies uncertainty exists with respect to the choice of appropriate measures to be employed and with respect to the implementation time-scales. Consequently, for many authorities with AQMAs within their boundaries, it has not been possible to determine whether attainment of the air quality objectives will be achieved.

In deciding the appropriateness of the measures to be included in their plans, local authorities are shown to be fulfilling the duty to provide details with respect to measures within the authority’s control. The assessment of these measures in terms of cost and their associated impacts on air quality has been a difficult component of the action planning process for many local authorities and one that, in some cases, has relied on the outcome of feasibility studies. In line with the comments made above, this has resulted in uncertainty with respect to whether air quality objectives will be achieved as a result of implementing measures contained within the action plan.

Local authorities have found the process of appraisal of action plans useful and have used the opportunity to consult with the Secretary of State on draft plans as a means of determining whether the action plan is appropriate and offers the correct level of transparency in thought. Comments received from the appraisal team have been largely welcomed.

The evaluation of the action planning process has identified that the following aspects of the process work well:

- Preceding technical work undertaken throughout the review and assessment process provides the necessary information for local authorities to produce their action plans;
- Internal working and regional groupings have proved successful in fulfilling the duties of the action planning process;
- An increasing number of local air quality strategies are highlighting local authority’s strategic approach to air quality management;
- Regional grouping has been shown to provide opportunities for consideration to wider environmental considerations;
• Local authorities are fulfilling their duties to include measures over which they have powers of authority;

• Consultation delivers an increased understanding of air quality issues and raises the profile of air quality at the local level.

The following constraints to the action planning process have been identified within the current evaluation:

• Delays in responses to consultation and relevant buy-in from upper-tier authorities and relevant external bodies responsible for implementation of measures;

• Effective assessment of impacts of proposed measures and their associated costs;

• Lack of clarity with respect to time-scales for the implementation of measures;

• Additional funding outside that of the current funding programme is required to complement existing funding cycles, which may be outside that of the date of achievement of the air quality objectives.

It is currently too early in the air quality action planning process to establish whether real improvements in absolute pollutant concentrations have been realised as a consequence of implementation. At most, those authorities that submitted action plans within the accepted time-scale are only a year down the line for implementation. Admittedly, many measures identified by local authorities are those that are already in place (regulation and inspection of industrial processes; local transport plans; unitary development plan policies, etc), which will ensure, at the very least, that current air quality does not worsen as a result of significant changes in emissions. An initial assessment of the expected impact of action plan measures provided so far, suggests that the air quality objective for NO₂ will only be achieved within a small proportion of AQMAs by 2005. The number of exceedences is expected to decline significantly by 2010, but even then, some AQMAs will still not meet the objective unless more drastic measures are taken. This assessment is however based on assumptions regarding timescale, funding, and expected improvement to emissions, and is subject to considerable uncertainty.

The current evaluation of action planning within England and Wales has resulted in a number of recommendations covering the different aspects of the current action planning process. Key recommendations include:

• Issue guidance to local authorities to ensure that the action plan contains a summary of the Stage 4 conclusions (unless submitted as a joint report);

• Set indicative deadlines for submission of final action plans following consultation on drafts;

• Provide additional guidance to local authorities on what is required for the assessment of cost-effectiveness and wider scale impacts;

• Organise a series of seminars/workshops on a regional basis to emphasise the action plan process;

• Remind County Councils of the LAQM process and the role that they are expected to take where they have responsibility for transport planning;

• Consider national measures for vehicle scrapping or ‘retrofit’ schemes in order to clean up the vehicle fleet;
• Prepare a national advertising campaign on vehicle maintenance and driving cycles;
• Encourage DfT research into costs and benefits of reduced speed limits; and,
• Establish a platform with the Highways Agency and the Welsh Assembly Government’s Transport Directorate to track and facilitate the implementation and progress of action plan measures.
1. INTRODUCTION: AIMS AND OBJECTIVES OF THE EVALUATION REPORT

Casella Stanger, in association with Transport Travel Research Ltd (TTR) was awarded a contract in December 2001 by the Department for Environment, Food & Rural Affairs (Defra) and the Welsh Assembly Government (WAG) to carry out the appraisal of local authority Air Quality Action Plans. These plans are the culmination of the review and assessment process of air quality under the requirements of the Local Air Quality Management (LAQM) regime established through Part IV of the Environment Act 1995.

This contract is due to terminate at the end of May 2004. This report draws together a summary of the Action Plans that have been appraised (up until December 2003) and also provides an evaluation of the Action Plan process, based on experience to date.

Defra and the Welsh Assembly Government identified the main aims of the evaluation exercise. The primary objective of this evaluation exercise is to assess the success of the implementation of Section 84(2) of the Environment Act, and to identify any areas for improvement in the implementation of measures for reducing pollution levels within the UK.

Specific objectives include the following:

- What are the links between the Action Planning Process and the Stage 4 review and assessment outcomes? Are they evident? Should there be a preferred format for the report?
- Is there evidence of impacts of Action Planning on the way local authorities work with other organizations (e.g. Highways Agency, Environment Agency, upper-tier authorities, etc)?
- Do action plans foster joined-up working?
- What does the consultation element of Action Planning Process deliver?
- Is there evidence of the impacts of Action Planning on local air quality?
- Are local authorities considering in-depth analysis of costs and impacts data?
- What constraints to the Action Planning Process are occurring? Are these largely related to funding and responsibility issues?
- How could action plans be improved?
- Is the appraisal process useful for local authorities?
- Local Air Quality Strategies - What are the links with the Action Planning Process?

Consideration of these aspects of the Action Planning Process is given in more depth in Chapter 5, Evaluation Outcomes.
Chapter 2 provides an overview of the Action Planning Process. This provides the context for
the current evaluation exercise and highlights relevant guidance made available to local
authorities that have declared Air Quality Management Areas (AQMAs) within their
boundaries. The methods by which the current evaluation exercise has taken place are outlined
in Chapter 3 with the consultation outcomes reported in Chapter 4. Chapter 5 provides details
of the evaluation outcomes in light of the aims and objectives of the current exercise. The
outcomes of the current evaluation exercise with respect to recommendations arising from the
assessment are discussed in Chapter 6.
2. REVIEW OF ACTION PLANNING PROCESS - REQUIREMENT AND APPROACH

Part IV of the Environment Act, 1995, places a statutory duty on local authorities to periodically review and assess the air quality within their area. This involves consideration of present and likely future air quality against relevant air quality objectives.

The regime known as Local Air Quality Management (LAQM) was set down first in the 1997 National Air Quality Strategy (NAQS), alongside associated technical guidance for the process of review and assessment of air quality. In 2000, Government reviewed the NAQS and published its revised Air Quality Strategy for England, Scotland, Wales and Northern Ireland (AQS). Following the publication of the revised Strategy air quality standards and objectives for seven pollutants were set in Regulation in 2000 through the Air Quality Regulations 2000. These were subsequently amended in 2002. More recently, (February 2003), Government published its Addendum to the AQ S which proposed new objectives for PM10 in 2010 whilst also setting down new objectives for benzene and carbon monoxide.

The key elements of the Environment Act 1995 concerning the UK AQS are listed in Table 2.1.

2.1 Review and Assessment Process

Within the First Round of review and assessment it was recommended that local authorities undertake a staged process comprising three discreet phases, increasing in detail at each stage. The first stage of this process (Stage 1) included undertaking a desktop review in order to identify all sources of pollution within the area. Using (then) Technical Guidance issued by Government significance is placed on sources of pollution both within the authority’s area and those immediately outside the authority’s area, that are likely to impact on air quality. Having identified those sources and areas that require further attention, simple screening assessments (Stage 2) or detailed monitoring and modelling programmes (Stage 3) were undertaken.

Where the results of the review and assessment process highlight that the problems are likely to exist with respect to attainment of the relevant air quality standards and objectives, the authority is required to declare an Air Quality Management Area (AQMA) under Section 83(1) of the 1995 Environment Act.

Having declared an AQMA the authority is required to confirm the findings of the Stage 3 work through further monitoring or modelling assessments (the Stage 4 work). The Stage 4 should provide information on the source-apportionment of the pollutant emissions in order to identify the level of pollutant reduction required for the attainment of relevant air quality objectives. Additionally, consideration should be made to evaluating local management practices that could be used to improve air quality, and feed into the formulation of an Action Plan.

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The current Second Round of review and assessment provides the opportunity for local authorities to re-visit the conclusions of the First Round and update previous assessments. Updates are required as a result of changes in legislation, such as the setting of new standards and objectives, changes in emission sources, and enables local authorities to provide further evidence gained from on-going monitoring programmes. New Policy and Technical Guidance (LAQM.PG(03) and LAQM.TG(03)) sets out the manner in which local authorities should complete their Updating and Screening Assessments (USA) and any Detailed Assessments, where results of the USA show possible further work is required.

At the time of writing the review and assessment process has culminated in the declaration of around 120 separate AQMAs across the UK. Examination of declarations shows that road traffic emissions account for 89% of these declarations - the remaining 11% being related to industrial processes. Of the 89% of road traffic AQMAs around 55% represent problems in the attainment of the objectives for NO_2 alone, whilst the remaining 45% have been made on NO_2 in combination with PM_{10}. A further analysis with respect to management responsibilities for the areas show that, of those AQMAs declared on road traffic emissions the majority (76%) have areas falling under the responsibility of the Highways Agency or (in the case of London) Transport for London. In Wales, it is the Assembly's Transport Directorate that covers this role.

Other pollutants such as carbon monoxide (CO) and benzene are also associated with road traffic emissions, however, the latest national perspective on the occurrence of each of these pollutants suggests that these are no longer a problem at roadside locations across the UK.

2.2 Action Planning Process

Section 84 (2) of the Environment Act 1995 requires those local authorities who have declared an Air Quality Management Area within their boundaries 'to prepare, [ ], a written plan [ ] for the exercise by the authority, in pursuit of the achievement of air quality standards and objectives in the designated area, of any powers exercisable by the authority.'

In providing guidance to local authorities on how to prepare their action plans, Policy Guidance LAQM.PG(03) provides relevant details and gives an update to the earlier considerations to action planning in Policy Guidance LAQM.G2(00). With respect to the approach to options the plans should contain ‘evidence that all available options have been considered on the grounds of cost-effectiveness and feasibility’.

Casella Stanger and TTR have been pro-active in providing local authorities with guidance on the approach to formulating air quality action plans. As part of the contract the Action Plan Helpdesk was set-up alongside the Action Plan Helpline Web-site, the details of which are provided below:

- Action Plan Helpdesk: 020 7902 6130
- Action Plan Helpline Web-site: [http://www.stanger.co.uk/actionplan](http://www.stanger.co.uk/actionplan)
In addition, the appraisal team has highlighted the requirements of action planning appraisal to local authorities through a number of conferences and workshops, at which members of the appraisal team have spoken. These include:

- NSCA SW Division and AQM Resource Centre, University of the West of England, Contaminated Land, Odour and Air Quality: Challenges Presented, 5th Annual Conference, November 27, 2002.
- Bristol City Council Air Quality Action Planning Seminar: Action Plans to Date. November 22, 2002
- NSCA Spring Workshop, Abingdon, April 2002:

In the early stages of the contract a checklist was made available to guide local authorities with the appraisal of local authority action plans. This specifically gave details of the process, guidance and specific aspects of what the appraisal team would be looking for. In short, a guide for local authorities with respect to content of the action plan. The approach was consistent with that of the preceding guidance issued to local authorities by the National Society for Clean Air and Environmental Protection (NSCA): Air Quality: Planning for Action issued on June 2001. At the time, this guidance was prepared by the NSCA with support and participation of Defra officials participating on the working group. However, it is important to recognise that this was not definitive guidance on Government policy with respect to action plans at the time, which had been set through Policy Guidance LAQM.G2(00), which has recently been updated and replaced with Policy Guidance LAQM.PG(03) guidance.

In addition to complying with guidance on air quality action plans local authorities are required to consult on their action plans with statutory consultees and other relevant stakeholders under Schedule 11 of the Environment Act 1995. This is one of the most important aspects of air quality action planning and, for most authorities, represents the first ‘public face’ of Local Air Quality Management which, up to this point, has identified whether a problem exists and, if so, what the geographic extent of the problem is.

The different facets of action planning process are considered in more detail within Chapter 5: Evaluation Outcomes.
**Table 2.1: Major elements of the Environment Act 1995**

<table>
<thead>
<tr>
<th>Part IV Quality</th>
<th>Air</th>
<th>Commentary</th>
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<tr>
<td>Section 80</td>
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<td>Places a statutory duty on the Secretary of State (SoS) to produce a national air quality strategy.</td>
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<td>Section 81</td>
<td></td>
<td>Obliges the Environment Agency to take account of the strategy.</td>
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<td>Section 82</td>
<td></td>
<td>Requires local authorities to review air quality and to assess whether the air quality standards and objectives within their areas are likely to be exceeded.</td>
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<tr>
<td>Section 83</td>
<td></td>
<td>Requires a local authority, for any area where air quality standards are not being met, to issue an order designating it an air quality management area (AQMA).</td>
</tr>
<tr>
<td>Section 84</td>
<td></td>
<td>Imposes duties on a local authority with respect to AQMAs. The local authority must carry out further assessments and draw up an action plan specifying the measures to be implemented within the AQMA, and the time-scale for doing so, to move towards attainment of the air quality standards and objectives.</td>
</tr>
<tr>
<td>Section 85</td>
<td></td>
<td>Gives reserve powers to cause assessments to be made in any area and to give instructions to a local authority to take specified actions. Authorities have a duty to comply with these instructions.</td>
</tr>
<tr>
<td>Section 86</td>
<td></td>
<td>Provides for the role of County Councils to make recommendations to a district on the carrying out of an air quality assessment and the preparation of an action plan.</td>
</tr>
<tr>
<td>Section 87</td>
<td></td>
<td>Provides the SoS with wide ranging powers to make regulations concerning air quality. These include standards and objectives, the conferring of powers and duties, the prohibition and restriction of certain activities or vehicles, the obtaining of information, the levying of fines and penalties, the hearing of appeals and other criteria. The regulations must be approved by affirmative resolution of both Houses of Parliament.</td>
</tr>
<tr>
<td>Section 88</td>
<td></td>
<td>Provides powers to make guidance which local authorities must have regard to.</td>
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3. EVALUATION METHODOLOGY

The approach to the evaluation has been one of review and consultation. A review of helpdesk queries and the time-line of guidance made available to local authorities completing the action planning process has been made. Appraisal reports have been reviewed in order to capture any consistent themes in commentary made by the appraisal team. Previously provided quarterly reports submitted to Defra and WAG throughout the course of the contract provide details on the type of measures currently being considered by local authorities in improving air quality.

Chapter 4 provides specific details with respect to the consultation process undertaken with local authorities that have previously submitted their action plans.
4. CONSULTATION EXERCISE

As a part of this evaluation exercise, feedback on the process was sought from all of those local authorities in England that had declared an AQMA prior to the end of November 2003. A questionnaire (shown in Annex 1) was sent to the authorities, with a total of 34 responses received. The responses covered a wide range of authority types, including both the larger urban conurbations and the smaller districts. In some cases a draft or final action plan had been submitted, whilst in others the action plan was still under development. A list of those authorities that responded is provided in Annex 2, with the broad conclusions set out below.

4.2 Effectiveness of action plans

In general terms, most authorities found that the conclusions of the Stage 4 review and assessment report allowed them to identify the main sources of pollution in their area, and thus to target their action plans accordingly.

Broadly speaking, authorities have been successful in evaluating the range of potential measures that could be used to improve air quality. However, in the majority of cases, many of these measures were part of existing plans to improve local transport etc, and were not specifically developed in relation to air quality. A main constraint to developing the action plan has been the reliance on external organisations for their input, for example, County Council highways departments, or the Highways Agency. A number of authorities also cited the different phasing of the Local Transport Plan (LTP) and the action plan as a further constraint on the potential measures that could be considered. That is, it was very difficult to introduce new traffic management measures into the action plan that had not been previously identified in the LTP.

Authorities are asked to undertake a simple cost-benefit analysis of the measures proposed in their action plans. This is not intended to be a detailed analysis, but sufficient to ensure that the most cost-effective solutions are identified and that the measures are proportionate. The majority of authorities confirmed that they had been able to undertake a basic or ‘broad brush’ analysis for the principle measures included in their plans.

Authorities are also required to consider the wider scale environmental and social impacts of their proposed measures. This was perceived as a much more difficult task, as many of the issues involved are quite complex, and expertise to address these issues was not always available in house. In cases where the issues where considered in depth, it was necessary to bring in external consultants with the required expertise.

In order to determine whether the proposed measures in the action plan will be sufficient to meet the objectives by the required date, authorities are required to confirm the timescale for implementation of each measure, and to quantify the resulting improvement. For measures enacted at a local level, this has generally been possible. Principal difficulties have been encountered where regional scale measures have been proposed (e.g. the London LEZ) or where the commitment of external authorities is required (e.g. County highways departments and the Highways Agency).
4.3 Liaison and interaction – local government and the public

There was a widely differing response to issues of liaison and interaction, in part reflecting the diversity of organisations involved. The majority of those authorities that responded reported effective engagement within the authority, with successful working groups or task forces being established. Not only did these arrangements progress the development of the action plan, but also provided the framework for co-operation on a wider range of environmental and development issues. In contrast however, a number of other authorities reported reluctance from other departments to become involved; a lack of engagement at the higher levels in the authority, and the difficulties they experienced in getting air quality recognised on the political agenda.

Consultation with neighbouring authorities was generally very successful, with many authorities choosing to form pollution groups and clusters that served as a platform for exchange of information, or in some cases, more formal partnerships which were used to develop joint action plans.

The mechanisms for public consultation ranged from posting of letters to local residents and businesses and publication of the action plan on the authority’s website, to the organisation of stakeholder meetings and workshops. Many authorities reported a disappointing response to the consultation exercise and the difficulty in raising public debate about air quality issues. Several authorities did, however, consider public consultation had been very successful, and in part this appears to reflect the effort that went into the organisation of local resident forums and stakeholder groups.

4.4 Liaison and interaction – other organisations

The mechanism for interaction with organisations, external to the authority was largely via the establishment of pollution groups or steering committees, to which representatives were invited to attend. This approach seems to have met with varying success, with many authorities that responded reporting significant difficulties in gaining the interaction of either County Councils with highways responsibilities, or the Highways Agency. Given that traffic emissions are judged to be the most important source of pollution in most AQMAs, this lack of engagement was judged to be a significant stumbling block in developing the action plan.

Other principal constraints that were noted included the delay in publication of the revised emissions factors, and the lack of resources within the authority.

4.5 Summary of issues

In addition to completing the questionnaire, authorities were also asked to indicate the top 5 issues or processes that they thought had worked well in the development of their action plan, and the top 5 issues that caused major difficulties or were not possible to resolve or implement. The response to this question was limited, but it has been possible to draw some conclusions from the answers provided directly and from an overview of the questionnaire. These are summarised in Table 4.1 below.
Table 4.1 Local authority response to good and poor aspects of the action planning process.

<table>
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<th>Top 5 ‘worked well’ aspects</th>
<th>Top 5 ‘difficulties encountered’ aspects</th>
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<tr>
<td>Smooth process in developing the AQAP and agreeing internally the measures that should be included</td>
<td>The mechanisms for local authorities to bring about improvement to air quality are considered to be relatively small and difficult to quantify. In addition, the policies and measures that drive this are relatively long term in relation to the attainment date for the objectives.</td>
</tr>
<tr>
<td>Development of the AQAP has encouraged local authorities to work closer together on air quality issues</td>
<td>Local authorities in many instances are removed from the principal organisations or groups that can institute significant measures to improve air quality. In some cases this has led to a lack of corporate ownership of the problems.</td>
</tr>
<tr>
<td>Where a significant effort was put into the process, there was a good consultation response from local residents and other organisations</td>
<td>Perceived apathy amongst local residents and the business community to air quality issues.</td>
</tr>
<tr>
<td>Development of the AQAP has helped to move air quality issues further up the political agenda and set a framework for the future</td>
<td>Lack of resources.</td>
</tr>
<tr>
<td>Measures identified in the AQAP provided a new stream of funding in relation to transport developments.</td>
<td>Delays in the provision of critical information (e.g. the revised emission factors) caused problems in completing the AQAP in the required timescale.</td>
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5. EVALUATION OUTCOMES

This chapter considers the individual evaluation outcomes taking into account the consultation responses reported in the previous chapter, the analysis of queries received by the Helpdesk, and general recurring themes reported in the appraisal report commentary. For the sake of clarity, each aspect is considered separately. Linkage between themes is discussed in Chapter 6 alongside recommendations with respect to future air quality action planning requirements.

5.1 Links with ‘Stage 4’ outcomes

Responses from local authorities with respect to the review and assessment process has highlighted that many are confident that the approach taken enables firm identification of the geographic extent of the AQMA. The approach to declaration has varied with local authorities taking decisions to declare areas defined by the exact exceedence contour, according to parish, ward, or natural geographic boundaries, or across the whole borough/district. The latter is particularly prevalent in large cities, for example, London Boroughs.

It was evident from the early stages that close linkage between the outcome of the Stage 4 and the action planning process was required. Having defined the geographic extent of the AQMA in the Stage 3 work, the further work undertaken in Stage 4 would confirm these findings. Additional work at Stage 4 identifying the main sources of emissions contributing to the exceedences of the objectives within the AQMA would subsequently enable a ‘targeted and focused’ approach to the action plan.

In setting out the timetable for local authority review and assessment, Part IV of the Environment Act sets a number of statutory deadlines, in addition to recommending additional timescales to which local authorities should adhere. Section 84(2) of the Environment Act states that a local authority, having declared an AQMA within their boundary should (a) ‘prepare, before the expiration of the period of twelve months beginning with the coming into operation of the order [ ], a report of the results of that assessment [Stage 4]; and (b) prepare, in accordance with the following provisions of this Part, a written plan (in this Part referred to as an ‘action plan’) for exercise by the authority, in pursuit of the achievement of air quality standards and objectives in the designated area, of any powers exercisable by the authority’.

In reality, many local authorities reported difficulties in meeting the statutory deadline of 12 months for completion of the Stage 4 work in light of revisions to road traffic emission factors, which led to significant delays in completing the work. Implications of this with respect to the action planning process are considered below. However, the release of critical information for technical assessment is cited by many local authorities as one of the key factors in the delays encountered for reporting at key stages of the Local Air Quality Management regime. Such issues, however, are not expected to cause a significant problem during the second round of review and assessment. The revised Technical Guidance sets out descriptive lists of the information that is required, authorities have been provided with spreadsheet tools to collate data, and critical data sources such as road traffic emissions factors, have now been ‘frozen’ for the purpose of review and assessment.

In setting out the requirements to submit an action plan for those authorities that have declared AQMAs within their boundaries, Defra stated that it had no preference for whether local authorities preferred to submit a single document, or a joint Stage 4/Action Plan report. From the appraisal of action plans submitted to date it is clear that a more prescriptive
approach to the format of the action plan could have proved beneficial. Experience of the appraisal team with respect to the action plans submitted to date highlights the need for improved linkage with the Stage 4 report and conclusions. Namely, the inclusion within the action plan of a statement related to the outcome of the Stage 4 work and the results of the source-apportionment (i.e. the scale of exceedences related to the objectives and the main contributing emission sources). Many authorities omitted to provide these details in their action plans, whilst others submitted Stage 4 reports in their entirety as a supporting annex. Consequently, many authorities were asked to revise their draft action plans to include a statement of the extent of the air quality problem within the AQMA, i.e. by how much is the objective exceeded, the identified emission source(s), and what improvement the action plan was required to achieve.

For AQMAs declared on whole borough boundaries, the inclusion of generic measures aimed at reducing background concentrations of pollutants could be perceived as a dilution of the targeted approach to measures aimed at dealing directly with the emission source leading to the predicted exceedences. For example, some local authorities with AQMAs within the vicinity of the roads managed by the Highways Agency (or the Assembly’s Transport Directorate for Welsh authorities) have included wider-ranging measures covering industrial processes. The approach is more akin to that of a Local Air Quality Strategy (see Section 5.9) which provides an over-arching view on the management of air quality within a district. Elsewhere, the inclusion of generic measures within the action plan is wholly applicable. Without exception, all London Borough air quality action plans submitted to date have included a number of measures covering industrial and domestic sources. For London, such measures are included as a matter of course at the request of The Mayor. The inclusion of measures aimed at these sources is appropriate with respect to their changing contribution to overall pollutant levels as contributions from other sources decrease.

5.2 Working with external organisations

Evaluation of the review and assessment process\(^5\) has shown that the Local Air Quality Management regime has been successful in fostering working partnerships between neighbouring local authorities and within different departments of the same authority. Similarly, it was envisaged that such working partnerships would continue into the formulation of the action plan, and in general terms this continues to be the case with many local authorities continuing the existing relationships that had been established.

However, authorities formulating action plans where the measures lie substantially within the remit of an external organisation have encountered significant difficulties. For example, where exceedences of the objectives are predominantly related to emissions emanating from national strategic road links, authorities are largely dependent upon the implementation of suitable measures by the Highways Agency (in England) and the Assembly’s Transport Directorate (in Wales). In such circumstances, many local authorities believe the process of preparing the action plan should revert to the organisation with direct control of the measures.

In other cases, where responsibility for preparation of the Local Transport Plan lies with upper-tier authorities, in some instances the County Council has been reluctant to acknowledge local issues in air quality, and to support measures within the action plan. Moreover, where a

local authority is dependent upon input into the action planning process from an upper-tier authority, they are also dependent upon the existing review cycle of Local Transport Plans for inclusion of specific measures on air quality. Such review cycles are inconsistent with the time-scales pertaining to the achievement of the air quality objectives for PM$_{10}$ and NO$_2$ in 2004 and 2005, respectively. However, whilst this may result in the objectives not being achieved by the required date, the measures will provide an improvement to air quality and attainment of the objectives in future years.

5.3 Consultation

Schedule 11 of Part IV of the Environment Act requires local authorities to consult with statutory consultees and other relevant stakeholders on their action plans. Without exception, authorities have submitted draft action plans for consultation with the Secretary of State through the appraisal team. This provides authorities with a level of flexibility for further revisions to the plan before final adoption by the Council and is similar to the approach used by authorities in seeking the opinions of the Secretary of State on previous review and assessment reports.

The process of consultation is seen as a vital step to the success of the plan and LAQM.PG(03) recognizes this through a comprehensive consideration to Consultation and Liaison. Previously, the NSCA guidance ‘Air Quality: Planning for Action’ had also highlighted the importance of consultation in the successful engagement of the public.

Whilst consultation is key to success in understanding the process of action plan and review and assessment, the response from public consultations has been disappointing. Experience of those local authorities that responded to the questionnaire in the current evaluation exercise shows varying success with consultation. However, a number of authorities state that the setting up of focus groups and steering committees has greatly aided the consultation period, and has been instrumental in its success. Moreover, having established focus groups some authorities have highlighted that these have provided an appropriate forum to address wider environmental issues.

Recent experience of consultation has indicated that an increased understanding of air quality issues and the duties of the local authority under Part IV of the Environment Act can be gained from the process. This is best exemplified through example. ‘Authority x’ had included compulsory purchase of properties as a potential measure that could be considered by the authority within the AQMA. The implementation of the measure was identified as the responsibility of the Secretary of State and not considered feasible on the basis of cost (due to the large number of properties involved). Moreover, the measure was not shown to be a suitable solution to the problem faced by residents within the AQMA, which merely sought to remove them from the area rather than address emissions resulting in pollutant exceedences. Initial local press response to the draft proposal highlighted that many local residents had misunderstood the process of action planning. Inevitably, the consultation process will lead to a more comprehensive understanding of the action planning process. Moreover, it is likely that an increased understanding of air quality issues will also be gained by both local residents and businesses, with the result that the authority may gain further support for its work.

A number of authorities have successfully combined consultation on the action planning process with wider campaigns on air quality and the environment, such as “In Town Without My Car” days, “Don’t Choke Britain” and “Switch Off When Parked”.

Ref: CS/ AQ/ AD 102126/ RM/ 2131(Final)
In addition to increased understanding of air quality issues by the public and other interested parties the process of consultation between neighbouring authorities has seen the formation of a number of regional pollution groupings. Response from authorities, summarised in Chapter 4, has shown that consultation between authorities has been generally successful.

An integral part of the appraisal process following initial draft of the appraisal report is the internal consultation period between the appraisal team, other elements of Defra (outside the AEQ2 division), Department for Transport, relevant Government Offices and (in the case of London Boroughs) the Greater London Authority.

5.4 Delivery of the air quality objectives

For many AQMAs it is too early yet to determine the outcome of the action planning process on pollutant levels, and whether the measures will deliver the objectives. The imminent due dates for the achievement of the objectives for PM$_{10}$ and NO$_2$, and the significant reliance on input from external organisations for the implementation of measures implies that exceedences in a large number of AQMAs will continue to occur beyond 2004/2005. This is recognised by many authorities with respect to the implementation of regional measures such as the London Low Emission Zone, which has been subject to detailed feasibility work and further consultation. Similarly, for many AQMAs within the vicinity of roads under Highways Agency management, the measures required to improve air quality are largely outside the objective years of 2004 and 2005, but could, nonetheless, deliver an improvement to air quality and attainment of the objectives in future years. An analysis of expected delivery of the air quality objectives and limit values is provided below. It is worthy of comment that local authorities that have shown that they will not meet the current objectives should continue to strive to deliver air quality improvements in future years. Thus, meeting the air quality objectives after the due date is better than not meeting the objectives at all.

For the small number of AQMAs within the vicinity of industrial processes, improvements in air quality can be achieved within much shorter time-scales, and it is likely that attainment of the objectives will be achieved by the due date. This is particularly relevant where high levels of dust emanating from fugitive releases attributed to poor site management has led to a complaint history in the vicinity of the site. With more regular inspections, non-compliance with authorizations can be readily identified and appropriate measures through BAT (Best Available Techniques) implemented in order to improve site management.

Engagement of industrial process owners throughout the review and assessment Process has, in general, highlighted concern regarding air quality at an earlier stage than that of the formulation of the action plan. This has, in itself, elicited responses by many industrial sites to address issues outstanding on air quality associated with poor site management and the requirements for additional abatement techniques. As such, it could be stated that the process of Local Air Quality Management as a whole has already brought many benefits to air quality within the UK. A more accurate determination of the impacts of action planning on air pollutant levels within individual AQMAs will be determined following the submission of future local authority Progress Reports, which will provide supporting information with respect to monitored levels of pollutants.

For many authorities, reliance on the outcome of ongoing feasibility studies has been a disadvantage with respect to the inclusion of full details on regional schemes. For example, the
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final report of the London Low Emission Zone feasibility study was reported only in July 2003, some 18-months later than the first London Borough submission of an air quality action plan. Whilst many London Boroughs have fully supported the feasibility study and welcome consideration to it in their action plans, the lack of available detail with respect to its impact on air quality has meant considerable uncertainty with respect to whether air quality objectives will be achieved. Similarly, the 9-month London-wide Roadside Vehicle Emissions Testing Programme, operated by the Association of London Government on behalf of London Boroughs, is due to complete its study shortly.

5.5 Attainment of the air quality objectives and limit values

The vast majority of AQMAs declared to date have been related to road traffic emissions and exceedences on the annual mean objective for nitrogen dioxide, and focus is given to this issue. It has not been possible at this stage to draw any firm conclusions on the outcome of the action planning process, as in a number of cases the timescale and/or funding of the proposed measures has not been confirmed, and the impacts have not been fully quantified. However, at this stage it seems clear that the annual mean objective for NO₂ will not be achieved within many AQMAs by 2005. Provided that the measures within the action plans are implemented as stated, then it is expected that the number of exceedences will decline significantly by 2010, although some areas of exceedence will remain unless more drastic measures are taken.

5.6 Cost Effectiveness and Wider Impact Assessment

Responses from local authorities and queries raised through the Action Plan Helpdesk highlight that impact and cost assessments of proposed measures within action plans has been the most difficult part of the action planning process for most local authorities. It was acknowledged from the outset that it would be difficult for authorities to assess a wide variety of measures for their impacts on air quality. For example, whilst overall traffic reductions targets lend themselves easily to detailed dispersion modelling assessment other measures, such as the implementation of cycle lanes, or developing sustainable travel plans, do not lend themselves as easily to quantitative assessment.

In the strictest sense, an assessment of cost effectiveness is detailed and potentially onerous for local authorities to undertake, specifically when the review and assessment process sits within the Environmental Health Departments of most authorities. It includes the calculation of the cost of a given action per unit reduction in pollutant concentrations, i.e. how much it costs to reduce emissions by a tonne, or improve air quality by 1µg/m³. Many authorities expressed concern with respect to the undertaking identified a lack of expertise in the methods of detailed cost effectiveness as the main reason for establishing specific requirements for the action planning process.

Early on in the action planning process Defra, the WAG and the appraisal team sought to clarify the position with respect to cost-effectiveness through issuing updates on the Frequently Asked Questions (FAQ) pages of the web-site. In doing so, reference was made to guidance issued at the time (LAQM.G2(00)), which states that, in developing an action plan, local authorities should ‘ensure that the relative contributions of industry, transport and individuals are cost-

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7 Whilst it is understood that this scheme was not successful in identifying significant numbers of vehicles with failed emissions, the publicity campaign was highly successful in communicating air quality issues to the public.
effective and proportionate. Additionally, NSCA Guidance Air Quality: Planning for Action proposed a mechanism of prioritizing actions according to an overall ranking score determined from cost effectiveness, air quality improvements and an estimate of the population affected by the proposals. A simplistic qualitative approach was recommended based on the allocation of High, Medium and Low categories. In order to understand the workings of the authority with respect to the allocation of these categories to cost and impact assessment it was recommended that local authorities include details of actual monitoring values and improvements in pollutant concentrations (perceived or estimated). Whilst many local authorities have adopted this approach, many continue to omit the relevant details that provide transparency on allocation of categories.

Authorities are also required, where possible, to set out what the wider impacts of the proposed measures might be. These might, for example, include changes to local noise levels, impacts on road safety etc. This has been dealt with by varying degrees of success. Whilst some authorities have considered the wider scale impacts in detail, usually by consultation with a range of relevant stakeholders, others have only undertaken a broad qualitative assessment, but with a level of detail probably sufficient for the purpose. In the many cases however, an evaluation of the wider impacts has been disregarded. This has generally been in cases where the action plan process has been problematic in other areas as well, most notably due to lack of engagement by other internal departments or external organisations, or lack of resources.

5.7 Evaluation of the appraisal process.

In December 2002, Defra undertook an initial evaluation of the appraisal process through discussions with a number of authorities that had, by then, received initial comments from the appraisal team on their draft action plans. Five out of the twelve authorities contacted provided feedback. In general, the initial response to the appraisal process was positive, with many authorities regarding the feedback as generally good, and timely. Some concern was expressed with respect to the lack of available statutory guidance from the outset, or with respect to available examples of action plans, which would otherwise have proved useful. Such comments were largely received on the basis that specific elements of the appraisal process (such as the Helpdesk and web pages) were not in place at the time that local authorities were writing their action plans (prior to the appointment of appraisal contractors). Earlier appointment of contractors for the appraisal of action plans would have reduced any problems associated with contract set-up and lead-in times. In the same manner, details regarding what was expected from local authorities in consideration to cost effectiveness and rankings of measures was not clear in the early stages of the appraisal process. This was subsequently rectified through discussion between Defra and the appraisal team following advice from Defra’s economic appraisal team with the posting of a ‘FAQ’ on the pages of the Action Plan web-site. No repeat of the feedback on the appraisal process has since been undertaken to obtain the views of a wider number of authorities. As a consequence, the views expressed by local authorities with regards to the appraisal process may be outdated and is a limitation with respect to the current analysis. It is recommended that an evaluation of the appraisal process for action plans be repeated.

5.8 Local Air Quality Strategies

LAQM.G2(00) highlighted the strengths in policy to be achieved through the formulation of local air quality strategies, and set out the main components of an air quality strategy. Central
to the strategy should be how the authority aims to improve air quality within its area. Whilst
the content may be similar to that of an Air Quality Action Plan, it is customary for a Local Air
Quality Strategy to cover all sources of pollution within the boundary of the authority, not just
those that have been shown to cause exceedences within the AQMA(s). Moreover,
acknowledging that air pollution does not recognize geographic boundaries of authorities the
Local Air Quality Strategy should highlight any regional coordinated attempts to improve air
quality through partnership working with neighbouring authorities and any other relevant
outside bodies. More recently, Policy Guidance LAQM.PG(03) provides an update on
previously issued guidance on the formulation of Local Air Quality Strategies.

Many local authorities have acknowledged the need to include wider policies aimed at reducing
background levels of pollution within their action plans. Specifically, a request by the Mayor of
London for London Boroughs to include a wide number of policies aimed at achieving such
reductions has meant that these action plans are far reaching in scope and detail. More so than
a local authority focusing on a specific industrial site, or one that has declared a single road link
within its boundary, an AQMA. This has caused some confusion amongst some local
authorities in respect of the requirement to produce an action plan that contains ‘targeted
measures’ (LAQM.PG(03)), with the potential for inconsistencies in commentary received
across a number of consultees. These inconsistencies have largely been removed through close
working between the consultees (specifically between the appraisal team and the Greater
London Authority), for London Boroughs. Elsewhere, it is acknowledged by the appraisal
team that other authorities within major cities are also likely to include a wider range of
measures aimed at emissions sources other than the main ones identified in the Stage 4 work.
As such, a two-tier expectation with respect to the breadth of measures to be included within
an air quality action plan has evolved dependent upon the need to reduce background
concentrations of pollutants in large built-up areas.

By and large, references to Local Air Quality Strategies have not been explicitly made in the
majority of action plans submitted for appraisal. In a few cases, Local Air Quality Strategies
have been appended as a supporting annex, often with little or no linkage with the main body
of the action plan.

Regional grouping of authorities have been successful in formulating local air quality strategies
and these have formed the basis of those linked with the action planning process to date.

5.9 Outcome of the Action Planning Process

The key positive and negative aspects arising from the action plan process to date are
summarised in this section. In doing so however, it is noted that individual authorities have
dealt with the process in different ways, and issues that have worked particularly well in some
authorities have proved to be intractable in others.

Positive aspects

• The development of action plans has generally taken place in close liaison with
  neighbouring authorities, often by means of a working group, or a more formal
  partnership. This has encouraged authorities to work together to tackle air pollution
  problems;

• In many cases, development of the action plan has allowed close working relationships to
  be established with other departments of the authority, such as development control and
transport. Where good relationships have been established, these have proved beneficial in dealing with other aspects of work e.g. approval of planning applications;

- In a number of cases, the development of the action plan has raised the status of air quality issues on the political agenda. As the process is ongoing, this has also set a framework for the future.

- Identification of measures in the action plan has provided a new stream of funding, particularly related to transport developments. Draft action plans also provide a platform to influence preparation of future LTPs.

**Negative aspects and constraints**

- Many authorities have highlighted a lack of resources as a major constraint to the development of the action plan. This relates both to the availability of staff within the authority, and funding to support the development and implementation of the action plan;

- Some authorities have found it difficult to seek engagement with other internal departments, or to get ‘corporate ownership’ of the problem. This is frequently related to shortage of resources and conflicting priorities;

- Many authorities consider that the measures that are under their direct control are both limited in number of scope, and unlikely to bring about significant improvements to air quality.

- The timescale for implementation of many measures is medium to long-term, and not expected to deliver the air quality objectives or limit values by the required date. A number of authorities have not fully appreciated that there is a requirement to meet the objectives in all years after the attainment date, and that medium to long-term measures will deliver improved air quality in future years;

- The current phasing of the action plan has meant that it is out of step with the Local Transport Plan. This has often meant a delay in funding of additional measures that will be incorporated in the next LTP. In many cases this has resulted in the preparation of an action plan without firm time-scales for implementation;

- Many local authorities have highlighted that they do not have the appropriate powers of authority with respect to the implementation of targeted measures on identified emission sources within their AQMAs. Engagement with external organisations has been problematic, and many authorities have cited the Highways Agency, and in some cases County Councils, as providing little response or feedback on measures to improve air quality along sections of road under their control;

- Many authorities have found it difficult to quantify the improvement to air quality that will result from the implementation of the action plan. It has not been possible to determine whether the action plan will deliver the air quality objectives.
6. DISCUSSION
This section provides an overview of this report with respect to the current state of play of air quality action planning within England and Wales – for Scotland, the Scottish Executive may provide a specific evaluation of air quality action planning in due course. The Local Air Quality Management regime in the UK has sought to bring about real improvements in air quality, whilst additionally seeking to foster joint working and a higher profile for air quality on the political agenda. It is with these two over-arching themes that the outcomes of the current evaluation exercise are discussed.

6.1 Action Planning and Air Quality Improvements
An assessment of the measures being implemented by authorities has been made, which has given close consideration to those plans submitted within large urban areas. Results of the evaluation show that the review and assessment process has enabled local authorities to clearly identify the main emission source(s) leading to predicted exceedences within an AQMA. In preparing their action plans however, many local authorities have omitted to include details of the outcome of their Stage 4 assessment. This has made it extremely difficult in some cases to establish from the action plan the necessary reductions in pollutant concentrations required to achieve the air quality objectives, and hence benchmark the improvements in air quality brought about by specific measures (either individual or cumulative). The outcome of the appraisal process suggests that a summary of the Stage 4 report should always be incorporated into the action plan report (unless a joint Stage 4/action plan is submitted).

Policy Guidance on action plans recommends that local authorities build upon existing polices and strategies in fulfilment of their action planning duties. Where road traffic is the main source identified within an AQMA local authorities have built upon the existing Local Transport Plan (Borough Spending Plans for those authorities within the Greater London area). An issue that has been commonly raised concerns the phasing of the LTP and the action plan, which has restricted the ability of some authorities to introduce new transport planning measures at an earlier stage. However, the decision to incorporate action plans into the LTP (where road traffic is the main cause of the exceedence) should eliminate this problem in the future.

For AQMAs declared on emissions from industrial sites, authorities have built upon existing duties through Local Authority Pollution Control (LAPC) and Integrated Pollution Prevention and Control (IPPC) regimes, dependent upon whether the industrial process falls under Part A or Part B authorisation. By and large, local authorities have included measures within their control and are fulfilling the requirement of the Act to provide a written plan ‘of any powers exercisable by the authority’. However, where input is required by external organisations (notably the Highways Agency) uncertainty exists with respect to the types of measures deemed appropriate and also with respect to any implementation time-scales.

Assessment of the cost-effectiveness and wider impact assessment of proposed measures has proved to be the most difficult aspect of air quality action planning. Impact assessment is a critical component of the action planning process, which indicates whether measures included in the plan will achieve the necessary goal of attaining the relevant objective(s). It was acknowledged early on in the action plan process that many so-called ‘soft measures’ would be impossible to assess in terms of air quality improvements. These included such measures
consistent with the principles of sustainability such as ‘the promotion of sustainable travel plans, walk-to-schools initiatives and the promotion of cycle ways’. For main intervention measures however, it was still expected that local authorities should include quantitative analysis of impacts, in terms of reductions to emissions, or (more relevant) in terms of improvements to pollutant concentrations. For some of these measures, this has still proved difficult and (in the case of London Boroughs) dependent upon the outcome of feasibility studies and the release of information into the public domain. For example, the outcome of the London Low Emission Zone (LEZ) Phase II study was reported in November 2003, some 18 months after the receipt of the first action plan for a London authority. This study has proved to be not only of regional importance but one that many authorities outside of the Greater London area have also had interest in, these making decisions with respect to their own feasibility studies pending the release of the results of the London LEZ. In the absence of information on the outcome of the LEZ study, many local authorities have included statements within their action plans merely highlighting their support for an LEZ in principal.

A number of cities outside of London have also considered radical transport planning measures such as an LEZ. In this, they have been faced with uncertainties over costs and operating requirements versus the impact and benefits of such a scheme. In some cases the question has been raised as to whether many, separate local actions, are the most cost-effective and efficient way of addressing the significant number of disproportionately polluting vehicles that have an impact on a national basis. Proposals for national measures, such as vehicle scrapping or ‘retrofit’ schemes have been highlighted in this respect.

A statutory duty of the Act is for local authorities to ‘include a statement of the time or times by or within which the local authority [ ] proposes to implement each of the proposed measures’. By and large, local authorities have provided generic considerations to the implementation time-scales, rather than specific dates for future progress reporting. Where reliance on the input of external bodies for implementation has been identified, additional uncertainty exists. In general, this has stopped many local authorities making a clear statement as to whether the proposed measures will achieve the air quality objectives.

Evidence elsewhere shows that there is a strong need for possible national schemes. The 2000 report by the Commission for Integrated Transport (CfIT): Pollution from Older Vehicles, considers what can be done to improve the emissions profile of the national fleet in the future through the use of retrofitting schemes, and the use of possible scrappage schemes. Such schemes would aim to accelerate improvements in emissions brought about by technology and tighter emission standards. The report considers various measures for lorries, buses, taxis and cars. In concentrating on the largest vehicle class (i.e. cars) the CfIT report highlights that scrappage schemes used with varying degrees of success in other countries may be equally applicable for use in the UK. Clearly, the air quality benefits of the scheme would be dependent upon the numbers of vehicles scrapped, and on the age of the replacement vehicle. The report highlights that preliminary work undertaken by the Transport Research Laboratory indicates that taking 50% of pre-cat cars off the road should lead to a reduction in average urban concentrations of NO\textsubscript{2} and PM\textsubscript{10} by around 5%. Where AQMAs have been declared on marginal exceedences, such a scheme could prove crucial in terms of local air quality management.

In addition to a national car scrappage scheme, the authors of this report believe that some merit may be derived in Government undertaking a national advertising campaign on the maintenance of vehicles, with particular focus on emissions and resultant air quality issues.
Moreover, driving styles are known to strongly influence the emissions of a vehicle. Consequently, some merit may be additionally gained through the inclusion of considerations to driving styles within a national advertising campaign.

It is too early into the action planning process to state whether the implementation of measures contained within an action plan has brought about real improvements in air quality. Some local authorities have already successfully engaged industrial site owners, which has brought about real improvements in site management (to reduce fugitive dust emissions), whilst additionally bring forward consideration to abatement technologies and associated site improvements. For road traffic, the results of ongoing monitoring programmes will hopefully be able to confirm real improvements as targeted measures are implemented. In relying on the results of monitoring programmes to establish the success of the action plan the dependency of pollution levels on the prevailing meteorology should be recognised. Preliminary results for pollution monitoring in 2003 (with its hot dry summer) has shown the highest pollution levels at a number of continuous monitoring stations for at least 10 years (based on ozone peaks and occurrence), despite significant reductions in pollutant emissions at the national level.

An initial assessment of the expected impact of action plan measures provided so far, suggests that the air quality objective for NO$_2$ will only be achieved within a small proportion of AQMAs by 2005. The number of exceedences is expected to decline significantly by 2010, but even then, some AQMAs will still not meet the objective unless more drastic measures are taken. This assessment is however based on assumptions regarding timescale, funding, and expected improvement to emissions, and is subject to considerable uncertainty.

The Air Quality Strategy highlights that where local action is not enough in working towards meeting the air quality objectives, “the Government and the Devolved Administrations will need to consider national action or supplementary local authority powers”. It might therefore prove beneficial to set up a series of meetings with individual and/or regional groups of authorities to discuss the action planning process and, if relevant, identify any additional actions that may be taken to deliver air quality improvement.

There is a real need to continue the promotion of the action planning process with local authorities. The current Second Round of Review and Assessment will invariably bring forward further declarations of Air Quality Management Areas across the UK. Whilst the formulation of an air quality action plan for some authorities may be a mere formality – having previously submitted action plans for AQMAs located elsewhere in their area – a number of local authorities will not doubt find themselves having to undertake the duty for the first time. It is therefore recommended that Defra considers undertaking a number of regional seminars/workshops to further highlight the process of action planning and promote the role that local authorities have with respect to air quality improvements and the attainment of the air quality objectives. Moreover, it should be emphasised that measures to improve air quality should not be disregarded simply because they cannot be implemented in time to deliver the objectives by the due date.

6.2 Consultation and Joint-Working

The submission of action plans represents the public face of the LAQM regime. To date, most of the review and assessment work has sat largely in Environmental Health departments and, whilst it is a duty to engage the public on technical assessment, responses reported by local authorities have been generally low and disappointing. Local authorities that have embarked on early engagement of relevant stakeholders in the early stages of the review and assessment
process have continued discussions into the current action planning requirements. Where early engagement has not been possible or response rates are relatively low, the submission of an action plan can prove controversial and is wholly dependent upon the public perception and understanding of air quality. Effective consultation invariably reduces the chances of ‘courting controversy’ and has been shown through the workings of local authorities, to increase understanding of air quality issues with the result that air quality is placed higher on the political agenda.

Many local authorities have reported successful internal working between departments through the use of Working Groups. In addition, an increased number of Regional Groupings have occurred in recent years in response to the LAQM regime, with at least one regional action plan being submitted (Greater Manchester). In London, The Mayor is effectively taking the co-ordinating role in action planning through the Air Quality Strategy, ensuring consistency among London Boroughs with respect to measures and approaches. Success of the workings of certain Regional Groupings has been recognised through the wider environmental issues being covered by a number of Groups, beyond that of air quality.

Working with external organisations (including upper-tier authorities (County Council) and the Highways Agency) has proved less effective, with a number of authorities reporting disappointing response rates and a general lack of interest in air quality issues. The scale of this problem is evident from the fact that of the 120 AQMAs declared so far, about 50 of these relate directly to traffic emissions from trunk roads under the management of the Highways Agency. It is believed that two issues may have confounded this problem:

- **Lack of understanding by the Highways Agency at a regional level of the LAQM process.** The importance of air quality has not been recognised, and in some cases the HA have been reluctant to accept the conclusions of the local authority review and assessment reports. The decision by 9 local authorities to revoke their AQMAs in proximity to motorways as a result of their Stage 4 review and assessment may have served to confound this opinion.

- **Lack of a dedicated air quality specialist within the HA to deal with highly technical queries fielded by local authorities.** The recent appointment of a permanent post within the HA to deal with air quality issues appears to have significantly improved dialogue.
7. RECOMMENDATIONS

This section provides a consolidated list of recommendations to Defra and the Devolved Administrations. These recommendations are based on the observations of the Casella Stanger and TTR team from the appraisal of action plans and Helpdesk queries, and the outcome of the consultation exercise with the local authorities:

7.1 AQAP Process

R1: Issue guidance to local authorities stating that the action plan should include a summary of the Stage 4 conclusions (unless submitted as a joint report).

R2: Set indicative deadlines for the submission of the final action plan following the draft action plan. This could be tracked on the database, with reminder letters sent by the Appraisal Team or by Defra/Devolved Administrations. There is concern that some authorities have submitted ‘weak’ action plans at a draft stage simply to comply with deadlines, or that critical issues identified in the appraisal are not followed up.

R3: Undertake a repeat evaluation of the appraisal process for action plans in order to establish that local authorities are obtaining the best value from the action planning appraisal team.

7.2 Guidance

R4: Provide additional guidance to local authorities on what is required for the assessment of cost-effectiveness and the wider scale impacts. This could take the form of an expanded FAQ and examples of best practice. A number of local authorities have not clearly understood what is required of them for these elements of the action planning process.

R5: Provide additional examples of best practice on working between local authorities and external organisations (e.g. the Highways Agency). These could be drawn from existing action plans subject to the authority’s approval.

R6: Promote best practice related to s106 agreements with developers to fund remedial measures (such as Green Travel Plans etc). This could take the form of an information pack.

R7: Undertake a series of bilateral meetings with individual and/or regional groups of local authorities. These meetings should seek to encourage the implementation of the measures proposed in the existing action plan and, if relevant, seek to identify additional actions that may be taken to improve local air quality.

R8: Organise a series of seminars/workshops on a regional basis to outline the action plan process. This should reinforce the importance that Government places on the LAQM process and the role that local authorities have to play, and provide guidance to the principal difficulties that are encountered. It should also be used to emphasise to authorities that measures to improve air quality should not be disregarded simply
because they cannot be implemented in time to deliver the objectives by the due date. In addition to recommendations set out above, issues that should be covered include:

- Remind and encourage authorities to use their draft action plans to influence the preparation of the new LTP (2006-2011) and the LTP annual progress report;
- Advise on consultation process, highlighting examples that have worked well

**R9:** Defra and the Devolved Administrations to write to all Chief Executives of local authorities with AQMAs to remind them of their important role in improving air quality and achieving the objectives. Issues related to the ‘corporate ownership’ of air quality should be emphasised.

### 7.3 National issues and external agencies

**R10:** Defra to write to County Councils (where appropriate) to remind them of the LAQM process, and the role that they are expected to take where they have responsibility for transport planning. Where necessary, consider use of powers of direction.

**R11** Consider national measures such as vehicle scrapping or ‘retrofit’ schemes in order to clean up the vehicle fleet. The CfIT report “Pollution from Older Vehicles” indicates that by taking 50% of pre-CAT cars off the road could lead to a 5% reduction in urban NO₂ concentrations. National action to deal with then older, and more polluting vehicles, is likely to be more cost-effective than numerous local initiatives.

**R12** Prepare a national advertising campaign on vehicle maintenance and driving styles. Whilst the outcome of many roadside emissions testing schemes have been inconclusive in terms of issuing fines, the publicity campaigns have been effective in highlighting issues to the public. This could build upon the LGAs “Don’t Choke Britain” campaign which is run successfully each year.

**R13** Encourage DfT to examine the costs, benefits and air quality impacts of reducing speed limits on sections of the national road network.

**R14** Defra to establish a platform to facilitate involvement by external organisations, in particular the Highways Agency (and the Assembly’s Transport Directorate in the case of Wales). This should:

- Encourage local authorities to flag issues at an early stage to the Helpdesk, where problems are occurring;
- Request that the Highways Agency provide a regular update on measures being taken within all relevant AQMAs. Advise local authorities that these measures are being tracked at a national level;
- Defra and the Highways Agency to facilitate local groups to co-ordinate development and progress of the action plan, where required.
ANNEX 1: LOCAL AUTHORITY QUESTIONNAIRE
EVALUATION OF AIR QUALITY ACTION PLANS

Defra, the Welsh Assembly Government and the Mayor of London are preparing an evaluation report on Air Quality Action Plans which will be published in early 2004. The report will summarise the outcome of action plans submitted to date, the principal measures that are being taken by local authorities and other bodies to improve air quality, and any constraints to the action plan process.

Local authority action plans are viewed as an essential part of the overall process in helping Defra and the Welsh Assembly Government attain the limit values set out in the EC Directives, and we are keen to identify any actions that could be taken at central or local level to improve the process. As part of this evaluation exercise, we would value feedback from those local authorities that have been engaged in the preparation of action plans.

It is not intended that this should be an onerous process, and at a simple level we would be grateful to seek views on the top 5 issues or processes that worked well in the development of the action plan, and the top 5 issues or processes that caused major difficulties or were not possible to resolve or implement. Where applicable, we would also appreciate more detailed feedback on the specific issues set out below, if you believe that this would be informative.

Responses should be sent to:

Stephen Parkinson
Zone 4/ E13
Ashdown House
123 Victoria Street
London SW1E 6DE

Fax: (020) 7082 8385
Email: stephen.parkinson@defra.gsi.gov.uk


Any responses received will be used to inform the evaluation process; it is not intended that these responses will be made publicly available, or that individual authorities be named in the report.
Specific Issues

7.4 Effectiveness of action plans

In order to ensure that action plans are effective, local authorities are asked to evaluate the main sources of the air pollution; to assess the options and measures that are available to reduce pollutant emissions; to assess the cost-effectiveness of their proposed measures; to evaluate the wider environmental, economic and social consequences of the action measures, and; to quantify the impact of the action plan and indicate whether the plan will result in meeting the air quality objectives by the due date.

- Have the conclusions of the review and assessment report allowed an evaluation of the main sources of air pollution? If not, what has caused the main difficulty?
- Has it been possible to evaluate all of the potential measures that might be used to reduce pollutant emissions? What have been the main constraints to achieving this?
- A detailed cost-benefit analysis is not required, but authorities are asked to rank the main proposed measures in terms of their expected cost and the air quality improvements that they are expected to deliver. Has it been possible to rank the measures in this way? If not, what have been the main constraints?
- Has it been possible to consider the wider scale environmental and social impacts of the proposed measures? If not, what could be done to improve this?
- Has it been possible to confirm the timescale for the implementation of the proposed measures, and to quantify the emissions improvement that they will bring? What difficulties and constraints have been involved in this process?
- Is the action plan been able to conclude whether the air quality objectives will be met? If not, what is the reason for this?

7.5 Liaison and interaction – local government and the public

Air quality issues need to be dealt with in a corporate and multi-disciplinary way, often requiring the input and endorsement of all parts of the council. Local authorities must also consult with neighbouring authorities to ensure that there are no adverse ‘knock-on’ effects:

- Has the action plan been developed in co-operation with other departments within the council? How was this process achieved, and what obstacles (if any) prevented effective working?
- How was the consultation with neighbouring authorities accomplished (e.g. formation of a regional group etc.)?
- What methods were used to engage the public in the consultation process? How successful was the public consultation?
7.6 Liaison and interaction – other organisations

In many cases, the actions that are required to improve air quality may lie outside of the local authority's remit, e.g. in the case of industrial processes regulated by the Environment Agency; motorways or trunk roads regulated by the Highways Agency etc:

- What process or mechanism was used to liaise with the regulatory authority?
- What constraints or limitations arose during the preparation of the action plan? Did these constraints hinder or prevent the submission of a timely or adequate action plan?
ANNEX 2: LOCAL AUTHORITIES RESPONDING TO QUESTIONNAIRE
List of local authorities that provided a response to the evaluation questionnaire

Birmingham City Council
Bolsover District Council
Boston District Council
Bromsgrove District Council
Broxbourne Borough Council
City of London
Colchester Borough Council
Dartford Borough Council
Dudley District Council
Gravesham District Council
Herefordshire Council
Liverpool City Council
London Borough of Camden
London Borough of Croydon
London Borough of Enfield
London Borough of Hammersmith and Fulham
London Borough of Hillingdon
Norwich District Council
Oadby & Wigston District Council
Oldham Borough Council
Oxford City Council
Rotherham Metropolitan Borough Council
Royal Borough of Kensington and Chelsea
Sheffield City Council
South Kesteven District Council
South Lakeland District Council
South Somerset District Council
Spelthorne Borough Council
St Albans District Council
Tonbridge & Malling District Council
Warrington District Council
Westminster City Council
Wokingham District Council
Wycombe District Council
ANNEX 3: KEY IMPLEMENTATION MEASURES
<table>
<thead>
<tr>
<th>Local Authority</th>
<th>Main intervention proposal</th>
<th>Time-scale for implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Westminster City Council</td>
<td>Borough Spending Plan and LEZ</td>
<td>2006</td>
</tr>
<tr>
<td>London Borough of Croydon</td>
<td>Borough Spending Plan and LEZ</td>
<td>2006 onwards</td>
</tr>
<tr>
<td>London Borough of Camden</td>
<td>Borough Spending Plan and LEZ</td>
<td>2005</td>
</tr>
<tr>
<td>London Borough of Southwark</td>
<td>Borough Spending Plan and LEZ</td>
<td>2005</td>
</tr>
<tr>
<td>South Lakeland District Council</td>
<td>LTP – comprises road layout changes, increased cycle network, Park &amp; Ride, improved local transport, changes to town centre parking</td>
<td>2003/ 2004</td>
</tr>
<tr>
<td>Dartford Borough Council</td>
<td>Speed restrictions – intervention by Highways Agency for implementation</td>
<td>Yet to be agreed (2004)</td>
</tr>
<tr>
<td>London Borough of Greenwich</td>
<td>LEZ and Roadside emissions testing</td>
<td>2005</td>
</tr>
<tr>
<td>London Borough of Barnet</td>
<td>Borough Spending Plan and LEZ</td>
<td>2005 onwards</td>
</tr>
<tr>
<td>Fenland District Council</td>
<td>Emissions abatement through authorization – EA role</td>
<td>2002 – 2005 dependent upon EA involvement</td>
</tr>
<tr>
<td>Royal Borough of Kensington and Chelsea</td>
<td>LEZ</td>
<td>2004 onwards</td>
</tr>
<tr>
<td>London Borough of Richmond Upon Thames</td>
<td>LEZ</td>
<td>Not given</td>
</tr>
<tr>
<td>Cardiff County Council</td>
<td>LTP plus additional measures aimed at traffic reduction, modal shifts and reduced emissions</td>
<td>2002/ 2003</td>
</tr>
<tr>
<td>London Borough of Lambeth</td>
<td>LEZ, roadside emissions testing and promotion of alternative fuels</td>
<td>2003 – 2005 onwards</td>
</tr>
<tr>
<td>London Borough of Merton</td>
<td>LEZ, roadside emissions testing</td>
<td>2005 onwards</td>
</tr>
<tr>
<td>Stoke on Trent City Council (Fenton AQMA)</td>
<td>Local Air Quality Strategy – planning decisions and LAPC enforcement</td>
<td>Summer 2003</td>
</tr>
<tr>
<td>North Warwickshire Borough Council</td>
<td>LTP and intervention by Highways Agency</td>
<td>2005/ 2006</td>
</tr>
<tr>
<td>Thurrock Council</td>
<td>Promotion of clean technologies and roadside emissions testing</td>
<td>2002 – 2005</td>
</tr>
<tr>
<td>Wycombe District Council</td>
<td>Speed restrictions – intervention by Highways Agency for implementation</td>
<td>Not given</td>
</tr>
<tr>
<td>London Borough of Ealing</td>
<td>LEZ and Roadside emissions testing</td>
<td>2003 – 2005</td>
</tr>
<tr>
<td>Tonbridge and Malling Borough Council</td>
<td>Speed restrictions – intervention by Highways Agency for implementation</td>
<td>Not given</td>
</tr>
<tr>
<td>Local Authority</td>
<td>Main intervention proposal</td>
<td>Time-scale for implementation</td>
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<tr>
<td>-----------------------------------------------</td>
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</tr>
<tr>
<td>Neath Port Talbot County Borough Council</td>
<td>Emissions abatement through authorization – EA role</td>
<td>2003</td>
</tr>
<tr>
<td>Doncaster Metropolitan Borough Council</td>
<td>Vehicle emissions testing</td>
<td>2003, feasibility for LEZ</td>
</tr>
<tr>
<td>London Borough of Islington</td>
<td>LEZ, freight management (lorry control areas), roadside emissions testing</td>
<td>Not given</td>
</tr>
<tr>
<td>Warrington Borough Council</td>
<td>Speed restrictions – intervention by Highways Agency for implementation</td>
<td>2004 – 2006</td>
</tr>
<tr>
<td>Corporation of the City of London</td>
<td>LTP, traffic reduction and LEZ</td>
<td>Ongoing, 2003, 2005 onwards</td>
</tr>
<tr>
<td>London Borough of Waltham Forest</td>
<td>LEZ and Roadside emissions testing</td>
<td>Not given</td>
</tr>
<tr>
<td>London Borough of Hammersmith &amp; Fulham</td>
<td>LEZ, roadside emissions testing and promotion of alternative fuels</td>
<td>2003/2005 onwards</td>
</tr>
<tr>
<td>Derby City Council</td>
<td>LTP – roadside emissions testing and LEZ</td>
<td>4 – 5 years</td>
</tr>
<tr>
<td>London Borough of Enfield</td>
<td>LEZ and roadside emissions testing</td>
<td>Ongoing</td>
</tr>
<tr>
<td>Colchester Borough Council</td>
<td>LTP – clear zones, vehicle bans, bus priority and bus quality partnerships</td>
<td>Ongoing</td>
</tr>
<tr>
<td>Leeds City Council</td>
<td>High Occupancy Vehicle lanes and promotion of alternative modes of transport</td>
<td>2006 – 2008</td>
</tr>
<tr>
<td>Hertsmere Borough Council</td>
<td>Speed restrictions – intervention by Highways Agency for implementation</td>
<td>Yet to be agreed (2004)</td>
</tr>
<tr>
<td>Oxford City Council</td>
<td>Reduction in emissions and consideration of a LEZ</td>
<td>Further consideration required</td>
</tr>
<tr>
<td>Spelthorne Borough Council</td>
<td>Traffic reduction plus Highways Agency intervention</td>
<td>Further consideration required</td>
</tr>
<tr>
<td>London Borough of Newham</td>
<td>Local Implementation Plan and support for LEZ</td>
<td>2003 - 2004</td>
</tr>
<tr>
<td>Sheffield City Council</td>
<td>MI Widening, speed reduction, area charging and variable message signing, Local Transport Plan</td>
<td>Needs further consideration</td>
</tr>
<tr>
<td>Oswestry Borough Council</td>
<td>Road widening</td>
<td>Needs further clarification</td>
</tr>
<tr>
<td>Local Authority</td>
<td>Main intervention proposal</td>
<td>Time-scale for implementation</td>
</tr>
<tr>
<td>--------------------------------------------------------------</td>
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<td>---------------------------------------------------</td>
</tr>
<tr>
<td>Greater Manchester Authorities</td>
<td>Local Transport Plan, support for feasibility study into Manchester LEZ, Freight Quality Partnerships, regulation of taxi exhaust emissions</td>
<td>Needs further clarification</td>
</tr>
<tr>
<td>Bolton MBC, Bury MBC, Manchester CC, Oldham MBC, Rochdale MBC, Salford MBC, Stockport MBC, Tameside MBC, Trafford MBC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maidstone Borough Council</td>
<td>Speed restrictions and/or reductions in HGVs</td>
<td>Ongoing</td>
</tr>
<tr>
<td>London Borough of Haringey</td>
<td>London LEZ and Borough Spending Plan</td>
<td>Ongoing</td>
</tr>
<tr>
<td>Kings Lynn &amp; West Norfolk, Borough Council of</td>
<td>Increased regulation, Best Available Techniques</td>
<td>Ongoing</td>
</tr>
<tr>
<td>Barnsley Metropolitan Borough Council</td>
<td>Local Transport Plan, speed restrictions on the M1 and road infrastructure and improvement programmes</td>
<td>April 2005</td>
</tr>
<tr>
<td>London Borough of Tower Hamlets</td>
<td>LEZ and Borough Spending Plan</td>
<td>End of 2003</td>
</tr>
<tr>
<td>London Borough of Harrow</td>
<td>Borough Spending Plan – reduced congestion, use of public transport, ‘soft’ measures</td>
<td>Not given</td>
</tr>
<tr>
<td>London Borough of Wandsworth</td>
<td>Borough Spending Plan, Mayor’s Transport Strategy and London LEZ</td>
<td>Ongoing</td>
</tr>
<tr>
<td>Sedgemoor District Council</td>
<td>Increase regulation</td>
<td>Not given</td>
</tr>
<tr>
<td>Rotherham Metropolitan Borough Council</td>
<td>Local Transport Plan, speed restrictions on the M1 and road infrastructure and improvement programmes</td>
<td>Uncertain due to Highways Agency involvement for M1 route corridor.</td>
</tr>
<tr>
<td>London Borough of Brent</td>
<td>LEZ and Borough Spending Plan – reduced congestion, use of public transport, ‘soft’ measures</td>
<td>Ongoing</td>
</tr>
<tr>
<td>Broxbourne Borough Council</td>
<td>Dependent upon outcome of discussions with Highways Agency. Reduction in HGVs, total vehicle reduction (25%) and speed increase in traffic through tunnel.</td>
<td>Generic (already exists, or 3-5 year periods)</td>
</tr>
<tr>
<td>Bristol City Council</td>
<td>LTP plus reduced emissions; improved road management.</td>
<td>3 – 6 years from date of plan (2003)</td>
</tr>
<tr>
<td>Local Authority</td>
<td>Main intervention proposal</td>
<td>Time-scale for implementation</td>
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<tr>
<td>Bromsgrove District Council</td>
<td>Junction upgrade (M42)</td>
<td>Dependent upon HA involvement</td>
</tr>
<tr>
<td>St. Albans District Council</td>
<td>Dependent upon outcome of discussions with Highways Agency. Reduction in HGVs, total vehicle reduction (20%), screening.</td>
<td>Dependent upon HA involvement</td>
</tr>
<tr>
<td>Salisbury District Council</td>
<td>Local Transport Plan – Park &amp; Ride schemes</td>
<td>Generic</td>
</tr>
</tbody>
</table>
REPORT STATEMENT

Casella Stanger completed this report on the basis of a defined programme of works and within the terms and conditions agreed with the Client. This report was compiled with all reasonable skill and care, bearing in mind the project objectives, the agreed scope of works, prevailing site conditions and degree of manpower and resources allocated to the project as agreed.

Casella Stanger cannot accept responsibility to any parties whatsoever, following issue of this report, for any matters arising which may be considered outside the agreed scope of works.

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