

Short Communication

The importance of information on industrial risk: A new documentation centre

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Abstract

In January 1989 the Commission of the European Communities set up a Community Documentation Centre on Industrial Risk (CDCIR). The objective of CDCIR is to create a bibliographic and scientific environment which facilitates the exchange of information between member states on the control of major hazardous industrial activities, and to gain maximum knowledge from the common European effort towards industrial safety. The CDCIR contains relevant information on the national approaches to the implementation of the EEC Directive on Major Hazards and technical guidelines concerning the industrial activities covered by this Directive. Further accident reports are also collected. Many of the documents are not easily found elsewhere, as they are issued by government sources or are specific to the Directive. A bulletin containing summaries of the new documents in CDCIR is issued twice a year. Furthermore reviews are made on specific subjects, e.g. the study report "National Approaches to the Safety Report — A Comparison".

1. Introduction

Since the dawn of industrialisation industrial accidents have happened. Some of these accidents have had consequences that could have been avoided if proper information had been available to the right persons at the right time, or if safety rules (which normally result from learning from past experience) had been applied and respected [1].

The Commission of the European Communities has recognised the importance of information as a means for risk management and accident prevention. In order to regulate major industrial hazards in a harmonised way and to ensure a sufficient flow of information in the Member States to the authorities, to industry and to the public, the Directive 82/501/EEC [2] was adopted in 1982 and amendments were approved in 1987 [3] and 1988 [4]. It is commonly

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known as the Major Accident Hazards Directive or the Seveso Directive. All member states have now appointed the competent authorities foreseen by the Directive and the implementation proceeds.

According to the Directive, each member state can shape the national laws implementing the Directive and can place the responsibilities of the actual implementation on chosen national authorities. In this way it is possible to match already existing national laws with the Directive.

For systematic diffusion of information concerning the practical implementation of the Directive in the twelve EEC member states, relevant documents were centralised in a new documentation centre. Thus the Community Documentation Centre on Industrial Risk (CDCIR) [5] was born, the prime objectives of which are as follows:

- To collect, classify and review technical rules, guidelines and documents concerning the requirements of the Seveso Directive and the safety of industrial installations in general. Documents on major accidents in the form of reports, videotapes, etc. will also be collected and reviewed.
- To make information accessible to interested visitors. Material which is not covered by copyright and which is not restricted will be made available on request to Mr P. Wiederstein, JRC Ispra, TP 632, I-21020 Ispra (fax. +39 332 78 90 07).
- To publish periodical bulletins which feature the inventory, including abstracts of the collected material. The bulletins will be made available to all interested parties.
- To publish accident case histories and documents devoted to comparing existing regulations and safety practices.

The novelty about this Documentation Centre is that public documents, which are not easily accessible or available from public libraries, will be collected in a central place. This fills a gap in the present registration and availability of papers, and ensures that their existence will be known more widely.

2. Documents in CDCIR

For most of the documents there is only one copy in the original language. Each document is summarised in English and printed in a report of reviews. The review bulletins are issued periodically, twice a year. The first bulletin of reviews was issued in April 1989 [6] and the sixth one is in print. There is a mailing list containing interested persons/organisations and so far the bulletins are sent out without charge. Depending on the amount of interest shown by the potential users of the Centre, the abstracts and index of the Documentation Centre may be stored on a data base system and the bulletins published on electronic media.

The documents are classified according to their content into the following

main groups, with each group being further subdivided to cater for detailed topics relevant to the main grouping.

- (1) The Seveso Directive requirements and related issues.
(Subgroups: Safety reports, emergency plans, etc.)
- (2) Non-process/facility specific technical guidelines or safety assessments.
(Subgroups: Fire and explosion, corrosion, etc.)
- (3) Technical guidelines or safety assessments specific to process or facility.
(Subgroups: Fertilisers, gas processing, etc.)
- (4) Accident documentation.
(Subgroups: Chlorine, petroleum refining, etc.)
- (5) Other relevant material.
(Subgroups: Reference books, proceedings of general conferences, etc.)

In total the classification system divides relevant documents into 89 subgroups.

Although the Documentation Centre started only in January 1989, it already contains more than 1000 documents of which 500 have been reviewed and the summary included in the first bulletins [6,7]. A growth of 300 documents per year seems a reasonable forecast.

The Competent Authorities in the Member States have been very collaborative and have forwarded many of the documents at the launching of the Documentation Centre. As their responsibility is the implementation of the Directive, the Documentation Centre naturally has received much information on that. Therefore the area of guidelines for implementing the Directive issued by the member states, i.e. main Group 1, is covered well by the Documentation Centre. At the moment a systematic collection of guidelines from industrial organisations has been initiated.

Otherwise the documents are distributed over the classification system. Not all subclasses contain documents at present, but it is still too early to identify probable empty classes as much work is to be accomplished concerning the collection of documents. Empty classes are interesting because they indicate areas where further contributions from industry and the Competent Authorities could be valuable, or areas in which more research is needed.

3. Studies performed by the CDCIR

The documentation centre also provides the possibility of studying and comparing the guidelines of the member states, and review reports comparing the national practices for chosen subjects. Major accident case histories and the lessons learnt from these are also collected. The sources of accident case histories, e.g. official investigation reports such as those issued by the Health and Safety Executive in the United Kingdom or accident inventories like those published by the French Ministry of Environment [8] as well as special journals and magazines exchanging more specialized information or magazines from industrial associations.

To date the CDCIR has published three studies made in the field of the Major Accident Hazards Directive.

The first is a core study of lessons learnt from emergencies after accidents in the UK involving dangerous substances [1]. The study concentrates on the nature and scale of the emergency response to chemical incidents rather than the causes of the incidents. Firstly, a comprehensive review of the statutory basis for emergency response in the UK, the organisations involved and their role is given. Then a limited number of chemical incidents, five for fixed installations and five for transportation, are selected for in-depth analysis. The main conclusions are that introduction of computerised decision support systems would allow organisations involved in an emergency to get a faster overview of the hazards connected to an incident. Post-incident discussions should be disseminated to the whole European Community for maximum learning from the past.

This was followed by an analysis of the lesson learned from accidents notified in MARS [9] (Major Accident Reporting System by the Seveso Directive. A description of MARS can be found in [11]). At the time of the analysis 97 accidents had been included in MARS. The accidents have been classified according to various parameters such as year of occurrence, type of industrial activity, type of accident, substances involved, consequences, severity, causes, etc. The result of this classification is analysed to understand the causes of the accidents (e.g. human error and managerial omissions) and the possibilities of preventing similar accidents from occurring.

The third publication contains a review of National Approaches to the Safety Report [10]. The Safety Report is required in Article 5 in the Seveso Directive, and should contain details about the hazardous substances involved in the industrial activity, information about the installation and information about possible accidents. A questionnaire was prepared by the Competent Authorities Committee to obtain information on the national implementation of Article 5. A comparative summary of the answers is given and an appendix contains the full questionnaire with the answers from all 12 member states.

Other studies are in print and the titles are:

Emergency Management in Germany This report has been made in collaboration with TÜV, Germany.

Safety related regulations for LPG installations in the EEC The study is performed by "Four Elements" in the United Kingdom.

Environmental Accidents This study has been made by the Water Quality Institute in Denmark.

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