

**REPORT TO
DIRECTORS – 12th October, 2000
CABINET – 17th October, 2000**

Report of: Director of Environmental Services

Subject: Proposed Air Quality Management Areas

Recommendations: Salford supports the partnership approach to Air Quality Management currently being undertaken by the ten GM Authorities and Warrington, and recommends to:

- (i) Continue to work together on Air Quality Management;
- (ii) Take part in a co-ordinated consultation exercise across the whole of the GM area, commencing in November, 2000;
- (iii) Support a joint approach to the declaration of Air Quality Management Areas and the production of Action Plans within the GM area.

Contact Officers: Joanne Miller, Principal Officer, Pollution Control,
Environmental Services: 0161 793 2143

1.0 PURPOSE OF THIS REPORT

This report aims to summarise the results of the Air Quality Review and Assessments for the Salford and the other Greater Manchester Authorities and propose Air Quality Management Areas. The report also outlines the consultation process for Greater Manchester Authorities.

2.0 INTRODUCTION

The government has set health-based standards for seven of the main pollutants. These pollutants are – nitrogen dioxide (NO₂), fine particles (PM₁₀), sulphur dioxide, carbon monoxide, benzene, 1,3 butadiene and lead. Local authorities are required under Part 1 of the Environment Act 1995, to review and assess air quality within their area to determine whether air quality objectives are likely to be exceeded between the years 2003 and 2008. Any areas that will not achieve the objectives will be declared Air Quality Management Areas (AQMA).

The review and assessment process has 3 stages requiring a combination of monitoring air pollution, use of emission inventories and air quality modelling packages. The deadline for the Department of the Environment Transport and the Regions has extended the third stage to December 2000 (DETR). Where an AQMA is declared, an action plan needs to be produced, showing the steps to be taken towards meeting the objectives. This plan will cover the whole of Greater Manchester, a wider area than the AQMA's

3.0 LINKS WITH OTHER STRATEGIES

3.1 *Local Transport Plan (LTP)*

The Local Transport Plan, produced jointly by the 10 Greater Manchester Authorities, is an overall strategy to control the transport networks across our area. The whole aim of the plan is to provide a sustainable transport strategy.

Road transport has been identified within Greater Manchester as a major contributor to air pollution. Within the area cars and other vehicles currently contribute to 61% of Oxides of Nitrogen, 36% of fine particles and 94% of Carbon Monoxide.

The first full 5 year Local Transport Plan was submitted to DETR/GONW (Government Officer North West England) in July 2000. All authorities are collaborating on the production of a Greater Manchester LTP, one objective of the plan is to improve Air Quality. It will include traffic reduction measures and public transport priority proposals (for example Metrolink and Quality Bus Corridors) across the county. Joint working arrangements have been made with the LTP working groups.

3.2 *The Strategic context: AGMA Strategic Planning Framework*

The context for dealing with air quality issues in the review of UDPs is set out in the AGMA Strategic Planning Framework.

The Framework indicates that the aim of strategic planning policies is to achieve an urban form within the conurbation which ensures that people have easy access by walking, cycling and public transport to jobs and local facilities, thus reducing the overall need for longer trips, and also ensures that they are well connected to urban centres by public transport.

The way in which this will be achieved is set out in the Framework and involves the promotion of compact, mixed use urban neighbourhoods based around local facilities and located especially within the conurbation core, the inner core of the surrounding towns and along high frequency public transport corridors which connect urban centres. In addition, activities generating large numbers of trips will be located where they can best be served by public transport at focal points on the network.

It is important to present improvements to air quality, resulting from this approach to urban renaissance, as a positive feature of strategic policies. This wider strategic context the AGMA Strategic Planning Framework is the starting point for any approach to improving air quality from a planning and land use perspective.

3.3 *Unitary Development Plans (UDP's)*

The UNITARY DEVELOPMENT PLAN REVIEWS will provide the opportunity to address air quality issues over a much longer term than the LTPs. One of the objectives of a UDP is that development meets environmental standards, such as air quality. This will be by bringing forward proposals for the allocation of land uses, especially those which generate trips. Thus by making recommendations on allocations or developments which have the effect of reducing trips and hence traffic volumes, there will be a consequent improvement in air pollution.

Close working with Planning Authorities can help to ensure that developments are assessed to minimise the impact on air quality, particularly in areas where the air quality objective is exceeded. Developers can consider ways of mitigating potential air

pollution, such as the use of; green transport plans, home delivery services and car sharing for employees. The existence of an Air Quality Management Area does not mean a cessation of development.

4.0 CO-ORDINATED APPROACH TO REVIEW AND ASSESSMENT

In order to assess and predict the level of air pollution, air quality modelling is needed. For a consistent approach and to provide better value for money, a regional bid was submitted by Salford Environmental Services, for the 10 AGMA districts and Warrington BC. The total funding spent to date is approximately £200,000, allowing the purchase of a modelling software package, equipment to operate the software and fees for AGMA funded units, Atmospheric Research Information Centre (ARIC) and Greater Manchester Transportation Unit (GMTU) to undertake the modelling exercise.

The Greater Manchester region has had an Emissions Inventory produced, funded by the DETR, which is now being updated by ARIC and GMTU. The emissions inventory, providing information on pollutant sources and emissions has formed an integral part of the modelling initiative. The modelling results show ground level pollution concentrations, to allow comparisons with the national objectives.

The most difficult Objective to meet is likely to be the annual mean for NO₂ of 21ppb. Computer-based predictive modelling of any kind has some uncertainty associated with the results, and as a precautionary approach account was made for the model standard deviation. This meant that the areas which were predicted to exceed 21ppb, and additionally those predicted to exceed 19ppb (i.e. likely to exceed the Objective, within the uncertainty of the modelling) were shown on the map.

The results from the modelling exercise have been produced on a digitised map, showing the areas of exceedence for the Greater Manchester area. GMTU have produced the map by first digitising the modelled areas provided by ARIC. These areas have been used on the map without alteration. The areas in between the modelled areas have then been extrapolated by the computer, followed by manual correction of anomalies by using the modelled data and GMTU's knowledge of the road system, traffic flows etc. The value of this approach is the consistency of analysis across the conurbation based upon objective criteria.

5.0 RESULTS OF THE REVIEW AND ASSESSMENT

Salford Environmental Services have completed the detailed study of air quality. The results show that out of the seven pollutants the government objectives for nitrogen dioxide and fine particles are not likely to be met. The completed map identifies areas where the NO₂ standard is likely to be exceeded. The problem areas identified all relate to transport generated pollution and are closely linked to the major arterial transport routes for the region. Results for fine particles show that the areas of exceedence are far smaller than for NO₂, but fall within the same areas. They tend to be localised hot spots.

The results show that there are areas where the standards are likely to be exceeded and therefore AQMAs will need to be declared.

6.0 EXTENT OF AN AIR QUALITY MANAGEMENT AREA

The areas where there are likely exceedences are widespread; the important thing to consider is trying to identify a solution to the problem. The Air Quality Steering Group

have considered all the issues in relation to declaring AQMA's and feel that the best way forward for GM would be to declare AQMA's for all the areas exceeding the 19ppb level. The following criteria have therefore been developed for each area to utilise in designating an AQMA:

- The area shall be based fundamentally on the contour plot of 19ppb (as shown on the attached map)
- Where there are small isolated areas, seek to join up areas to represent a precautionary approach.
- Where a property is divided by an AQMA the whole property shall be included.
- Where the area is along the centre of a road the properties adjacent to the road shall be included.

Whilst a GM consistent approach is favoured it is up to each individual local authority to undertake the actual declaration of the air quality management area as it affects their Council area.

7.0 THE NEXT STAGE IN THE PROCESS

The next stage in the process of Air Quality Management is for authorities to go out to consultation on the proposed AQMA. It has been agreed that the Greater Manchester Authorities will undertake a co-ordinated consultation exercise across the region.

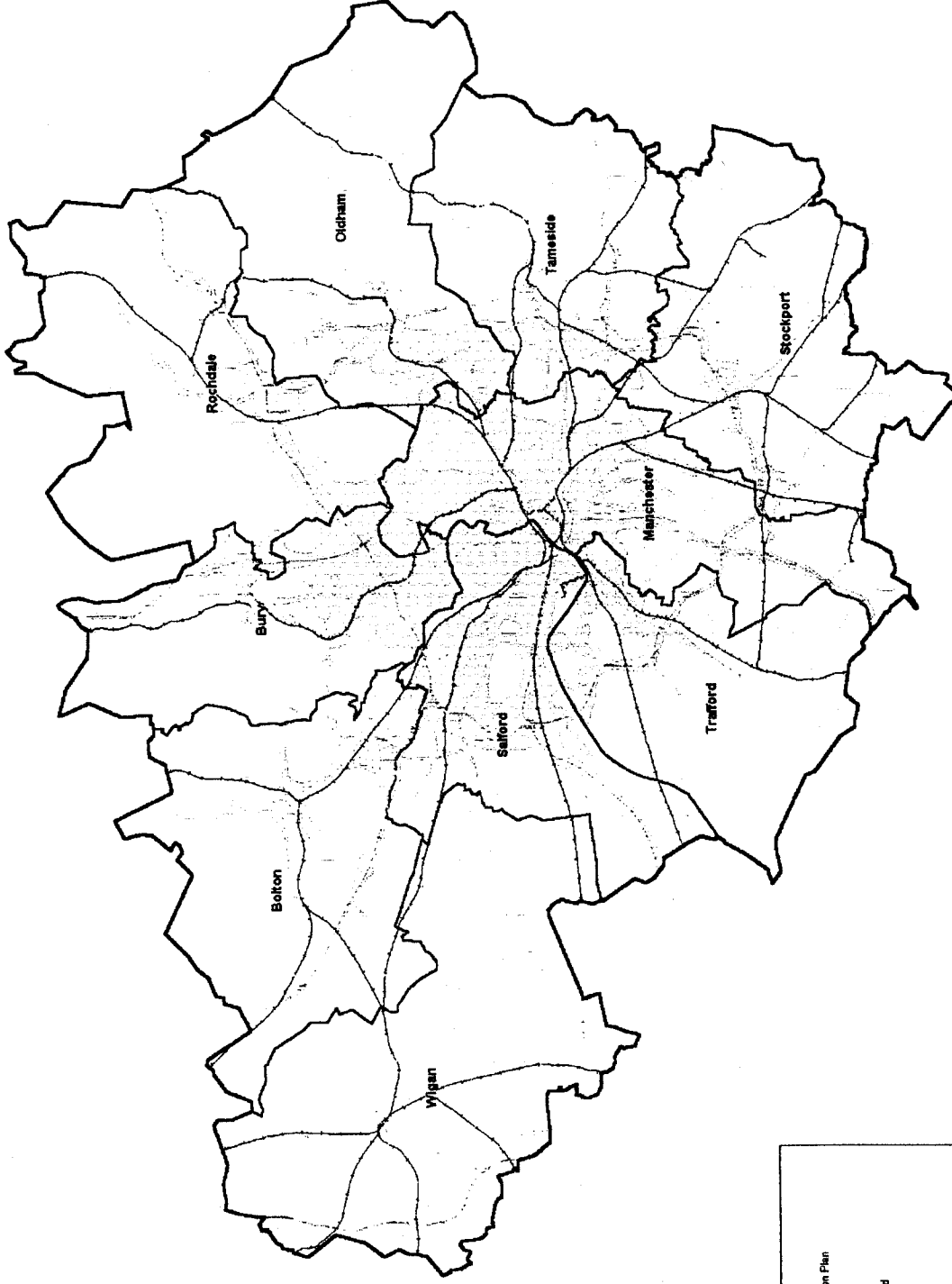
A consultation leaflet, summarising the results of the review and assessment for the whole of Greater Manchester and identifying the scale of the problem and suggesting the AQMA's, has been produced, with 10,000 leaflets per authority. The leaflet has a freepost return card requesting views from the public on the proposed approach. The cost of the consultation exercise is being covered through the SCA3 bid, at approx. £11,000. The Authorities will go out to consultation at the same time, in November, with press releases and the launch of the Manchester Area Pollution Advisory Council (MAPAC) web-site, with an electronic consultation exercise to run concurrent.

The results of the consultation process will be analysed during February, with the aim of declaring AQMA's in March. Authorities then need to produce an Action Plan by March 2002, which will cover a wider area than the AQMA's and is likely to cover the Greater Manchester Area as a whole.

8.0 CONCLUSION

The partnership and multi-disciplinary working of all ten GM Authorities in pursuing their responsibility for air quality management has provided consistency, cost effectiveness and a more strategic approach to this difficult statutory requirement. Continued collaboration is now planned in the consultation and implementation phase of declaring Air Quality Management Areas and producing Action Plans aimed at securing improved air quality within Greater Manchester by 2005.

Proposed Air Quality Management Areas



Based upon the Council's Survey mapping with the permission of the Council of the Greater Manchester Air Quality Authority. The map is not to be used for any other purpose without the written permission of the Council. The map is not to be used for any other purpose without the written permission of the Council. The map is not to be used for any other purpose without the written permission of the Council.