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# COMMISSION OF THE EUROPEAN COMMUNITIES

COM(91) 493 final - SYN 321 Brussels, 20 December 1991

# Amended proposal for a COUNCIL DIRECTIVE

concerning minimum requirements for improving the safety and health protection of workers in the extractive industries

(presented by the Commission pursuant to Article 149(3) of the EEC Treaty)

#### EXPLANATORY MEMORANDUM

Based on the Opinion adopted by the European Parliament in the first reading on 9 October 1991, the Commission submits to Council pursuant to Article 149, paragraph 3, of the EEC Treaty an amended proposal for a directive.

There are two different types of proposed amendments:

- The first type comprising the majority of the amendments, is to incorporate findings of Lord Cullen's Report (report on the Public Inquiry into the Piper Alpha Disaster) into the proposal. The proposal had been completed before the publication of the said Report.
- The second type is of a more general kind trying to strengthen the improvement of health and safety of workers in the extractive industries.

The layout and the aims of the amended proposal have not been changed. In global, the amendments tend towards improving the initial proposal by adding and defining some more precise details.

- 1 -

AMENDED PROPOSAL PURSUANT TO THE OPINION OF THE EUROPEAN PARLIAMENT OF 9 OCTOBER 1991

(Where no alternative version is given in this column, the text is unchanged)

THE COUNCIL OF THE EUROPEAN COMMUNITIES.

Having regard to the Treaty establishing the European Economic Community and in particular Article 118a thereof,

Having regard to the proposal from the Commission(1),

In cooperation with the European Parliament(2),

Having regard to the opinion of the Economic and Social Committee(3),

Whereas Article 118a of the Treaty provides that the Council shall adopt, by means of Directives, minimum requirements for encouraging improvements, especially in the working environment, to ensure a better level of protection of the safety and health of workers;

Whereas, under the terms of that Article, those directives are to avoid imposing administrative, financial and legal constraints in a way which would hold back the creation and development of small and medium-sized undertakings;

Whereas the improvement of workers' safety, hygiene and health at work is an objective which should not be subordinated to purely economic considerations;

Whereas Council Directive 89/654/EEC of 30 November 1989 concerning the minimum safety and health requirements for the workplace(4) does not cover the extractive industries;

Whereas the extractive industries are higher than average risk activities;

Having regard to the proposal from the Commission, which has consulted the Safety and Health Commission for the mining and Other Extractive Industries (1) ORIGINAL PROPOSAL FROM THE COMMISSION

(OJ C 32 of 07.02.1991)

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(Where no alternative version is given in this column, the text is unchanged)

Whereas the oil and gas sector of these industries is deemed to be of particular importance for introducing improvements in the protection of the safety and health of workers;

Whereas this Directive is an individual Directive within the meaning of Article 16(1) of Council Directive 89/391/EEC of 12 June 1989 on the introduction of measures to encourage improvements in the safety and health of workers at work(5); whereas, therefore, the provisions of the said Directive are fully applicable to the domain of the extractive industries without prejudice to more restrictive and/or specific provisions contained in this Directive;

Whereas this Directive constitutes a practical aspect of the realization of the social dimension of the internal market, in respect of the extractive industries as defined by Council Decision 74/326/EEC of 27 June 1974 on the extension of the responsibilities of the Mines Safety and Health Commission to all mineral-extracting industries(6);

Whereas it is considered appropriate that the scope of activities comprised in the present Directive be identical with the scope of activities concerned by Decision 74/326/EEC.

Whereas according to Decision 74/326/EEC the surface back-up facilities of mines and quarries which are not essential to prospecting, extraction in the strict sense of the word or preparation of the extracted materials for sale are not to be considered extractive industries, and are therefore within the scope of the Directive 89/654/EEC,

HAS ADOPTED THIS DIRECTIVE :

SECTION I

AMENDED PROPOSAL PURSUANT TO THE OPINION OF THE EUROPEAN PARLIAMENT OF 9 OCTOBER 1991

(Where no alternative version is given in this column, the text is unchanged)

General Provisions

Article 1

#### Subject

- 1. This Directive, which is an individual Directive within the meaning of Article 16(1) of Directive 89/391/EEC, lays down minimum requirements for the safety and health protection of workers in the extractive industries as defined in Article 2.
- 2. The provisions of Directive 89/391/EEC are fully applicable to the domain referred to in paragraph 1, without prejudice to more restrictive and/or specific provisions contained in this Directive.

Article 2

Definitions

- ...For the purpose of this Directive:
- "Extractive industries" shall be taken to mean the activities of prospecting and of extraction in the strict sense of the word as well as of preparation of extracted materials for sale but not the processing of such extracted materials.
- "workplace" means the whole area intended to house workstations in which work is carried out including the immediate and ancillary activities and facilities of the extractive industries including sanitary equipment, rest rooms and accommodation where provided to which workers have access in the course of their work.

Section II

AMENDED PROPOSAL PURSUANT TO THE OPINION OF THE EUROPEAN PARLIAMENT OF 9 OCTOBER 1991

(Where no alternative version is given in this column, the text is unchanged)

Obligations of the employer

Article 3

General obligations

- To safeguard the safety and health of workers, the employer shall take the necessary measures to ensure that:
- workplaces are designed, constructed, equipped, commissioned, operated and maintained in such a way that workers can perform the work assigned to them without danger to themselves and/or others,
- responsible supervision is present during operation of manned workplaces,
- work involving a special risk is entrusted only to suitably qualified staff and carried out in accordance with the instructions given,
- all safety instructions are comprehensible to the workers concerned,
- appropriate first-aid facilities are provided,
- any relevant safety exercises are performed at regular intervals.
- 2. Prior to the commencement of work, and when changes are made during prospection and/or extraction of minerals, the employer shall forward to the responsible authorities:
  - the name of the person or corporate body who assumes responsibility for the health and safety of all operations and personnel, whether direct employees or

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employees of contractors at an installation or a site for the prospection and/or extraction of minerals.

- a document where the risks at an installation or a site for the prospection and/or extraction of minerals are assessed from the concept and design stage in an objective manner in order to achieve the goals set down in this Directive and in its annexes and to follow the provisions laid down in Article 6 (2), Article 9 and Article 10 of Directive 89/391/EEC.
- 3. The employer shall report forthwith to the responsible authorities fatal and serious occupational accidents and dangerous occurrences and give an account of the measures taken to prevent any repetition.

2. The employer shall report forthwith to the responsible authorities fatal and serious occupational accidents and dangerous occurrences.

#### Article 4

Protection against fire, explosions and health endangering atmospheres

The employer shall take measures appropriate to the nature of the operation to protect against, detect and combat the starting and propagation of fires and explosions as well as the occurrence of explosive and/or health-endangering atmospheres.

#### Article 5

Escape and rescue facilities

To ensure that workers have adequate opportunities for leaving all workplaces promptly and safely in the event of danger the employer shall provide and maintain appropriate means for escape and rescue.

#### .Article 6

.Communication, warning and alarm

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#### systems

The employer shall take measures to provide the necessary warning and other communication systems to enable aid, escape, evacuation and rescue immediately, in case of need.

#### .Article 7

- .Provision of sanitary equipment and rest rooms
- The employer shall provide and maintain appropriate sanitary equipment and rest rooms, and if appropriate, accommodation. .The employer

#### .Article 8

Information of workers

Without prejudice to Article 10 of Directive 89/391/EEC, workers and/or their representatives shall be informed of all measures to be taken concerning safety and health at the workplaces in particular of those relating to the implementation of Articles 3 to 7.

.Article 8a

.Health Surveillance

- Health surveillance of workers as defined in Article 14 of Directive 89/391/EEC must be carried out prior to the assigning of workers to duties related to the activities referred to in article 2 and at regular intervals thereafter.
- These health checks may in no circumstances involve the worker in financial cost as laid down in Articles 6 and 14 of Directive 89/391 EEC

Article 9

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Consultation of workers and workers' participation

Consultation and participation of workers and/or of their representatives shall take place in accordance with Article 11 of Directive 89/391/EEC on the matters covered by this Directive.

#### SECTION III

Requirements for improving the safety and health protection of workers

Article 10

Exploration for and exploitation of minerals by means of boreholes

- 1. Workplaces concerned with the exploration for and exploitation of minerals by means of boreholes used for the first time after 31 December 1992 must satisfy the minimum safety and health requirement laid down in the Annex.
- 2. Workplaces already in use before 31 December 1992 must satisfy the minimum safety and health requirements laid down in the Annex as soon as possible and at the latest five years after that date.
- 3. When workplaces undergo modifications, extensions and/or conversions after 31 December 1992, the employer shall take the measures necessary to ensure that those modifications, extensions and/or conversions are in compliance with the corresponding minimum requirements laid down in the Annex.

Article 11

In accordance with the procedure laid down in Article 118a of the

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Treaty, the Council shall adopt minimum safety and health requirements corresponding to those established in Article 10 of this Directive for the exploration for and exploitation of minerals by means of boreholes in relation to the exploration for and exploitation of minerals in mines and quarries.

#### SECTION IV

Other provisions

Article 12

Amendments to the Annex

Amendments to the Annex as a result of:

- the adoption of Directives, technical harmonization and standardization and/or
- technical progress, changes in international regulations or specifications, and new findings,
- ...shall be adopted in accordance with the procedure laid down in Article 17 of Directive 89/391/EEC.

Article 13

Final provisions

1. Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive by 31 December 1992 and shall forthwith inform the Commission thereof.

When Member States adopt these provisions, these shall contain a reference to this Directive or shall be accompanied by such reference at the time of their

shall be adopted in accordance with the procedure laid down in article 17 of Directive 89/391/EEC. On such occasions the Commission shall consult the Safety and Health Commission for the Mining and other Extractive Industries.

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official publication. The procedure for such reference shall be adopted by Member States.

- 2. The Member States shall communicate to the Commission the texts of the provisions of national law which they have already adopted or adopt in the field governed by this Directive.
- 3. Member States shall report to the Commission every five years on the practical implementation of the provisions of this Directive, indicating the points of view of employers and workers.
- ...The Commission shall inform the European Parliament, the Council, the Economic and Social Committee and the Safety and Health Commission for the Mining and Other Extractive Industries.

Article 14

This Directive is addressed to the Member States.

#### ANNEX

Minimum requirements for improving the safety and health protection of workers in the extractive industries concerned with the exploration for and the exploitation of minerals by means of boreholes

- A: Common requirements applicable to the onshore and offshore sectors
- 1. Preliminary note

The obligations laid down in this Annex apply whenever required by the features of the workplace, the activity, the circumstances or the hazard.

1..Preliminary note

The obligations laid down in this Annex apply whenever required by the features of the workplace, the activity, the circumstances or the hazard or

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by the risk assessment mentioned under Article 3 paragraph 2.

#### Risk Assessment

Without prejudice to Articles 6 (2) 9 and 10 of Directive 89/391/EEC the following shall apply

The risk assessment as mentioned under Article 3, paragraph 2 must demonstrate to the responsible authority that certain objectives have been met, including:

- that the safety management at the workplace or installation or site is adequate to ensure that the design, operation and maintenance of the workplace, installation or site and its equipment are safe.
- that the hazards of the workplace or installation or site and the risks to personnel have been identified and appropriate controls provided.

2. Stability and solidity

Workplaces must be designed, constructed, erected, operated, supervised and maintained to withstand the environmental forces anticipated and have a structure and solidity appropriate to the nature of their use.

- 3. Organisation and Supervision
- 3.1...Organisation of the workplace
- 3.1.1. Workplaces must be organized so as to provide adequate protection against hazards. They must be kept clean, with any hazardous

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substances or deposits removed or controlled in such a way that they do not pose any threat to the health and safety of the workforce.

- 3.1.2. Workstations must be ergonomically designed and constructed taking into account the need for workers to be aware of relevant operations at their workstations.
- 3.1.3. Areas within which there is a particular hazard must be delineated and warning signs placed.
- 3.2. Person in charge

Every workplace which is manned must at all times be under the charge of a person who has the skills and competence suitable for the appointment, and who is authorized by the employer.

## .3.3. Competent Persons

....At every workplace which is manned there must be provided a sufficient number of competent persons having the abilities and the experience necessary to perform the tasks to which they are assigned.

#### 3.4. Supervision

To ensure workers' safety and health protection during all operations undertaken, the necessary supervision must be provided. Supervision may only be exercised by responsible and properly trained persons appointed by and on behalf of the employer.

....At every workplace which is staffed there must be provided a sufficient number of competent persons having the necessary abilities, experience and training recognised by the responsible authorities to perform the tasks to which they are assigned.

To ensure workers' safety and health protection during all operations undertaken, the necessary supervision must be provided. Supervision may only be exercised by responsible persons, properly trained to standards recognised by the responsible authorities and appointed by and on behalf of the employer.

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3.5. Information, instruction and training

Workers must be given the necessary information, instruction training and retraining to ensure their health and safety.

3.6. Written Instructions

Written instructions specifying practices to be observed to ensure the safety of workers and the safe use of equipment must be provided for every workplace. These must include information on the use of emergency equipment and the action to be taken in the event of an emergency on or near the workplace.

3.7. Safe Systems of Work and Work Permits

Safe systems of work shall be implemented at every workplace. These shall include a system of work permits where hazardous activities are undertaken, or where usually straightforward activities may interact with other activities to produce serious hazards. Such permits must be authorized by a responsible person prior to the commencement of work. The permit must specify the conditions to be fulfilled and the precautions to be taken before, during the work and

Workers must be given the necessary information, instruction, training and retraining to ensure their health and safety. The employer must ensure that workers are instructed in the language used in emergencies to ensure that they do not hazard themselves or others. Written instructions must be made available in such languages as are necessary to ensure that they can be understood by all those employed at a worksite or installation.

AMENDED PROPOSAL PURSUANT TO THE OPINION OF THE EUROPEAN PARLIAMENT OF 9 OCTOBER 1991 ORIGINAL COMMISSION **PROPOSAL** FROM THE (OJ C 32 of 07.02.1991) (Where no alternative version is given in this column, the text is unchanged) after its completion. The employer must organise regular audits of his safety management system to ensure that the requirements of this directive are adhered 3.8. 4. Mechanical and Electrical Equipment and Plant 4.1. General Without prejudice to Directive 89/392/EEC and 89/655/EEC mechanical, and electrical equipment and plant must be designed, constructed, installed, commissioned, operated and maintained so as to ensure safe operation. If located in an area within which danger of fire or explosion from ignition of gas, vapour or volatile liquid exists or is likely to exist, it must be suitable for use in that area. Equipment must, where appropriate, be fitted with suitable protective devices and fail-safe systems. Mechanical Plant 4.2. Equipment and All equipment and plant must be of good construction, sound material, adequate strength and free from patent defect and suitable for the purpose for which it is used.

4.3.

Electrical equipment installations

All electrical equipment and installations must be sufficient in size and power for the work for which it is to be used and so designed, constructed, installed and protected as to prevent danger.

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### 5. Maintenance

## 5.1. General maintenance

(OJ C 32 of 07.02.1991)

There shall be in force a suitable scheme providing for the systematic examination, maintenance, and where appropriate, testing of mechanical and electrical equipment and plant.

All maintenance, examination and testing of any part of the plant and equipment must be carried out by a competent person. Records of examinations and tests must be made and kept in an appropriate manner.

5.2. Safety Equipment Maintenance

Safety equipment must be maintained ready for use and in good order at all times. Maintenance must be undertaken with due regard to operations, to ensure that adequate protection is provided.

6. Lifting Equipment, Crane Operations - Safety Precautions

Every lifting appliance or piece of lifting gear must be plainly marked with its safe working load or loads. No lifting appliance or piece of lifting gear may be operated in excess of the safe working load.

Every lifting appliance and every piece of lifting gear must be thoroughly examined and, where necessary, tested by a competent person at appropriate intervals and after substantial modifications or following any repair. Records of examinations and tests must be made and kept in an appropriate manner.

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Only specially approved equipment and procedures may be used for the lifting of persons.

7. Well Control

Suitable well control equipment must be provided for use during well operations to protect against blowouts. Arrangements for such equipment shall take into account the prevailing well and operational conditions.

- 8. Protection against hazardous atmospheres and explosion protection
- 8.1. Efficient means must be provided and used for detecting the presence and for measuring the concentration of hazardous and/or potentially explosive atmospheres.

Where the circumstances so require monitoring devices measuring gas concentrations at specified places automatically and continuously, automatic alarms and devices to cut off power automatically from electrical installations and internal combustion engines must be provided.

The results of automatic measurements must be recorded and preserved for a period of 12 months.

Where appropriate, the results of automatic measurements must be recorded and preserved for a specified period.

The risk assessment mentioned under paragraph la must include a statement as to what automatic measurements are recorded and the period of time for which these measurements shall be preserved.

ORIGINAL COMMISSION **PROPOSAL** AMENDED PROPOSAL PURSUANT TO THE OPINION OF THE EUROPEAN PARLIAMENT OF 9 OCTOBER 1991 FROM THE (OJ C 32 of 07.02.1991) (Where no alternative given in this column, unchanged) version is the text is Protection against hazardous atmospheres 8.2. 8.2.1. Appropriate measures must be provided to extract at source and remove at provided to extract at source and remove accumulations of hazardous atmospheres, if these are or may be present. The system must be capable of dispersing any such gases in a manner which avoids the contamination of other areas of the installation by those gases 8.2.2. Without prejudice to Directive 89/656/EEC (7) and where workers may be endangered by atmospheres which are hazardous to health, appropriate and sufficient breathing and resuscitation equipment must be provided. A sufficient number of persons must be constantly available to operate such equipment. Protective equipment must be suitably stored and maintained. 8.2.3. Where hydrogen sulphide or other toxic gases are or maybe present, a gas protection plan detailing the protective equipment and the preventative measures must be available for the relevant authorities. 8.3. Explosion protection 8.3.1. All necessary measures must be taken to prevent the occurrence and accumulation of potentially explosive atmospheres. explosion hazard all necessary measures must be taken to prevent the ignition of explosive atmospheres. 8.3.2. In areas explosion

8.3.3. An explosion protection plan detailing the equipment and measures required must be

prepared.

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- 9. Emergency routes and exits
- 9.1. In the event of danger, it must be possible for workers to evacuate the workplace quickly and as safely as possible.
- 9.2. Every general area must have at least two separate escape routes situated as far apart as possible and leading to a safe area, a safe assembly point or abandonment station.
- 9.3. Emergency routes and exits must remain clear and lead as directly as possible to the open air, to a safe area, a safe assembly point or to an abandonment station.
- 9.4. The number, distribution and dimensions of the emergency routes and exits depend on the use, equipment and dimensions of the workplaces and the maximum number of persons that may be present.
- 9.5. Emergency doors must either open outwards or if this is not possible, be designed as sliding doors.
- 9.6. Emergency doors should not be so locked or fastened that they cannot be easily and immediately opened by any person who may require to use them in an emergency.
- 9.7. Emergency doors must not be locked by key.

The emergency routes and exits, and the traffic routes and doors giving access to them, must be free from obstruction so that they can be used at any time without hindrance.

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- 9.8. Emergency routes and exits requiring illumination must be provided with emergency lighting of adequate intensity in case the lighting fails.
- 9.9. Specific emergency routes and exits must be indicated by signs in accordance with Directive 77/576/EEC (8).
- 10. Ventilation of enclosed workplaces
- 10.1. Steps shall be taken to ensure that there is sufficient fresh air in enclosed workplaces, having regard to the working methods used and the physical demands placed on the workers.

If a ventilation system is used, it shall be maintained in working order.

Any breakdown must be indicated by the control system where this is necessary for worker's health.

10.2. Air-conditioning or mechanical ventilation installations must be used in such a way that workers are not exposed to draughts which cause discomfort.

Any deposit likely to create an immediate danger to the health of workers by polluting the atmosphere must be removed without delay.

- 11. Room Temperature
- 11.1. During working hours, the temperature in rooms containing workstations must be suitable for workers, having regard to the working methods being used and the physical demands placed on

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the workers.

- 11.2. The temperature in rest areas, rooms for duty staff, sanitary facilities, canteens and first aid rooms must be appropriate to the particular purpose of such areas.
- 11.3. Windows, skylights and glass partitions should allow excessive effects of sunlight in workplaces to be avoided, having regard to the nature of the work and of the workplace.
- 12. Floors, walls, ceilings and roofs of rooms
- 12.1. Floors of workplaces must be fixed, stable, not slippery and free of dangerous bumps, holes or slopes.

Rooms containing workstations must be adequately insulated, bearing in mind the type of undertaking involved and the physical activity of the workers.

- 12.2. The surfaces of floors, walls and ceilings in rooms must be such that they can be kept at an appropriate standard of hygiene.
- 12.3. Transparent or translucent walls and in particular all glass partitions, in rooms or in the vicinity of workplaces and traffic routes must be clearly indicated. These must be made of safety material or be shielded from such places or traffic routes to prevent workers from coming into contact with walls or being injured should the walls shatter.
- 12.4. Access to roofs made of non load bearing materials must

ORIGINAL COMMISSION **PROPOSAL FROM** AMENDED PROPOSAL PURSUANT TO THE OPINION OF THE EUROPEAN PARLIAMENT OF 9 OCTOBER 1991 THÈ (OJ C 32 of 07.02.1991) (Where no alternative version is given in this column, the text is unchanged) be controlled. Suitable equipment must be provided to ensure that requisite work there can be carried out in a safe manner. Natural lighting 13. and artificial Every workplace must be provided throughout with lighting capable of supplying illumination sufficient to ensure the health and safety of persons therein. The lighting installation must be arranged to ensure that operational control areas, escape routes, embarkation areas and hazardous areas remain illuminated in both normal and emergency normal conditions. and emergency 14. Windows and skylights Windows, skylights and ventilation devices which are meant to be opened, adjusted or secured must be such that these operations can be carried out safely. 14.1. They must not be positioned so as to constitute a hazard to workers when open. It must be possible to clean windows and skylights without risk. 14.2. 15. Doors and gates The position, number and dimensions of doors and gates, and the materials used in their construction must be determined by the nature and use of the rooms or areas. 15.1. Transparent doors and gates must be appropriately marked at a conspicuous location. 15.2.

Swing doors and gates must

15.3.

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be transparent or have suitable see-through panels.	
15.4. Where there is a danger that workers may be injured if doors or gates with transparent or translucent surfaces shatter then these must be protected against breakage.	· ·
15.5. Sliding doors must be fitted with safety devices to prevent them from being derailed and falling over.	·
15.6. Doors and gates opening upwards must be fitted with a mechanism to secure them from falling back.	
15.7. Doors along escape routes must be appropriately marked. It must be possible to open them at any time.	
15.8. Doors for pedestrians must be provided in the immediate vicinity of any gates intended primarily for vehicle traffic, unless it is safe for pedestrians to pass through. Such doors must be clearly marked and kept free of obstruction.	
15.9. Mechanical doors and gates must function in such a way that the risk of accident to workers is minimized.	
They must be fitted with easily identifiable and accessible emergency stop devices. Unless they open automatically in the event of a power failure, it must also be possible to open them manually.	
15.10. Where chains are used to constrain access at any place, these should be clearly visible and appropriately identified by signs denoting any prohibition or warning.	

ORIGINAL COMMISSION AMENDED PROPOSAL PURSUANT TO THE OPINION OF THE EUROPEAN PARLIAMENT OF 9 OCTOBER 1991 PROPOSAL FROM THE (OJ C 32 of 07.02.1991) (Where no alternative version is given in this column, the text is unchanged) 16. Traffic routes It must be possible to reach workplaces without danger and leave them quickly and safely in an emergency. 16.1. Traffic routes and/or access routes, including stairs, fixed ladders and loading ramps, must be so located and of such dimensions that they are safe and do not represent a danger to workers employed in the vicinity. 16.2. The dimensions of routes used for pedestrian traffic and/or goods traffic must be suitable for the number of potential users and the type of undertaking. 16.3. A sufficient safety clearance must be provided for pedestrians, if vehicles are used on traffic routes. Sufficient clearance must be allowed between vehicle traffic routes and doors, gates, passages for pedestrians, corridors and staircases. 16.4. Where the use and equipment of rooms so requires traffic or access routes must be clearly identified for the protection of workers. Where road vehicles enter the workplace, traffic regulations must be established as necessary. 17. Dangerous areas Danger areas must be clearly indicated. Unauthorized access to workplaces with dangerous areas, including those where there is a risk of objects or workers falling must where possible be prevented. 17.2.

AMENDED PROPOSAL PURSUANT TO THE OPINION OF THE EUROPEAN PARLIAMENT OF 9 OCTOBER 1991 ORIGINAL COMMISSION **PROPOSAL** FROM THE (OJ C 32 of 07.02.1991) (Where no alternative version is given in this column, the text is unchanged) Appropriate measures must be taken to ensure the protection of health and safety of workers authorized to enter dangerous areas. 17.3. Room dimensions and air space in rooms - freedom of movement at the workstation 18. Workrooms must have sufficient surface area, height and air space to allow workers to perform their work without risk to their safety, health or well-being. 18.1. The space available to workers at their workstation must be such to allow sufficient freedom of movement as well as to perform their work safely. 18.2. 19. Rest Rooms Where the safety or health or numbers of workers so requires, workers must be provided with an easily accessible rest room. 19.1. This provision does not apply, where the workers are employed in offices or similar workrooms providing equivalent relaxation during breaks. Rest rooms must be large enough for the number of workers and equipped with an adequate number of tables and seats with backs. 19.2. Appropriate measures must be introduced in rest rooms for the protection of non-smokers against tobacco 19.3.

smoke.

Outdoor workplaces

Workstations, traffic routes

20.

ORIGINAL COMMISSION AMENDED PROPOSAL PURSUANT TO THE OPINION OF THE EUROPEAN PARLIAMENT OF 9 OCTOBER 1991 PROPOSAL THE (OJ C 32 of 07.02.1991) (Where no alternative version is given in this column, the text is unchanged) and other areas or installations outdoors which are used or occupied by the workers in the course of their activity must be organized in such a way that pedestrians and vehicles can circulate safely. Workplaces outdoors must be adequately lit by artificial lighting if daylight is not adequate. 20.2. When workers are employed at workstations outdoors, such workstations must as far as possible be arranged so that workers: 20.3. are protected inclement weather; against are protected from slips, falls and if necessary against falling objects; are not exposed to harmful noise levels or to harmfulexternal influences such as gases, vapour or dust; are able to leave their workstations swiftly in the event of danger or can rapidly be assisted so to do. Pregnant women and nursing mothers 21. Pregnant women and nursing mothers must be able to lie down to rest in appropriate conditions. 22. Handicapped workers Workplaces must be organized to take account of handicapped workers, if handicapped necessary. This provision applies in particular to the doors,

particular to

AMENDED PROPOSAL PURSUANT TO THE OPINION OF THE EUROPEAN PARLIAMENT OF 9 OCTOBER 1991 ORIGINAL COMMISSION **PROPOSAL** FROM THE (OJ C 32 of 07.02.1991) (Where no alternative version is given in this column, the text is unchanged) passageways, staircases, showers, washbasins, lavatories and workstations used or occupied directly by handicapped persons. B. Special requirements applicable to the onshore sector Fire detection and fighting 1. fire Wherever workplaces are being designed, constructed, equipped, commissioned, operated or maintained adequate measures must be taken to prevent fires starting and spreading from the sources identified in a safety assessment as referred to in Articles 6, 9, 10 of Directive 89/391/EEC(5). Provision must be made for fast and effective fire fighting. 1.1. Workplaces must be equipped with appropriate fire-fighting equipment and with fire detectors and alarm systems, as necessary. 1.2. Fire-fighting equipment intended for general use must be easily accessible, simple to use and where necessary, protected from damage 1.3. damage. A fire protection plan detailing the precautions to be taken in accordance with Articles 3, 4, 5 and 6 appropriate to protect against, detect and combat the outbreak and spread of fires must be kept on site. 1.4.

The equipment indicated by accordance with 77/576/EEC(8).

Remote

Emergencies

must be signs in Directive

in

Control

1.5.

2.

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Equipment identified as necessary by a safety assessment must be capable of remote control at suitable locations in the event of an emergency. Remote control equipment must be able to control the isolation and blowdown of wells, plant and pipelines.

- 3. Communication, General and Emergency
- 3.1. Every normally manned workplace must be provided with:
  - a) an audio-visual system capable of transmitting an alarm indication to every manned part of the workplace as necessary.
  - b) where appropriate a system capable of being heard distinctly at all parts of the installation where persons are frequently present.
- 3.2. Facilities for raising an alarm must be provided at suitable locations.
- 3.3. When persons are present on workplaces which are not normally manned, communication systems appropriate to the circumstances must be provided.
- 4. Safe Assembly Points and Muster List

The need for specifying safe assembly points and maintaining muster lists, must be evaluated and where required the necessary action taken.

5. Means of Evacuation and Escape

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- 5.1. Workers must be trained in the appropriate actions to be taken in emergencies.
- 5.2. Rescue equipment must be provided at readily accessible and appropriately sited places and kept ready for use.
- 5.3. Where escape routes are difficult and where irrespirable atmospheres are or may be present self-contained escape apparatus must be provided for immediate use at the workstation.
- 6. Safety Exercises

On normally manned workplaces safety exercises must be held at regular intervals. In these exercises, amongst other matters, each person at the workplace to whom duties have been assigned in the event of emergency involving the use, handling or operation of emergency equipment, is instructed and examined. Where relevant, these persons should also be exercised in the correct use, handling or operation of that equipment.

- 7. Sanitary equipment
- 7.1. Changing rooms and lockers
- 7.1.1. Appropriate changing rooms must be provided for workers if they have to wear special work clothes and where, for reasons of health and propriety, they cannot be expected to change in another room. Changing rooms must be easily accessible, have sufficient capacity and be provided with seating.

On normally staffed workplaces safety exercises must be held at regular intervals. In these exercises, amongst other matters, each person at the work place to whom such duties have been assigned in the event of emergency involving the use, handling or operation of emergency equipment, must be instructed and examined in the execution of such duties to a standard which meets with the satisfaction of the responsible authority. Where relevant these persons so assigned should also be exercised in the correct use, handling or operation of that equipment.

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7.1.2. Changing rooms must be sufficiently large and have facilities to enable each worker to lock away his clothes during working hours. Provision must be made to enable wet working clothes to be dried.

If circumstances so require lockers for work clothes must be separate from those for ordinary clothes.

- 7.1.3. Provisions must be made for either separate changing rooms or separate use of changing rooms for men and women.
- 7.2. Showers and washing facilities
- 7.2.1. Where required by the nature of the work or for health reasons an adequate and a suitable number of showers must be provided for workers.

Provisions must be made for either separate shower rooms or separate use of shower rooms for men and women.

- 7.2.2. The shower rooms must permit each worker to wash without hindrance in suitably hygienic conditions. The showers must be equipped with hot and cold running water.
- 7.2.3. Where showers are not required according to 7.2.1, washbasins with hot and cold running water must be provided in the vicinity of workstations.
- 7.2.4. Where the rooms housing the showers or washbasins are separate from the changing rooms, there must be easy communication between the two.

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7.3. Lavatories and washbasins

Separate facilities must be provided in the vicinity of workstations, restrooms, changing rooms and rooms housing showers or washbasins with an adequate number of lavatories and washbasins.

Provisions must be made for separate lavatories or separate use of lavatories for men and women.

- 8. First aid facilities
- 8.1. First aid equipment must be available in all places where working conditions require it.

This equipment must be suitably marked and easily accessible.

- 8.2. The first aid equipment provided must be fitting to the operation. Where appropriate, a suitable room where first aid can be given to injured persons must be provided. Clearly visible first aid instruction in the event of accidents must be displayed in this room.
- 8.3. First aid rooms must be fitted with essential first aid installations and equipment and be easily accessible for stretchers.

They must be signposted in accordance with Directive 77/576/EEC.

8.4. A suitable number of persons must be trained in the use of the first aid equipment provided.

C: SPECIAL REQUIREMENTS APPLICABLE TO THE OFFSHORE SECTOR

FROM THE

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(Where no alternative version is given in this column, the text is unchanged)

- 1. Fire detection and fire fighting
- 1.1. Appropriate precautions, as identified by a safety assessment, must be undertaken to protect against, detect and combat, the outbreak and spread of fires. Where appropriate fire breaks should be provided for the purpose of segregating fire risk areas.
- 1.2. Adequate fire detection and protection systems, fire-fighting systems and alarms must be provided on all workplaces in accordance with the risks identified in a safety assessment. These may include but are not limited to:
  - fire detection systems
  - fire alarms
  - fire water mains
  - fire hydrant and hoses
  - water deluge systems and water monitors
  - automatic sprinkler
  - gas extinguishant systems
  - foam systems
  - portable fire extinguishers
  - fireman's equipment
- 1.3. Fire-fighting equipment intended for general use must be easily accessible, simple to use and where necessary, protected from damage.
- 1.4. A fire protection plan detailing the precautions appropriate to protect against, detect and combat the outbreak of fires must

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be kept on the workplace.

- 1.5. Emergency systems must be so segregated or otherwise afforded protection from accidental events to the extent necessary to ensure that the emergency functions remain operational in an emergency. Where appropriate such systems shall be duplicated.
- 1.6. The equipment must be indicated by signs in accordance with Directive 77/576/EEC(8).
- 2. Remote Control in Emergencies
- 2.1. Equipment, identified as necessary by a safety assessment, must be capable of remote control at suitable locations in the event of an emergency. Such equipment must include the systems for ventilation, emergency shut-down of equipment which could give rise to ignition, the prevention of the escape of flammable liquids and gas fire protection and well control.
- 3. Communication: General and Emergency
- 3.1. Every normally manned workplace must be provided with:
  - an audio-visual system capable of transmitting an alarm indication to every manned part of the workplace as necessary.
  - a public address system capable of being heard distinctly at all parts of the installation where persons are frequently present and aural communication is practicable.
  - a system capable of maintaining communication

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with the shore and the emergency services.

- 3.2. Such systems must be capable of remaining operational in the event of an emergency. The public address system should be supplemented by communication systems which are not reliant on vulnerable power supplies.
- 3.3. Facilities for raising an alarm must be provided at suitable locations.
- 3.4. When persons are present on workplaces which are not normally manned, communications systems appropriate to the circumstances must be provided.
- 4. Safe Assembly Points and Muster List
- 4.1. All necessary measures must be taken to protect abandonment stations and safe assembly points from heat, smoke and the effects of explosion.

4.1. All necessary measures must be taken to protect refuges (abandonment stations and safe assembly points) from heat, smoke and the effects of explosion.

These measures which shall ensure safe refuge for all personnel for a time sufficient to permit their safe and full evacuation, shall be determined in the light of the risk assessment mentioned in Section A, paragraph la.

These measures shall also include the protection of personnel using routes to or from a refuge whether by means of the layout of the escape routes in relation to the location of hazardous areas or by means of specific protection of the escape routes from the effects of fire, smoke or explosion.

4.2. At least one such safe assembly point shall be in

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the form of a temporary safe refuge which shall be a centre from which the emergency can be assessed and controlled. For this purpose the temporary safe refuge shall be equipped with a control center which should contain minimum facilities as specified in the risk assessment and a radio room which may be located within area notwithstanding the general provision on the separation of accommodation from any workplace.

At least one of such refuges shall be an emergency centre from which the emergency can be assessed and controlled. For this purpose that refuge shall be equipped as indicated in the risk assessment with a control centre containing the minimum facilities as specified in the risk assessment including a radio room which may be located within the accommodation area, notwithstanding the general provision on the separation of accommodation from any workplace.

- 4.2. Each safe assembly point must be as close as possible to its associated abandonment stations and have sufficient space to accommodate all persons assigned to the station or stations.
- 4.3. Safe assembly points and abandonment stations must be readily accessible from accommodation and work areas.
- 4.4. A list of the personnel on a workplace must be maintained at all times. Every person on the workplace must be allocated a safe assembly point. Records of persons assigned to different abandonment stations must be separately maintained and displayed.

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4.5.	A record of persons assigned special duties in the event of an emergency must be provided and displayed at suitable locations on the workplace and noted in the written instructions referred to in section A under 3.6.		
5.	Means of Evacuation and Escape		
5.1.	Workers must be trained in the appropriate actions to be taken in emergencies.	5.1.	Workers must be trained in the appropriate actions to be taken in emergencies. In addition to general emergency training workers should receive workplacespecific training which should be specified in that workplace's risk assessment.
5.2.	Workers must be given suitable training in survival techniques.	5.2.	Workers must be given suitable training in survival techniques and be in possession of a current certificate recognised by the responsible authority.
5.3.	Suitable and sufficient means of evacuation in an emergency and means of escape direct to the sea must be provided on every workplace.		
5.4.	A safety assessment must be undertaken and an emergency plan developed for man overboard and workplace evacuation situations. Standby vessels must be available and must be suitably equipped to save lives.	5.4.	A risk assessment must be undertaken and an emergency plan developed for person overboard and workplace evacuation situations. Standby vessels must be stationed sufficiently close to an installation or installations in order that they may respond with adequate speed in any emergency. A required response time should be included in the risk assessment of any installation. Standby vessels must be suitably designed and equipped to save lives and recover personnel from the sea.

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The risk assessment must fully consider the role of helicopters in any offshore emergency and must provide for the use as and when necessary.

- 5.5. The minimum requirements for every survival craft (lifeboat), life-raft, life-buoy and life-jacket which is provided are that they:
  - be suitable and equipped to maintain life for a sufficient time;
  - be of sufficient number for all the workers likely to be present;
  - be of a type suitable for the workplace;
  - be properly constructed of suitable materials having regard to its life-saving function and the circumstances in which it may be used and kept ready for use; and
  - be of such colour as will make it conspicuous when in use, and equipped with devices such that the user can use them to attract the attention of rescuers.
- Adequate life-saving appliances must be available for immediate use.
- 6. Safety Exercises

On normally manned workplaces safety exercises must be held at regular intervals in which:

 all persons on the workplace to whom duties have been assigned involving the use, handling or operation of  all persons on the workplace to whom duties have been assigned involving the use, handling or operation of

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emergency equipment must be instructed and examined in the execution of such duties. Where relevant they should be also exercised in the correct use, handling or operation of that equipment;

emergency equipment must be instructed and examined in the execution of such duties to a standard which meets with the satisfaction of the responsible authority. Where relevant they should also be exercised in the correct use, handling or operation of that equipment.

- all emergency equipment used in the drill is examined, cleaned and, where appropriate, recharged or replaced and all portable equipment so used is returned to the place where it is ordinarily kept;
- survival craft are tested for operation.
- 7. Sanitary equipment
- 7.1. Changing rooms and lockers
- 7.1.1. Where workers have to wear special work clothes, or, for reasons of health or propriety, they cannot be expected to change elsewhere, appropriate changing rooms must be provided. They must be easily accessible and be provided with seating.
- 7.1.2. Changing rooms must be sufficiently large and have facilities to enable each worker to lock away their clothes during working hours. Provisions must be made to enable wet working clothes to be dried.

If circumstances so require (e.g dangerous substances, humidity, dirt), lockers for work clothes must be separate from those for ordinary clothes.

7.1.3. Provision must be made for

survival craft are examined for operation.

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separate changing rooms or separate use of changing rooms for men and women.

7.2. Showers and Washing facilities

In addition to those facilities provided in any accommodation area, adequate and suitable showers and washing facilities shall if necessary be provided in the vicinity of workstations.

7.3. Lavatories and Wash-basins

In addition to those facilities provided in any accommodation, an adequate number of lavatories and Wash-basins shall if necessary be provided in the vicinity of workstations.

Provisions must be made for separate lavatories or separate use of lavatories for men and women.

- 8. First-Aid Rooms
- 8.1. One or more first-aid rooms must be provided in accordance with the size of the premises and the type of activity being carried out.
- 8.2. They must be signposted in accordance with Directive 77/576/EEC.
- 8.3. There must be provided, such equipment, facilities and medications and such number of suitable persons as are adequate and appropriate in the circumstances for rendering first-aid or where necessary treatment under the direction of a registered medical practitioner (who may or may not be present).
- 8.4. In addition first-aid equipment must be available

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in all places where working conditions require it.

- 8.5. The provisions of Council Directive... on the minimum health and safety requirements for improved medical treatment on board vessels shall apply to workplaces where the provisions of that Directive are more stringent than those of the present Directive.
- 9. Accommodation
- 9.1. If the nature, scale and duration of operations so require, the employer must also provide employees with accommodation which must be:
  - protected against the effects of explosion, the ingress of smoke and gas and the outbreak and spread of fire as identified by a safety assessment.
  - suitably equipped with ventilation, heating and lighting facilities;
  - provided at each level with at least two independent exits leading to escape routes.
  - protected against noise, smells and fumes likely to be hazardous to health from other areas and against the weather;
  - separate from any workstation and located away from dangerous areas;
- 9.2. Such accommodation must contain sufficient beds or bunks for the number of persons expected to sleep on the installation. Any room designated as sleeping accommodation must contain adequate space for the

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occupants to store their clothes. Separate sleeping rooms for men and women must be provided.

9.3. Such accommodation must include a sufficient number of showers and washing facilities equipped with hot and cold running water. Provision must be made for separate shower rooms or separate use of shower rooms for men and women.

Showers must be sufficiently spacious to permit each worker to wash without hindrance in suitably hygienic conditions.

- 9.4. The accommodation must be equipped with a sufficient number of lavatories and Wash-basins. Provision must be made for separate facilities or separate use of such facilities for men and women.
- 9.5. The accommodation and its equipment must be maintained to adequate standards of hygiene.
- 10. Helicopter Operations

Helicopter decks on workplaces must be of sufficient size and located so as to provide a clear approach to enable the largest helicopter using the deck to operate under the most severe conditions anticipated for helicopter operations. The helicopter deck must be of a design and construction adequate for the intended service.

There should be provided, and stored in the immediate vicinity of the helicopter landing area, equipment needed for use in the event of an accident involving a helicopter.

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11. Movement of Installations - Safety and Stability

Towing arrangements and procedures must be such as to reduce to a minimum any danger to workers during towing operations. The design and arrangement of towing fittings should have regard to both normal and emergency conditions.

(1) OJ No C32 7.2.1991 p. 7 (2) OJ No C (3) OJ No C191 22.7.1991 p.34 (4) OJ No L 393,30.12.1989, p.1 (5) OJ No L 183, 29.06.1989, p. 1 (6) OJ No L 185, 09.07.1974, p. 18 (7) OJ No L 393, 30.12.1989, p. 18 (8) OJ No L 229, 07.09.1977, p. 12 On installations with a resident workforce a sufficient number of dedicated emergency response personnel, who are trained to standards recognised by the responsible authorities, should be available at the helicopter deck during aircraft movements.

Towing and anchor handling arrangements and procedures must be such as to reduce to a minimum any danger to all workers during towing anchor handling operations. The design and arrangement of towing and anchor handling fittings and equipment should have regard to both normal and emergency conditions.

COM(91) 493 final

# **DOCUMENTS**

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Catalogue number: CB-CO-91-565-EN-C

ISBN 92-77-78494-6

Office for Official Publications of the European Communities L-2985 Luxembourg

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