

Manual of European Environmental Policy

The following pages are a section from the Manual of European Environmental Policy written by the Institute for European Environmental Policy.

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This section is the text of the Manual as published in 2012. It is therefore important to note the following:

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Major-accident hazards (COMAH)

Formal references	
96/82/EC (OJ L10 14.1.1997)	Directive on the control of major-accident hazards involving dangerous substances
Proposed 26.1.94 – COM(94)4	
2003/105/EC (OJ L345/97 31.12.03)	Amendment
Proposed 10.12.01 – COM(2001)624 and amended proposal 26.09.02 – COM(2002)540	
Legal base	Article 192 TFEU (originally Art. 130s EEC Treaty)
98/433/EC (OJ L192 8.7.98)	Commission Decision concerning dispensations under Article 9
Binding dates	
Formal compliance	3.2.99
Notification of establishments	3.2.00
Safety reports and internal emergency plans	
– Establishments Covered by 82/501/EEC	3.2.01
– Others	3.2.02 Note: The following earlier Directives dealing with the same subject were repealed on 3.2.99 (but emergency plans prepared under the Directives can remain in force): 82/501/EEC (OJ L230 5.8.92); 87/216/EEC (OJ L85 28.3.87); and 88/610/EEC (OJ L336 07.12.88).

Purpose of the Directive

The risks for man and the environment arising from any industrial activity are of two kinds: routine risks in normal operating conditions, and exceptional risks such as fires, explosions and massive emissions of dangerous substances when an activity gets out of control. The Directive is concerned with the second kind of risk and requires steps to be taken to prevent major accidents and to limit the consequences of those that do occur. These steps include preparing safety reports and emergency plans for establishments containing specified dangerous substances, and informing the public of the correct behaviour to adopt in the event of an accident. Directive 82/501/EEC was often called the ‘Seveso Directive’ since it was the notorious accident in Italy in 1976 that prompted the Community to legislate. Directive 96/82/EC, which replaces it, is therefore often known as Seveso II or ComaH, for the control of major-accident hazards.

Summary of the Directive

The essential elements of this apparently complicated Directive are as follows. The Directive applies to establishments in two categories (sometimes known as upper- and lower-tier sites) depending on the quantities of dangerous substances involved – with the upper-tier installations having greater quantities of dangerous substances than the lower tier. A general duty is placed on operators of both tiers to prevent major accidents and to limit their consequences for man and the environment. The following specific duties apply but some only to the upper-tier sites:

- The operator is to notify establishments where dangerous substances are present.
- The operator is to prepare a major-accident prevention policy.
- The operator of upper-tier sites is to prepare a safety report.
- The operator of upper-tier sites is to prepare an internal emergency plan.
- The authorities are to prepare an external emergency plan for upper-tier sites.
- The public is to be informed of safety measures and of the requisite behaviour in the event of an accident.

Definitions

The Directive applies to establishments where dangerous substances are present in quantities listed in Annex 1 of the Directive. The quantities are listed in two columns defining two categories of establishments. Article 3 sets out a number of definitions including ‘operator’, ‘establishment’ and ‘installation’. An ‘establishment’ is the whole area under the control of an operator and an ‘installation’ is a technical unit within an establishment. The definition of ‘major accident’ is not precise and refers to ‘an occurrence such as a major emission, fire or explosion ... leading to serious danger ...’.

Various activities are excluded from Directive 96/82/EC such as hazards created by ionizing radiation, military establishments, transport of dangerous substances including by pipeline, extractive industries and waste land-fill sites.

The amending Directive 2003/105/EC requires additional establishments to be covered by the Seveso provisions (and so reducing the exclusions of Directive 96/82/EC), namely the exploitation (exploration, extraction and processing) of minerals in mines and quarries and offshore exploration and exploitation of minerals, including hydrocarbons, and waste land-fill sites, including tailing ponds or dams containing dangerous substances. Facilities handling ammonium nitrates and potassium nitrates are also now covered. The amendment had to be transposed into national law by July 2005.

General duty

A general duty is placed on Member States to ensure that the operator is obliged to take all measures necessary to prevent major accidents and to limit their consequences for man and the environment. The operator is to prove to the competent authority at any time that the necessary measures have been taken.

Notification

The operator is to send to the competent authority a notification including formal details (address etc.), information sufficient to identify the dangerous substances or category of substances involved, the quantity and form of the substances, the activity or proposed activity and the environment of the establishment (elements liable to cause a major accident or to aggravate the consequences).

New establishments must be notified a reasonable period before construction or operation. Existing establishments must be notified by 3.2.2000 but those already notified under existing national law do not need to be notified again.

Safety report

Operators of upper-tier sites must produce a safety report for the purposes of demonstrating:

- That a major-accident prevention policy and a safety management system have been put into effect in accordance with Annex III.
- That major-accident hazards have been identified and that the necessary measures have been taken.
- That adequate safety and reliability have been incorporated into the design, construction, operation and maintenance.
- That internal emergency plans have been drawn up.

The safety reports must be public and must supply information to enable the competent authority to draw up external emergency plans and to make decisions about siting new activities around existing establishments. As a minimum the safety report must contain an inventory of dangerous substances and the information listed in Annex II:

- A description of the site and its environment including identification of installations and activities which could present a major-accident hazard.
- A description of the installation.
- Identification and accidental risks analysis and prevention methods.
- Measures to limit the consequences of an accident.

Safety reports for new establishments are to be sent to the competent authority a reasonable period of time before construction or operation. Existing establishments not previously covered by Directive 82/501/EEC are to be sent by 3.2.02 and others by 3.2.01. The competent authority is to inform the operator of the conclusions of its examination of the safety report and may prohibit the use of the establishment (see below).

The safety report is to be reviewed periodically (at least every five years) and updated if necessary.

Member States may limit the information in a safety report when it can be shown to the competent authority that a particular substance is in a state incapable of creating a major hazard. Commission Decision 98/433/EC lists the criteria for dispensations.

External emergency plans

Competent authorities are to draw up an external emergency plan for upper-tier sites in order to contain incidents so as to minimize the effects, to communicate the necessary information to the public and to the services and authorities in the area, and to provide for the restoration of the environment following a major accident. Annex IV lists the information to be included in external emergency plans.

The public and employees of the establishment are to be consulted on external plans. Internal and external plans are to be reviewed, tested and if necessary revised at least every three years. The competent authority must give reasons if it decides that an external plan is not necessary.

Domino effect

The competent authority is to identify establishments where the possibility of major accidents may be increased because of their location or proximity. Information is then to be exchanged so as to take account of the overall hazard and co-operation is to be made in preparing the external emergency plan and informing the public. This can be an issue in large industrial estates where more than one installation falls under Seveso criteria.

Land-use planning

Member States are to ensure that preventing major accidents and limiting their consequences are taken into account in land-use policies, in particular in siting new establishments, in modifications to existing establishments and in new developments such as transport links and residential areas. Account is to be taken, in the long term, of the need to maintain appropriate distances between establishments and residential areas and areas of particular natural sensitivity. Appropriate consultation procedures are to be established between all competent authorities and planning authorities in order to ensure that technical advice on risks is available when decisions are taken. Directive 2003/105/EC includes the following conciliation outcome – the European Commission (EC) will draw up a database on ‘risk data and risk scenarios’ to improve land-use planning decisions and that risk maps or equivalent will be required for safety reports.

Information for the public

Member States must ensure that information on safety measures and on the requisite behaviour in the event of an accident is supplied, without their having to request it, to persons liable to be affected by a major accident. The information is to be reviewed at least every three years. It is to contain the matters listed in Annex V and is to be permanently available.

The safety report is to be publicly available but the operator may ask that certain parts are not disclosed for reasons of industrial, commercial or personal confidentiality, public security or national defence. The approval of the authority is necessary for non-disclosure.

The public is to be able to give its opinion on planning for new establishments, modifications to existing establishments, and developments around existing establishments.

Where an upper-tier site could result in a major accident having transboundary effects, the Member State must provide sufficient information to the potentially affected Member State so that it can prepare an external emergency plan and take the information into account in land-use planning.

Action following accident

As soon as a major accident occurs the operator shall:

- Inform the competent authorities.
- Provide them with information on the circumstances of the accident, the dangerous substances involved, the data available for assessing the effects and the emergency measures taken.
- Inform the authorities of the steps envisaged to alleviate the medium- and long-term effects of the accident and to prevent reoccurrence.

The competent authority must ensure that any urgent medium- and long-term measures which may prove necessary are taken, and must collect the information necessary for a full analysis of the accident.

Member States must inform the Commission as soon as possible of major accidents meeting the criteria set out in Annex VI.

Prohibition of use

Member States are to prohibit the use, or bringing into use, of any establishment where the measures taken by the operator for prevention or mitigation of major accidents are seriously deficient. Member States may prohibit use, or bringing into use, if the operator has not submitted the notification or safety report. Operators may appeal against such a prohibition order.

Inspections

The competent authority is to organize a system of inspections. There is to be a programme of inspections for all establishments and following an inspection a report is to be prepared.

Information exchange

Member States and the Commission are to exchange information on the experience acquired. The Commission is to maintain a public register and information system about major accidents. (For this purpose the Commission has established a Major-Accidents Hazard Bureau (MAHB) at the Joint Research Centre at Ispra, Italy, with the tasks of (a) analysing major accidents notified to the Commission and disseminating the lessons learnt, (b) running a Community Documentation Centre on Industrial Risk, and (c) organizing studies and workshops.)

Member States are to provide the Commission with a three-yearly report under the standardized reporting Directive [91/692/EEC](#). The Commission is to publish a summary every three years.

Development of the Directive

The original Directive 82/501/EEC was proposed in response to pressure from the European Parliament following a disaster in 1976 when dioxin escaped from a factory at Seveso near Milan in Italy and spread across the countryside. Although no-one died, many animals had to be slaughtered and land was sterilized. The accident had more environmental effects than effects on the workforce. Other major accidents at Flixborough, UK (1974), Beek, Netherlands (1975) and Velbert, Germany (1979) showed that existing control systems were not satisfactory. The Commission's explanatory memorandum recorded that the Netherlands, the United Kingdom and Italy had all informed the Commission of proposed legislation in the field and the Directive was an attempt to ensure comparable procedures in all Member States.

Within a year of the proposal being first discussed in the Council, the broad outlines of a draft had been generally approved except for the issue of transfrontier responsibilities. The proposals on this point were not acceptable to France and took a further 18 months to resolve. In Britain an Advisory Committee on Major Hazards, which published a report¹ in September 1976 recommending legislation similar to the Directive in providing both for notification of installations handling dangerous substances and the preparation of hazard surveys and this influenced the Directive. Thus the United Kingdom supported the principle of the Directive but was troubled by the use of the word environment and believed that the Directive should be confined to substances directly affecting man.

The original proposal made no mention of the transfrontier responsibilities of the Member States and this provision was inserted at the insistence of the Benelux countries and in response to the Resolution of the European Parliament (OJ C175 14.7.80). It is possible that without the pressure of Parliament the provision would not have survived since it was not acceptable to the French government which was concerned that once the principle was conceded it might be difficult to resist similar provisions relating to its nuclear power stations even if these were outside the scope of the Directive.

After the adoption of the Directive, a disaster occurred at Bhopal, India (in December 1984) where a leak of methyl isocyanate from the Union Carbide plant manufacturing pesticides caused the deaths of at least 3000 people and caused illness to tens of thousands of others. As a result, the Commission proposed what became Directive 87/216/EEC adding some substances and lowering the thresholds for others (including phosgene, chlorine, methyl isocyanate, sulphur trioxide and liquid oxygen).

Following a spill into the Rhine (again an environmental major accident) from the Sandoz plant at Basle in November 1986, a second amending Directive 88/610/EEC was adopted. It increased the number of warehouses subject to the Directive and increased and clarified the information to be made available to the public.

In 1988 the Commission and the relevant Committee of Competent Authorities began a fundamental review of the whole of the Directive. This resulted in a proposal that became Directive 96/82/EC. In its explanatory memorandum (COM(94)4) the Commission said that an analysis of the 130 major accidents that had occurred since 1982 showed that 95 per cent could have been prevented by the application of existing knowledge and proper management and operational procedures.

Apart from clarifying some obligations in the original Directive, the new Directive 96/82/EC added significant new ones including the requirement that safety reports should be public and that operation can be prohibited, subject to appeal, if the necessary notification or reports have not been submitted or are deficient. It also effects land-use planning.

The 2003 amendment followed the 2000 and 2001 industrial accidents (a cyanide spill in Baia Mare in Romania, a ‘fireworks’ accident in Enchede in the Netherlands, and an explosion at a fertilizer plant in Toulouse, France) and studies on carcinogens and substances dangerous to the environment. This led to the extension of the application of 96/82/EC to other installations (as noted above) as well as extending the list of carcinogens and significantly lowering the qualifying quantities assigned to dangerous substances, which should lead to more installations having to respect Directive 96/82/EC and some installations moving from the lower tier to the upper tier. The changes relate to installations holding ammonium nitrate, carcinogens, explosives and petroleum products.

Implementation of the Directive

Information on the measures taken by the Member States to transpose Directive 96/82/EC can be found in their national [execution measures](#).

The Commission published two reports on the implementation of Directive 82/501/EEC in 1988 (COM(88)261) and 1999 ([OJ C291 12.10.1999](#)). The Commission has published three reports on the implementation of Directive 96/82/EC. The three-yearly reports covering the periods 1994–1996, 1997–1999 and 2000–2002, published in 1999, 2002 and 2005, respectively, provide information on practical implementation in all Member States.

The 2002 report² noted that information was supplied by all 15 Member States. Although the transposition deadline was 3 February 1999, ‘many specific deadlines were one, two or three years later than the deadline’. Member States reported on 3,278 upper-tier establishments and 93 per cent had sent their safety report to the competent authorities, and 91 per cent of the establishments had drawn up an internal emergency plan.

The 2005 report³ included information from 25 Member States and Norway. In December 2005 3,949 upper-tier establishments were reported (3,278 in the EU-15 in 2002, plus 399 in the EU-10). More than 93 per cent of the operators had provided a Safety Report. Also more than 94 per cent of the upper-tier establishments have an internal emergency plan. In all, 68.1 per cent of establishments had an external emergency plan and about 40 per cent of the existing external emergency plans in the EU-25 were tested between 2003 and 2005. With regard to inspection in 2005 69.4 per cent (2,741) of the establishments were inspected that year, with about 89 per cent inspected over the three-year period.

The reports also provide information on the MAHB, on the Major-Accident Reporting Scheme (MARS) and the Community Documentation Systems on Industrial Risk (CDCIR) (for further information see – <http://mahbsrv.jrc.it/>).

In 2008 a report on the effectiveness of the Directive was published⁴. This sought the views of affected industry in eight Member States and concluded that the Directive had improved safety and had had little impact on competitiveness.

On 9 August 2010 a report on implementation of the Directive for the period 2006-2008 was published ([C\(2010\) 5422](#)). Over this period 79 major accidents were reported in the EU. In December 2008, 4,528 upper tier establishments were reported, an increase over the previous three years of 14 per cent (see above). By 2008 98 per cent of the operators had submitted a Safety Report. The percentage of establishments covered by External Emergency Plans had been ‘unacceptably low’, according to the Commission, in the previous two reporting periods (68.1 per cent in 2005, 34.4 per cent in 2002; EU-25), had improved so that, at the end of 2008, the average level had reached 91.3 per cent. On inspections, the overall percentage of inspected establishments was unchanged over the last three reporting periods.

In June 2007 the Commission issued two guidance documents on how to implement key aspects of COMAH. The first document⁵ deals with the preparation of safety reports and the second document⁶ covers land-use planning guidelines in the context of Article 12. Further guidance has been published through the MAHB, including on Major Accident Prevention Policy and Safety Management System, Explanations and Guidelines on harmonised criteria for dispensations, General Guidance for the content of information to the public and Guidance on Inspections.

Enforcement and court cases

There have been a number of cases decided in the European Court of Justice concerning Directive 96/82/EC. Four cases concern the failure by Member States to ensure adequate transposition of the Directive:

- [C-226/05](#) 5.10.06. This was a judgement against Austria for failure to ensure adequate transposition of the Directive within the prescribed period.
- [C-383/00](#) 14.05.02. This was a judgement against Germany for failure to ensure adequate transposition of the Directive within the prescribed period.
- [C-423/00](#) 17.01.02. This was a judgement against Belgium for failure to ensure adequate transposition of the Directive within the prescribed period.
- [C-394/00](#) 17.01.02. This was a judgement against Ireland for failure to ensure adequate transposition of the Directive within the prescribed period.

Three cases concerned the failure by Member States to draw an emergency plan:

- [C-401/08](#) 02.04.09. This was a judgement against Austria for failure to ensure adequate emergency planning.
- [C-342/08](#) 12.03.09. This was a judgement against Belgium for failure to ensure that an external emergency plan is drawn up for all the establishments covered by Article 9.
- [C-289/08](#) 12.03.09. This was a judgement against Luxembourg for failure to ensure that an external emergency plan is drawn up for all the establishments covered by Article 9.

One case concerned the failure by Member State to ensure adequate transposition of Directive 2003/105/EC:

- [C-375/06](#) 24.05.07. This was a judgement against Portugal for failure to ensure adequate transposition of the Directive within the prescribed period.

Further developments

In February 2008 the Commission launched a review of the Directive in the form of the F-SEVESO study, which assessed the effectiveness of the Directive and identified improvements that could be incorporated in a revised version. The study was based on a survey focusing on eight Member States, covering more than 80 per cent of the total number of COMAH establishments. The final report⁷ included a number of long- and short-term recommendations on how to improve the implementation of COMAH.

A technical working group was set up to examine the impact of the Globally Harmonized System of Classification and Labelling of Chemicals ([GHS](#)) on COMAH. In 2009 this working group published an interim report⁸ on how the physical, health and environmental hazards categories under GHS could be best aligned to COMAH. A final report⁹ was published in February 2010. The Commission also organised a stakeholder consultation meeting in November 2009 to inform the review.

On 21 December 2010 the Commission published a proposal ([COM\(2010\)781](#)) for an amended Directive. The main proposed changes are: to align Annex I of the Directive (defining the substances falling within its scope) to changes to the EU system of classification of dangerous substances (Regulation (EC) No 1272/2008, see section on [classification, labelling and packaging of chemical substances and mixtures](#)); to include mechanisms to adapt Annex I in the future to deal with changing situations; to strengthen the provisions relating to public access to safety information, participation and access to justice; and to introduce stricter standards for inspections.

Related legislation

Directive 96/82/EC excludes some specific activities from its scope (see above). These activities are addressed by other Directives, including those addressing transport of dangerous goods (Directive [2008/68/EC](#)), radiation safety (Directive [2006/25/EC](#)) and land-fill sites (Directive [1999/31/EC](#)). As noted above in the proposed revision to the Directive, it has a strong relationship to Regulation (EC) No 1272/2008 on [classification, labelling and packaging of chemical substances and mixtures](#).

Directive 96/82/EC sets out accident prevention and management requirements for two tiers of industrial activities. The IPPC Directive [2008/1/EC](#) also requires accident prevention and management to be considered in the operation of the installations it covers. Some consider that this creates a 'third tier', although without the detailed specifications of Directive 96/82/EC. This interaction is continued with the future replacement of IPPC with the [Industrial Emissions Directive](#) (2010/75/EU).

There is also a relationship with other emergency planning, such as seen with the Floods Directive [2007/60/EC](#), and with measures to support those affected by emergencies, such as through the European Solidarity Fund (Regulation (EC) No [2012/2002](#)).

References

- 1 Health and Safety Commission (1976) *Advisory Committee on Major Hazards: First Report*. HMSO, London.
- 2 European Commission (2002) *Report on the Application in the Member States of Directive 96/82/EC on the control of major-accident hazards involving dangerous substances for the period 2000–2002*, http://ec.europa.eu/environment/seveso/pdf/report_en.pdf
- 3 European Commission (2005) *Report on the Application in the Member States of Directive 96/82/EC on the control of major-accident hazards involving dangerous substances for the period 2003–2005*, http://ec.europa.eu/environment/seveso/pdf/report_2003_2005_en.pdf
- 4 EU-VRi 2008. Study of the Effectiveness of the Seveso II Directive http://ec.europa.eu/environment/seveso/pdf/seveso_report.pdf
- 5 DG Joint Research Centre (2005) *Guidance on the Preparation of a Safety Report to Meet the Requirements of Directive 96/82/EC as amended by Directive 2003/105/EC (SEVESO II)*, 2005.
- 6 DG Joint Research Centre (2006) *Land Use Planning Guidelines in the Context of Article 12 of the SEVESO II Directive 96/82/EC as amended by Directive 105/2003/EC*, also defining a technical database with risk data and risk scenarios, to be used for assessing the compatibility between SEVESO establishments and residential and other sensitive areas listed in Article 12, September 2006.
- 7 EU-VRi (2008) *F-SEVESO Study on the Effectiveness of the Seveso II Directive, Final Report*, 29 August 2008.
- 8 DG Joint Research Centre (2009) *Technical Working Group on SEVESO and GHS, Draft Interim Report*, in Zsuzsanna Gyenes, http://ec.europa.eu/environment/seveso/pdf/twg_report.pdf
- 9 DG Environment 2010. Impact assessment study into possible options for adapting Annex 1 of the SEVESO II Directive into the GHS. Final Report. February 2010. [http://ec.europa.eu/environment/seveso/pdf/ghs_impact%20assessment.pdf]