

emergency planning guidance notes

Prepared on behalf of the CONCAWE Major Hazards Management Group by the Special Task Force on Off-Site Emergency Planning (MH/STF-1)

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ABSTRACT

These are three of a series of Guidance Notes to be issued by CONCAWE on the general subject of major hazards with specific reference to the implementation of the requirements of the Seveso Directive.

The overall purpose of these Notes is to provide guidance to CONCAWE contributing companies on aspects of the assessment and control of major hazards. The Notes may also assist national Regulatory Authorities in their contacts with the petroleum industry.

The first of the Guidance Notes is "Selecting the Incident Scenarios for Off-Site Emergency Planning". This recommends inclusion of a range of incidents which may occur based on a review of the design of the plant and audit of its operation and maintenance. The second Guidance Note is "Responsibilities of Petroleum Industry and Regulatory Authorities in Off-Site Emergency Planning". This clarifies that the petroleum industry is to provide the information to the authorities who develop the Off-site plan and ensure that it is ready for action. Both parties need to liaise closely. The third Guidance Note is "Information to the Public". This provides advice on the type of information that should be provided during and after an incident and makes recommendations on its dissemination.

Additional Guidance Notes in this series are planned for future publication.

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This report does not necessarily represent the views of any company participating in CONCAWE.

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FOREWORD

CONCAWE's reputation has been established by its analysis and guidance to companies and authorities in the areas of environment and health protection. With the formation of the Major Hazards Management Group in 1986, CONCAWE is responding to the need to provide safety guidance to companies meeting the requirements of Seveso directive-type legislation in Europe.

The EEC Seveso Directive 82/501 requires member states to adopt provisions to ensure that all manufacturers (Article 3) take measures to prevent and limit the consequences of major accidents, and (Article 4) prove to competent authorities that they have identified major hazards and adopted appropriate measures.

Where an installation contains a large quantity of hazardous or highly flammable material, the manufacturer must notify the competent authority (Article 5):

- type, quantity, use of substances
- location, manning, technology of processes,
- sources of hazards, arrangements for safe operation,
- information to enable emergency plans to be set up.

The guidance notes in this folder deal with emergency planning topics; in particular with those topics which require a dialogue between the company and the competent and local authorities. Such dialogue is essential to develop effective Off-site emergency plans.

The first three guidance notes cover:

- selecting the incident scenarios for Off-site emergency planning,
- responsibilities of petroleum industry and regulatory authorities in Off-site emergency planning,
- information to the public.

Subsequent guidance notes will cover other emergency planning topics. Each note is intended to be suitable for stand-alone use within the company and use to assist dialogue with regulatory authorities on a particular emergency planning topic. In addition, the group of notes in the folder can be used to inform authorities about the range of procedures the oil industry has developed for emergency planning.

Safety and emergency planning matters are the legal responsibility of management. CONCAWE's advice is to assist managements carry out these responsibilities. CONCAWE Major Hazards Management Group would be interested to hear from member companies of any lessons learned during the practical application of these guidance notes or other relevant issues associated with emergency planning.

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CONCAWE MAJOR HAZARDS MANAGEMENT GROUP
EMERGENCY PLANNING GUIDANCE NOTE

SELECTING THE INCIDENT SCENARIOS FOR OFF-SITE EMERGENCY PLANNING

Manufacturers who are covered by Article 5 of the Seveso Directive are required to provide information to their national Competent Authorities so that the latter can develop Off-site emergency plans. This Guidance Note comments on the selection of the incident scenarios which should be used as the basis of the plans.

1. INTRODUCTION

The fundamental objective of any emergency plan is to minimise loss and suffering in the event of an incident. There are legal requirements for the provision of a plan laid down in the Seveso Directive and derivative national legislation, but the preparation of a plan must be undertaken with clear understanding of the objective - in an emergency, keeping injury to people and damage to property and the environment to a minimum.

The Seveso Directive places obligations on both the Competent Authority in a Member State and the affected manufacturer in regard to emergency planning.

The manufacturer is required under Article 5 to:

- develop an On-site emergency plan and have this available for inspection by the Competent Authority;
- provide information to the Competent Authority so that they can develop, in conjunction with their emergency services, an Off-site plan;

The Member State Competent Authority is required to:

- ensure that an Off-site emergency plan, based on the information provided by the manufacturer, is in place (Article 7);
- ensure that persons liable to be affected by a major incident occurring at the manufacturers' site are informed in "an appropriate manner of the safety measures and of the correct behaviour to adopt in the event of an accident" (Article 8).

The purpose of this CONCAWE Guidance Note is to give advice on selecting the incident scenarios on which Off-site emergency plans should be based.

It needs to be emphasised that the Seveso Directive covers incidents both to man and the environment (Article 1).

2.

DISCUSSION

Generally speaking, the accident with the most serious consequences which could occur on a petroleum refinery or terminal will be the result of a rupture of a large vessel or pipework. This situation should have been foreseen by the designer of the plant and suitable measures taken to make it a very unlikely event.

However, it must be recognised that there may be some particular situations, particularly on older plant which may have been designed to less stringent standards than modern plant, where improvements have to be made to ensure that the event is very unlikely. In addition to internal reviews these situations will be reviewed as part of the work associated with the preparation of the safety report required by the Seveso Directive (Article 5). In general, it would then be appropriate only to consider smaller (but more likely) events for emergency planning purposes.

As a result of the much publicised large accidents which have occurred during the past ten years on process plant world-wide, an initial reaction might have been to base the formulation of an emergency plan on the "worst conceivable event" that could be envisaged on the site. Such an event, if it happened, would result in the maximum Off-site damage and casualties to the public. However, the probability of such an accident happening should be very low provided that the plant is designed, maintained and operated to current national and industry standards. To set up plans solely to handle such an emergency could lead to an entirely unrealistic estimate of the resources that should be available. It could also detract from a proper understanding of the planning that would be required, and from a realistic estimation of the resources that would be needed, if a smaller and more likely accident was to occur.

Plans based on more realistic scenarios will be easier to make and easier to apply. This will mean that there will be a much better chance that an accident with the potential to affect people outside a manufacturing site will be properly handled. The choice of these scenarios should be based on an assessment of the types of incident that have occurred on such plants in the past, supplemented by an objective assessment of the realistic major accidents which could occur on the plant under review.

It is not proposed that the "worst conceivable event" should be completely ignored, rather that it should be seen in perspective. The review of past events and the audit of the plant should start with consideration of the worst situation and work down to situations which can be recognised as realistic. The historical information, together with a review of the design, operation and maintenance of the plant should provide adequate evidence for the choice of scenarios. Whether one or more of these should be chosen for the emergency plan (or plans) will have to be discussed with the local authorities.

Unless the surrounding population live or work close to the refinery or terminal it is unlikely that even a major fire or an explosion will cause much damage or many injuries outside the plant boundary. Release of toxic substances (where present) is likely to lead to greater hazard ranges and hence will probably have a greater influence on the basis for the emergency plan. It should be recognised that the presence of population close to the site will affect the choice of scenarios to be considered for emergency planning. The choice of scenarios could involve a fire and/or explosion following release of hydrocarbons, e.g. LPG, or a release of one of the toxic materials which are often associated with refinery processes, such as hydrogen sulphide, hydrogen fluoride, chlorine or ammonia. The potential effect of such releases on the environment must also be considered.

Release scenarios which might be considered are:

- failure of piping connections associated with storage of hazardous substances with possible loss of contents of a cylinder or storage vessel. The presence of features such as remotely-operated shut-off valves and the probability that they function correctly should be taken into account;
- unplanned release of inventory through vents, drains, relief-valves or other routes to atmosphere designed into the plant for other reasons. Although the total release may not be of the entire inventory, the existence of such routes to the environment makes releases of this type comparatively likely so the possible mechanism must be explored;
- major leak from a process line. For instance, some releases on an H₂S absorption/regeneration unit could be serious and it would be wise not to neglect situations such as a major flange leak in the line from a regeneration column to a Claus sulphur recovery unit;
- overfilling of a storage tank with release of a considerable quantity of hydrocarbons.

Once one or more scenarios have been chosen it will be necessary to calculate the effect-distances associated with fire, explosion, toxic release or environmental impact. Although these notes have been written with existing plant in mind, they apply equally to new installations. Particular care will have to be taken when assessing processing involving new technology. Calculation methods of varying complexity and involving a range of assumptions and uncertainties have been developed by a number of manufacturing companies and other bodies. Member companies should take advice on the methods which are considered acceptable to the authorities in the countries in which they operate.

3. CONCLUSIONS

The scenarios which are chosen as the basis for an Off-site emergency plan should be based on a review of the design of the plant and audit of its operation and maintenance.

It is recommended that companies should advise the authorities of their reasons for the selection of the scenarios on which the Off-site emergency plan should be based.

The use of a single scenario as the basis for an Off-site emergency plan may seriously prejudice the ability to respond to other incidents. The effectiveness of an Off-site emergency plan will depend on the selection of a range of realistic incidents representative of the hazards associated with operations on the site. Therefore, companies are recommended to give the Competent Authorities information on the potential effects of a range of incidents which may occur as the result of their operations.

CONCAWE MAJOR HAZARDS MANAGEMENT GROUP
EMERGENCY PLANNING GUIDANCE NOTE

RESPONSIBILITIES OF PETROLEUM INDUSTRY AND REGULATORY AUTHORITIES
IN OFF-SITE EMERGENCY PLANNING

Under Articles 5, 7 and 8 of the Seveso Directive all installations handling specified hazardous substances above certain stated inventory levels are required to have in place an Off-site emergency plan and a means of informing the public of "the correct behaviour" to adopt in the event of a major accident.

The Directive states that the responsibility for developing, implementing and rehearsing the Off-site plan rests solely with the Member State and its designated Competent Authority.

Industry affected by this Directive has the responsibility for supplying to the Member State authorities information on the nature and possible consequences of any major accident that might occur on the site with significant Off-site societal effects.

This Guidance Note looks in some detail at the responsibilities of the two main concerned parties and recommends actions that should be considered by both parties in developing the Off-site plan.

1. INTRODUCTION

EEC legislation now requires a major-hazard industrial plant, such as a petroleum refinery, to provide the local authority with technical information on incidents which can be foreseen and which could have damaging effects on the local community and property. It is a responsibility of the concerned industrial organisation under this legislation to identify these cases and estimate the nature and societal consequences of such incidents if they occurred.

This information is required by the local authority to form the basis for the development and implementation of an Off-site emergency plan, the primary purpose of which is to protect the local community.

An Off-site emergency plan cannot be effective unless the hazardous installation has in place a well organised On-site plan with adequate well-trained emergency manpower and an efficient command organisation structure.

The On-site emergency organisation will normally involve an incident controller who is responsible for the control of emergency actions at the scene of the incident, and an emergency manager who is responsible for the overall direction of the site emergency organisation, co-ordination with the emergency services, dealing with the media etc. This emergency manager will normally be based at the site emergency control centre. The On-site plan will also require a clear procedure for deciding when to call upon external assistance. In most countries, the local authority emergency services will take over responsibility for control of the incident when they arrive.

The On-site plan must also include a procedure for identifying when an incident has escalated to a situation where there could be serious effects on the local community. The incident controller should be responsible for putting into effect the Off-site plan thereby warning the public living in the vicinity of the actions they need to take to protect themselves.

No Off-site plan can be regarded as completely effective unless the members of the public who are potentially at risk are informed, prior to the event, of the nature of the hazards and "the correct behaviour" they should adopt during a major incident. This essential requirement is also recognised in the Seveso Directive (under Article 8) which places a legal obligation on the Member State to ensure that suitable information is provided to members of the public who are likely to be affected. The important subject of how the issue of information to the public can be handled is discussed in a separate CONCAWE Guidance Note.

It is not the purpose of the present Guidance Note to discuss On-site emergency planning in detail. It is assumed that all the European petroleum refineries and bulk storage depots which are affected by the Seveso Directive legislation already have effective On-site emergency procedures in place. A useful exercise, however, may be to review these in the light of any lessons learned in the development of the Off-site plan.

The following guidance is arranged in the chronological order followed at each site:

- (i) evaluation of hazards;
- (ii) development of the Off-site plan;
- (iii) ensuring effectiveness of the plan;
- (iv) initiating the Off-site plan.

It should be noted that the Seveso Directive only sets minimum requirements to be met by all EEC Member States, and the situation in some individual countries may differ significantly.

2. EVALUATION OF HAZARDS

In regard to emergency planning, the responsibilities of the operators of the affected installations are stated in general terms in Article 5(c) of the Seveso Directive.

In the specific case of the Petroleum Industry, all European refineries, many bulk storage depots and some customer installations (e.g. handling LPG) are likely to be affected by this legislation.

Article 5(c) requires all affected operators to provide information to the local authority and its emergency services on the nature of the potential hazard resulting from its operations to enable them to develop an Off-site emergency plan.

Essential first actions by the concerned operator should therefore include:

- find out what are the detailed requirements (including timing) of national legislation with respect to Off-site emergency planning in your country;
- find out what authority is responsible within your country for developing and implementing the Off-site plan and develop a chain of communication with them;
- find out how other similar installations are dealing with the problem and ensure, as far as reasonably practicable, that a consistent approach to dealing with the authorities is developed. This is particularly important if an oil company operates several similar installations in the same country. Exchange of experience through local petroleum industry associations is one valuable route for ensuring that consistent approaches are used throughout the industry;
- decide what initiatives, if any, your organisation needs to take to open discussions on Off-site emergency planning with the local authority;
- find out if Off-site emergency plan scenarios and calculation procedures for predicting consequences have been specified by the local authority, or whether company procedures be acceptable.

Notwithstanding the requirements of local legislation, member companies are recommended to take the initiative in addition to collaborating fully with the authorities in the development of the Off-site plan. In all cases, member companies should follow a supportive and constructive approach in their contacts with the authorities on this issue, not only to ensure that an effective Off-site plan, consistent with the installation On-site plan, is developed but also to meet the relevant statutory obligations.

In specific situations where the local authorities have not yet taken an initiative on this issue, the petroleum industry is advised to consider making the first move itself.

Following the above, each operator is recommended to:

- develop an in-house capability or obtain access to methodology by other means for the estimation of the consequences of the accidental discharges of the potentially hazardous substances they have on site. The approach adopted should be agreed with neighbouring operators and the authorities;
- define the On-site incident scenario or scenarios on which the Off-site plan will be based. The CONCAWE Guidance Note "Selecting the Incident Scenarios for Off-Site Emergency Planning" gives some advice on the factors that need to be taken into consideration in deciding how these incident scenarios should be defined;
- define how affected members of the public living in the vicinity of the installation should be informed of the situation prior to the event (see CONCAWE Guidance Note "Information to the Public").

The purpose is to provide reasonably realistic advice to the local authority and emergency services so that they can develop an effective Off-site emergency plan.

3. DEVELOPMENT OF THE OFF-SITE PLAN

Under the Seveso Directive the responsibility for developing and preparing the Off-site emergency plan for each installation lies clearly on the Competent Authority and local authority.

All European Member States should already have in place general plans, on a regional basis, for handling disaster-scale incidents such as floods, aircraft and rail crashes, fires or explosions. These general disaster plans should cover items such as:

- organisation and command structure for control and co-ordination of police, fire brigade, medical and other public or voluntary emergency services;
- key personnel and their responsibilities;
- communication systems;
- procedures and means of communication for instructing the local community to evacuate or take shelter;
- traffic and spectator control;
- provision of temporary accommodation and food for people who have had to leave their homes. Provision of first aid, hospital and other facilities for casualties;
- means of contacting the newsmedia and relatives of casualties.

Much of what is required in the Off-site emergency plan should have already been put in place by the Member State local authority for other reasons.

Operators are advised to check what the local disaster plan actually is. In some areas extensive and well organised plans are already in place, but in others the situation may not be so advanced.

In most cases the Off-site plan, developed by the local authority from the information supplied by the manufacturer, should consist of an addendum to the overall regional disaster plan. This addendum should state what the special types of risk are (fire, explosion, toxic release) and what area is likely to be affected.

The plan must contain advice to the emergency services on the actions and special precautions they need to take in dealing with any emergency at the site. In particular, the plan must include guidelines on whether members of the public should be evacuated. Some authorities now take the position that when limited response time is available, the correct action should be for people to take shelter in their houses in downstairs rooms facing away from the location of the incident with windows, doors and curtains closed

and with ventilation and fired heating systems closed down. This emphasises that an essential part of the Off-site emergency plan is the provision of means of informing the local community, prior to the event, of the appropriate actions they need to take during an emergency.

It is critically important that the responsibilities of the local authority emergency controller be clearly defined, including procedures for initiating the Off-site plan and then initiating actions according to this plan. Further, responsibilities remaining on the operator's personnel must be specified.

4. ENSURING EFFECTIVENESS OF THE PLAN

Once the Off-site emergency plan has been prepared, it is essential that it be checked, tested and rehearsed. The local authority is clearly *responsible* for this activity, including the organisation of rehearsals. For real effectiveness these must involve representatives of all parties affected by the plan. Operators are recommended to encourage regular rehearsals.

The authorities need to anticipate the cost and resources required for regular "classroom" rehearsals and periodic full-scale trials. Further, the lessons learnt must be incorporated in the plan and the revised plan re-tested.

The local authority will also have the responsibility for ensuring that sufficient resources of the right calibre are available to the emergency services to deal with the anticipated consequences of the emergency. In some cases this may be a major problem and require an efficient method of bringing in resources from other regions of the concerned country. However, it is the responsibility of the Member State government authorities and not industry to ensure that adequate resources are available to deal with incidents that affect the community.

5. INITIATING THE OFF-SITE PLAN

Once an incident occurs, it may escalate to the point where the potential arises for harmful toxic, heat radiation or blast effects outside the installation perimeter. Then the Off-site emergency plan needs to be initiated to protect the local community.

The Off-site plan should be initiated by the On-site incident controller as directed in the On-Site plan. Depending on the type of incident and the rapidity of development, the incident controller may be a designated member of the site management, or the local authority senior officer. Once the Off-site plan has been initiated, one of the most critical decisions facing the emergency controller during a major incident is whether evacuation of the local community should be ordered. Such a decision would be normally taken by the local authority emergency controller following consultation with the installation's emergency manager and representatives of the emergency services.

When an emergency has been successfully terminated there may still be potential for re-ignition, building collapse, toxic residues or other hazardous conditions in the affected Off-site area. The Off-site plan should therefore define the criteria and responsibilities for declaring the end of the emergency, when the emergency organisation can be stood-down and the public informed that the incident is over. These criteria should be developed and stated in the Off-site plan.

The responsibility for declaring that the emergency is at an end should rest with the local authority emergency controller.

6. CONCLUSIONS

In regards to Off-site emergency planning, the responsibility of the petroleum industry is to provide information to the authorities, from which the Off-site emergency plan can be developed as a section of the overall disaster plan for the region in which they operate.

The responsibility of the authorities is to develop the Off-site plan, ensure that it is rehearsed and kept up-to-date, and that sufficient emergency services resources are available.

While the specific responsibilities of both parties are clear, effective plans can only be developed by close liaison between the authorities and industry.

CONCAWE MAJOR HAZARDS MANAGEMENT GROUP EMERGENCY PLANNING
GUIDANCE NOTE

INFORMATION TO THE PUBLIC

Under Article 8 of the Seveso Directive, all installations handling or processing specified quantities of hazardous materials are required to have in place a means of informing the public of the "correct behaviour" to adopt in the event of a major accident.

The purpose of this CONCAWE Guidance Note is to give advice on the type of information which should be provided to the general public before, during and after an incident. The Note also makes recommendations on how this information should be disseminated and who should have the responsibility for doing so.

1. INTRODUCTION

The local community may need to know about the nature of the activities on a particular industrial site, the risks and environmental impacts these might pose, and the arrangements that exist for ensuring the safety of persons who may be affected by an incident.

The information provided to the public must consist of the following two elements:

- advance information to the public. The information identifies potential hazards and in broad terms describes the measures which have been taken to minimise the risks and to control any emergency. The message provided in advance also contains basic safety guidelines to be followed should a major accident occur;
- emergency action information should a major accident occur. Information will need to be given to the public during an emergency. The likely content and means of providing this information should be considered.

In addition to the above, member companies are strongly advised to establish means for providing follow-up information after any major accident or false alarm. This is essential for reassuring the public and maintaining good relations with the community.

2. CONTENT OF INFORMATION

The public and local communities should be provided with sufficient appropriate information to enable them to understand the nature of potential risks and the arrangements that exist for their safety.

Advance information will include:

- information on the general nature of work activities, what hazards are seen to be involved and their nature (flammable, toxic, etc.);
- a simple explanation of the arrangements taken to minimise the risk through existing procedures for construction and operation, education and training of the installation's personnel, good maintenance, etc.;
- general safety guidelines on what action to take in the event of a major accident, for example,
 - when hearing the alarm, or when instructed by Police, do....
 - switch on the radio and/or TV and listen....
 - prepare for evacuation....
 - close the windows and doors and keep everybody sheltered....

The message must provide realistic information and is to be written in plain language. When first providing the information at an established facility, it is advisable to reassure people that nothing has changed and that the information is simply being provided in the public interest and in compliance with new legislation.

Companies should ensure that the information provided is updated at regular intervals, both to take account of new developments on site and because of the natural movement of people within the local community.

Emergency action information must be prepared in advance for each foreseeable scenario (e.g. toxic, flammable or explosive vapour clouds and possible flying fragments). Each message will contain appropriate instructions for the particular case. The Off-site planning procedures must contain all the prepared messages, ready to be dispatched should an emergency arise.

If a number of adjacent plants present the same or equivalent risks, the information can be supplied once for all the installations applying the above system in an appropriate way.

If neighbouring plants present different risks, each installation should provide its own information. The different messages should be co-ordinated through the Off-site emergency planning arrangements for the entire industrial complex.

3. WHO SHOULD BE INFORMED

It is necessary to provide information to those members of the public who live or work near to the installation and who may be affected by the consequences of a major accident.

In the interests of maintaining good public relations, the message should not be confined to those people who may be at risk Off-site from a major incident but should also be disseminated to all who may be significantly inconvenienced by any foreseeable event. Particular care should be taken to inform neighbouring industrial sites in a complex. Workers at adjacent plants or installations who could be at risk will be informed through their own management of the action they should take.

People with a direct link or relationship with the installation (families, contractors) will receive information informally and it is therefore important that all employees, who play the main role in transferring this type of information, are correctly briefed and kept up to date with developments.

Special problems may arise in the case of hospitals, schools, sports centres and other buildings where numbers of people may congregate. In such cases it may be necessary to discuss appropriate contingency actions with those responsible for managing the buildings.

Those responsible for the management of transport undertakings in the affected area should be informed of the correct action to take by the local authority under the terms of the Off-site emergency plan.

4. WHO SHOULD INFORM THE PUBLIC

Depending on the legislation in the country concerned both local authorities and the installation management may have responsibilities for providing information to the public.

Regardless of the likely role played by the local authorities, member companies are reminded of the advantages in terms of good public relations of providing the information directly. This should, however, be done with the agreement of the local authorities.

In any case mutual discussions should be held in each area to determine the exact responsibility for providing the information, the means by which it is to be conveyed and the frequency with which it is to be updated. Generally the operator will prepare the advance information and select the various messages to be conveyed, although it may be disseminated by the local authority.

Should a major accident occur, the local emergency authorities have the responsibility for spreading the appropriate emergency action information to the public.

5. METHODS OF COMMUNICATION

Advance information on risks should be presented in a simple brochure or letter. The information can also be presented in video clips.

General safety guidelines should be printed using appropriate sketches or pictograms and a minimum of words. Experience shows that the message (text and drawings) must be limited to a single information sheet even if printed on both sides.

The general safety guidelines should be mailed to all persons within the area likely to be affected by an incident and should be made available to enquirers who express a concern. The document should be free of charge. The use of video clips and radio flashes might also be considered. Printing the safety guidelines on a calendar offered or distributed by the local fire brigade might be helpful.

Public meetings might be organised on behalf of the local administration, Competent Authority and installation management. The information would be presented in discussion followed by questions and answers. It is recommended that such meetings should be kept informal.

It can be most effective to organise welcome visits to the site for the concerned public, when an explanation of the operation with its associated risks, safety procedures and devices can be given. The advance information sheet would then be discussed with the visitors.

The emergency action information must be prepared in a form suitable for use by the local emergency authorities at any time - day, night or weekend, and whatever the circumstances of the incident. The message must be clear and concise using simple and common words. This message can be supported by local radio or television broadcasts, also prepared in advance.

In isolated cases, local circumstances and the nature of the incident may dictate that the installation itself should initiate the emergency action information to the public, in order to avoid unnecessary delay.

6. TIMING

Advance information can be disseminated at any convenient time according to the company's public relations program and local legal requirements. When new installations or modifications to the existing facilities are planned, these changes may affect the content of the information previously provided and require an update.

Should a major accident occur which could have the potential to affect the members of the public, it is essential that any specific emergency action information is communicated as rapidly as possible to those who may need it. Prior arrangements should therefore be made between the installation management and the local emergency authorities to facilitate the transfer of relevant information from the On-site emergency controller to the authorities and from them to the affected persons.