



Practical implementation of the Seveso II directive in the UK

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Abstract

This paper describes the arrangements being made in the UK to implement the Control of Major Accident Hazards Involving Dangerous Substances Directive (Seveso II) (96/82/EEC¹). It starts by describing briefly the arrangements for making the regulations to give legal effect to the Directive. It then goes on to describe the practical arrangements which are being made to ensure that the new regulations will be enforced effectively and that the principles on which enforcement is based (consistency, proportionality, targeting and transparency) will apply. The paper describes major projects dealing with safety report assessment and the development of an inspection strategy. It also describes the liaison arrangements being drawn up between the various enforcing authorities and the internal reorganisation recently carried out by the Health and Safety Executive (HSE): the enforcing authority for the current Seveso Directive.² Crown Copyright © 1999 Published by Elsevier Science B.V. All rights reserved.

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1. Introduction

Details about the implementation of the Seveso Directive in the UK and review of it can be found in Porter and Wettig paper in this Journal.

2. COMAH Regulations

The legal implementation of the Directive in the UK involves the making of a code of regulations (Working title the Control of Major Accident Hazards or COMAH) to

¹ Reference.

² Title and reference.

replace the CIMAH Regulations. Many of the elements of the new Directive go with the grain of the UK approach to Regulation—it is framework and objective setting in approach, legal controls already existed in respect of Land Use Planning and the CIMAH regulations already made reference to management systems although these were not included in the original Seveso Directive. However implementation (in the legal and practical sense) is not without its difficulties and UK has had to review and change its policies and arrangements to satisfy itself that it will be in a position to meet the requirements and policy objectives of the new Directive.

The UK believes that health and safety legislation is best developed (and enforced) with the involvement of major stakeholders so the policy making body—the Health and Safety Commission (HSC)—contains representatives of employers, trades unions and local government. Implementation arrangements have ensured that these stakeholders have been consulted and had ample opportunity to express their views and experience and contribute to the process. An advisory committee considered early drafts of HSE's implementation proposals with detailed discussions taking place on issues of particular concern. This process which took about nine months enabled a document to be prepared for wider consultation. In March 1998, HSC approved this formal Consultation Document (CD), containing a draft code of regulations and a draft guidance on the content of the regulations, and invited public comment on them and especially upon those issues which had been identified as being of particular concern during the informal consultation. Comments had to be submitted to HSE by August 1998. This process enabled HSE and DETR to submit amended proposals to the HSC who will submit the final draft of the COMAH Regulations to Ministers for approval.

3. Practical arrangements

If implementation is to have the desired practical effect of improving the standards of control of major hazards, legal requirements have to be supported by effective enforcement arrangements. Having considered these in some detail HSE believes that these include:

- ensuring that the enforcing authority or authorities have enough suitably qualified, trained and competent inspectors in place;
- that these inspectors are provided with clear principles and criteria by which to assess safety reports and procedures to follow for the administration of this process;
- that these (inspectors and procedures) are supported by information systems to track and monitor progress and also to inform elements of the assessment process; and
- ensure that liaison arrangements have been agreed between the various agencies that might be involved to provide a coordinated approach avoiding duplication and conflicting advice.

4. Organisation and staffing

In anticipation of COMAH, HSE implemented a structural reorganisation in 1996 which involved the setting up of a Chemical and Hazardous Installations Division

(CHID) which was charged with taking the lead in preparing HSE for discharging its operational obligations under the Directive and supporting the policy makers in preparing the new regulations. Inspectors working in CHID will have primary enforcement responsibility within HSE under COMAH and hence will be able to develop greater expertise in this work. Although the new Division has responsibilities for the entire chemical industry this enabled its managers and staff to concentrate upon major hazard problems and resources can be allocated to suit the needs of major hazard work without the need to consider the demands of other sectors. Since 1996, HSE has increased by over a third the inspection resources it allocates to major hazard inspection and it is undertaking the recruitment of additional technical specialists. Many of these will be based in HSE's local offices where they will work beside the regulatory inspectors. Specialists in process safety, electronic process control engineering and mechanical engineering (especially vessel integrity) will be particularly important. The presence of these specialists will enable HSE to provide multi-disciplinary teams with the full range of expertise for inspection and assessment work at complex major hazard sites.

5. Interdepartmental liaison

The new regulations will be enforced jointly by HSE and the two environment regulators, the Environment Agency for England and Wales, and the Scottish Environmental Protection Agency in recognition of the equality of standing of health and safety and environmental protection. This arrangement will also permit the full range of expertise to be brought to bear.

Although the involvement of more than one agency with enforcement duties increases the expertise available there are attendant risks. Failure to coordinate enforcement strategies could result in burdens on industry being needlessly increased by inspectors from the different agencies enquiring separately into the same matters. HSE and the agencies also have to visit sites to enforce other legislation, e.g. the agencies enforce IPC and there are common issues which need to be addressed. Effective and efficient arrangements are needed so that operators and regulators optimise on cost and benefit. To achieve this, HSE and the agencies have held detailed discussions which have resulted in the drawing up of Memoranda of Understanding to govern relations both nationally and locally. The assessment of safety reports is a detailed and structured process with the greatest potential for problems to arise. To minimise this potential the agencies have been members of the team drawing up the principles and procedures to govern the assessment process. It is intended that each assessment will be carried out in an integrated way by an assessment team on which both HSE and the relevant agency are represented. A single set of conclusions will be prepared for the employer. If serious deficiencies requiring the halting of production are discovered, the action will be discussed by the whole team.

There are also risks from a lack of coordination of inspection. Local managers will therefore consult on their overall inspection plans. At the end of each assessment process, an inspection plan will be drawn up for the premises both by HSE and the relevant agency taking account of the information obtained during assessment. HSE and

the agencies will take this opportunity to discuss these to see if, in the particular circumstances, there is any scope for avoiding inspection overlaps or organising joint inspections. There will also be consultation before any decision is taken to resort to formal enforcement action.

6. Safety report assessment

One of the biggest changes between COMAH and CIMAH relates to safety report assessment. Not only are the elements against which a safety report must be assessed wider with much greater emphasis on safety management systems but also the report must be produced with the purpose of demonstrating that major accident hazards have been identified and the measures necessary taken to prevent them. For the first time, there are duties on the competent authority to communicate the conclusions of its examination of the report to the company within a reasonable time, thereby imposing a specific timetable for the assessment process. Furthermore there is a duty on the CA to prohibit operations if there are serious deficiencies in the measures for prevention and mitigation.

HSE is carrying out (in cooperation with the agencies) a major project to develop high level principles for assessment, a process map to describe the assessment process in detail and assessment criteria for the information which has to be given by operators in the reports. A manual containing this information is being produced and will be distributed to all inspectors involved in the assessment process. This will enable a high level of consistency to be achieved in the way the process is carried out. To identify any flaws in the process, four operators have agreed to produce early COMAH safety reports and these have been assessed using the new processes. This manual will be an open document and will be available to industry.

7. Inspection strategy

Another major project is to develop an overall inspection strategy for CHID. This will involve:

- the preparation of high level principles setting out CHID's aim in carrying out inspection;
- identification of the inspection requirements needed to satisfy Article 18 of the Directive;
- evaluation and application of the range of inspection and intervention techniques to enable them to be effectively and efficiently applied in the most appropriate circumstances;
- provision of criteria for selection of premises for inspection and the planning and recording needed to prepare and maintain a rolling inspection programme; and
- preparation of a manual describing the policy and practice of enforcement.

To be effective, the new arrangements must include formal arrangements for taking account of information from the following sources: (1) information from assessment

about the major hazard scenarios, the measures taken to control the hazards and the views of the assessment team about possible deficiencies in precautions and standards; (2) information from the investigation of major accidents both about issues that warrant priority attention and about the effectiveness of different inspection techniques; and (3) information from inspectors carrying out this and past inspection programmes about the operator's performance on this and any other sites.

To enable subsequent assessments to be carried out as effectively as possible, there needs to be feedback from the inspection programme about on-site information and standards against which the statements in the operator's report can be judged.

8. Identifying and developing competence

CHID is in the process of identifying and developing competencies for all its staff and this work will anticipate the skills needed to deal with the new COMAH Regulations.

A skills model has been developed which defines the five main skills areas for all CHID staff. They are:

- Legal and Technical Skills—e.g. knowledge of chemical processes and relevant legislation
- Inspection Skills—e.g. inspection techniques appropriate for dealing with large multi-site employers, such as audit
- Personal Skills—e.g. negotiating and influencing skills
- Organisational Skills—e.g. effective use of IT
- Managerial Skills—e.g. staff appraisal

All staff will need skills in the Personal Skills and Organisational Skills areas, but the extent to which skills in the other skills areas are needed will depend upon the individual's current post. Regulatory inspectors will need skills in all five areas.

9. Information system support

CHID intends to roll out a new information system about six months after the introduction of the COMAH Regulations. The main objective of this system will be to support CHID's work on hazardous installations.

It will draw together existing information held in 12 separate databases, and provide new facilities. It will help CHID: (1) identify which establishments are covered by the requirements of the Directive; (2) manage the process of Assessing Safety Reports; (3) draw up Inspection Plans to deal with issues arising from Assessment, and to record the outcome of Inspection; (4) deal with companies more effectively on a national basis, by enabling information about Safety Report Assessment and health and safety performance from a number of sites around the UK to be assembled; (5) manage the process of providing advice to Land Use Planning Authorities about developments in the vicinity of Hazardous Installations; and (6) record CHID's investigation of an Major Incidents.

10. Improving consistency and proportionality

Consistency and proportionality are two principles on which HSE's enforcement policy is based. An operator is entitled to expect that the similar circumstances will produce a similar response from inspectors and that inspectors' actions will be proportionate to the extent of the hazard, the size of risk, the seriousness of any deficiency in the measures taken and the operator's compliance record. To improve its performance, HSE is adopting a quality policy and framework which may be summed by the maxim 'doing the right things right'. Over a period of time, HSE intends to identify the more important of its processes and apply ISO 9000 principles to them. New procedures being developed for COMAH will be priority items on CHID's list. For example, the first will be the safety report assessment regime. These quality principles will include arrangements for monitoring, auditing and review including where appropriate an element of peer review of inspectors' judgements.

11. Transparency

It is a fundamental principle of the way in which HSE works that operators are entitled to know what is expected of them and the principles, policies and procedures which inspectors will use. A detailed guidance booklet is being prepared on the new regulations with full consultation with stakeholders on its contents. This will be supplemented by a booklet addressing the special problems of emergency planning and, in particular the interpretation of the new requirements for testing of emergency plans. Detailed leaflets will also be prepared for external audiences, e.g. employers and members of the public.

HSE has consulted stakeholders about the principles and criteria both for assessment and inspection. The manuals produced as part of the assessment and inspection strategy projects will also be made publicly available. As required by articles 13(4) and 20 of the COMAH directive, HSE is also making arrangements for safety reports to be available to the public subject only to the conditions in the directive designed to protect industrial, commercial and personal confidentiality, public security and national defence.

12. Conclusion

The UK has adopted a comprehensive implementation programme designed to ensure that regulations are in place by February 1999 addressing the whole range of the Seveso II Directive requirements and to supplement those regulations by a full range of practical measures designed to provide an effective and efficient enforcement regime.