SHERIF MAHMOUD HASSAN

EVALUATION OF THE LOCAL AIR QUALITY MANAGEMENT PROCESS IN GREAT BRITAIN IN ITS SECOND ROUND OF REVIEW AND ASSESSMENT

ABSTRACT

The environment Act 1995 places responsibility on the British local authorities to review and assess air quality in their areas of jurisdiction. Accordingly, local authorities across Great Britain have undertaken two rounds of review and assessment since 1997. The production of this thesis is coincident with the implementation and completion of the second round of Local Air Quality Management (LAQM) in Great Britain. The second round is significantly more prescriptive for local authorities undertaking their LAQM duties. This prescription is reflected in guidance from the Government and the Devolved Administration that takes a stronger role in directing local authorities to consider specific air pollution sources and issues in a more standardised manner. This thesis evaluates the second round of LAQM in the context of increased prescription and explores the capabilities of local authorities to deliver better air quality. It also seeks to identify if any air pollution problems identified by the application of a prescriptive process are function of guidance, increasing pollution levels, or other features relating to local authorities.

A combination of three research methods is adopted: questionnaire surveys to British local authorities, secondary analysis of data extracted from local authorities' air quality *review and assessment* reports, and case studies in five British local authorities. The questionnaire surveys and case studies provide insight into technical and managerial aspect of the LAQM process in its second round of review and assessment, whereas the secondary data analysis investigates its outcomes.

Results indicate that local authorities identified a number of new Air Quality Management Areas (AQMAs) during the second round of LAQM. These areas were not identified in the first round of LAQM, which suggest that the enhanced prescription of guidance have led to their identification,

Other factors that contributed to the identification of new AQMAs are the increased technical and managerial capabilities to local authorities and the experience gained from conducting the first round of LAQM. It is apparent from this research that the technical capabilities of local authorities to manage air quality have developed since the first round of review and assessment. However, in some instances more investment in air pollution monitoring and modelling is required. Results also show that there are signs of good collaborations between local authorities. On the other hand, more collaboration between different departments within local authorities is required. The thesis concludes with a suite of recommendations for the future practice of air quality management and for the future research in air quality management