



PREPARING FOR YOUR COURSE WITH BV ASSOCIATES LIMITED

NEBOSH National Certificate in Environmental Management

Contents:

About the NEBOSH Certificate in Environmental Management	3
EC2 Environmental Safety Practical Application	6
Use of Command Words	7
NEC Pre-Course Reading Guide	11

Annexes:

About the NEBOSH National Certificate in Environmental Management

Overview

A globally recognised qualification for those who have Environmental Management responsibilities or anyone wishing to have a career in this area. The NEBOSH Certificate in Environmental Management covers the principles of environmental management and is relevant for both UK and international markets.

NEBOSH qualifications are developed based on extensive research with health and safety professionals, employers, professional bodies and regulators to ensure that they remain relevant, rigorous as well as achievable and practical.

This qualification is for anyone who needs to gain a sound understanding of the principles of environmental management and is relevant for both UK and international markets.

For some, the NEBOSH Environmental Certificate is a crucial first step towards establishing a lifelong professional career in environmental management. Many who take their Environmental Certificate progress on to a NEBOSH Environmental Diploma.

Around two thirds of health and safety practitioners now have environmental management as part of their overall day-to-day responsibilities at work. The knowledge and understanding gained from the NEBOSH Certificate in Environmental Management can help you if you have these responsibilities.

NEBOSH qualifications can play an important part in ensuring that the health and safety provision businesses have in place is effective. This may explain why so many organisations choose to include NEBOSH qualifications on their competency matrices.

NEBOSH research has shown that 85% of health and safety job advertisements in the UK insisted on candidates holding some form of NEBOSH qualification.

Course summary

The NEBOSH Certificate in Environmental Management consists of two units, each separately assessed:

- EC1: Management and control of environmental hazards
- EC2: Environmental practical application

The qualification covers the practical issues of managing environmental risk. The syllabus takes a risk management approach, based around best practice and international industry standards, including:

- Environmental Management Systems and aspect identification
- Sources and use of energy and energy efficiency
- Control of pollution
- Planning for and dealing with environmental emergencies.

Students will learn how to carry out an environmental review of the workplace and prepare a report to management regarding the review with recommendations for improvement.

No previous environmental management knowledge is required.

EC2: Environmental Practical Application

The aim of this unit is to assess a candidate's ability to complete successfully two activities:

- To carry out unaided an environmental review of a workplace.
- To prepare a report to management regarding the review with recommendations for improvement.

This will require candidates to apply the knowledge and understanding gained from their studies of the elements of Unit EC1 in a practical environment and to carry out an evaluation of information gathered during the review. The time allowed to complete the assessment is not restricted but NEBOSH suggests that candidates aim to complete the review and the report in three hours excluding preparatory work. Please note that the suggested timescales are for guidance only.

The practical application may be submitted in the candidate's own handwriting or be word processed.

The proforma and report should clearly identify:

- The nature and location of each environmental issue.
- The degree of risk associated with the environmental issue.
- Preventative and protective environmental measures already in place.
- The remedial actions, where appropriate, with relevant prioritisation.

Course Assessments

All units are compulsory and assessments must be passed to gain the full qualification.

- Unit EC1 is assessed by a 2-hour exam consisting of 10 short essay answers and 1 long essay answer.
- EC2 is a practical assessment which must be completed within 14 days of sitting the written exam.

You will be sent an email containing the latest NEBOSH Templates once your course has started. The requirement will be explained to you during your course. If you wish to read in to the requirement prior to your course the NEBOSH Practical Guidance Notes can be found as a separate document in our Student Zone.

Our guide to completing your NEBOSH Practical

The DO's	The DON'Ts
Do: Read the NEBOSH Guide in your Student Zone or sent to you by email before picking up your pen.	Don't: Forget that the overall aim of the report is to persuade management.
Do: Pay attention to the marking scheme and plan accordingly	Don't: Scrimp on the high mark percentage areas - namely the observation sheets which account for 30 - 100 marks available.
Do: Demonstrate your knowledge and understanding of the various regulations that may have been breached.	Don't: Breeze over the conclusions and recommendations section of the report as it is also worth 30 marks.
Do: Utilise all of your H&S knowledge - including relevant safety regulation.	Don't: Forget to sign the declaration that your submission is all of your own work - your signature can be electronic.
Do: Check back through the marking scheme to satisfy yourself that you've done all that you have been asked for.	Don't: Repeat a hazard as you will only be awarded one point for it - go for a broad spread of hazards instead.
Do: Be sure to get your completed practical in on time.	Don't: Neglect to consider the measures needed to retain control.
Do: Identify more than 20 uncontrolled hazards (But always less than 30)	Don't: Scrimp on the introduction. Paint a picture in words of the inspection site including a description, location, size and the number of people working there.
Do: Include a couple of hazards where the control measures are sufficient	Don't: Reply on general recommendations such as stating "safety training required" - be specific.
Do: List the immediate controls for each hazard itself.	Don't: Forget to add medium and long term hazard controls.
Do: Distinguish between symptoms and the root causes of hazards	Don't: Use acronyms or abbreviations.
Do: Follow the recommended report format. There are no points for originality!	Don't: Write less than 500 words and try to keep under 1000 - review your work and remove any waffle or repetition.
Do: Write your executive summary last and be sure to include all key points and findings.	Don't: Feel that you have to know the actual cost of putting your recommendations right - it is sufficient to let the reader know that you are aware that there will be cost implications.
Do: Back up your recommendations with facts and base them on your conclusions - the report is about getting management buy-in, so convince them of your argument!	Don't: Mention anything in your conclusion that you have not mentioned previously. A conclusion is for summing up, not introducing new information.

The Use of Command Words

The phrase 'command word' is used to refer to the words specifically associated with the learning outcomes and assessment objectives of a qualification. Since learning outcomes are concerned with what students can do at the end of a learning activity, command words are action (active) verbs. The command words used follow Bloom's taxonomy of educational objectives and as such are instructional terms that indicate the level of thinking and type of performance that is required of students.

This section concentrates on command words used for NEBOSH Certificate qualifications.

Learning outcomes

NEBOSH produces a guide, which includes the syllabus, for each qualification. The syllabus is broken down into individual units and each unit into elements. Each element has clear learning outcomes. Command words are used in the learning outcomes to indicate what is required of students in relation to each item of content.

Example learning outcome:

Unit NGC1: Management of health and safety Learning outcome 1.2

Explain the moral and financial reasons for promoting good standards of health and safety in the workplace.

Questions

Only questions that assess the learning outcomes established in the syllabus can be set. Questions are written to discover not only how much of a subject a student knows but also the associated skills that they are expected to demonstrate. Marks are then based on how effectively these skills are demonstrated. Command words are the guides in the question as to what assessment skill is being targeted by that question. Certificate questions will predominantly assess knowledge, comprehension and application.

Knowledge requires an ability to recall or remember facts without necessarily understanding them. Command words used in knowledge based questions include identify.

Comprehension requires an ability to understand and interpret learned information.

Command words used in comprehension based questions include explain.

Application is the skill of being able to take knowledge and apply it in different contexts and circumstances in order to understand why and where problems and issues arise. The important thing to remember is that whatever the context, e.g. a transport company, a communications centre or an oil refinery, the principles being assessed are the same, but will have different implications given the different industry or issue being considered.

Command words used to assess application include outline and explain.

Command words are used very carefully and each question has a certain order of words to try to enable candidates to understand what Examiners are looking for. In every question the skills required by the specific command words are also reflected in the marks allocated for

the question. In general, there are going to be more marks available for application and comprehension skill questions than for knowledge based questions.

Understanding the command words in a question is the key to success in answering it. The command word indicates the nature of answer and the skills being assessed.

NEBOSH Certificate qualification command words

The following definitions are included for a common understanding of the command words used in the compilation of Certificate question papers.

Command Word	Definition
Identify	To give reference to an item, which could be its name or title. NB: normally a word or phrase will be sufficient, provided the reference is clear.
Give	To provide short, factual answers. NB: normally a single word, phrase or sentence will be sufficient.
Outline	To indicate the principal features or different parts of. NB: an exhaustive description is not required. What is sought is a brief summary of the major aspects of whatever is stated in the question.
Describe	To give a detailed written account of the distinctive features of a subject. The account should be factual, without any attempt to explain. When describing a subject (or object) a test of sufficient detail would be that another person would be able to visualise what you are describing.
Explain	To provide an understanding. To make an idea or relationship clear. NB: this command word is testing the candidate's ability to know or understand why or how something happens. Is often associated with the words 'how' or 'why'.

Accredited course providers are strongly advised to make command word lists available to both tutors and students to ensure a common understanding. Consistent and regular use of command words during teaching and revision will help students develop confidence in taking

Responding to command words in questions

It is important to read the whole question and to understand what the question requires as the command word on its own will need to be reinforced by the remainder of the question. Many candidates miss out on gaining marks because they do not read the question carefully enough and do not think about their answer thoroughly before writing it down. Candidates need to think about each question.

- What is the command word?
- What do I need to say to gain marks?
- What is or is not relevant to the question?

In many cases a brief answer plan is an essential aid to ensuring that answers are well thought out and structured.

NEBOSH applies a 'positive marking' approach where marks are awarded for correct material in candidates' answers, rather than being deducted for incorrect or missing material.

In order to give further direction as to the detail of information required by the command word in a question, examples are given below both for general knowledge and for the NGC1 syllabus.

IDENTIFY

Applying **identify** to a non-syllabus related common subject: Q1. **Identify FOUR** kitchen appliances.

Q2. **Identify FOUR** types of bicycle.

Sufficient answers would include:

A1. Toaster, Electric kettle, microwave cooker dishwasher A2. Mountain bike
Racing bike, Penny-farthing, Tandem

Note that giving only one or two word answers provides a clear reference and therefore is sufficient to satisfy an **identify** question.

Applying **identify** to syllabus subjects:

Q3. **Identify FOUR** hazards associated with excavations.

Q4. **Identify FOUR** mechanical hazards associated with machinery. Q5. **Identify FOUR** types of safety sign.

Sufficient answers would include:

A3. Collapse of the sides, water ingress, falling materials, underground services
A4. Entanglement, drawing in and trapping, friction or abrasion, stabbing or puncture
A5. Prohibition signs Warning signs such as mandatory signs, emergency or safe condition signs

Again, answers are limited to a brief phrase or in some cases just two words but do give clear reference.

OUTLINE

To gain the marks for the **outline** example questions below, the same breadth of answer is required as for an **identify** answer, but now, additional information will be required to satisfy the depth of an **outline**.

Applying **outline** to the same non-syllabus subjects: Q6. **Outline FOUR** kitchen appliances.

Q7. **Outline FOUR** types of bicycle.

Sufficient answers would include:

A6. **Toaster:** Accommodates slices of bread, ejects as toast when ready.

Electric kettle: 1 to 2 litre capacity, boils water. Can be cordless.

Microwave cooker: Heats food rapidly using short wavelength radio waves.

Dishwasher: Dirty tableware placed in baskets. Mixture of high pressure water and detergent automatically cleans.

A7. **Mountain bike:** Robust bicycle with deep tread tyres, suspension and several gear choices.

Racing bike: Lightweight frame with drop handlebars and maybe fixed gearing.

Penny-farthing: Vintage device with very large front wheel and small rear wheel.

Tandem: Bicycle designed for two people with two seats and two sets of pedals.

Applying **outline** to the same syllabus subjects:

Q8. **Outline FOUR** hazards associated with excavations.

Q9. **Outline FOUR** mechanical hazards associated with machinery.

Q10. **Outline FOUR** types of safety sign.

Sufficient answers would include: A8.

Collapse of the sides: Unsupported trench or incorrect angle of the sides.

Water ingress: Through heavy rain or burst water main.

Falling materials: Spoil dug from excavation or materials and tools stored at ground level could fall in.

Underground services: Contact or rupturing of electricity, gas or water utilities. A9.

Entanglement

On rotating parts. **Drawing in and trapping**

Between counter rotation rollers, or pulley belts and wheels. **Friction or abrasion**

Contact with fast moving surfaces. **Stabbing or puncture**

From ejected objects or flying objects. A10.

Prohibition signs: Circular with red border, red diagonal bar and black symbol.

Warning signs: Triangular, yellow background, black border and symbol.

Mandatory signs: Circular, blue background, white border and white symbol.

Emergency or safe condition signs: Rectangular, green background, white border and white symbol.

Again, the **identify** answer (shown in bold) gives the breadth required and the additional information given in the bullet point satisfies the required depth for an **outline**.

DESCRIBE

Applying **describe** to the non-syllabus subjects:

Q11. **Describe** a microwave cooker.

Q12. **Describe** a penny-farthing bicycle.

Sufficient answers would be:

A11. An oblong box shaped object, approximately 30cm tall, 30cm deep and 60cm long. There is a single hinged door at the front, typically see through. The door opens outwards and inside there is a space to place a plate or dish and a microwave transmitter is located above. Outside, on the front there will be normally two controls to set the power and cooking time.

A12. A manually propelled vintage bicycle consisting of a very large wheel at the front and a much smaller wheel at the back. The wheels are connected by a frame that supports a seat above the front wheel and handlebars to steer. Pedals are connected directly to the centre of the front wheel.

Applying **describe** to a syllabus subject:

Q13. **Describe** the mechanical hazards associated with a bench grinder.

A sufficient answer would be:

A13. An entanglement hazard would be associated with the rotating spindle that the abrasive wheel is mounted on. Drawing in and trapping is associated with the gap between the tool rest and the rotating abrasive wheel. Friction or abrasion hazards would be associated with the surface of the rotating abrasive wheel and stabbing or puncture hazards could be created by flying fragments or pieces of ejected broken wheel.

In all of the **describe** answers above, no attempt is made to explain how a microwave cooker heats food, why the front wheel of a penny-farthing is so much larger than the rear wheel or how a person could be injured using an abrasive wheel.

EXPLAIN

Applying **explain** to a non-syllabus subject:

Q14. **Explain** how a microwave cooker heats up food.

Q15. **Explain** why there is a very large front wheel on a penny-farthing.

Sufficient answers would include:

A14. The frequency of microwaves used in a microwave cooker is sufficient to cause water molecules in food to vibrate. Vibrating molecules hit other water molecules and put them into the same vibration and therefore this vibration of molecules is converted into heat.

A15. By having a large front wheel, the peripheral (rim speed) of the wheel is much faster than the rotation of the pedals at the centre. This results in faster forward speed per pedal rotation. Also, a larger wheel is more suitable for riding on cobbled streets or rough ground.

Applying **explain** to a syllabus subject:

Q16. **Explain** how sensitive protective equipment (trip device) can reduce the risk of contact with moving parts of machinery.

A sufficient answer would be:

A16. Sensitive protective equipment is designed to identify the presence of a person or body part within the danger zone of machinery. Examples of such devices include pressure mats and light beams that are connected to the machine controls and would stop the machine rapidly should a person or body part be detected.

GIVE

Applying **give** to a non-syllabus subject:

Q17: **Identify FOUR** European cities **AND give** an example of a tourist attraction in **EACH**.

Sufficient answers would include:

A17. London – eg Buckingham Palace Paris – eg Eiffel Tower Pisa – eg Leaning Tower Rome – eg Colosseum

Applying **give** to a syllabus subject:

Q18. **Identify FOUR** types of safety sign **AND give** an example in **EACH** case.

Sufficient answers would include:

A18. Prohibition signs – eg No smoking Warning signs – eg Caution hot surface
Mandatory signs – eg Wear ear protection

NEC Pre-Course Reading Guide

The pre-course reading for the NEBOSH National Certificate in Environmental Management represents 25 pages of study – see Practitioner Guide to Environmental Law attached (your password for the Student Zone is: w1nn3r) - we have removed many pages so you can focus on just the 44 pages below ahead of your course:

- The Foreword and introduction.
- Section 2.3 The Purpose of the Environmental Regulation
- Section 2.4 The Principle Environmental Regulators
- Section 2.5 The Regulatory Approach
- Section 3.2 What is EMS
- Section 4.1 Guidance for Organisations
- Section 4.2 The Case for Better Compliance Management
- Section 6 Compliance assessment and the relationships between ISO, EMAS and the legal requirements
- Appendix B

You should also research and bring an example of an environmental based event - any country and any period of history.

We would also like all of you to look up and come prepared with your understanding of the following key words used during the course:

- State the meaning of the term Sustainability.
- What are Environmental Aspects under ISO 14001 (cut and paste in to a google search to find)?
- What is a Pollutant?

All of this should take no longer than 2 hours to read/prepare and will put you in good stead ahead of the course. We will fill in the rest ahead of your exams and look forward to welcoming you.

PRACTITIONER

Best Practice Series

Volume 6

December 2005

THE INSTITUTE OF ENVIRONMENTAL
MANAGEMENT AND ASSESSMENT



Managing compliance
with environmental law:
a good practice guide



Entec



iema

Foreword

Environmental laws and regulations provide a cornerstone for protecting the environment from harm; without them, it would be in a much poorer state. Environmental laws provide a brake on the indiscriminate release of noxious substances into the atmosphere and water courses, and help to prevent the destruction of the Earth's natural systems and cycles, habitats and species. As our knowledge of the consequences of polluting releases has developed, so too have the laws and regulations that seek to control those actions that give rise to them. More and more laws to protect the environment are being passed by legislators, with ever stricter emission limits to achieve. The relatively recent introduction of market-based instruments, such as greenhouse gas emissions trading, has provided another dimension to the controls on pollution from organisations.

Organisations have a legal and moral duty to comply with environmental laws and regulations; regulatory compliance is society's licence to operate. Given the complexity of legal requirements regarding environmental protection, however, this is a significant challenge for organisations. The first difficulty comes from finding out what laws and regulations actually apply; followed by the need to understand how they apply and what needs to be done to comply and ensure compliance on an ongoing basis. This takes time and resources, together with strong management, if it is to be done in an appropriate way.

Environmental management systems are a tool by which organisations can manage, amongst other things, their regulatory compliance and improve their regulatory performance. On the face of it, organisations with an EMS should have better regulatory performance compared to those without such strong systems. However, there has been much reported in the environmental press about the failure by some organisations to achieve regulatory compliance on an ongoing basis, even when their EMS is certified to ISO 14001 or registered to EMAS. Much criticism has been levied at the certifiers; UKAS, to its credit, has taken action to improve the way it accredits certification bodies and the IEMA will seek to evaluate how effective this has been in 2006. The REMAS LIFE funded project, a partnership between the Environment Agency, Scottish Environment Protection Agency, the Irish EPA, and the IEMA, is seeking to establish the value of an EMS to regulators and the results, due out in the first quarter of 2006, are eagerly awaited. Both of these initiatives should help to improve the effectiveness of EMS in managing regulatory compliance and performance.

While an EMS cannot guarantee legal compliance (can anything?), if it is effective it should act as a tool so that organisations know their compliance status and corrective and preventative action can be quickly implemented. Regulators, certifiers or members of the public should not be able to find areas of legal non-

Foreword (cont)

compliance that the organisation itself isn't aware of and isn't rectifying. This Guide is part of the IEMA's contribution to assisting organisations in complying with environmental regulations. It sets out what the regulators expect from organisations using an EMS, and provides help and assistance in managing for legal compliance. For those who choose to have their EMS certified to ISO 14001 or registered to EMAS, additional guidance is provided on what certifiers and verifiers expect.

The IEMA's 2005 Environmental Practitioners Survey showed that 35.6 per cent of the Institute's membership thought that Environmental Law/Legislation was the area where they would most benefit from continuing professional development. We hope that you find the Guide useful and timely.

Martin Baxter

Technical Director

IEMA

Introduction

An organisation may choose to implement an environmental management system (EMS) for a variety of reasons; for example to:

- manage legal compliance;
- demonstrate environmental commitment and achieve environmental improvements;
- satisfy customer expectations;
- reduce risks with regard to the environment; and
- improve commercial performance and enhance reputation.

From the regulators' point of view the first of these reasons is the most important and a well implemented EMS can be appreciably useful to an organisation in managing compliance. However, the same system can also offer benefits to the regulator in terms of assessing and evaluating compliance.

Regulators expect organisations to take responsibility for the environmental impacts of their activities, products and services. They consider management and maintenance of legal compliance to be a fundamental deliverable for an EMS. Compliance with legal requirements regarding environmental protection should result in appropriate environmental control measures and better environmental performance.

Regulators recognise that the task of managing legal compliance is not easy. There are an ever-increasing number of environmental legal requirements placed on organisations, which are often complex both individually and collectively. In the regulators' view, consistent and continuing management of environmental impacts requires a structured approach, such as that provided by an EMS.

A number of academic studies have indicated that an EMS does not in itself guarantee legal compliance and good environmental performance. The regulatory approach to any organisation will always be informed by the observed standards of environmental protection and management, including the results of environmental and compliance monitoring, permit breaches, incidents and complaints from the public.

This Guide seeks to address these issues. It is divided into five main sections. Section 2 describes the approach to environmental regulation in the UK and sets out the regulators' expectations of an organisation's use of an EMS to manage

Introduction

and maintain compliance with legal requirements regarding environmental protection.

Section 3 describes environmental management systems and their value to regulators, whilst Section 4 discusses best practice in managing an organisation's performance with respect to legal compliance. The underlying theme is the introduction of compliance thinking into all aspects of business management.

Section 5 gives guidance to organisations on compliance and assurance matters whilst Section 6 explains the certification/verification process in general, and more specifically, the approach of certifiers and verifiers to assessing an organisation's policy commitment to comply with applicable legal requirements. This section and Appendix A also outline the role of UKAS as the UK's national accreditation body in assessing the capability and competence of the certification/verification bodies to undertake this function.

The overall aim of this Guide is to provide organisations with a comprehensive account of compliance with environmental law, within the context of environmental management systems. In doing so we hope that members of the IEMA and others who receive this Guide will be better placed to discharge their legal obligations and improve the environmental performance of their organisations.

Table 2.3 NetRegs sector guidelines

1. Agriculture, animal boarding and pest control	13. Machinery manufacture
2. Chemicals manufacture	14. Metals production and processing
3. Construction	15. Mining and quarrying
4. Electrical equipment and machinery manufacture	16. Non metallic mineral products manufacture
5. Electronics	17. Office businesses
6. Fabricated metal products	18. Printing, publishing and reproduction of recorded media
7. Fishing and aquaculture	19. Pulp and paper manufacture
8. Food and drink manufacture	20. Recycling
9. Forestry	21. Rubber and plastic products
10. Hotels and restaurants	22. Sewage, waste and cleansing
11. Hunting, shooting and game breeding	23. Textiles and clothing
12. Leather	24. Transport by land
	25. Wood products

2.3 The purpose of environmental regulation

The environmental regulation of businesses and other organisations is intended to protect human health and the environment from harm within the context of sustainable development.

Traditionally, environmental regulation has covered the environmental media (air, water and land), together with wildlife protection and conservation. It has focused on the control of polluting emissions and on maintaining and improving water quality and waste management. From the early 1990s, a more integrated approach has been taken across all media with Integrated Pollution Control (IPC) in England, Wales and Scotland and, more recently, the Integrated Pollution Prevention and Control (IPPC) European Directive (EC, 1996).

In the future, primary environmental legislation is likely to be developed in the following key areas:

- management of the environmental impacts of products and associated activities and services (such as manufacturing and transport) by adopting a lifecycle approach;

Environmental law and regulation in the UK

- efficient use of resources as part of the drive towards sustainable consumption and production;
- maintenance and enhancement of biodiversity; and
- corporate and social responsibility.

Duties and powers of the regulators

Legislation provides environmental regulators with specific duties and powers. Duties are the things that regulators must do and therefore tend to be prescriptive; for example, the duty to determine and issue environmental permits.

Powers are usually discretionary in the way they are applied; for example, powers to enter premises or to take appropriate enforcement action. Once a power has been used, say to enter premises, there may be duties that are applicable such as to prohibit activities that are causing harm to the environment.

Regulators have a number of tools at their disposal to implement duties and powers ranging from the provision of advice and guidance through to formal enforcement and prosecution – see box 2.1.

Box 2.1 Regulatory tools

Least prescriptive

- Education and advice (provision of information)
- Voluntary codes of best practice
- Voluntary agreements
- Negotiated agreements
- Economic instruments (taxes, trading schemes)
- Statutory codes of practice (eg agricultural)
- Statutory guidance
- Direct regulations
- Exemptions (to permits)
- Permits (licences, consents, authorisations, registrations etc)
- Permit variation, suspension, revocation
- Notices (works, improvement, prohibition)
- Formal cautions
- Civil or criminal prosecution

Most prescriptive



2.4 The principal environmental regulators

There are differences in environmental legislation in the UK across England and Wales, Northern Ireland and Scotland. This is reflected in the existence and responsibilities of the national environmental enforcement bodies, as set out in Tables 2.4 and 2.5.

Table 2.4 Principal environmental regulators in the UK

Environment Agency
Conservation (habitats and wildlife protection and enhancement)
Emergency planning eg control of major accident and hazard (COMAH) sites with the Health and Safety Executive (HSE)
Fisheries (resource management and licensing)
Flood Defence (flood mitigation and warning)
Information Law (public registers and access to environmental information)
Industrial pollution and air quality (eg Integrated Pollution Control (IPC) and Integrated Pollution Prevention and Control (IPPC))
Land quality (eg management of contaminated land at 'special sites')
Radioactive substances (licensing of nuclear and non-nuclear sites)
Waste management (licensing of management, treatment and disposal activities)
Water quality (environmental monitoring and consents to discharge to watercourses)
Water resources (abstraction licensing and demand management)
Scottish Environment Protection Agency (SEPA)
Responsibilities are similar to the Environment Agency's, with the following differences:
All PPC requirements are regulated (there are no local authority powers under PPC in Scotland)
Flood defence is limited to issuing flood warnings
No fisheries involvement
Water resources (abstraction licensing) responsibilities were acquired in 2005 under the Water Framework Directive

cont over page

Table 2.4 (cont) Principal environmental regulators in the UK

Environment and Heritage Service in Northern Ireland (EHS NI)
Natural heritage – protection of wildlife species, habitats and rural landscapes
Environmental protection – water quality, air quality and noise, waste management, industrial pollution and drinking water for public and private supplies
Built heritage – identify, record and protect historic monuments and buildings
Local authorities
Land use planning
Local air quality strategies (to reflect the national air quality strategy)
Local Authority Air Pollution Control (LAAPC) including PPC Part B installations in England and Wales
Clean Air Act 1993
Noise and statutory nuisance (eg dust and odour)
Environmental health
Contaminated land
Tree preservation orders

Table 2.5 Other environmental regulators

Regulator	Responsibilities/legislation
British Waterways	Maintenance of inland waterway network
Cadw – <i>Cadw is a Welsh word which means 'to keep'</i>	Protection and conservation of the built environment in Wales
Countryside Agency	Statutory body dealing with economic, environmental, community and recreation aspects of the countryside in England
Countryside Council for Wales	The natural landscape and wildlife conservation authority for Wales and its inshore waters

cont over page

Table 2.5 (cont) Other environmental regulators

Regulator	Responsibilities/legislation
Defra – Department for Environment Food and Rural Affairs	Principal government department for policy on the environment. For regulatory responsibilities see Defra website
Department of Trade and Industry (DTI)	Regulation of offshore oil and gas installations in the UK, through the Offshore Oil and Gas Directorate
Drinking Water Quality Regulator	Monitors the progress of Scottish Water in improving the quality of Scotland's drinking water
Drinking Water Inspectorate	Regulates public water supplies in England and Wales. Responsible for assessing the quality of drinking water, taking enforcement action if standards are not being met, and appropriate action when water is unfit for human consumption
English Heritage	Protection and conservation of the built environment in England, including listed buildings and scheduled ancient monuments
English Nature	Conservation of wildlife and geology in England, including Sites of Special Scientific Interest (SSSIs). EN has enforcement powers to prevent damage to habitats
Health and Safety Executive	Joint competent authority (with EA, SEPA and EHS NI) for Control of Major Accident Hazards Regulations 1999 (COMAH) sites. Health and safety in nuclear installations and mines, factories, farms, hospitals and schools, offshore gas and oil installations, the safety of the gas grid and the movement of dangerous goods and substances, railway safety, and other aspects of the protection both of workers and the public. Local authorities are responsible to HSE for enforcement in offices, shops and other parts of the services sector

cont over page

Table 2.5 (cont) Other environmental regulators

Regulator	Responsibilities/legislation
Internal Drainage Boards	Manage land drainage in areas of special drainage need. Each board operates within a defined area in which they are empowered under the Land Drainage Act 1991. Further information is available from the Association of Drainage Authorities website
Marine Consents and Environment Unit	Administers marine works consents in tidal waters and at sea: marine developments, offshore energy, coast defences, dredging and waste disposal. Administers certain applications on behalf of the Welsh Assembly Government which is the licensing authority in Welsh waters
Pesticides Safety Directorate	Ensures that pesticides in the UK are safe for users, consumers and the environment
Scottish Executive and local authorities	Flood defence in Scotland
Scottish Natural Heritage	Conservation and enhancement of habitats, species and landscapes in Scotland, including 'protected' areas (NNRs, SSSIs, SPAs, NSAs, National Parks)
Scottish Water	Water abstraction and supply in Scotland
Water companies (England and Wales)	Water companies have a number of duties relating to water supplies (to collect, store and transfer water to cope with normal fluctuations in rainfall) and sewerage but they also hold powers to control and police discharges of trade effluent to foul drains under the Water Industry Act
Welsh Assembly (environment)	The Environment Planning and Countryside Committee brings together the Welsh Assembly Government's responsibility for sustainable development; planning; environmental policy, countryside issues; National Parks Authorities; agricultural and rural affairs

2.5 The regulatory approach

The approach that regulators adopt for their regulatory activities, including compliance assessment and enforcement, generally follows the model:

- apply a set of rules;
- monitor and assess compliance with the rules; and
- enforce compliance with the rules.

Regulatory definitions

The terms below are defined to ensure a clear understanding of their use in this Guide and, in particular, in the following sub-sections covering regulatory rules, compliance assessment and enforcement.

Audit (regulatory): in-depth evaluation of an operator's ability to comply with all, or parts of, the permit or directly applied legislation. For example, an audit might include specific reviews of the effectiveness of an operator's procedures and management system.

Compliance: compliance is defined by the European Union network, 'Implementation and Enforcement of Environmental Law' (IMPEL) as: "full implementation of environmental requirements. Compliance occurs when requirements are met and desired changes are achieved." IMPEL (1992)

Compliance assessment (regulatory): the overall approach taken to check compliance with all the conditions of a permit or other regulatory instrument.

Compliance monitoring: compliance monitoring is defined by IMPEL as: "collecting and analysing information on compliance status". Compliance monitoring may be carried out either by an operator (who is subject to legislation) or a regulator (who enforces legislation).

Operator: regulations and permits are normally applicable to sites (eg Waste Management Licence), installations (eg Pollution Prevention and Control permit) or processes (eg Integrated Pollution Control authorisation). The organisation, which may be a single person, that operates the site, installation or process and who is responsible for compliance with legal requirements is referred to as the 'operator'.

Operator self-monitoring: operator self-monitoring is defined by IMPEL as "monitoring undertaken by the operator in accordance with a requirement of a

permit or relevant legislation”. It may include monitoring of emissions and of impacts on receiving environments.

Sampling (check monitoring): taking measurements of inputs, emissions or the receiving environment.

Site inspection: attendance at a site to check compliance with all or some of the permit conditions, or directly applied legislation (other than by check monitoring) using, for example, visual assessment.

Regulatory rules

Directly applied regulations: regulators enforce specific rules within legislation that are directly applied to operators. Examples are the Waste Duty of Care (see Box 2.2) and the Oil Storage Regulations (UK Parliament, 2001).

Box 2.2 Duty of Care

The ‘duty of care’ applies to all ‘controlled waste’ – this means that waste materials produced as part of an organisation or within the workplace are regulated by law and are subject to the ‘duty of care’. All organisations have a duty to ensure that any waste produced is handled safely and in accordance with the law. The ‘duty of care’ applies to anyone who produces, imports, carries, keeps, treats or disposes of controlled waste or acts as a waste broker in this respect.

Further information on ‘duty of care’ may be found in NetRegs Management Guidelines – go to www.netregs.gov.uk

Environmental permits: regulators implement environmental legislation by issuing environmental permits¹ that contain conditions that the permit holder must fulfil to operate activities prescribed by legislation.

These are normally applied to operations at specific sites or installations, and typically regulate polluting emissions to air (eg local authority air pollution control), water (eg consents to discharge and abstraction licences) and land (eg waste management licences). Pollution Prevention and Control (PPC) permits are used to regulate all media on an integrated basis.

¹ In this Guide the term ‘permit’ is used to refer to all licences, permits, authorisations, consents and any other conditioned permissions.

It is the responsibility of an organisation or operator to apply for a permit having recognised that one is required under legislation. The regulator receives an application and determines whether a permit is issued and what permit conditions are applicable.

Regulators issue guidance on the requirements for permits and on how to apply for them. This may include technical guidance, such as PPC guidance on Best Available Techniques (BAT); for example on environmental assessment, energy efficiency and sector specific BAT requirements. For more information on guidance issued by regulators, visit the relevant websites for the environmental regulators and LAAPC (Defra) listed in Appendix D.

Permit conditions typically set out requirements in the following areas:

- **emission limit values:** numerical limits for emissions and ambient pollutant loads, sometimes expressed as a range of acceptable environmental loading;
- **technical standards:** for example, the operation and maintenance of abatement equipment to specified limits;
- **management standards:** for example, managing and training staff, operational procedures and communication arrangements;
- **preventative measures:** for example, to prevent or reduce accidents and incidents which might cause pollution or other environmental harm;
- **notifications (of non-compliances) and reporting requirements:** for example, self-monitoring data and information, and records to document legal compliance checks, maintenance checks and completed improvements; and
- **improvement measures and programmes:** typically brought in when it is considered that a further period of time and/or further resources are required to meet permit conditions.

Other rules: regulators may enforce other requirements. An example is the EU Greenhouse Gas Emissions Trading Scheme. Emissions-trading gives companies the flexibility to meet emissions targets according to their own strategy. By allowing participants to trade in allowances, overall emissions reductions are achieved in the most cost-effective way possible. The scheme covers emissions of greenhouse gases from a number of industries which are specified in the EU Emissions Trading Directive (EC, 2003), initially covering emissions of carbon dioxide. The EU scheme commenced on 1 January 2005; for further information about the scheme, the EC Monitoring and Reporting Guidelines and the National Allocation Plan (NAP) contact the EA helpdesk at: ethelp@environment-agency.gov.uk

Compliance assessment

The purpose of compliance assessment is to:

- check compliance of regulated organisations with relevant environmental legal requirements, including with directly applied regulations, conditions in permits or any other legal obligations that are applicable; and
- monitor the impact of regulated organisations on the environment to determine whether further inspection or enforcement action (including granting, issuing, modification or revocation of any permit) is required to secure compliance with environmental legal requirements.

Box 2.3 considers how compliance can be demonstrated and Table 2.6 lists some typical activities used by regulators to assess compliance.

Box 2.3 How is compliance demonstrated?

It is the responsibility of operators to manage their activities to achieve legal compliance, and it is the job of the regulator to check whether an operator is complying with legal requirements and decide whether further action is required.

An operator is assessed as compliant if there is no evidence of failure to meet permit (or other) conditions. Regulators expect operators to carry out periodic evaluations to test whether they are in compliance. Evaluations should be risk based, according to the hazards posed by operational activities. A systematic approach to compliance management (such as that provided by an EMS) should provide evidence of how environmental legal requirements are assessed and met, and identify any legal non-compliances.

Regulators scrutinise evidence provided by operators in order to help determine whether permit conditions or other requirements are being met. The frequency of regulatory assessments will be informed by such evidence and observed standards of performance.

There may be circumstances where an operator is not fully compliant with one or more conditions in a permit, or other legal requirements. The operator should (a) immediately notify the regulator of the non-compliance(s) and (b) agree with the regulator the actions needed to return to compliance and mitigate any harm to the environment.

Table 2.6 Typical activities used by regulators to assess compliance

Compliance assessment activity	Description
Sampling and check monitoring	Taking measurements of inputs, emissions or the receiving environment
Review of reports and data	Scrutiny of reports and data submitted by the permit holder, such as emissions and environmental monitoring data, notifications of non-compliances and technical reports
Procedure review	An operator may be required to submit procedures for agreement prior to implementation – regulators will check whether such procedures are in place and comprehensive
Site inspection	Attendance at a site to check compliance with all or some of the permit conditions, or directly applied legislation
Audit	In-depth evaluation of an operator's ability to comply with all, or parts of, the permit, or directly applied legislation; for example, an audit might include specific reviews of the effectiveness of an operator's procedures and management system

Compliance is assessed using one or more of the following types of assessment:

- **Continuous assessment:** this occurs when in-situ monitoring apparatus records data continuously either in real time for alarm purposes or in archive mode for subsequent examination. In this case, equipment is installed to monitor important aqueous discharges and stack emissions, typically at complex sites. However, not all aspects of a site's activities can be monitored in this way and therefore continuous assessment, where it is carried out, tends to be selective.
- **Retrospective assessment:** periodic and annual assessments (see overpage) rely on a retrospective assessment of compliance in which evidence is sought by the regulator to confirm that the operator has been in compliance. EMS evaluations and records can provide such evidence.

- **Periodic assessment:** this is the most common form of regulatory assessment. When used as part of a risk-based approach, this type makes optimum use of staff resources. There are three subsets to it:
 - a) **Site-based assessment:** regulatory officers visit a premises and carry out either a comprehensive assessment (eg legal compliance audit), or a targeted inspection (eg check monitoring) based on pre-determined criteria for evaluation.
 - b) **Report-based assessment:** regulatory officers receive and examine data returns, analytical results and programme reports back in their offices, between site visits.
 - c) **Incident-based assessment:** regulatory officers respond to incidents notified to them by the operator or indirectly as a complaint by a member of the public. The response can include attendance at the scene of the incident.
- **Annual assessment:** regulators compile annual data and information for input into annual reports and plans. These contain summary data and it is necessary to assess compliance retrospectively in order to reach fair conclusions.

Monitoring

There are primarily two types of monitoring carried out or required by regulators; these are:

- monitoring of compliance with environmental legal requirements, for example permit conditions; and
- monitoring of environmental quality, for example meeting environmental quality standards.

Monitoring can be carried out in a number of ways (ie continuously, periodically or remotely) and by operators (self-monitoring) or regulators. The exact mix of monitoring will depend on regulatory requirements and resources, operator competence, third-party involvement and available techniques and technology. It is vital that organisations deliver monitoring results that are valid, reliable, accurate and appropriate. This requires the proper use of suitable methods, standards, services and equipment, trained and qualified personnel, effective planning, quality assurance and quality control.

With this in mind the Environment Agency has established a Monitoring Certification Scheme (MCERTS) to improve and ensure the quality of monitoring data. SEPA in Scotland is currently pursuing MCERTS status for staff involved in manual stack emissions monitoring. EHS in Northern Ireland encourages operators to use MCERTS-approved continuous emission monitors and have manual spot monitoring work carried out by MCERTS accredited personnel.

Details of MCERTS and the Environment Agency's Operator Monitoring Assessment (OMA) schemes are set out in Box 2.4.

Box 2.4 MCERTS and OMA

MCERTS is operated by SIRA Certification Service (SCS) and the UK Accreditation Service (UKAS) on behalf of the Environment Agency. The scheme is based on the following standards:

- ISO 17025 for monitoring and equipment testing;
- EN 45004 for inspection;
- EN 45011 for product certification; and
- EN 45013 for personnel competency.

MCERTS covers:

- continuous emissions monitoring systems (CEMs);
- manual stack emissions monitoring;
- continuous ambient air quality monitoring systems (CAMS);
- portable emissions monitoring equipment;
- continuous water monitoring equipment;
- self monitoring of effluent flow; and
- chemical testing of soil.

MCERTS assures users of certified instruments and services that they:

- meet performance standards set out in current international standards and the growing requirements of EC directives; and
- comply with relevant national regulations and requirements; eg the Environment Agency's Operator Monitoring Assessment requirements.

MCERTS also:

- enables instrument manufacturers and service providers to assure customers that certified instruments and services are suitable; and

cont over page

Box 2.4 (cont) MCERTS and OMA

- provides independent inspections of installations to Environment Agency requirements.

Environment Agency's Operator Monitoring Assessment (OMA) Scheme

The Environment Agency has introduced this scheme to strengthen its auditing of operators' self-monitoring arrangements. OMA is currently applied to the monitoring of emissions to air from industrial processes. It is proposed to extend OMA to other media and regulatory regimes. The Environment Agency uses the OMA scheme to:

- assess operators' self-monitoring (including monitoring undertaken on behalf of operators by contractors) using a consistent and transparent approach;
- contribute to the Agency's sampling and check monitoring programme; and
- provide a driver for necessary improvements.

Source: EA, 2005a

Enforcement

Enforcement action is taken by regulators to ensure that organisations comply with legal requirements of environmental permits and directly applied laws by using: warning letters, enforcement notices, formal cautions and prosecution (Box 2.5).

Enforcement action is also taken to mitigate the polluting effects of incidents and to prevent further incidents and pollution which may cause serious environmental damage or harm to human health. These include:

- prohibition notices to stop or prevent illegal and polluting activities;
- works (anti pollution) notices to enforce actions needed to mitigate or prevent serious environmental damage or harm to human health; and
- suspension or revocation of a permission.

Enforcement action will be proportionate to the potential or actual damage to the environment, the level of non-compliance and offences committed.

The principles by which the main UK regulators take enforcement action

are informed by the Cabinet Office Enforcement Concordat. Specific regulators' policies are:

- the Environment Agency's enforcement and prosecution policy (EA, 1998);
- SEPA's policy statement on enforcement (SEPA, 2002). It should be noted that in Scotland, cases are referred to the Procurator Fiscal for consideration; and
- EHS NI's enforcement and prosecution policy (EHS NI, 2005).

Box 2.5 Penalties for a successful prosecution

- **Magistrate's Court:** maximum fine £20,000 and a three month prison sentence
- **Crown Court:** unlimited fine and a two year prison sentence.

2.6 Principles of modern regulation

The Better Regulation Task Force (BRTF, 2005) is an independent body that advises Government on actions to ensure that regulation and its enforcement accord with the five Principles of Good Regulation. The principles applied to environmental regulation are:

- proportionate (or risk-based): regulators allocate resources according to the risks involved and the scale of outcomes which can be achieved;
- targeted (or outcome-focused): regulators use environmental outcomes to plan and assess performance;
- consistent: regulators apply the same approach within and between sectors, and over time;
- transparent: regulators have rules and processes which are clear and available to organisations and local communities; and
- accountable; regulators explain their decisions and performance.

Regulators have or are developing risk-based approaches that use a range of different regulatory tools (eg permitting, trading schemes, voluntary agreements, education and advice, and environmental taxes). The Environment Agency and SEPA respectively have set out their approaches to modernising regulation in 'Delivering for the Environment, a 21st Century approach to regulation' (EA, 2005a) and 'Vision for Regulation: Protecting and Improving the Environment Through Regulation' (SEPA, 2003) – see Box 2.6.

- Environmental Impact Appraisal (EIA) which concerns the potential environmental impacts of a process according to type, level of upgrading to meet regulatory requirements and location; and
- Operator Performance Appraisal (OPA) which relates to how well the operator manages the potential environmental impacts of the process.

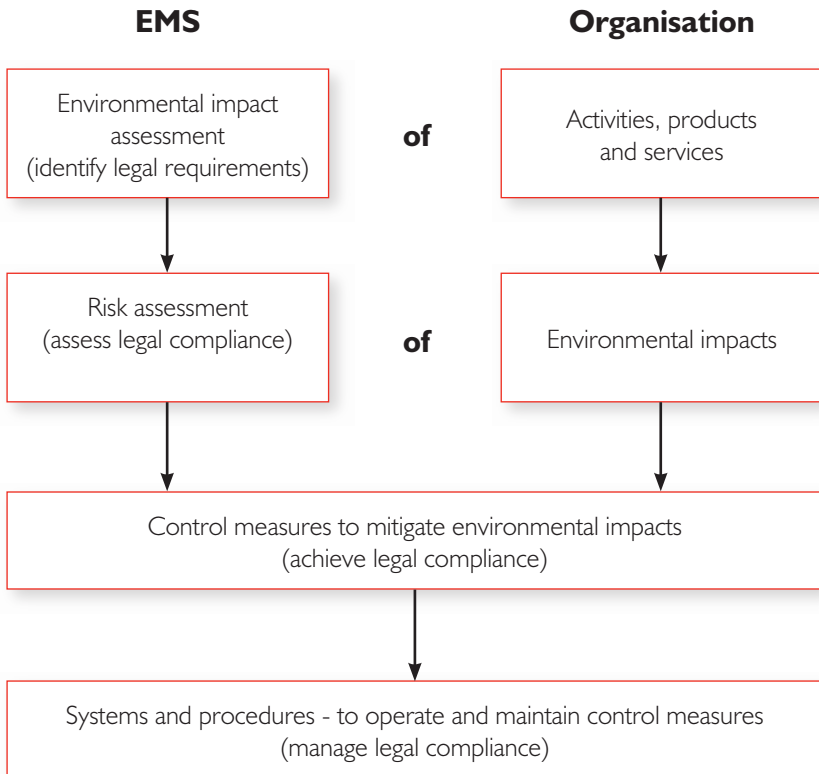
Further details can be found in the air quality section of the Defra website at: www.defra.gov.uk/environment/airquality/lapc/risk/index.htm

Environmental management systems and legal compliance

3.1 What is an EMS?

An environmental management system (EMS) is “that part of an organisation’s management system used to develop and implement its environmental policy and manage its environmental aspects” (ISO 14001: 2004a). Figure 3.1 shows a schematic of the key elements of an EMS. The EMS process can be expressed in terms of environmental management techniques set out below. Legal compliance is addressed at the stages indicated in brackets.

Figure 3.1 Key elements of an EMS



Certification and accreditation

Certification is the process by which an organisation's system (eg its EMS) is assessed for its conformity to the requirement of a standard (eg ISO 14001:2004). Certification Bodies (CBs) may be accredited to perform such assessments where they meet the criteria in ISO/IEC Guide 66 (ISO, 2003).

Accreditation bodies check on a regular basis via surveillance at the CB's offices, witnessed assessments at their client's sites and other activities that certification bodies are capable of providing accredited certification. Similar processes are operated to accredit environmental verifiers to carry out verification under EMAS, including the validation of EMAS environmental statements, and IEMA Acorn inspection bodies.

In the UK, the United Kingdom Accreditation Service (UKAS) performs the accreditation function for ISO 14001:2004 certification bodies, EMAS verifiers and IEMA Acorn inspection bodies, through a Memorandum of Understanding with the DTI. Accreditation criteria and guidance is developed at an international level by organisations such as the International Accreditation Forum (IAF) and accreditation bodies are required to conform to ISO/IEC 17011 (ISO, 2004b). Certification assessments are carried out according to international standards and guidelines, such as ISO/IEC Guide 66 and EA 7/02 (IAF, 2003). A later section of this Guide explains in detail the role and mechanics of certification; additional information on accreditation is contained in Appendix A.

Types of EMS

The main types of EMS in use in the UK are described below:

In-house EMS: many companies choose to design and implement an EMS to their own specification. Regulators encourage the uptake of EMSs which help to manage risks and establish environmental control measures. An in-house EMS may be as effective as any other, but the main drawback for regulators is that it is more difficult to assess the effectiveness of such an EMS in the absence of a standard approach, including assessment criteria.

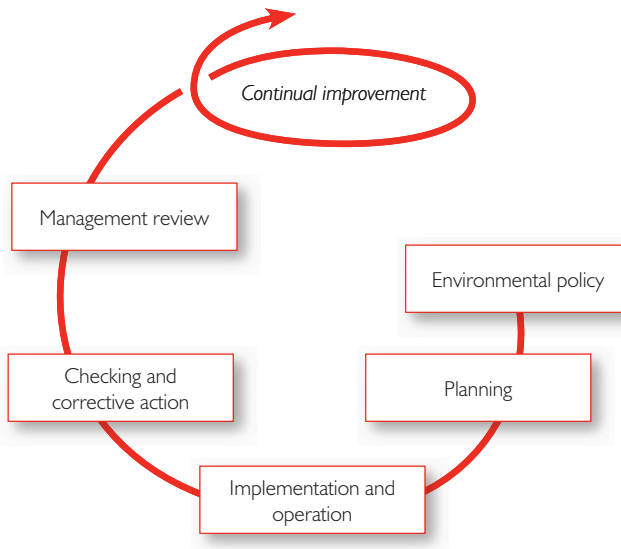
Assessments of the value of an EMS start with the degree of conformance to a recognised standard such as BS 8555 or ISO 14001:2004, or a scheme such as EMAS. Judgements on each individual case may then be based on the degree of conformance and whether this delivers regulatory requirements including legal compliance. Independent (third-party) checks can be made via accredited certification, inspection and verification assessments.

Environmental management systems and legal compliance

ISO 14001: 2004: ISO 14001:2004 is an international standard, entitled: 'Environmental Management Systems: Requirements with Guidance for Use' (ISO, 2004a). The standard specifies the different elements of an EMS and how they relate to one another based on a methodology known as plan-do-check-act (see Figure 3.2). The overall aim of the standard is to support environmental protection and prevention of pollution in balance with socio-economic needs. In common with all management systems, the standard provides a means for continual improvement of performance.

Conformity against the requirements of ISO 14001:2004 can be demonstrated through self-declaration, accredited certification or by other independent means.

Figure 3.2 EMS model for ISO 14001:2004



BS 8555: 2003: BS 8555 is a British Standard, entitled: 'Environmental Management Systems – Guide to the Phased Implementation of an Environmental Management System including the Use of Environmental Performance Evaluation' (BSI, 2003). The standard:

- provides guidance to organisations on environmental management and the use of environmental performance indicators;

Environmental management systems and legal compliance

- describes a six-phase, incremental approach to implementing an EMS using environmental performance evaluation;
- is suitable for any organisation, particularly small and medium-sized enterprises, to implement an EMS – for example to ISO 14001 standard;
- may be used to demonstrate improved environmental performance to customers and stakeholders; and
- allows organisations to proceed at their own pace up to ‘full’ implementation of an EMS, which may then be certified to ISO 14001 or registered under EMAS.

The IEMA has developed a scheme for accredited inspection of conformance to any chosen phase of BS 8555, known as the IEMA Acorn Scheme (IEMA, 2005) – the Environment Agency is considering how it can be recognised under its OPRA scheme.

Eco-Management and Audit Scheme (EMAS): The Eco-Management and Audit Scheme (EC, 1993) is a registration scheme, not simply a standard. It is a voluntary initiative designed to improve organisations’ environmental performance. It was initially established by European Regulation 1836/93, although this was replaced by Council Regulation 761/01. This amendment incorporated ISO 14001:1996 (ISO, 1996) into the EMAS Regulation as the specification for an EMS (Annex 1A of the regulation). At the time of writing, Annex 1A is being amended to include the requirements of ISO 14001:2004. Further information about EMAS, including guidance and how to register, may be found at www.emas.org.uk

3.2 The value of an EMS to regulators

Regulators’ support for EMS

Businesses must take responsibility for the environmental impacts of their activities. Continual management of environmental impacts requires a structured approach and environmental management systems (EMSs) provide a way for businesses to do this.

Legal compliance and good environmental performance are fundamental requirements of an EMS. A robust EMS should lead to improved environmental performance, including better and more consistent legal compliance.

Regulators are supportive of accredited certification to ISO 14001:2004 as the basis for a systematic approach to managing environmental legal compliance.

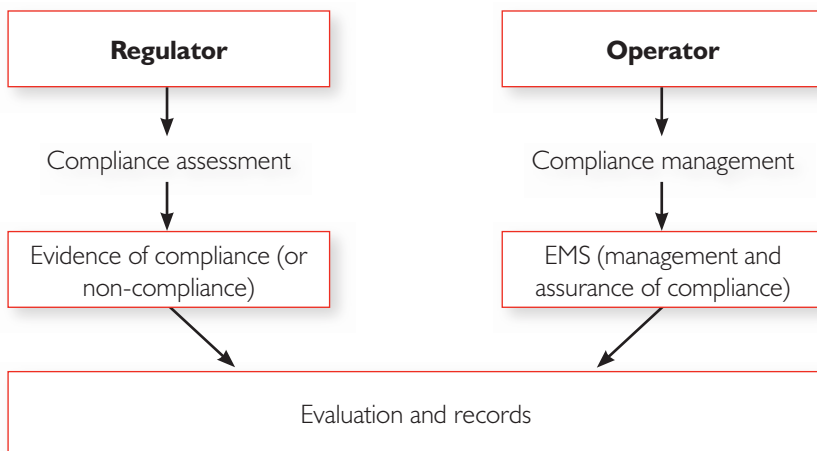
Environmental management systems and legal compliance

Regulators support EMAS (which incorporates conformance to ISO 14001) as a way for organisations to demonstrate their green credentials beyond ISO 14001:2004 accredited certification. A company registered to EMAS must comply with legislation, and assurance must be sought from the environmental regulator. EMAS also places additional emphases on environmental performance and public environmental reporting.

The regulatory approach at any site will always be informed by the observed standards of environmental protection and management, including permit breaches, incidents and complaints from the public.

When regulators carry out assessments of compliance, information from an EMS may be used to demonstrate (ie give assurance) that an organisation is or has been in compliance. EMS records provide an objective means for the regulator to make such appraisals and may provide evidence for an audit trail. This is illustrated in Figure 3.3.

Figure 3.3 Regulatory value of an EMS



An operator's EMS is an important element to examine during a regulator's inspection, as valid as other areas of assessment such as abatement equipment and storage areas. The EMS may add value to on-site regulatory assessments; for example by providing:

- evidence of compliance since the last visit;
- a focus for the subsequent tour of the premises; and
- a starting point for an OPRA appraisal.

3.3 Key deliverables for an effective EMS

Regulators need to be convinced that an operator's EMS is an effective tool for managing legal compliance. Effectiveness is judged by:

- Risk assessments: is the EMS well designed and fit for purpose?
- Performance: does the EMS result in fewer permit breaches and improved compliance with legal requirements?

To address their concerns, regulators have identified key deliverables for an effective EMS in relation to legal compliance. These are:

- **policy commitment** to legal compliance and improving environmental performance;
- **identification of legal and other environmental requirements** mapped against operational activities, services and products;
- **periodic evaluation of legal compliance** to identify and remedy non-compliances through appropriate corrective and preventive actions;
- **staff awareness, competencies and training** required for managing legal compliance;
- **operational controls and emergency preparedness** to meet legal requirements;
- **monitoring, audits and management review** to check and make appropriate changes to controls, systems and procedures; and
- **delivery of improvements** where these have been identified or required by the regulator – note that this deliverable is incorporated in the above six points.

Boxes 3.2 to 3.7 set out criteria for each key deliverable applicable to any EMS; cross-references are provided to the relevant sections or clauses of ISO 14001:2004, BS 8555 and EMAS. The regulators believe that an EMS that delivers in these areas will be effective in managing compliance with environmental legal requirements.

Guidance for organisations – establishing good practice

4.1 Introduction

This section describes best practice in managing an organisation's performance with respect to legal compliance. The underlying theme is the introduction of compliance thinking into all aspects of management including planning, operations management, performance monitoring and reporting and assurance processes.

An Environmental Management System (EMS) framework such as that provided by ISO 14001:2004 can be used as a tool in helping to achieve this. However, the management of legal compliance should be seen as part of a process of achieving performance improvement rather than the implementation of what are sometimes seen as discrete system elements. This process needs to cover:

- the identification and analysis of legal and regulatory requirements (both current and forthcoming);
- the periodic evaluation of performance against those requirements;
- the implementation and operation of responsibilities, procedures and improvement programmes for ensuring that improvements are planned and achieved; and
- the maintenance of control.

Furthermore, legal performance must often go beyond the statistical criteria (limits) set by regulators. A compliance orientated organisation must also address other requirements, such as any risk that can just as significantly influence compliance.

There are three parts to this section; these are: the case for better compliance management; identifying environmental legal and regulatory requirements and evaluating compliance; and systems and procedures for ensuring ongoing compliance and improvement. Section five deals with extending internal compliance assurance.

4.2 The case for better compliance management

This section aims to help organisations determine how they can pursue best practice in compliance management. The application of best practice is not, however, a one-size-fits-all approach. It is essential that the business case is fully understood and that compliance management is tailored to each organisation, albeit that the principles underlying best practice should always be the same.

Why is there a need to demonstrate compliance?

Reputable organisations in the UK and internationally should be in a position to demonstrate full compliance with all aspects of environmental legislation – this encompasses all legal requirements, some of which may be found in non-environmental statutes such as product and health and safety legislation. Stakeholders such as the public and an organisation's shareholders, customers and workforce need to be confident that the organisation operates within the law and is not harming the environment. There is little sympathy for organisations whose non-compliances are brought to light; magistrates and courts are coming under increasing criticism for not imposing sufficiently stringent penalties.

Why is there sometimes a lack of focus on compliance?

For many organisations, achieving and demonstrating legal compliance is a difficult, time-consuming and continuous exercise that needs to be managed within the resources available. The sheer volume of environmental legislation that must be complied with can be daunting – Acts of Parliament; numerous ever-changing regulations; individual permits, consents and licences; and even certain items of European legislation that have direct effect. Moreover, within many of these pieces of legislation there are likely to be several separate compliance requirements for an individual organisation. Each of these requirements needs to be identified, screened for relevance, understood and acted upon before an organisation can satisfy itself that it has attempted to comply.

Unsurprisingly, many organisations do not achieve this level of compliance management, and this may be due to:

- insufficient resources allocated within the organisation to compliance management;
- failure to identify or understand legal requirements;
- over-reliance on conformance with a management system that is not closely integrated with legal compliance; and
- low priority given within the organisation to compliance management.

What are the consequences of a lack of compliance assurance?

In simple terms, a lack of compliance assurance means that an organisation may not know whether it is breaking the law. Most breaches of health, safety and environmental legislation are criminal offences, but regulators are committed to a proportionate enforcement response. In their published enforcement policies (EA, 1998), (SEPA, 2002) and (EHS NI, 2005), the UK environmental regulators take into account factors such as the severity and foreseeability of the offence; the offender’s past record, attitude and co-operation with the investigation; and whether enforcement action is likely to act as a deterrent to others.

The regulator’s response can vary (see Figure 4.1) from taking no action in cases where there might have been an acceptable reason for the non-compliance, through informal and formal warnings, up to statutory enforcement action and prosecution with the associated negative publicity that this brings.

Figure 4.1 Enforcement response hierarchy



Regulators have complained that the levels of fines imposed by the courts are often insignificant in comparison to the offending organisation’s annual turnover or profit. But the biggest worry for an organisation is usually the indirect effect of enforcement action, and sensitivities to this vary according to circumstances

(see Table 4.1). For example, a company with a large stockpile of unsold finished goods could be less concerned about a prohibition or suspension notice than another company struggling to fulfil orders. Similarly, a back-street supply chain intermediate with little public visibility may not place the same degree of emphasis on protecting its reputation as would a high-profile multinational with brands on supermarket shelves.

Table 4.1 Effects of enforcement action

Commercial	Loss of business
Industrial relations	Workforce concerns
Reputational	Customer perception, other stakeholders, corporate reporting
Environmental	Workforce concerns, site contamination, pollution incidents
Operational	Loss of production, accidents and injuries, business continuity, additional management time
Individual liability	Corporate manslaughter and dismissal
Financial	Fines and insurance premiums

Why might an organisation wish to improve its compliance performance?

There are several motivating forces behind an organisation's desire to comply with environmental legislation. There is altruism and the concept of social responsibility where an organisation might believe compliance is the morally correct stance. There may be a desire to appear as an exemplar or role model and this may have the associated commercial benefits of attracting like-minded customers, or forcing competitors to respond.

There are more neutral motivators such as the 'herd instinct' to comply because everyone else appears to be doing so, or just wanting to be reassured that the company is not going to get into trouble. However, there are also more negatively inspired motivations such as the desire to comply solely as a result of pressure from customers, employees or shareholders, or the fear of individual responsibility and criminal liability.

How do organisations check compliance?

In assessing compliance levels, organisations may decide to rely solely upon regulatory inspection reports, complaints and occasionally commendations from members of the public or non-governmental organisations (NGOs) or unsolicited advice from employees. This has the advantage that compliance efforts are minimised and focused on areas of current concern. However, any view obtained through this passive approach may be completely unrepresentative of the organisation's true level of compliance.

Therefore, it is in an organisation's interests to implement more active approaches to checking, such as internal and external evaluation and auditing. Auditing has the limitation that it may pick up problems only after they have occurred. As a result, organisations may decide to take further steps and develop management systems that integrate the achievement of compliance into the work programme; that is, plan to comply from the beginning rather than just checking afterwards.

4.3 Establishing good compliance practice

There are three steps to establishing good compliance practice. They are:

- Step A** Understand your organisation and gather information
- Step B** Identify legislation of specific relevance to your organisation
- Step C** Evaluate current compliance and implement appropriate controls

A: Understand your organisation and gather information

A(i): know your activities, products and services

The starting point for the identification of legal and regulatory requirements relevant to an organisation is an understanding in detail of its operations including all activities, products and services.

The organisation can then focus on identifying environmental legislation or regulations that affect their operations. To ensure that all operations are covered, consider the organisation in terms of process or activity flows and associated inputs and outputs - see Figure 4.2. For each input or output consider broad categories of environmental impact as a starting point – see Table 4.2.

Figure 4.2 Process and activity flows in an organisation

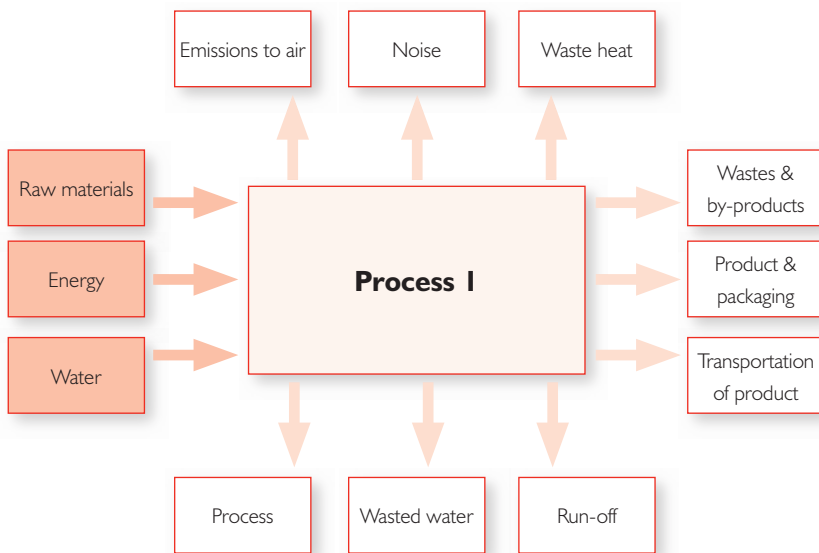


Table 4.2 Environmental impact categories

Environmental impact category	Include consideration of
Emissions to air	Emissions of smoke, dust, grit, gaseous air pollutants from industrial activities (eg carbon dioxide, nitrous oxides and sulphur oxides), radiation sources and releases of odours from industrial processes
Releases to water	Releases to surface water, sewers and groundwater; storage of hazardous substances, eg oil and pesticides; and marine pollution
Wastes	Avoidance, recycling, reuse, transportation and disposal of solid and other wastes; packaging and hazardous and non-hazardous wastes
Land	Use and contamination of land (historic, current and future)
Use of natural resources and raw materials	Including water and energy use, and use of hazardous materials

cont over page

Table 4.2 (cont) Environmental impact categories

Environmental impact category	Include consideration of
Nuisance issues	Noise from industrial and construction sites, entertainment noise, vehicle, rail and aircraft noise; nuisance arising from vibration, odour, dust and visual appearance
Travel and transport	For goods, services and employees; pollution of air from road vehicles; aircraft emissions
Biodiversity	Impacts on- and off-site, consider protected habitats and species of flora and fauna; sites with recognised designation, eg AONB, SSSI, SAC; local or regional biodiversity action plans
Heritage	Possible impacts if in listed building or within a conservation area; possible impacts on ancient monuments and archaeological areas

The systematic identification of environmental aspects of activities, products and services of the organisation, as required by ISO14001, BS 8555 and EMAS, is the first step to be taken when developing an EMS. All these standards require that all the organisation’s activities, products and services are identified, to help the organisation understand the environmental impacts (or changes to the environment) arising from each of these aspects. Examples of aspects and impacts are shown in Table 4.3.

Table 4.3 Examples of environmental aspects and impacts

Feature	Environmental aspects	Environmental impacts
Definition	Environmental aspect is defined in ISO14001 as an “element of an organisation’s activities, products or services that can interact with the environment” eg electricity consumption for lighting, equipment and plant. The activity the organisation carries out which causes an environmental impact.	Environmental impacts are defined in ISO14001 as “any change to the environment, whether adverse or beneficial, wholly or partly resulting from an organisation’s environmental aspects”. The impact on the environment that is caused by the activities of the organisation.

cont over page

Compliance assessment - certification and verification

6.1 Introduction

This Guide has already explained the role of EMSs in assisting organisations to adopt a structured approach to the delivery of consistent and continuing management of their environmental impacts. An organisation may choose to establish and run an EMS without the involvement of any external body other than the regulator but this Section is concerned only with systems which are certified or verified by an independent third-party as being in accordance with an international standard or European regulation. Through such external assessment, the demonstration of successful implementation of an appropriate, recognised technical standard or regulation enables organisations to assure interested parties that an effective EMS is in place.

This Section explains certification and verification processes in general and, more specifically, the approach certifiers and verifiers take to assessing an organisation's policy commitment to comply with applicable legal requirements within the context of an EMS. The final part of this Section describes the role of UKAS, the UK's national accreditation body, in assessing the capability and competence of the certification and verification bodies to undertake this function.

Relationship of assessment to legal compliance

The main standards and regulation associated with third party assessment are:

- ISO 14001:2004 – 'EMSs - Requirements with Guidance for Use';
- the Eco-Management and Audit Scheme (EMAS); and
- the IEMA Acorn Scheme – using 'BS 8555 – EMSs – Guide to the phased implementation of an EMS including the use of environmental performance evaluation'.

ISO 14001:2004: this international standard was developed by a technical committee with worldwide membership drawn from interested relevant international organisations, both governmental and non-governmental, including industry representation. The standard specifies the requirements for an organisation's EMS.

It should be borne in mind that the ISO standard does not establish absolute requirements for environmental performance beyond commitment, within an organisation's EMS, to legal compliance and continual improvement. It follows therefore that application of the standard does not, in itself, guarantee future legal compliance.

Organisations wishing to manage their environmental legal compliance through certification to ISO 14001:2004 should use an accredited certification body (CB). Accreditation of a CB is granted by an accreditation body and is formal recognition that the CB is competent to conduct ISO 14001 certifications in specific areas. Accredited CBs are subject to a demanding, rigorous and continuing assessment regime to obtain and maintain accreditation to grant accredited certification to ISO 14001. This regime derives from internationally approved accreditation standards and involves assessment of the competence of third-party EMS auditors and the technical capability of the head office of the CB, as well as the delivery of the certification audit at the client's premises. At the international level, the International Accreditation Forum (IAF) operates a multilateral arrangement process for accreditation bodies in the field of EMS. The United Kingdom Accreditation Service (UKAS) is the only UK based accreditation body recognised by the UK Government for ISO14001 (and EMAS) and is a signatory to the IAF multilateral arrangement on EMS.

Eco-Management and Audit Scheme (EMAS): EMAS is a European Union initiative. Its EMS specification is the same as that of ISO 14001:2004 but it places additional emphasis on legal compliance and environmental performance. It also contains specific requirements for public environmental reporting. External accredited verifiers assess the EMAS system and validate the environmental statement of the organisation. UKAS has been appointed by the UK Government to accredit EMAS verifiers in the UK.

IEMA Acorn Scheme: the requirements of the IEMA Acorn Scheme are set out in 'IEMA Acorn Scheme of Accredited Recognition – for organisations evaluating and improving their environmental performance in accordance with BS 8555'. Organisations are able to use the Scheme to implement an EMS through a phased approach. The scheme encompasses the requirements of ISO 14001:2004 for the EMS aspects, together with those of ISO 14031 (ISO, 1999) for environmental performance evaluation.

UKAS accredited Acorn inspection bodies check to ensure that the different phase requirements of the scheme have been met by participating organisations. The inspectors also make observations regarding the organisation's environmental performance, in particular the relevance and applicability of their environmental

performance indicators and the organisation's performance relating to these. In this respect, the scheme covers the additional aspect of environmental performance when compared to ISO 14001:2004 certification.

Overview

Purpose of assessment, verification and inspection: third-party certification assessment provides an independent appraisal of a management system. The assessment is designed to determine whether or not an organisation satisfies the requirements of the relevant clauses of the standard. It will involve preparation, a review of documentation, on-site audit and a consideration of audit reports. It also includes other activities such as a site tour and staff interviews at all levels within an organisation. On completion of an assessment, a CB should have sufficient information to enable a decision on the grant of certification to be made.

EMAS verification checks conformance to the requirements of the EMAS Regulation. It is essentially similar to ISO 14001:2004 except that it additionally requires the validation of an environmental statement. This assessment is carried out by an external environmental verifier to check that the information and data within an organisation's environmental statement is reliable, correct, credible and meets the requirements of the Regulation. The environmental statement must not be validated where a legal non-compliance exists.

An important element of the certification and verification process is that, in addition to evaluating whether the system elements have been implemented, the assessor will determine whether the organisation is capable of running the system and improving it in the future. As such, the award of an accredited ISO 14001:2004 certificate or EMAS registration indicates an organisation's ongoing commitment to legal compliance and gives some indication of its capability to comply in the future. The certification and verification process will also determine the extent to which the organisation has set objectives and targets, instigated improvement programmes, and how well they are linked to its legal compliance and performance improvement policy commitments.

The IEMA Acorn Scheme uses accredited inspection, rather than accredited certification, for determining whether an organisation has met the scheme's requirements. The reason for this is that the certification standards used by accreditation bodies can only be used for assessing organisations that have a fully implemented and functioning system (whether environmental or quality); organisations using the IEMA Acorn Scheme will not have all the system elements implemented in the earlier phases, hence the use of inspection standards.

Role of assessors and inspectors

An assessor conducts a visit as part of the initial certification process. Subsequent periodic surveillance and re-assessment visits are made to verify the continuing conformity of the organisation's EMS to the standard and that the EMS has been properly implemented and maintained and that continual improvement is evident.

An assessor checks that the requirements of the ISO 14001:2004 or EMAS standard have been met. The assessment focuses on the resources committed to satisfying these requirements to ensure that they are being applied in a manner which benefits the environment, the organisation and the local community in which the organisation operates. This is accomplished through close examination of the factors that give rise to ongoing environmental performance improvement. It assists the organisation in meeting regulatory requirements and delivering reductions in its environmental impacts, thus improving environmental performance as a whole.

Assessors play a key role in ensuring that certified EMSs are delivering meaningful results. This requires them to meet comprehensive competence criteria.

Inspectors, as part of the IEMA Acorn Scheme, have the same overall role and intention as assessors. They have an additional focus on the evolving nature of a developing management system and the processes that drive environmental performance evaluation within the context of a particular organisation.

Competence requirements of assessors and inspectors

The competence requirements for assessors are laid down in the accreditation criteria of CBs offering certification of EMSs. In addition, minimum criteria are prescribed in ISO 19011 (ISO, 2002). The qualification criteria for EMS auditors cover:

- personal attributes;
- the ability to apply knowledge and skills;
- audit principles, procedures and techniques;
- management systems knowledge;
- organisational situations such as organisational size and structure;
- applicable laws, regulations and other such requirements;
- environmental management methods and techniques;
- environmental science and technology; and

- technical and environmental aspects of operations.

An assessor should have knowledge of environmental management systems, environmental terminology, pollution abatement and control techniques and the type of organisation being audited – this includes knowledge of the sector and issues such as the size and complexity of the organisation. In addition, an assessor should have a sufficiently detailed knowledge of environmental laws and regulations to know whether an organisation has correctly identified all its applicable legal requirements related to its environmental aspects.

Inspectors involved in the IEMA Acorn Scheme require the same competencies as those already outlined, but with additional training given in order ensure consistency of interpretation when judging degrees of EMS development against the guidance in BS 8555.

Relationship between ISO 14001, EMAS and legal requirements

The ISO 14001:2004 standard has several clauses that impact upon compliance with legal requirements.

The clause on environmental policy [4.2] states that it should include a “commitment to comply with applicable legal requirements and with other requirements to which the organisation subscribes which relate to its environmental aspects”. Users of the standard should note that the phrase “applicable legal requirements...” includes all legislation and regulations that include any provision to protect, enhance or conserve the environment, even if the laws are not necessarily classed as being environmental, for example some health and safety legislation includes environmental protection provisions. The “other requirements” relates to codes of practice, contractual requirements, sector guidelines and other such documents.

To comply with ISO 14001:2004 an organisation is also required to “establish, implement and maintain a procedure(s) to identify and have access to applicable legal requirements and other requirements to which the organisation subscribes related to its environmental aspects” and “to determine how these requirements apply to its environmental aspects”. This requirement is intended to promote knowledge and understanding of legal responsibilities. It does not require an organisation to establish libraries of legal or other documents that will rarely be referenced or used, but to develop information that will help the organisation to know what is legally required and how it relates to their organisation.

Compliance assessment – certification and verification

For accredited certification to ISO 14001:2004 it is also necessary to ensure that throughout an organisation, environmental objectives and targets are established to support the implementation of environmental policy. The standard requires “legal and other requirements” to be considered when targets and objectives are being established and reviewed.

The process of the identification and assessment of environmental aspects should result in a list of environmental issues, some of which may be classed as significant. In addition, the review of relevant legislation may have highlighted areas of compliance requirement needing tighter control. These issues need to be incorporated within the EMS. The process for identification, evaluation and review of issues should be defined, including the grounds for determining significance. This may relate to applicable legislation, quantity, scale, severity, likelihood of incident, cost, impact on the community or other reasonable grounds as may be determined by the organisation. For example, an environmental aspect may automatically be rated significant by the presence of controlling legislation.

In addition, a key area in ISO 14001:2004 is the requirement for an organisation to establish, implement and maintain a procedure for periodically evaluating compliance with applicable legal requirements and to keep records of the evaluations. This can be demonstrated in several ways and checks should be undertaken on a regular basis to ensure continuing compliance. Analysis should then be undertaken to evaluate the levels of compliance with the legislation and requirements laid down in consents and permits. Note that this will need to include an evaluation of compliance with environmental limit values as well as an evaluation of compliance with the administrative and reporting requirements.

Beyond the requirements of ISO 14001:2004, validation of the EMAS statement must cover environmental performance including that against legal obligations.

Structure of ISO 14001:2004 assessment and EMAS verification

The enquiry stage: the credibility of any individual certification is dependent upon the capabilities of the chosen CB. The basic requirements are that the CB is deemed competent in the relevant sector and that it is able to award an accredited certificate. When selecting a CB, organisations should choose one that is accredited by UKAS or by another body recognised under the International Accreditation Forum (IAF) multi-lateral agreement – see www.iaf.nu for accreditation bodies recognised under the multi-lateral agreement. Organisations

should also request full details, including CVs, of individual assessors who will be undertaking the assessment.

An organisation making initial enquiries about certification should also ask about timescales, availability of technical advice and cost. CBs will wish to discuss the scope of the certification activities, the size and complexity of the organisation, environmental aspects and impacts and applicable environmental legislation. Organisations should cross check the number of days quoted by the CB to undertake the assessment with tables in document EA-7/02 (IAF, 2003) – these can be obtained from UKAS and other IAF accreditation bodies. These tables set out the amount of time that will typically be taken to undertake an EMS assessment, dependent on a number of different variables.

Although there might be a temptation to ‘barter down’ the cost of the assessment by reducing the number of days spent assessing the EMS, this will undoubtedly lower the value gained by the organisation, particularly the extent and quality of observations on how the organisation might, in general terms, improve its environmental performance.

Application

Once a CB has been selected, a formal application needs to be made to begin the certification process. When an application has been received, certification assessment is conducted in two stages as shown in Figure 6.1 and described below:

Stage 1 audit: the purpose is to check that the requirements of the standard are adequately addressed by the organisation’s EMS. Stage 1 also assesses the extent to which the EMS has been implemented and applied in order to determine a suitable time frame for the organisation to move towards the stage 2 audit. The assessment programme for the stage 2 audit is also agreed at this stage. With reference to legal compliance, the stage 1 audit should ensure that:

- the EMS is designed to meet the environmental policy – the policy should include a commitment to comply with applicable legal requirements and other requirements relating to its environmental aspects;
- the organisation has appropriate environmental permits in place, eg discharge consents and process licences, relevant to its activities, products and services;
- the organisation has identified all applicable legal requirements relevant to its

activities, products and services within the scope of its EMS and determined how the legal requirements apply to its environmental aspects; and

- an overview has been carried out of applicable regulations (including licences and permits) and any agreements with regulators, (such as the Environment Agency or the local authority), that the organisation may have.

The assessor also informs the organisation of any additional information that will be required for inspection at the stage 2 audit, such as:

- licence and permit requirements; and
- records, including records of incidents, breaches of regulation or legislation and relevant correspondence with regulators and relevant authorities – and any other information on which the organisation based its assessment of compliance with regulatory requirements.

Stage 2 audit: the objective of the stage 2 audit is to ensure that the requirements of the standard are being met in practice. This stage of the assessment focuses on many issues. Key issues are control, monitoring and improvement to ensure compliance with legal and other requirements.

An assessor examines matters relating to legal compliance in detail, including ensuring that the organisation has established, implemented and is maintaining a procedure for periodically evaluating its compliance with legislation. The assessor will inspect the results of the periodic evaluation of legal compliance. The Stage 2 assessment has a standard format consisting of:

- an opening meeting at which the assessor confirms the scope of the registration and the audit programme – this will relate to the scope of the EMS which the organisation is required to define and document under clause 4.1;
- the assessment itself including a tour of the premises, interviews with staff at all levels, examination of documentary evidence and observation of tasks being carried out – it is at this stage that any deviation from procedures or the requirements of the standard is noted by the assessor – these ‘non conformances’ are discussed with the organisation which is given an opportunity to challenge or agree to them; and
- a closing meeting, during which the assessor presents a report on the assessment and summarises the agreed non-conformities.

Compliance assessment – certification and verification

Depending upon the nature of the non-conformities, the assessor recommends either certification or non-certification.

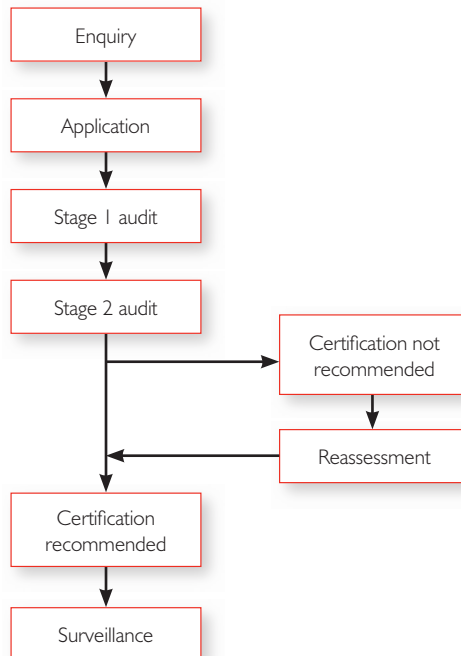
Certification: the assessor's report is forwarded to the CB with a recommendation regarding certification. The report will be reviewed and if approved a certificate will be issued.

Regular surveillance: an EMS is or should be dynamic and regular surveillance visits are undertaken to ensure continued conformance with the standard and to confirm continual improvement in the performance generated by the EMS.

With respect to legal compliance, the surveillance audit ensures the functioning of procedures for the periodic evaluation and review of compliance with applicable legal requirements.

CBs carry out a re-assessment of the entire EMS over a three-year period, ensuring that all the elements of the system are audited.

Figure 6.1 ISO 14001:2004 assessment process



Assessment reporting - regulatory compliance example

Introduction - purpose of assessment and what in particular is examined

This report concerns a surveillance assessment of Emissions Ltd at their main Emissionshire site.

Items covered during the assessment were:

- maintenance of environmental impacts and legal databases;
- effluent treatment – focus on recent improvements to ensure regulatory compliance, current operational controls, monitoring and performance, including communications with the EA;
- packaging design and use, including compliance with associated regulation; and
- compliance tracking and review.

Summary - the general picture

Clear evidence was seen of the EMS being well maintained with regard to keeping up-to-date with environmental impacts and regulatory requirements.

The discharge consent for effluent treatment had been reissued by the Environmental Agency with tighter criteria for suspended solids, flow rate and temperature. This was agreed with the organisation following significant improvements made by them to their effluent treatment plant.

A good and positive working relationship with the regulator was evident from the records of correspondence seen.

Assessment checks made at the effluent plant revealed operation of sound procedures by knowledgeable operators. This included routine operations, monitoring (all measurements inside consent limits), installation of emergency alarms plus testing done during planned maintenance.

Performance records seen for the previous three months showed full and continuous compliance.

Appendix B

Some confusion was apparent over how the organisation would meet their obligations under the packaging producer and 'essential requirements' Regulations. It was clear that they understood their reuse and recycling requirements (advised by packaging scheme operator). However, it was evident that they had had no formal process for achieving these, nor had built this into their EMS objectives. Compliance, it seemed, was being met through series of ad hoc and uncoordinated activities. Please also see non-conformity ref. MH2.

Sound provisions were evident for monitoring and review of regulatory compliance, including tracking of performance concerning the packaging requirements.

Conclusion - concise statement of whether the EMS was working effectively

With exception of the non-conformity identified concerning packaging, the EMS was seen to be operating effectively.

Recommendation - can they remain certified?

Continued certification is recommended, but is subject to a satisfactory proposal of corrective action to be taken to address the non-conformity, and which will be verified during the next surveillance assessment.

iema

St. Nicholas House, 70 Newport, Lincoln LN1 3DP UK
Tel: 01522 540069 Fax: 01522 540090

