

February 1999

# **THE SEVESO II DIRECTIVE**

by

**Jürgen Wettig**

and

**Sam Porter**

## 1. INTRODUCTION

On 9 December 1996 *Directive 96/82/EC on the control of major-accident hazards* (so-called Seveso II Directive) was adopted by the Council of the European Union. Following its publication in the *Official Journal (OJ) of the European Communities (No L 10 of 14 January 1997)* the Directive entered into force on 3 February 1997.

Member States had up to two years to bring into force the national laws, regulations and administrative provisions to comply with the Directive (transposition period). From 3 February 1999, the obligations of the Directive have become mandatory for industry as well as the public authorities of the Member States responsible for the implementation and enforcement of the Directive.

The Seveso II Directive has replaced *Directive 82/501/EEC on the major-accident hazards of certain industrial activities (OJ No L 230 of 5 August 1982)*, now called Seveso I Directive. The fact that the Seveso I Directive was not amended but that a completely new Directive has been conceived already indicates that important changes have been made and new concepts have been introduced into the Seveso II Directive.

This article aims at explaining to industrial operators and public authorities in an easily comprehensible way, the historical background for legislation concerning major accident prevention, preparedness and response as well as the provisions of the new Seveso II Directive, in particular highlighting new areas not contained within the Seveso I Directive.

The explanations on the Seveso II Directive broadly follow the structure of the Directive but intentionally do not overload the reader with too many quotations of Articles and paragraphs or a “legalistic language”.

## 2. HISTORICAL BACKGROUND

Major accidents in chemical industry have occurred world-wide. Increasing industrialisation after the Second World War also led to a significant increase of accidents involving dangerous substances. During the four decades following the Second World War, there were over 100 reported major incidents world-wide, involving toxic clouds which led to the loss of some 360 lives and significant physical and environmental damage.

In Europe, in the 1970's two major accidents in particular prompted the adoption of legislation aimed at the prevention and control of such accidents.

The *Flixborough accident* in the United Kingdom in 1974 was a particularly spectacular example. A huge explosion and fire resulted in 28 fatalities, personal injury both on and off-site, and the complete

destruction of the industrial site. It also had a domino effect on other industrial activity in the area, causing the loss of coolant at a nearby steel works which could have led to a further serious accident.

The Seveso *accident* happened in 1976 at a chemical plant manufacturing pesticides and herbicides. A dense vapour cloud containing tetrachlorodibenzoparadoxin (TCDD) was released from a reactor, used for the production of trichlorofenol. Commonly known as dioxin, this was a poisonous and carcinogenic by-product of an uncontrolled exothermic reaction. Although no immediate fatalities were reported, kilogramme quantities of the substance lethal to man even in microgramme doses were widely dispersed which resulted in an immediate contamination of some ten square miles of land and vegetation. More than 600 people had to be evacuated from their homes and as many as 2.000 were treated for dioxin poisoning.

After almost three years of negotiations in Council and European Parliament, the Seveso I Directive was adopted in 1982. However, in the decade since the Directive's adoption, its strict reporting requirements have meant that some 130 major accidents have been identified EU-wide.

In the light of the severe accidents at the Union Carbide factory at Bhopal, India (1984) where a leak of methyl isocyanate caused more than 2.500 deaths and at the Sandoz warehouse in Basel, Switzerland (1986) where fire-fighting water contaminated with mercury, organophosphate pesticides and other chemicals caused massive pollution of the Rhine and the death of half a million fish, the Seveso I Directive was amended twice, in 1987 by *Directive 87/216/EEC of 19 March 1987 (OJ No L 85 of 28 March 1987)* and in 1988 by *Directive 88/610/EEC of 24 November 1988 (OJ No L 336 of 7 December 1988)*. Both amendments aimed at broadening the scope of the Directive, in particular to include the storage of dangerous substances.

The reporting requirements of the Seveso I Directive were last amended in 1991 by *Directive 91/692/EEC of 23 December 1991 standardizing and rationalizing reports on the implementation of certain Directives relating to the environment (OJ No L 377 of 31 December 1991)*. The only report about the implementation of the Seveso I Directive has been published by the Commission in 1988 (*COM (88) 261 final*).

The original Seveso I Directive required a review of its scope by the Commission by 1986. Also, the Member States, in accompanying resolutions concerning the fourth (1987) and the fifth Action Programme on the Environment (1993), had called for a general review of the Seveso I Directive to include, amongst others, a widening of its scope and a better risk-and-accident management. A resolution from the European Parliament also called for a review.

Following such a review, the proposal for a new Seveso II Directive was presented to Council and European Parliament by the Commission in 1994.

### **3. LEGAL BASIS, AIM**

#### **3.1 Legal basis**

The Seveso II Directive is based on Article 130s of the Treaty (establishing the European Community). This Article forms part of a Title within the Treaty which establishes the objectives of the *Environmental Policy of the Community* and the decision procedures to be followed when adopting measures in order to pursue these objectives.

It is important to mention that, according to Article 130t, Member States can maintain or adopt stricter measures than those adopted by the Community in the field of its Environmental Policy. In other words: When transposing the Seveso II Directive into national law, Member States may impose stricter obligations on their industry than those foreseen in the Directive. This can, of course, have an impact on the competitiveness of the industries concerned.

#### **3.2 Aim (Article 1)**

The aim of the Seveso II Directive is two-fold:

Firstly, the Directive aims at the *prevention* of major-accident hazards involving dangerous substances.

Secondly, as accidents do continue to occur, the Directive aims at the *limitation of the consequences* of such accidents not only for man (*safety and health aspects*) but also for the environment (*environmental aspect*).

Both aims should be followed with a view to ensuring high levels of protection throughout the Community in a consistent and effective manner.

Although in many cases substances which are dangerous for man are also dangerous for the environment, it can be said that the scope of the Seveso I Directive was more focused on the protection of persons than on the protection of fauna and flora. With the Seveso II Directive, propensity to endanger the environment is an important aspect that has been reinforced by the inclusion, for the first time, of substances classified as *dangerous to the (aquatic) environment* in the scope of the Directive. Such substances were covered by Seveso I only if they were also covered by another classification category.

### **4. SCOPE, DEFINITION, TWO-TIER APPROACH, EXCLUSIONS**

#### **4.1 Scope, Definition (Article 2)**

The scope of the Seveso II Directive has been broadened and simplified at the same time. It solely relates to the *presence of dangerous substances in establishments*. 'Presence of dangerous substances' is defined as the

*actual* or *anticipated* presence of such substances or the presence of substances which may be *generated during loss of control of an industrial chemical process*, such as for example TCDD. Thus, the scope covers both, *industrial “activities”* as well as the *storage* of dangerous chemicals.

There are two major changes with regard to the Seveso I Directive:

- The old Directive contained a list of particular installations described by a number of activities. The Seveso II Directive no longer contains such a list. Therefore, the need to define the term *industrial activity* no longer exists.

Moreover, the list of *named substances* has been reduced from 180 to around 50 substances (Annex I, Part 1) in favour of an enlarged and more systematic list containing *generic categories* (Annex I, Part 2) such as toxic, explosive or flammable. As concerns the definition of these generic categories, the Directive makes reference to the Directives relating to the classification, packaging and labelling of dangerous substances, preparations and pesticides.

- Whereas the old Directive applied to *installations*, the Seveso II Directive applies to *establishments* which are defined as “*the whole area under the control of an Operator where dangerous substances are present in one or more installations, including common or related infrastructures or activities*”.

This important change of approach removes the ‘loophole’ where a split of activities and storage facilities into smaller units could allow “escape” from the obligations imposed by legislation.

## 4.2 Two-tier approach (Annex I)

Similar to its predecessor, the scope of the Seveso II Directive follows a so-called *two-tier approach* which means that for each named substance and for each generic category of substances and preparations, two different *qualifying quantities* (threshold levels) are mentioned in Annex I, Parts 1 and 2 of the Directive, a lower and an upper value (e.g. for chlorine: 20 and 100 tonnes).

It is assumed that the risk of a major-accident hazard arising from an establishment in which dangerous substances are present increases with the quantities of substances present at the establishment. Consequently, the Directive imposes more obligations on *upper tier* establishments than on *lower tier* establishments (see points 6. to 8. below).

In fact, the Directive can be viewed as inherently providing for three levels of ‘proportionate’ controls in practice, where larger quantities mean more controls. A company who holds a quantity of dangerous substance less than the lower thresholds given in the Directive is not covered by this legislation but will be proportionately controlled by general provisions on health, safety and the environment provided by other legislation which is

not specific to ‘major-accident hazards’. Companies who hold a larger quantity of dangerous substance, above the lower threshold contained in the Directive, will be covered by the ‘lower tier’ requirements. Companies who hold even larger quantities of dangerous substance, above the upper threshold contained in the Directive, will be covered by all the requirements contained within the Directive.

### 4.3 Exclusions (Article 4)

Important areas excluded from the scope of the Seveso II Directive include *nuclear safety, the transport of dangerous substances and intermediate temporary storage outside establishments and the transport of dangerous substances by pipelines.*

However, the Commission has been requested by Council and the European Parliament to investigate the necessity of taking action in the areas of *transport interfaces such as ports and marshalling yards*, and in the area of *transport of dangerous substances in pipelines.*

It is recognised that the transportation of dangerous substances has a significant major-accident potential. Transportation to and from an establishment may involve greater risks than those at the establishment itself. Moreover, the number of people at risk from the accidental release of a dangerous substance during transportation through inhabited areas or during intermediate temporary storage near such areas might in fact be larger than at the establishment where the substance is produced, used or stored. There is ongoing liaison with the transport sector to promote coherent policies in this context.

## 5. GENERAL AND SPECIFIC OBLIGATIONS

The Directive contains general and specific obligations on both operators and the Authorities. The provisions broadly fall into two main categories related to the two-fold aim of the Directive, that is, measures related to:

- the *prevention* of major accidents;
- *limitation of the consequences* of major accidents

### 5.1 Control measures aimed at prevention

All operators need to meet requirements including:

- General obligations
- notification
- major-accident prevention policy

- controls on modifications of establishments/installations

In addition, operators of ‘upper tier’ establishments need to meet requirements on:

- safety reports
- safety management systems

## 5.2 **Control measures aimed at limitation of the consequences of a major accident**

For all establishments, the operator/authorities must meet requirements related to:

- land-use planning

For ‘upper tier’ establishments, the operator/authorities must meet additional requirements related to:

- emergency planning
- information on safety measures (to the public)

## 5.3 **General obligations (Article 5)**

This article is intended to impose a clear simple general requirement that an operator must do all that is necessary. The Operator must

- *take all necessary measures* to prevent major accidents and, in the case of such a accident, to limit its consequences for man and the environment and
- be able to *prove*, at any time, to the public authority responsible for carrying out the duties under the Directive (so-called *Competent Authority*) that he has taken all the necessary measures as specified in the Directive.

It is important to stress that this latter obligation imposes the *burden of proof* on the Operator.

## 6. **NOTIFICATION (ARTICLE 6)**

The principle intent behind an article on *notification* is that it should be illegal for companies to hold large quantities of a dangerous substance without identifying this to the authorities. The Directive requires that a notification shall contain the following information:

- the *name* of the Operator and the *address* of the establishment

- the *registered place of business* of the Operator
- the *name or position of the person in charge* of the establishment
- information sufficient to identify *the dangerous substances or category of substances* involved
- the *quantity and physical form* of the dangerous substance or substances involved
- the *activity* of the installation or storage facility
- the *immediate environment* of the establishment

For *new* establishments, a notification has to be sent to the Competent Authority within a reasonable period of time prior to the start of construction or operation. ‘Reasonable period of time’ means that the Competent Authority must have sufficient time to examine the notification and to *react* to it, for example by requesting supplementary information or by raising doubts as regards the safety of the establishment.

Operators of *existing* establishments who already have transmitted the above information to their Competent Authority are not required to submit a new notification once the Seveso II Directive will enter into mandatory application. Operators of existing establishments *not previously covered by the Seveso I Directive* have to transmit a notification within a year’s period from 3 February 1999, i.e. before 3 February 2000.

Of course, in the event of significant changes in quantities and/or nature of dangerous substances or the permanent closure of an establishment/installation, the Operator has to inform the Competent Authority.

## **7. MAJOR-ACCIDENT PREVENTION POLICY - MAPP (ARTICLE 7)**

The obligation to establish and to properly implement a MAPP applies to Operators of both lower and upper tier establishments. This represents a new requirement not specifically contained within Seveso I. It has been derived from an increased recognition that appropriate policies and management systems within a company are necessary to safeguard against major accidents, as seen from the fact that ‘management factors’ have contributed to many of the accidents which have occurred since the implementation of Seveso I.

The MAPP must be established *in writing* and should include the Operator’s overall *aims and principles* of action with respect to the prevention and control of major-accident hazards. It shall be designed to guarantee a high level of protection for man and the environment by appropriate means, structures and management systems.

Some major differences exist in the practical ways that Operators of lower and upper tier establishments make the contents of their MAPP known to the authorities.

Operators of *lower tier* establishments shall make the MAPP *available* to the Competent Authorities (at their request) which means that they have no obligation to actually send the written document setting out their MAPP to the Competent Authority.

Operators of *upper tier* establishments must demonstrate in their Safety report that a MAPP has been put into effect. The Safety report must be sent to the Competent Authority.

## **8. SAFETY REPORT (ARTICLE 9)**

The Seveso I Directive also contained a requirement to produce a safety assessment of hazards (although the term “safety report” was not used as such). Whereas the technical format of the Safety report required by the Seveso II Directive will to a large extent be similar to that of its predecessor, significant supplementary requirements (MAPP, SMS) have been introduced.

The obligation to produce a Safety report and to send it to the Competent Authority only applies to Operators of *upper tier* establishments.

A flexible presentation permits the combination of the Safety report with other reports produced in response to other legislation to form a single Safety report in order to avoid unnecessary duplication or repetition of work.

### **8.1 Contents**

Safety reports shall have the purpose of :

- demonstrating that a MAPP and a SMS have been put into effect,
- demonstrating that major-accident hazards have been identified and that all necessary measures have been taken to prevent such accidents and to limit their consequences for man and the environment,
- demonstrating that adequate safety and reliability have been incorporated into the design, construction, operation and maintenance of any establishment/installation and/or storage facility, as well as equipment and infrastructure connected,
- demonstrating that Internal Emergency Plans have been drawn up, supplying information to enable the External Emergency Plan to be drawn up,

- providing sufficient information to the Competent Authority to enable decisions to be made in terms of the siting of new activities or developments around existing establishments.

The Safety report must include the following minimum data and information which are specified in more detail in Annex II of the Seveso II Directive:

- Information on the MAPP and on the SMS
- Presentation of the environment of the establishment
- Description of the installation(s)
- Identification and accidental risk analysis and prevention methods
- Measures of protection and intervention to limit the consequences of an accident

## **8.2 Time limits for the submission of the safety report**

For *new* establishments, the Safety report has to be sent to the Competent Authority within a ‘reasonable period of time’ prior to the start of construction or operation.

For *existing* establishments previously covered by the Seveso I Directive, the Safety report has to be sent to the Competent Authority before 3 February 2001.

For *existing* establishments not previously covered by the Seveso I Directive, the Safety report has to be sent to the Competent Authority before 3 February 2002.

## **8.3 Review of the safety report**

The Safety report must be reviewed and, if necessary, updated

- at least *every five years* or
- at the *initiative of the Operator* or at the *request of the Competent Authority*, where justified by new facts, new technical knowledge about safety or about hazard assessment, or
- in case of a *modification* of a site which means modification of the establishment, the installation, the storage facility, the (chemical) process, the nature of dangerous substance(s) or the quantity of dangerous substance(s)

#### **8.4 Limitation of the information required in safety reports (Article 9.6 - dispensations)**

The applicability of this provision of the Directive requires in the first instance the development of so-called *harmonized criteria* for a decision by a Competent Authority that particular substances present at an establishment, or part thereof, are “in a state incapable of creating a major-accident hazard”.

These harmonised criteria which have been elaborated by the Commission, in close co-operation with the Member States, were adopted by the Commission on 26 June 1998 in accordance with the *Regulatory Committee* procedure established under the Seveso I Directive (*OJ No L 192 of 8 July 1998, p. 19*).

In conclusion, this provision allows the Competent Authorities, at the (justified) request of an Operator, to decide and to communicate to the Operator that he may limit the information to be provided in his Safety report. However, it is clear that this cannot mean a total dispensation from the obligation to submit a Safety report.

The Member States are obliged to notify any dispensations granted to the Commission, including the reasons. The Commission shall forward the lists containing the notifications to the Committee established under the Directive (see point 19. below) on a yearly basis.

#### **8.5 Tasks of the Competent Authority with regard to the safety report**

The Competent Authority has the task of *examining* the Safety report and to *communicate the conclusions* of its examination to the Operator.

The Competent Authority has not only the right to *request further information* from the Operator but also to proceed to an *inspection* of the establishment (see point 17. below), if necessary.

Although the Seveso II Directive does not explicitly mention the necessity of issuing a *permit* to the Operator (or some other type of *licensing system*), it seems clear that the Competent Authority has to take an “active decision” to either *allow* or *prohibit* the bringing into use, or the continued use of the establishment. A simple statement by the Competent Authority that the Safety report has been received and seems complete will not be sufficient.

### **9. SAFETY MANAGEMENT SYSTEMS - SMS (ANNEX III)**

The introduction of the obligation for Operators of *upper tier* establishments to put into effect an SMS has taken account of the development of new managerial and organisational methods in general and, in particular, of the significant changes in industrial practice relating

to risk management which have occurred over the past ten years. One of the main objectives pursued by this obligation is to prevent or reduce accidents caused by management factors which have proven to be a significant causative factor in over 90 per cent of the accidents in the EU since 1982.

The SMS shall address the following issues which are specified in more detail in Annex III of the Seveso II Directive:

- organisation and personnel
- identification and evaluation of major-accident hazards
- operational control
- management of change
- planning for emergencies
- monitoring performance
- audit and review

## **10. EMERGENCY PLANS (ARTICLE 11)**

As was the case with the old Directive, on-site (internal) and off-site (external) emergency plans are still required. The *Internal Emergency Plan* for the measures to be taken inside the establishment has to be drawn up by the Operator and to be supplied to the Local Authorities to enable them to draw up an *External Emergency Plan*. Emergency Plans have to be reviewed, revised and updated, where necessary.

Important new elements are requirements on the Operator to *consult with his personnel on the Internal Emergency Plan* and on the Local Authority to *consult with the public on the External Emergency Plan*. For the first time, the Seveso II Directive contains an obligation to *test in practice* the Internal and External Emergency Plan at least every three years. Moreover, Annex IV of the new Directive contains specific requirements on data and information to be included in *Internal and External Emergency Plans*.

For *new* establishments, *Internal and External Emergency Plans* have to be drawn up prior to the start of operation.

For *existing* establishments previously covered by the Seveso I Directive, the *Internal Emergency Plan* has to be drawn up before 3 February 2001.

For *existing* establishments previously not covered by the Seveso I Directive, the *Internal Emergency Plan* has to be drawn up before 3 February 2002.

The competent local authorities are obliged to draw up *External Emergency Plans* within a reasonable period of time.

## **11. DOMINO EFFECTS (ARTICLE 8)**

This new provision obliges the Competent Authority to

- identify establishments or groups of establishments where the danger of an accident and its possible consequences may be increased because of the *location* and the *proximity* of the establishments, and the *dangerous substances present* and to
- ensure an *exchange of information* and *co-operation* between the establishments.

## **12. LAND-USE PLANNING (ARTICLE 12)**

This provision reflects the request of the Council, following the Bhopal accident, that the land-use planning implications of major-accident hazards should be taken into account in the regulatory process. The inclusion of this provision can be regarded as a major step forward in the process of major accident mitigation.

Member States are obliged to pursue the two-fold aim of the Directive through controls on

- the *siting* of new establishments,
- *modifications* to existing establishments (see definition under point 8.3 before) and
- new developments such as *transport links*, *locations frequented by the public* and *residential areas* in the vicinity of existing establishments.

In the long term, Land-use Planning Policies shall ensure that *appropriate distances* between hazardous establishments and residential areas are maintained. Where such establishments already exist in the vicinity of residential areas, the Seveso II Directive calls for consideration of *additional technical measures* so as not to increase the risks to people, in the context of application of the above mentioned controls.

## **13. INFORMATION AND CONSULTING OF THE PUBLIC (ARTICLE 13)**

The Seveso II Directive gives more rights to the public in terms of access to information as well as in terms of consultation. It is expected that this Article will continue to promote the benefits of an effective dialogue between the operator and the residents living in the vicinity of plants who are liable to be affected by major accidents.

## 13.1 Information to the public

Operators as well as public authorities have certain obligations to inform the public. These information obligations can be divided into two forms of information: *Passive* and *Active* Information (although the Directive does not use these terms). Whereas *Passive* Information means *permanent availability of information* i.e. that this information can be requested by the public, *Active* Information means that the Operator or the Competent Authority themselves need to be pro-active, for example through the distribution of leaflets or brochures, to “actively” inform the public.

### 13.1.1 *Passive information*

This concerns the possibility of the public to scrutinise Safety reports.

### 13.1.2 *Active information*

Member States are obliged to supply persons liable to be affected by a major accident with information on safety measures and the requisite behaviour in the event of an accident. The items of information to be communicated are specified in more detail in Annex V of the Seveso II Directive.

The information shall be reviewed at least every three years and repeated at least every five years, and always in the case of a modification of a site (see definition under point 8.3 before).

## 13.2 Consultation of the public

The public must be able to give its opinion in the cases of

- *planning* for new *upper tier* establishments,
- *modifications* to existing establishments (see definition under point 8.3 before),
- *developments* around existing establishments and on
- *External Emergency Plans*

## 14. INFORMATION ON SAFETY MEASURES TO OTHER POTENTIALLY AFFECTED MEMBER STATES (ARTICLE 13, PARAGRAPH 2)

Member States have to supply information on *upper tier* establishments to other potentially affected Member States where there is a possibility of transboundary effects of a major accident in order to enable them to take account of this in

- the establishment of Emergency Plans,

- their Land-use Planning and
- the information to their public.

This provision also applies to UN/ECE Member countries which are Parties to the *Convention on the Transboundary Effects of Industrial Accidents*. This Convention which provides for a similar exchange of information has been approved on behalf of the European Community by *Council Decision of 23 March 1998 (OJ No L 326 of 3 December 1998, p.1)*.

## **15. DEFINITION OF A MAJOR-ACCIDENT; INFORMATION OBLIGATIONS OF THE OPERATOR AND THE MEMBER STATES FOLLOWING A MAJOR-ACCIDENT; INFORMATION OBLIGATIONS OF THE COMMISSION: THE MAJOR ACCIDENT REPORTING SYSTEM - MARS**

### **15.1 Definition of a major accident**

According to the more general definition of Article 3 of the Directive, a “*major accident*’ shall mean an occurrence such as a major emission, fire, or explosion resulting from uncontrolled developments in the course of the operation of any establishment covered by the Directive, and leading to serious danger to human health and/or the environment, immediate or delayed, inside or outside the establishment, and involving one or more dangerous substances”.

Annex VI of the Directive gives criteria for the notification of an accident to the Commission by the Member State and relates to the *consequences* of a major accident in terms of

- substances involved,
- injury to persons and damage to real estate,
- immediate damage to the environment,
- damage to property,
- cross-border damage.

It is important to note that the general definition of a major accident is much broader than the Annex VI criteria and should not be restricted to the latter.

## **15.2 Information obligations of the Operator following a major-accident (Article 14)**

As concerns the obligations of the Operator following a major accident, the broad definition of a major accident applies.

The Operator has the obligation to

- inform the Competent Authority,
- provide information on the circumstances of the accident, the substances involved, data for an assessment of the effects of the accident and the emergency measures taken
- inform about the steps envisaged to alleviate the effects of the accident and to prevent a recurrence of such an accident
- update the information about the accident.

The Competent Authority must

- ensure that all necessary measures are taken;
- collect all information necessary for a full analysis of the accident, which might also include on-site inspection,
- ensure that the Operator takes all necessary remedial measures and
- recommend future preventive measures.

## **15.3 Information obligations of the Member States following a major-accident (Article 15)**

As concerns the obligations of the Member States following a major accident, the Annex VI criteria apply.

Member States have the obligation to report to the Commission all accidents which correspond to this definition of a major accident. However, this means that the Member States are not obliged to report all the major accidents that they have been informed of by Operators.

An initial accident report (short report) by a Member State must include the following:

- name and address of the responsible authority of the Member State
- date, time and place of the accident
- name of the Operator and address of the establishment

- description of the circumstances of the accident (substances involved, immediate effects on man and the environment)
- emergency measures and precautions taken.

After a more detailed analysis of an accident, Member States are obliged to send to the Commission a more detailed report using a harmonised report form (long report).

#### **15.4 Information obligations of the Commission : the Major Accident Reporting System - MARS (Article 19)**

In order to fulfil its information obligations towards the Member States, the Commission has established a so-called *Major-Accident Reporting System (MARS)* and the *Community Documentation Centre on Industrial Risks (CDCIR)* at the Major-Accident Hazards Bureau (MAHB) established within the Joint Research Centre (JRC) in Ispra, Italy.

MARS is an information system containing descriptive data of accidents supplied by the Member States and evaluated by MAHB (see <http://mahbsrv.jrc.it/mars/Default.html>). It is a database network, consisting of 15 local databases in each Member State and a central analysis system at MAHB that allows complex text retrieval and pattern analysis to generate lessons learned from accidents.

The CDCIR is a library and information system that collects and evaluates guidelines, regulations, codes of good practice, and accident case histories related to all aspects of relevant Community and international legislation in the area of industrial risks (see <http://mahbsrv.jrc.it/cdcir/Default.html>).

#### **16. REPORTING OBLIGATIONS OF THE COMMISSION CONCERNING THE IMPLEMENTATION OF THE SEVESO II DIRECTIVE (ARTICLE 19)**

*Directive 91/692/EEC of 23 December 1991 standardizing and rationalizing reports on the implementation of certain Directives relating to the environment (OJ No L 377 of 31 December 1991)* to which the Seveso II Directive refers introduces three-year reporting periods for reports on the implementation of certain Directives relating to the environment (including the Seveso I and II Directives), starting with the period 1994 to 1996.

The provisions of this framework Directive oblige

- the Committee established under the framework Directive (not the Committee established under the Seveso II Directive) to adopt a 'questionnaire' to standardise the reporting, at the latest 6 months prior to the beginning of the reporting period,

- the Member States to provide the Commission with a three-year report based on the questionnaire, at the latest 9 months after the end of the reporting period,
- the Commission to establish and publish in the OJ a summary of this information, at the latest 18 months after the end of the reporting period.

The second report about the implementation of the Seveso I Directive (following the report of 1988, see page 3) which will be at the same time the report covering the first reporting period under the above framework Directive (1994-96) should therefore be published by the Commission until 30 June 1998.

## 17. INSPECTIONS BY THE PUBLIC AUTHORITIES (ARTICLE 18)

This is an area that has been amended and strongly reinforced in the Seveso II Directive; whereas the Seveso I Directive only contained one small paragraph on inspection, the provision in the new Directive has been extended to an Article of its own. An attempt is made to ensure increased consistency in enforcement at European level through greater prescriptive detail of the obligations of the Competent Authorities.

The most important new element is that Competent Authorities are obliged to organise an *Inspection System* which shall ensure that

- the Operator has taken all necessary measures with regard to the two-fold aim of the Directive (prevention of major accidents and limitation of their consequences),
- the Safety report is correct and complete; however, inspections and control measures are not dependent on the submission of a Safety report or other documents,
- the public has been informed.

An *Inspection System* shall comprise

- a *programme of inspections* by the Competent Authority consisting either of a *systematic appraisal of each establishment* or of at least *one on-site inspection per year*
- an *inspection report* to be drawn up by the Competent Authority
- a *follow-up with the Operator* within a 'reasonable period' following the inspection. This is of course particularly important when the Competent Authority has detected deficiencies in the safety of an establishment and has requested the Operator to take supplementary measures to improve safety.

## **18. PROHIBITION OF USE (ARTICLE 17)**

Competent Authorities are obliged to *shut down* or to *prohibit the bringing into use* of

- establishments
- installations
- storage facilities,
- or parts thereof,

if the safety measures taken by the Operator are *seriously deficient*.

However, Competent Authorities may also proceed to a prohibition of use if the Operator has *not submitted*

- the Notification and/or
- the Safety report or
- any other information required by the Directive.

Member States must ensure that an *appeal procedure* is in place against a prohibition order by a Competent Authority.

In conclusion, the provision of the Seveso II Directive concerning the prohibition of use serves a *double objective*:

- On the one hand, Competent Authorities must be empowered to apply strict measures where the health and safety of the population and/or the protection of the environment is at stake.
- On the other hand, Competent Authorities can exercise pressure against Operators who are not willing or who fail to fulfil their formal obligations under the Directive (disciplinary measure).

## **19. COMITOLGY; ADMINISTRATIVE CO-OPERATION**

### **19.1 Comitology (Articles 21 and 22)**

As was the case with the Seveso I Directive, the Comitology provisions of the new Directive provide for a *Regulatory Committee* (type IIIa) to assist the Commission for certain tasks. These tasks are

- to amend the *harmonised criteria* enabling the Competent Authorities to grant dispensations for the limitation of information in Safety reports (see point 8.4 above),

- to adapt Annexes II to VI of the Directive to technical progress,
- to adopt the major accident report form (see point 15.3 above).

When fulfilling the above tasks, the Committee of Competent Authorities (see point 19.2 below) acts as a Regulatory Committee. The Regulatory Committee takes its decisions with *qualified majority*.

## 19.2 Administrative co-operation

A coherent implementation and consistent application of the provisions of the Seveso II Directive throughout the Community necessitates a close co-operation of the Competent Authorities of all Member States and the European Commission.

In order to underline the importance of a continuous administrative co-operation, the Directive obliges the Member States and the Commission to exchange information on the experience acquired and the functioning in practice of the Directive.

The forum for such an administrative co-operation is the so-called **Committee of Competent Authorities (CCA)** which consists of representatives of the Member States and the Commission services. The CCA is chaired by a representative of the Commission and meets once in every Council presidency, i.e. every six months. The work of the CCA is based upon *consensus*.

The CCA discusses all issues concerning the implementation of the Seveso I and II Directives and gives guidance as to their practical application. In this context, the Guidance documents and Guidelines on important provisions of the Seveso II Directive play an important role. Although they have no legal status, they provide valuable guidance to industrial operators as well as enforcement authorities, taking into account the fact that they represent the unanimous view of all Member States on the issue concerned.

The following Guidance documents are available from the Major-Accident Hazards Bureau (MAHB) (see <http://mahbsrv.jrc.it/Profile-Publications.html>):

- *Guidance on Inspections as Required by Article 18 of the Council Directive 96/82/EC (Seveso II), EUR 18692 EN (1999)*
- *Guidance on Land Use Planning as Required by Council Directive 96/82/EC (Seveso II), EUR 18695 EN (1999)*
- *Guidelines on a Major Accident Prevention Policy and Safety Management System, as required by Council Directive 96/82/EC (SEVESO II), EUR 18123 EN (1998)*
- *Explanations and Guidelines for the application of the Dispensation Rule of Article 9, paragraph 6 of Council Directive 96/82/EC on the*

*control of major-accident hazards involving dangerous substances, EUR 18124 EN (1998)*

- *Guidance on the preparation of a Safety Report to meet the Requirements of Council Directive 96/82/EC (Seveso II), EUR 17690 EN (1997)*
- *General Guidelines for Content of Information to the Public (Directive 82/501/EEC - Annex VII) EUR 15946 EN (1994)*
  - *Steht auch zur Verfügung auf Deutsch - EUR 15946 DE*
  - *Disponible aussi en français - EUR 15946 FR*
  - *Está también disponible en español - EUR 15946 ES*
- *Guidance on Domino Effects*

Furthermore, a series of answers to frequently asked questions (Q&A's) which have equally been agreed upon by the CCA is published and regularly updated on MAHB's Website (<http://mahbsrv.jrc.it/Home.html>).

## **20. FINAL REMARKS**

At the threshold of the 21st century, the new Seveso II Directive represents a modern piece of *goal-oriented* legislation that will hopefully contribute to improving safety in European chemical industry.

The Directive is consistent with other mandatory and voluntary legislative instruments in the environmental field, such as *Directive 96/61/EC concerning integrated pollution prevention and control - IPPC (OJ No L 257 of 10 October 1996)* or *Regulation No 1836/93 allowing voluntary participation by companies in the industrial sector a Community eco-management and audit scheme - EMAS (OJ No L 168 of 10 July 1993)*.

Industrial operators should therefore not consider the Directive as an administrative burden but as a chance of demonstrating their responsible attitude towards plant safety not only to the responsible Government authorities but also to their local communities including environmental interest groups. In fact, the relationship between all players involved - Operators, Competent Authorities and the public - should be characterized by dialogue and co-operation rather than confrontation.

Finally, the challenge for the Commission will consist in ensuring a consistent and effective implementation and application of the Seveso II Directive throughout the Community. This objective will only be achieved by fostering administrative co-operation with the Member States and by providing further guidance to industrial operators as well as to national administrations.

Jürgen Wettig is employed as a principal administrator in Directorate-General XI (Environment, Nuclear Safety and Civil Protection) of the European Commission. Sam Porter works in the Chemical Hazards Inspection Division of the Health and Safety Executive (HSE) in the United Kingdom. Both authors are concerned with the area of Industrial Risks, including the Seveso I and II Directives as well as international activities in the field of accident prevention, preparedness and response (OECD, UN Economic Commission for Europe, UN Environment Programme).

*The contents of this article are the personal opinions of the authors and in no way commit the European Commission.*

Addresses:

EUROPEAN COMMISSION

Directorate-General XI (Environment, Nuclear Safety and Civil Protection)

Unit E 1 (Industrial installations and emissions)

Sector Industrial Risks and Eco Management and Audit Systems

200, rue de la Loi

B - 1049 BRUSSELS

tel: (+32-2) 296.91.49

fax: (+32-2) 299.03.13

e-mail: Juergen.Wettig@dg11.cec.be

EUROPEAN COMMISSION

Joint Research Centre

Major-Accident Hazards Bureau (MAHB)

TP 670

I – 21020 ISPRA (VA)

tel: (+39-0332) 78.9391

fax: (+39-0332) 78.9007

e-mail: [christian.kirchsteiger@jrc.it](mailto:christian.kirchsteiger@jrc.it)

Webpage: <http://mahbsrv.jrc.it>

1. INTRODUCTION.....	2
2. HISTORICAL BACKGROUND.....	2
3. LEGAL BASIS, AIM.....	4
3.1 Legal basis.....	4
3.2 Aim (Article 1).....	4
4. SCOPE, DEFINITION, TWO-TIER APPROACH, EXCLUSIONS.....	4
4.1 Definition (Article 2).....	4
4.2 Two-tier approach (Annex I).....	5
4.3 Exclusions (Article 4).....	6
5. GENERAL AND SPECIFIC OBLIGATIONS.....	6
5.1 Control measures aimed at prevention.....	6
5.2 Control measures aimed at limitation of the consequences of a major accident.....	7
5.3 General obligations (Article 5).....	7
6. NOTIFICATION (ARTICLE 6).....	7
7. MAJOR-ACCIDENT PREVENTION POLICY - MAPP (ARTICLE 7).....	8
8. SAFETY REPORT (ARTICLE 9).....	9
8.1 Contents.....	9
8.2 Time limits for the submission of the safety report.....	10
8.3 Review of the safety report.....	10
8.4 Limitation of the information required in safety reports (Article 9.6 - dispensations).....	11

8.5 Tasks of the Competent Authority with regard to the safety report.....	11
9. SAFETY MANAGEMENT SYSTEMS - SMS (ANNEX III) .....	11
10. EMERGENCY PLANS .....	12
11. DOMINO EFFECTS.....	13
12. LAND-USE PLANNING .....	13
13. INFORMATION AND CONSULTING OF THE PUBLIC (ARTICLE 13) .....	13
13.1 Information to the public.....	14
13.1.1 Passive information .....	14
13.1.2 Active information.....	14
13.2 Consultation of the public .....	14
14. INFORMATION ON SAFETY MEASURES TO OTHER POTENTIALLY AFFECTED MEMBER STATES (ARTICLE 13).....	14
15. DEFINITION OF A MAJOR-ACCIDENT, INFORMATION OBLIGATIONS OF THE OPERATOR AND THE MEMBER STATES FOLLOWING A MAJOR-ACCIDENT, INFORMATION OBLIGATIONS OF THE COMMISSION : THE MAJOR ACCIDENT REPORTING SYSTEM - MARS .....	15
15.1 Definition of a major accident .....	15
15.2 Information obligations of the Operator following a major-accident (Article 14) .....	16
15.3 Information obligations of the Member States following a major-accident (Article 15) .....	16
15.4 Information obligations of the Commission : the Major Accident Reporting System - MARS (Article 19) .....	17

16. REPORTING OBLIGATIONS OF THE COMMISSION CONCERNING THE IMPLEMENTATION OF THE SEVESO II DIRECTIVE (ARTICLE 19) .....	17
17. INSPECTIONS BY THE PUBLIC AUTHORITIES (ARTICLE 18).....	18
18. PROHIBITION OF USE (ARTICLE 17).....	19
19. COMITOLGY; ADMINISTRATIVE CO-OPERATION.....	19
19.1 Comitology (Articles 21 and 22) .....	19
19.2 Administrative co-operation .....	20
20. FINAL REMARKS.....	21