1 What is an Environmental Management System?

1.1.1 An Environmental Management System (EMS) is the system by which a company controls the activities, products and processes that cause, or could cause environmental impacts and in doing so minimises the environmental impacts of its operations. Environmental Management Systems are very much related to quality management systems. They are mechanisms that provide for a systematic and cyclical process of continual improvement.

2 What is ISO14001?

2.1.1 ISO 14000 is a series of international standards for environmental management. ISO14001 is the first in the series and specifies the requirements of an EMS (not environmental performance which will be different for each organisation). It applies to any organisation that wishes to improve and demonstrate its environmental performance to others through the presence of a certified EMS. ISO14001:2004 is the latest version.

2.2 Certification

2.2.1 The process of auditing the EMS for compliance to the standard entails checking that all of the necessary components of a functioning system are present and working properly. The certification process involves the following major steps.

1. Preliminary Assessment

This entails undertaking a gap analysis between the EMS and the main requirements of ISO 14001 and generally helps identify problem areas before the main certification assessment.

2. Document Review

This is an off-site audit of the EMS documentation to ensure that the essential documents such as an environmental policy, objectives and targets, registers, procedures etc. are present and properly prepared.

3. Initial Assessment

Having passed the document review and implemented any recommendations made, a site visit is conducted to ensure preparedness for the main assessment and allow the certifier to gain a better understanding of the EMS and those involved with it.

4. Main Assessment

The main and most in-depth assessment of the EMS is conducted after allowing for changes to the system in the light of any findings from the initial assessment and document review. It takes place on site over several days.

5. Certification (Registration)

If the main assessment is successful, a certificate is issued by the accrediting certifier. The certifier then notifies the national body responsible for overseeing ISO 14001 in England.

6. Surveillance

Once certified, the EMS is assessed periodically by the certification body to ensure its continuing conformance to the requirements of ISO 14001.

3 Implementation - What this means for the DfE

- 3.1.1 DfE has achieved certification of it's EMS to ISO14001:2004 standard and this involved a structured four stage cycle based on:
 - Planning;
 - Implementation and Operation;
 - Checking and Corrective Action; and
 - Management Review.

3.2 Planning

- 3.2.1 This is the most intensive and critical phase which entails development and completion of the following:
 - Initial Environmental Review (IER);
 - Register of environmental Aspects and Impacts;
 - Corporate Environmental Policy;
 - Register of environmental Legislation and Regulation;
 - Environmental Objectives and Targets;
 - Environmental Management Programme.

3.3 Implementation and Operation

- 3.3.1 The implementation and operation phase covers the development and implementation of the following:
 - Organisational structure and responsibilities;
 - Environmental procedures;
 - Environmental training and awareness;
 - Environmental communication;
 - Environmental Management Manual;
 - Document control;
 - Operational control;
 - Emergency preparedness and response.

3.4 Checking and Corrective Action

- 3.4.1 This phase covers the activities needed to maintain a functional EMS and includes:
 - Monitoring and measuring;
 - EMS non-conformance, correction and prevention;
 - Environmental records;
 - EMS audit.

3.5 Management Review

- 3.5.1 The management review assesses whether the EMS is adequate, appropriate and effective in relation to the organisation's overall intentions to improved corporate environmental performance. The review must assess the need to revise and improve the environmental policy, objectives and targets, environmental management programmes and other key components of the EMS in light of:
 - EMS Audits;
 - The degree to which the environmental policy has been followed;
 - The degree to which objectives and targets have been realised;
 - The efficacy of environmental management programmes and procedures;
 - Changing circumstances;
 - The views of stakeholders;
 - The intention to continually improve environmental performance.