

International Association of Drilling Contractors

Appendix 4 to Health, Safety and Environment Case Guidelines for Land Drilling Contractors

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Appendix 4 Review Status

Issue	Review Status	Date
01	First formal issue	9 October 2007

A4 NATIONAL REGULATORY REFERENCE INDEX

This appendix contains information on:

- > Contact details of the Regulatory Authorities in:
 - o Austria
 - o Denmark
 - o Germany
 - o Hungary
 - o Italy
 - o The Netherlands
 - o Poland
 - o UK
- > Information regarding submission of HSE Cases (or equivalent) for each regime.
- > Reference indexes of the primary legislation as of October 2007.
- Reference index to OHSAS 18001
- European Union Directive 89/391 (see note below)
- European Union Directive 92/91 (see note below)

***** PLEASE NOTE *****

Whilst every effort has been made to ensure the accuracy and completeness of this Appendix, it only reflects the knowledge available on the date of issue.

This Appendix will be updated on a more regular basis than the remainder of the guideline to accommodate legislative changes. However, Drilling Contractors are urged to verify the completeness of relevant legislative references with their respective National authorities prior to developing their HSE Case documents. They should also familiarize themselves with regional and local industry agreements, codes of practice, covenants, standards and treaties applicable to their operations.

This Appendix also contains details of country specific requirements not addressed within Parts 1 to 6, inclusive, of this European Land version of the IADC HSE Case Guideline. When developing an HSE Case for use in Europe where additional National requirements exist, Drilling Contractors should ensure that these requirements are incorporated within the body of their HSE Case.

Country specific requirements, where identified, can be found after the foreword for each of the above Nations.

European Union Directives: for completeness, this appendix also details two historical European Union Directives, but in view of the following statement from the European Union, it does not cross-reference individual articles with the main body of this guideline. As National legislation takes precedence over EU Directives for industry, only they are cross-referenced.

"A Directive is adopted by the European Council in conjunction with the European Parliament or by the Commission alone. A directive is addressed to the Member States, not companies, organisations or industries. Its main purpose is to align national legislation. A directive is binding on the Member States as to the result to be achieved but leaves them the choice of the form and method they adopt to realise the Community objectives within the framework of their internal legal order." (EUR-Lex)

A4.1. AUSTRIA

Regulator:	Bundesministerium für Wirtschaft und Arbeit (Federal Ministry of Economics and Labour)
Location:	Denisgasse 31 A-1200 Vienna Austria
Telephone:	+43 (1) 711 00 3000
Fax:	+43 (1) 714 3583
E-mail:	post@IVSL.bmwa.gv.at
Web-site:	www.bmwa.gv.at

Safety and Health Document Submission Requirements and Acceptance

The Mining Act is the legal basis for the Austrian mining Industry (Federal Law Gazette I 38/1999, as amended).

The Health and Safety at Work Act (Federal Law Gazette 450/1994, as amended) and its bylaws are the legal basis for occupational health and safety and specify the requirements concerning handling and content of the document.

The Safety and Health Document has to be prepared before operation begins. There is no requirement to submit the Safety and Health Document to the authority and no approval of this document is required.

The document has to be available at the place of work.

Austrian Legislation

Detailed regulations for borehole operations concerning specific risks caused by oil and gas activities (e.g. minimum safety distances, prevention of explosions, fires and blowouts, protection from irrespirable media) can be found in the Borehole Mining act ("Bohrlochbergbau-Verordnung", Federal Law Gazette II 367/2005). This standard covers regulations for exploration, production, storage and pipeline-bounded transportation to ensure the health and safety of all persons - except employees - and to ensure protection of environment, water and deposit site.

Regulations concerning occupational health and safety of employees while borehole operations (based on the Health and Safety at Work Act) are standardized particularly in the Drilling Act "Bohrarbeitenverordnung" (Federal Law Gazette II 140/2005), which is the incorporation of the Council Directive 92/91 EEC into Austrian Legislation, and the Explosive Atmosphere Act ("Verordnung explosionsfähige Atmosphären", Federal Law Gazette II 309/2004).

All Austrian regulations are listed at www.ris.bka.gv.at

Austrian Legislation

	Drilling Act 140 / 2005 140. Verordnung: Bohrarbeitenverordnung	
Regulation	Requirement	HSE Case Ref
	Article 1 (Artikel 1)	
1	Area of application (Geltungsbereich)	NA / information only
2	Definitions (Begriffsbestimmungen)	NA / information only
3	Supervisor (Aufsichtsperson)	NA / information only
4	Hazard Investigation and Assessment plus Determination of Safeguards (Gefahrenermittlung und -beurteilung sowie Festlegung von Schutzmaßnahmen)	2.4.2 & Part 4
5	Written instructions, Work Permits (Schriftliche Anweisungen, Arbeitsfreigabe)	2.3.4, 2.3.5, 2.3.8 & 2.3.10
6	Examination and maintenance of Drilling Equipment (<i>Prüfung und Wartung von Bohr- und Behandlungsanlagen</i>)	2.3.14, 2.3.19 & 2.3.20
7	Communications, warning and alarm systems (Kommunikations-, Warn- und Alarmsysteme)	2.3.9, 2.3.10, 3.4.6 & 3.6
8	Assembly Points and Muster List (Sammelstellen und Namensliste)	2.3.16, 3.6, 5.3.3 & 5.4.1
9	Safety Exercises (Sicherheitsübungen)	2.3.3 & 5.3
10	Remote Control in Emergencies (Fernbedienung in Notfällen)	2.3.12, 5.1 & 5.2
11	Well Control (Bohrlochkontrolle)	2.3.12 & 3.3
12	Fire Protection <i>(Brandschutz)</i>	3.5
13	Protection from Harmful Atmospheres (Schutz vor gesundheitsgefährdender Atmosphäre)	2.3.7 & 2.3.17
14	Resuscitation Equipment (Wiederbelebungsgeräte)	2.2.3.7
15	Employment <i>(Arbeitsplätze)</i>	2.2
16	Construction Stages (Gerüstbühnen)	3.1, 3.2, 3.3 & 3.4
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Regulation	Requirement	HSE Case Ref
17	Fall Protection (Sicherung gegen Absturz)	2.3.5
18	Storage of combustible liquids (Lagerung brennbarer Flüssigkeiten)	2.3.17 & 3.4.9
19	Exceptions, Entry into Force and Guideline Conversion (Außer- und In-Kraft-Treten, Richtlinienumsetzung)	NA / information only

Borehole Mining Act 367 / 2005 367. Verordnung: Bohrlochbergbau-Verordnung

Regulation	Requirement	HSE Case Ref
	Section 1 – General Regulations (1. Abschnitt: Allgemeine Bestimmungen)	
1	Aims (<i>Ziele)</i>	NA / information only
2	Practical Area of Application (Sachlicher Geltungsbereich)	NA / information only
3	Personal Area of Application (Persönlicher Geltungsbereich)	NA / information only
4	Definitions (Begriffsbestimmungen)	NA / information only
5	Linguistic Equality (Sprachliche Gleichbehandlung)	NA / information only
6	Driving on Mining Locations (Befahrung von Bergbauanlagen)	2.3.13, 2.3.16.2 & 3.1.7
7	Entering Mining Locations (Betreten von Bergbauanlagen)	2.3.11
8	Records (Aufzeichnungen)	2.2.12, 2.4 & 2.5
	Section 2 – Explosion Protection (2. Abschnitt: Explosionsschutz)	
9	General Requirements (Allgemeine Anforderungen)	NA / information only
10	Evaluation of Explosion Hazards (Beurteilung der Explosionsgefahren)	Part 4
11	Explosion Protection Document Explosionsschutzdokument	Part 4

Regulation	Requirement	HSE Case Ref
12	Hazardous Area Classification Explosionsgefährdete Bereiche	3.5.1
13	Precautions in Hazardous Areas (Verhalten in explosionsgefährdeten Bereichen)	2.3.4, 2.3.5 & 2.3.8
	Section 3 – Fire Protection (3. Abschnitt: Brandschutz)	
14	General Requirements (Allgemeine Anforderungen)	NA / information only
15	Fire Protection Arrangements (Brandschutzordnung)	3.5
16	Hazardous Areas – Hazard Zones (Brandgefährdete Bereiche – Brandschutzstreifen)	3.5.1
17	Behaviour in Hazardous Areas and Hazard Zones (Verhalten in brandgefährdeten Bereichen und Brandschutzstreifen)	2.3.4, 2.3.5 & 2.3.8
18	Fire Fighting (Brandbekämpfung)	2.2.4.4, 2.3.3 & 5.3
19	Fire Protection Advisor (Brandschutzbeauftragter)	2.2.3.2
(4. Absc	Section 4 – Protection from Harmful Atmospheres hnitt: Schutz vor gesundheitsgefährdenden und unatembaren Atmosphe	ären)
20	General Requirements (Allgemeine Anforderungen)	NA / information only
21	Evaluation of Harmful Atmospheres (Beurteilung der Gefahren von gesundheitsgefährdenden oder unatembaren Atmosphären)	Part 4
22		
	Gas Protection Document – Gas Protection Exercise (Gasschutzdokument – Gasschutzübung)	Part 4
23		Part 4 3.5.2, 3.5.3 & 3.6
23	(Gasschutzdokument – Gasschutzübung) Gas Protection Defence	3.5.2, 3.5.3
23 24	(Gasschutzdokument – Gasschutzübung) Gas Protection Defence (Gasschutzwehr) Section 5 – Safety Distances	3.5.2, 3.5.3
	(Gasschutzdokument – Gasschutzübung) Gas Protection Defence (Gasschutzwehr) Section 5 – Safety Distances (5. Abschnitt: Sicherheitsabstände) Mining Location Registration	3.5.2, 3.5.3 & 3.6 NA / information

Regulation	Requirement	HSE Case Ref
27	Mining Plant Safety Distances (Sicherheitsabstände der Bergbauanlagen)	
28	Safety Distances when Drilling into Hydrogen Sulphide Formations (Sicherheitsabstände bei Anfall oder Erwarten von schwefelwasserstoffhältigen Medien)	3.5.1
29	Enlarging Safety Distances (Erhöhung von Sicherheitsabständen)	3.5.1
30	Safety Cordons (Alarmierungsstreifen)	3.5.1
	Section 6 – Borehole Operations (6. Abschnitt: Arbeiten an Bohrlöchern)	
31	Location Identification (Kennzeichnung der Bohrungen)	NA / information only
32	Well Design and Cementation (Verrohrung, Zementation)	NA / information only
33	Blowout Preventors (Absperreinrichtungen)	3.3.3
34	Kill Pump and Pressure Relief Systems (Totpump- und Druckentlastungseinrichtungen)	3.3 & 3.4
35	Mud (Zirkulationsmedien)	3.3.2
36	Mud Pumps (Spülungspumpen)	3.3.2
37	Cementing Work (Zementierarbeiten)	3.3
38	Well Control Training (Vorkehrungen gegen Ausbrüche – Unterweisung)	2.2.4
39	Well Control (Überwachung des Bohrlochverlaufs)	3.3
40	Drilling Records (Bohrergebnisse)	2.2.1.2
41	Competent Persons (Anwesenheitspflicht)	2.2.4
	Section 7 – Borehole Testing (7. Abschnitt: Testarbeiten an Bohrlöchern)	
42	General Requirements (Allgemeine Bestimmungen)	NA / information

only

Regulation	Requirement	HSE Case Ref
	Section 8 – Extraction and Storage (8. Abschnitt: Gewinnen und Speichern)	
43	Well Site Characterisation (Kennzeichnung der Sonden)	NA / information only
44	General Requirements for Well Sites and Boreholes (Allgemeine Anforderungen an Bohrlöcher von Sonden)	Part 3
45	Supplementary Requirements for Well Sites where formations contain Hydrogen Sulphide and or Carbon Dioxide (Ergänzende Anforderungen an Sonden, in denen Medien mit Gehalt an Schwefelwasserstoff und/oder Kohlendioxid anfallen oder zu erwarten sind)	Part 3
46	Storage (Speichern)	2.3.17
47	Requirements for introducing Well Fluids into the Borehole (Anforderungen an das Einleiten von Medien in Bohrlöcher)	2.3.12
48	Well Testing <i>(Prüfungen)</i>	3.8
49	Well Site Register (Sondenbuch)	2.2.1.2
50	Continuously Manned Position - Remote Supervision (Ständig besetzte Stelle – Fernüberwachung)	2.2.3
51	Site Protection (Lagerstättenschutz)	2.3.11
	Section 9 – Protection and Abandonment of Boreholes (9. Abschnitt: Sichern und Verfüllen von Bohrlöchern)	
52	Protection of Abandoned Boreholes (Sichern von nicht in Verwendung stehenden Bohrlöchern)	NA / information only
53	Abandonment of Boreholes (Verfüllen von Bohrlöchern)	NA / information only
	ction 10 – Production and Storage Piping for Oil and Ga chnitt: Rohrleitungen für die Gewinnung und Speicherung von Erdöl und	
54	General Requirements (Allgemeine Anforderungen)	NA / information only
55	Welding (<i>Leitungsverlegung</i>)	2.3.4 & 2.3.5
56	Supplementary Requirements for High Risk Piping (Ergänzende Anforderungen an Rohrleitungen mit besonderem Gefahrenpotenzial)	2.3.14

Regulation	Requirement	HSE Case Ref
57	Piping Management – Protective Trench <i>(Leitungsführung – Schutzstreifen)</i>	NA / information only
58	Testing (Prüfungen)	2.3.14 & 2.3.19
59	Piping Register (Rohrleitungsbuch)	NA / information only
	Section 11 – Final Clauses (11. Abschnitt: Schlussbestimmungen)	
60	Authority (Behörde)	NA / information only
61	Exceptions (Ausnahmebestimmungen)	NA / information only
62	Storage of Flammable Liquids (Lagerung brennbarer Flüssigkeiten)	3.4.9
63	Temporary Provisions (Übergangsbestimmungen)	NA / information only

IADC in Europe HSE Case Guidelines Appendix 4 – Land Drilling

A4.2 DENMARK

Regulators:	Arbejdstilsynet	Energistyrelsen
	(Danish Working Environment Authority)	(Danish Energy Authority)
Location:	Postboks 1228	Amaliegade 44
	0900 København C	1256 København K
Telephone:	+45 7012 1288	+45 33 92 67 00
Fax:	+45 7012 1289	+45 33 11 47 43
E-mail:	at@at.dk	ens@ens.dk
Web-site:	www.at.dk	www.ens.dk

Workplace Assessment Requirements

Executive Order 559 of the Danish Working Environment Act requires that a workplace assessment of the health and safety conditions of the workplace is drawn up. The completed document must be filed in the enterprise and made available to managers, supervisors, other employees and the Danish Working Environment Authority.

The Workplace Assessment has to be prepared before operations begin. However, there is no requirement to submit the Workplace Assessment to the authority and no approval of the document is required.

The Workplace Assessment has to be available at the place of work.

Danish Legislation

In addition to the legislation detailed below, which reflects only Danish implementation of the European Union Boreholes Directive, Drilling Contractors are advised to contact both the Danish Working Environment Authority and the Danish Energy Authority for more detailed advice on additional applicable legislation.

Danish Working Environment Act Executive Orders can be found at: <u>http://www.at.dk/sw12174.asp</u>

Danish Working Environment Act Guidelines can be found at: http://www.at.dk/sw12175.asp

Additional Danish Requirements

When developing an HSE Case for use in Denmark, Drilling Contractors should ensure that the following additional country specific requirement is adequately addressed and incorporated within the body of documentation submitted to the Arbejdstilsynet. As this item is not addressed within Parts 1 to 6, inclusive, of this global version of the IADC HSE Case Guideline, it is important that Drilling Contractors discuss it with the Arbejdstilsynet, prior to developing their HSE Case.

Working Environment Act 2004, Executive Order 559 – 17th June 2004.

Regulation Requirement

Section 9a In connection with the performance of work, it shall be ensured that the work does not involve a risk of physical or mental impairment to health as a result of bullying, including sexual harassment

Danish Legislation

Working Environment Act 2004		
Regulation	Requirement	HSE Case Ref
	Part 1 - Scope	
1	(1) This Executive Order shall apply to any work performed for an employer.(2) This Executive Order shall also apply:	NA / information only
	 to work not performed for an employer, except sections 6a to 6c, section 7, section 10 and sections 22 to 24; to work performed in the employer's private household, except sections 6a to 6c, section 7, section 10 and sections 22 to 24; and to work performed exclusively by the members of the employer's family who belong to his household, except sections 6a to 6c, section 7(1), sections 8 to 10 and sections 22 to 24. 	
2	The obligations under this Executive Order shall rest on employers, business managers, supervisors and other employees, suppliers, project planners, repairers, etc. in accordance with the general rules laid down by the Working Environment Act.	NA / information only
3	In addition to the provisions of this Executive Order, such rules shall apply as may have been laid down on the performance of work in pursuance of other legislation.	NA / information only
	Part 2 - Planning and organisation of work	
4	All aspects related to work shall be planned and organised so as to ensure safe and healthy working conditions. Planning and organisation of work shall take into account the principles of prevention stated in Annex 1. It shall be ensured that no designs, plans, detailed solutions or working methods which may be dangerous to or otherwise impair health or safety in connection with the performance of work are prescribed or assumed to be used. Moreover, it shall be ensured that the overall impact on the working environment does not in the short or the longer term impair the health and safety of the employees.	2.2 & 2.3.1
5	In connection with the planning of new or changing of existing workplaces, working	2.2, 2.3.1 & 2.3.2

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Regulation	Requirement	HSE Case Ref
	processes and methods, the introduction of new technology, the acquisition of technical equipment, personal protective equipment and substances and materials, it shall be ensured that the working environment conforms to the general and special requirements of the working environment legislation.	
6	(1) The Internal Safety Organisation of the enterprise shall participate in the planning of the work, cf. sections 4 and 5, and in inspection of the working environment, cf. Part 5.	2.2.1.3, 2.2.3.1, 2.2.3.2 & 2.2.3.3
	(2) In enterprises where no Internal Safety Organisation is to be set up, the employees shall participate in the planning of the work, cf. sections 4 and 5, and in inspection of the working environment, cf. Part 5.	
	Part 2a - Workplace assessment	
6a	(1) The employer shall ensure that a written workplace assessment of the health and safety conditions of the workplace is drawn up, mainly with a view to ensuring a written procedure in connection with the detailed planning, organisation and implementation of the workplace assessment and to ensuring recognition of the result thereof, cf. section 6b(5). The workplace assessment may be drawn up in electronic form.	2.2.1.3, 2.3.1 & Part 4
	(2) To ensure that all health and safety conditions are included in the workplace assessment, the employer shall see to it that the Internal Safety Organisation of the enterprise is involved in and participates in the entire process concerning planning, organisation, implementation and follow-up as well as updating of the workplace assessment. The Internal Safety Organisation shall attest the workplace assessment to document its involvement.	
	(3) In enterprises where no Internal Safety Organisation is to be set up, the employees shall be similarly involved in drawing up the workplace assessment, cf. subsection (2) above.	
6b	(1) A workplace assessment shall be drawn up regardless of the nature of the work, the technical means, substances and materials, working methods and processes used in the enterprise, the design and fitting out of the workplace and the size and organisation of	2.1 & Part 4

Regulation	Requirement	HSE Case Ref
	the enterprise.	
(2)	In compliance with the principles of prevention stated in Annex 1, a workplace assessment shall include an opinion on the health and safety problems of the enterprise and how these are to be solved. The necessary solutions shall be specified in the workplace assessment.	
(3)	The employer may choose the method according to which the workplace assessment is to be drawn up. However, the chosen method shall ensure that the assessment includes the following elements:	
	 Identification and mapping of the health and safety conditions of the enterprise, including health and safety problems, if any, and their nature and scale. 	
	2. Description and assessment of the health and safety problems of the enterprise, including their nature, seriousness and scale, and their causes in order to introduce the necessary solutions.	
	3. Incorporation of sick absence at the enterprise with a view to assessing whether any health and safety conditions of the enterprise may contribute to the sick absence.	
	4. Prioritising and preparing an action plan to solve those health and safety problems of the enterprise which cannot be immediately solved. The plan shall prescribe the order of and rate at which the problems observed shall be solved.	
	5. Guidelines on follow-up procedures with regard to the action plan, specifying who is responsible for implementing the plan and where and how to supervise and control the measures initiated, including whether the solutions introduced are adequate and whether the action plan shall be revised, etc.	
(4)	A workplace assessment shall be brought up to date in the event of any changes in the work, the working methods and processes, etc. that affect the working environment of the enterprise, however, at least every three years.	
(5)	A workplace assessment shall be filed in the	

Regulation	Requirement	HSE Case Ref
	the Danish Working Environment Authority.	
	(6) A workplace assessment shall not be submitted to or approved by the Danish Working Environment Authority unless specific rules on this matter have been laid down in the Working Environment Act.	
6c	(1) If the employer does not have the necessary expertise to draw up the workplace assessment, the employer shall obtain assistance from an occupational health service or other experts.	2.0.4 & 2.2.3
	(2) Regardless of whether the employer obtains expert assistance, it shall remain the employer's responsibility to ensure that a workplace assessment is drawn up and that the requirements prescribed in sections 6a and 6b (1) to (5) are observed.	
Part 3	 Performance of work - General requirements 	
7	(1) All aspects related to work shall be performed so as to ensure health and safety, both in the light of an individual assessment and in the light of an overall assessment of the physical, ergonomic and psychosocial conditions of the working environment which in the short or the longer term may affect the physical or mental health of the employees.	2.2, 2.3 & 2.4
	(2) In the case of work having a physically or mentally harmful or stressful effect in the short or the longer term, the Danish Working Environment Authority may demand that special occupational health and safety measures be carried out. Such measures may be special welfare measures and any other occupational health and safety measures necessary for the prevention of diseases, wearing-down, accidents, etc.	
	(3) Where work may involve particular risks to health and safety, the Danish Working Environment Authority may demand breaks and limited working hours for such work where such risk cannot otherwise be prevented. The same requirements may be stipulated where special working clothing and personal protective equipment are used.	
8	 In connection with the performance of work account shall be taken of the employee's age, insight, fitness for work and other qualifications. 	2.2 & 2.3

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Regulation	Requirement	HSE Case Ref
	pregnant employees and employees who are breastfeeding, shall be protected against the dangers which specifically affect them.	
	(3) When the employer is notified or otherwise becomes aware that an employee is pregnant or breastfeeding, the employer shall see to it that the assessment of health and safety at work includes an evaluation of whether the employee is exposed to effects which may involve danger to the pregnancy or breastfeeding, cf. in particular the agents, working processes and working conditions mentioned in Annex 2.	
	(4) If thereafter the risk is found to exist that a pregnant employee or an employee who is breastfeeding is exposed to the effects referred to in subsection (3) above, it shall be determined on the basis of an assessment of the nature, scale and duration of the individual exposure whether such risk will have an adverse effect on the pregnancy or breastfeeding of the employee, and, where necessary, preventive measures shall be taken in pursuance of subsections (5) and (6) below.	
	(5) If possible, such measures shall consist of technical measures or design and fitting out of the workplace. Where it is not reasonably practicable to achieve adequate protection of the employee in this way, the risk shall be prevented through measures in connection with the planning and organisation of the work, including, if necessary, any change of working hours and limitation of night work.	
	(6) If it is not possible to comply with subsection (5) above, the measures may consist of transfer to other jobs which do not involve any danger to the health and safety of the pregnant employee or the employee who is breastfeeding.	
9	In connection with the performance of work, efforts shall be made to ensure	2.3.1 & 2.3.5
	 that monotonous work involving a risk of physical or mental impairment to health in the short or the longer term is avoided or alleviated; 	
	that the work pace does not involve any risk of physical or mental impairment to health in the short or the longer term; and	
	 that work in isolation which may involve a risk of physical or mental impairment to 	
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Regulation		Requirement	HSE Case Ref
		health is avoided or alleviated;	
10		nnection with the performance of work, it be ensured:	2.3
	1.	that the design of workplaces, equipment, technical means, and the choice of working and production methods are as far as possible adapted to the persons using them;	
	2.	that suitable and efficient equipment such as lifting devices and means of transport, etc. are available to the extent necessary to enable the work to be performed safely and without risks to health.	
Part 3 -	Perfor	mance of work - Special requirements	
11	a s w s	the employee is the only person engaged in working process and this may involve pecific danger to the person concerned, the vork shall be organised so as to prevent uch danger. If the danger cannot be revented, the employee shall not be ermitted to work alone.	2.3.1
	e ir	Steps shall be taken to ensure that only mployees who have received adequate instructions may have access to areas where mere is specific danger.	
12	p p h	, in connection with certain jobs, the hysical or mental state of an employee may resent increased risk to the employee imself or his surroundings, the employee hall not be engaged in such work.	2.2.4
	8 tł p b	Where the measures referred to in section (4) are not found to be adequate to prevent he risk to the health and safety of the regnant employee or the employee who is reastfeeding, such employee shall not be ngaged in the work concerned.	
13		nnection with the performance of work, it be ensured	2.3 & Part 4
	1.	that effective measures have been taken to prevent risks of collapses, falls, earth falls, accidents arising from electric power, vibrations, and the like;	
	2.	that the danger of explosion, fire, poisoning and suffocation, etc. is effectively prevented;	
	3.	that effective measures be taken to prevent any escape, leakage and generation of dust, smoke, vapours, smells, gas, etc.	

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Regulation	Requirement	HSE Case Ref
	which may endanger health and safety;	
	 that effective measures be taken to protect the employees where the working process or the conditions under which work is performed represents a risk of infection; and 	
	 that the climatic and lighting conditions are fully satisfactory from a health and safety point of view for the work to be performed. In this connection measures shall be taken to protect the employees from intense heat or cold. 	
14	Any unnecessary exposure to noise shall be avoided. Therefore, the noise level during work shall be reduced to the lowest level reasonably practicable taking account of technical progress, and any limits fixed shall be complied with.	2.3.7
15	Any unnecessary exposure to radiation shall be avoided. Therefore, the effect of radiation during work shall be reduced to the lowest level reasonably practicable taking account of technical progress, and any limit values fixed shall be complied with.	2.3.7
16	Any unnecessary effect of substances and materials shall be avoided. Therefore, the effect of substances and materials during work shall be reduced to the lowest level reasonably practicable taking account of technical progress, and any limit values fixed shall be complied with.	2.3.17
17	Any unnecessary physical loads and inappropriate postures or movements shall be avoided. Therefore, the load during work shall be reduced to the lowest level reasonably practicable taking account of technical progress, and any limits fixed shall be complied with.	2.3.8
	Part 4 - Training and instructions	
18	 (1) The employer shall ensure that each employee – irrespective of the nature and duration of the employment relationship – receives adequate and appropriate training and instructions in performing the work safely. Information shall be given about any risks of accidents and diseases specific to their jobs, including information about any occupational-medicine studies that the employees have access to. Training and instructions shall particularly be given: 	2.2.4
	1. on recruitment;	
- 4 0 0 0 - 4 - k 0007	2. in the event of a transfer or a change of	A 4 4 0

Regulation	Requirement	HSE Case Ref
	job;	
	 in the event of the introduction of new work equipment or a change in equipment; 	
	 in the event of the introduction of any new technology. 	
	(2) The training and instructions mentioned in subsection (1) above shall be adapted to the development taking account of new risks and shall be repeated periodically if necessary.	
19	The employer shall pay any expenses connected with the training referred to in section 18, which shall take place during working hours.	2.2
20	The employer shall ensure that employees from outside enterprises engaged in work in his enterprise receive appropriate instructions regarding the health and safety conditions of the enterprise which are relevant to their activities in his enterprise.	2.2.4.2, 2.3.9 & 2.3.20
21	(1) An enterprise employing persons whose services have been hired out to the enterprise or otherwise made available to the enterprise by an outside enterprise shall be under an obligation to ensure that the work is planned, organised and performed so as to ensure safety and health and in accordance with the rules laid down by the working environment legislation.	2.2
	(2) Prior to the commencement of such employment the enterprise shall give the outside enterprise the following information which the latter shall be under an obligation to communicate to the persons to be employed:	
	 the required professional level, including whether special qualifications are required; 	
	any requirements of health certificates; and	
	the special nature of the work, including any risks.	
Part	5 - Inspection of the working environment	
22	In order to ensure safe and healthy working conditions at all times, the employer shall ensure:	2.4
	 that the assessment, cf. section 6b(4) and (5) and section 8(4), is in the possession of the enterprise and is revised whenever this is of particular importance to health and safety at work. 	

and safety at work;

Regulation	Requirement	HSE Case Ref
	 that expert assistance is obtained where necessary to ascertain whether the working conditions are safe and healthy; and 	
	 that a list is kept and reports prepared on any occupational accidents in accordance with Executive Order No. 33 of 20 January 2003 on the Reporting of Occupational Accidents, etc. to the Danish Working Environment Authority. 	
23	(1) The employer shall ensure	2.3
	 that rules of work for cleaning, repairs and maintenance are drawn up to the extent necessary to ensure that the work can be performed safely and without risks to health 	
	 that the necessary measures are taken in the enterprise with regard to first aid, fire fighting and evacuation of employees taking account of the nature of the work and the size of the enterprise. If necessary, the enterprise shall obtain the assistance of an occupational health service or other experts; and 	
	 that emergency, evacuation and exercise plans are drawn up in cases where there may be a specific risk of leakage of dangerous substances or where there may be a specific risk of fire, explosion, accidents or the like. 	
	(2) The employer shall select the persons responsible for introducing the measures and plans under paragraphs 1) and 2) of subsection (1) above, and they must have received the necessary training, make up a sufficient number and have adequate equipment at their disposal taking account of the nature of the work and the size of the enterprise. The employees of the enterprise shall be informed of the contents of the aforesaid measures and plans.	
	(3) Effective inspection and supervision shall be conducted to ensure that the rules, measures and plans mentioned in subsection (1) above are complied with. Such inspection and supervision shall be conducted by persons having the necessary insight in the field concerned.	
24	Effective inspection shall be carried out to ensure	2.4

that the harmful effects mentioned in sections 13

Regulation	Requirement	HSE Case Ref
	to 16 are prevented. Where gases, vapours and dust arising from substances and materials or noise and radiation may present a health hazard, the employer shall see to it that inspection is carried out regularly or, where necessary, continuously to ensure that conditions are in order and that in this connection such measurements are made as are necessary to carry out inspection. The results of such measurements shall be kept and presented on request to the Danish Working Environment Authority.	
	Part 6 - Detailed rules and exemptions	
25	(1) The Director General of the Danish Working Environment Authority shall be authorised to lay down detailed rules concerning the performance of work in accordance with the aforesaid provisions.	NA / information only
	(2) In addition, the rules may contain provisions:	
	 concerning special welfare measures and other occupational health and safety measures necessary for the prevention of diseases, wearing-down, accidents, etc. in connection with work which must be deemed to have a physically or mentally stressful effect in the short or the longer term; 	
	 concerning posting of notices or adequate marking; 	
	 concerning limit values, including noise limits, weight limits, temperatures, radiation, etc., as well as control of compliance with such limit values; 	
	 to the effect that work which may involve a substantial risk of accidents or diseases may only be performed by persons having received specified training, passed a test or attained a certain age; 	
	 concerning employment of persons suffering from bodily or mental defects or diseases which may involve an increased risk of accidents or diseases in connection with certain jobs; 	
	concerning restrictions on the access to let employees work alone.	
	(2) The rules may include references to acknowledged norms and standards provided that they are specified clearly and include dating.	

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Regulation	Requirement	HSE Case Ref
	(3) In the rules the Director General of the Danish Working Environment Authority may authorise the regional inspectorates to permit, to a specified extent, derogations from the detailed rules, cf. section 28	
26	The Director General of the Danish Working Environment Authority shall issue WEA guidelines and guides specifying how the provisions of the Executive Order and the detailed rules can be met.	NA / information only
27	Where the performance of work is also subject to other legislation, no rules may be laid down in pursuance of the aforesaid provisions without prior consultation with the respective authorities.	NA / information only
28	In special circumstances, the Director General of the Danish Working Environment Authority may permit derogations from the provisions of this Executive Order where this is deemed to be reasonable and fully acceptable and to the extent it is compatible with Directive 89/391/EEC of 12 June 1989 on the introduction of measures to encourage improvements in the health and safety of workers at work, Directive 91/383/EEC of 25 June 1991 supplementing the measures to encourage improvements in the health and safety at work of workers with a fixed-duration employment relationship or a temporary employment relationship, and Directive 92/85/EEC of 19 October 1992 on the introduction of measures to encourage improvements in the health and safety at work of pregnant workers and workers who have recently given birth or are breastfeeding.	NA / information only
	Part 7 - Right of appeal	
29	Any decisions made by the Danish Working Environment Authority under this Executive Order may be appealed in accordance with section 81 of the Working Environment Act.	NA / information only
	Part 8 – Penalty Provisions	
30	 Unless a more severe penalty is prescribed by the Working Environment Act or any other legislation, anyone who contravenes section 4, section 5, section 6a, section 6b(1) to (5), section 6c, section 7(1), section 8(1) to (4), section 9a and sections 10 to 24; fails to comply with any improvement notice or prohibition notice issued in accordance with the provisions of this 	NA / information only

Regulation	Requirement	HSE Case Ref
	 Executive Order. (2) For contravention of section 4, section 5, section 6a, section 6b(1) to (5), section 6c, section 7(1), section 10, section 11, sections 13 to 17 and sections 22 to 24 an employer may be held liable to pay a fine even if he has not acted intentionally or negligently. The liability to pay a fine shall be on condition that the contravention may be ascribed to one or more persons associated with the enterprise or the enterprise per se. There shall be no alternative sentence in lieu of the fine. 	
	(3) Companies, etc. (legal persons) may be held criminally liable pursuant to the rules set out in Part 5 of the Danish Criminal Code.	
31	Any detailed rules laid down in pursuance of this Executive Order may provide for punishment for contravention of provisions thereof in pursuance of section 84 of the Working Environment Act.	NA / information only
	Part 9 - Entry into Force, etc	
32	 This Executive Order shall enter into force on 1 July 2004, cf. however subsections (2) and (3) hereof. 	NA / information only
	(2) Paragraph 3 of section 6b(3) shall enter into force on 1 January 2005.	
	(3) For employers who have drawn up a workplace assessment by 31 December 2004, paragraph 3 of section 6b(3) shall enter into force when the workplace assessment has to be updated, cf. section 6b(4).	
	(4) Executive Order No. 492 of 20 June 2002 on the Performance of Work shall be repealed on 1 July 2004	
Δ	nnex 1 - General principles of prevention	
34	(1) Avoiding risks;	NA / information
	(2) evaluating risks which cannot be avoided;	only
	(3) combating the risks at source;	
	(4) adapting the work to the individual, especially as regards the design of workplaces, the choice of work equipment and the choice of working and production methods, with a view, in particular, to alleviating monotonous work and work at a predetermined work-rate and to reducing their effect on health;	
	(5) adapting to technical progress;	
	(6) replacing the dangerous by the non-	

Regulation	Requirement	HSE Case Ref
	dangerous or the less dangerous;	
(developing a coherent overall prevention policy which covers technology, organisation of work, working conditions, social relationships and the influence of factors relating to the working environment; 	
(1	 giving collective protective measures priority over individual protective measures; and 	
()	giving appropriate instructions to employees.	
Annex 2 - Pregnant workers	and workers who are breastfeeding, cf. sectio	on 8(3) & (4)
A. Agents, working process	es and working conditions	
1 A	gents	
a	hysical Agents where these are regarded as gents causing foetal lesions and/or likely to srupt placental attachment, and in particular:	NA / information only
1	. shocks, vibration or movement;	
2	 handling of loads entailing risks, particularly of a dorsolumbar nature 	
3	. noise;	
4	. ionising radiation;	
5	. non-ionising radiation;	
6	. extremes of cold or heat; and	
7	. movements or postures (including work in a standing position or requiring constant walking), travelling – either inside or outside the establishment - mental or physical fatigue and other physical or mental burdens connected with the activity of the worker.	
s C B is A a b	iological Agents of risk groups 2, 3 and 4, cf. ection 2(2) and Annexes 7 and 8 of Executive rder No. 864 of 10 November 1993 on iological Agents and the Working Environment sued by the Danish Working Environment uthority, in so far as it is known that these gents or the therapeutic measures necessitated y such agents endanger the health of pregnant omen and the unborn child.	NA / information only
k	he following Chemical Agents in so far as it is nown that these agents endanger the health of regnant women and the unborn child:	NA / information only
1	. substances and materials to be classified and labelled R40, R45, R46, R49, R61, R63, R64 and R68 under the rules laid down by the Danish Ministry of the Environment on classification and labelling;	

	Eana Bi		
Regulation		Requirement	HSE Case Ref
	E 2 tł C	ubstances and materials comprised by Executive Order No. 906 of 8 November 2002 on Measures to Protect Workers from the Risks Related to Exposure to Carcinogenic Substances and Materials at Vork;	
	E V	ubstances and materials covered by Executive Order No. 292 of 26 April 2001 on Vork with Substances and Materials chemical agents);	
	4. p	esticides;	
	5. n	itrous oxides;	
	6. n	nercury and mercury derivatives;	
	7. a	ntimitotic drugs;	
	8. c	arbon monoxide; and	
		hemical agents of known and dangerous percutaneous absorption	
2	Proc	esses	
3	No. 9 Prote Expo Mate Envir founc or the	ing processes covered by Executive Order 06 of 8 November 2002 on Measures to ect Workers from the Risks Related to sure to Carcinogenic Substances and rials at Work issued by the Danish Working onment Authority, in so far as these are d to endanger the health of pregnant women e unborn child. King conditions – Underground Mining	NA / information only
		nts and working conditions presenting a ific risk for pregnant workers	
	Ager	nts	
	1.	Physical agents:	
		 work in hyperbaric atmosphere, e.g. pressurised enclosures and underwater diving 	
	2.	Biological agents:	
		- toxoplasma	NA / information
		 rubella virus (unless the pregnant workers are proved to be adequately protected against such agents by immunisation) 	only
	3.	Chemical agents:	
		- lead and lead derivatives in so far as	

these agents are capable of being absorbed by the human organism

Working conditions

- underground mining work

A4.3 GERMANY

Regulator:Landesamt für Bergbau, Energie und Geologie (LBEG)
(State Authority for Mining, Energy and Geology)
An der Marktkirche 9
Postfach 1153
D 38678 Clausthal-Zellerfeld
Germany

Telephone: + 49-5323-723250

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IADC in Europe HSE Case Guidelines Appendix 4 – Land Drilling

E-Mail: <u>Poststelle.CLZ@lbeg.niedersachsen.de</u> <u>www.lbeg.niedersachsen.de</u>

Revision: 2

Revision Date: 07.08.2006

In Germany the responsibility to legislate the mining activities is split between the Federal Government and the Governments of the 16 States that forms the Federal Republic of Germany. Based on this there exists several regulators on the State level. The following information in given by the LBEG as regulator for the States: Hamburg, Bremen, Niedersachsen und Schleswig-Holstein where more than 90 % of German oil and gas is being produced.

Safety and Health Document Submission Requirements:

The Safety Case in Germany is called Safety and Health Document. The General Federal Mining Ordinance (BGBI.¹ I S. 1466, 23.10.1995) is the legal basis for this document and describes the requirements concerning handling and content of the document. The Safety and Health Document is comparable with the Safety Case from other North Sea Countries but has another status within the German Legislation. The Safety and Health Document has to be prepared before the work on site begins. However, there is no requirement to submit the Safety and Health Document to the LBEG and no approval of the document is necessary. The document has to be on the installation and in the case of an accident or incident this document has to be made available for the inspectors of the LBEG.

Acceptance Regime:

See above.

Other Information:

According to the Mining Directive for deep drilling, underground storage and for the exploitation of mineral resources in the State of Niedersachsen (Deep drilling Directive - BVOT -) the structural safety of the derrick has to be verified and demonstrated to the LBEG before the work at the site begins. A general acceptance for the derrick for all drilling activities that are performed in Niedersachsen can only be issued by LBEG. Other States in Germany usually accept the LBEG decision so that there is no need for further derrick specific verifications in other German States. In addition to this further works plans (for example: Completion, Drilling Mud and Waste Handling) need to be approved by the LBEG before the work on site begins. (§§ 55 ff. Federal Mining Law, 13.09.1980, BGBI. I S. 1310).

¹ BGBI. = Bundesgesetzblatt (Official gazette of Federal Law)

GERMAN LEGISLATION

Regulation	Requirement	HSE Case Ref.	
Allgemeine Bundes- Bergverordnung vom 23.10.1995 (BGBI.I S. 1466)			
Article 3 (1) Nr. 1	Identify and evaluate all risks for the workers and present the results of this evaluation	1.7.3, 4.1, 4.3	
Article 3 (1) Nr. 2	Demonstrate that the appropriate technical, organisational and personal measures are taken for the safety and health of the workers	2.2, 2.3.2.1	
Article 3 (1) Nr. 3	Demonstrate that workplaces and equipment are properly designed, can be operated safely and are maintained	2.3.1.4, 2.3.2.4	
Article 3 (1) Nr. 4	Demonstrate that there is an appropriate induction program for the workforce concerning safety and health risks and safety measures	2.2.4.5	
Article 3 (2) Nr. 1	The risk evaluation under Article 3 (1) Nr. 1 has to consider risks that result out of the design of work places	2.3.1.3, 2.3.1.4	
Article 3 (2) Nr. 2	The risk evaluation under Article 3 (1) Nr. 1 has to consider risks that result out of the design, selection and use of equipment, as well as the interaction with working material	1.7.3	
Article 3 (2) Nr. 3	The risk evaluation under Article 3 (1) Nr. 1 has to consider risks that result out of qualification, experience and ability of workers	2.2.1.4, 4.1	
Article 3 (3) Nr. 1	Revision to the document is necessary whenever a worksite undergoes major alterations, extensions or renovations	1.5	
Article 3 (3) Nr. 2	Revision to the document is necessary to prevent repetitions of major incidents/accidents	1.5	
Article 3 (4)	The safety and health measures have to be checked regularly to control if they comply with the legislation. The result has to be documented	2.2.1.7, 6.1	
Appendix 3 Nr. 1.1	Describe the particular sources of danger for the work places which might lead to major accidents	2.3.1.3	
Appendix 3 Nr. 1.2	The consequences of the danger resulting out of the particular sources of danger have to be evaluated	1.7.4, 4.2.4	
Appendix 3 Nr. 1.3	The precautions that are necessary to prevent major accidents, to minimize the consequences of accidents, and to abandon the workplace/installation in the case of an emergency, have to be described in detail	2.3.7, 4.1, 4.2.5, 5.1	

IADC in Europe HSE Case Guidelines Appendix 4 – Land Drilling

A4.4 HUNGARY

Regulator:	Magyar Bányászati Hivtal (Mining Bureau of Hungary)
Location:	Arany János u. 25
	H-1051 Budapest
	Hungary
Telephone:	+36 (1) 301 2900
Fax:	+36 (1) 301 2903
E-mail:	<u>info@mbh.hu</u>
Web-site:	www.mbh.hu

Safety and Health Document Submission Requirements and Acceptance

• To be completed

Hungarian Legislation

Legislation		
Regulation	Requirement	HSE Case Ref

A4.5 ITALY

Regulator:	Ufficio Nazionale Minerario per gli Idrocarburi e la Geotermia (Mining National Office for Hydrocarbons and Geothermal)
Location:	Via Molise, 2 00187 Roma Italy
Telephone:	+39 6 4705 2859
Fax:	+39 6 4788 7802
E-mail:	franco.terlizzese@sviluppoeconomico.gov.it
Web-site:	www.unmig.sviluppoeconomico.gov.it/unmig/unmig.htm

Safety and Health Document Submission Requirements and Acceptance

The Safety Case in Italy is called Safety and Health Document. The legislative decree n.624 issued on November 25th,1996 is the main legal basis for this document and describes the requirements concerning handling and content of the document. The Safety and Health Document is comparable with the Safety Case from other EU Countries. The Safety and Health Document has to be prepared before the work on site begins. The Safety and Health Document must be submitted to the territorial section of UNMIG before each authorisation for drilling or production activities, but no approval of the document is necessary. The document has to be kept also on the installation. In the case of an accident or incident this document is the legal basis to assess responsibilities of the holders of the exploration or exploitation licence, the on site assistants and of the workers. The assessment is made by the inspectors of the UNMIG.

The same provisions apply for offshore and land drilling.

Acceptance Regime:

See above.

Other Information:

Safety and Health Documents have to demonstrate compliance with all legislation applicable to the oil and gas industries. These documents must include an objective assessment of the adequacy and applicability of a Drilling Contractor's management system to effectively control risks and manage operational and maintenance activities.

Any revisions that make a material change to the current safety case must be submitted to the regulator for acceptance.

Combined operations (simultaneous drilling & production on the same site) must be addressed in a specific Safety Cases.

The Safety and Health Documents must:

- provide enough information to show that all the kinds of risks have been considered and evaluated
- show that hazards with the potential to cause a major accident have been identified and that the risks arising from those hazards are, or will be, adequately controlled.
- demonstrate that the level of risk exposures of the workers are acceptable
- establish clearly roles and responsibilities, including those of the contractors and subcontractors
- show the compliance of the installations and of the equipments to the safety rules
- show that the installation owner's management system is adequate to ensure

compliance with the law in respect of matters within his control

- ensure the satisfactory management of arrangements with contractors and subcontractors;
- show that adequate arrangements for audit have been established

show that there is an effective safety management system which ensures that the organisational arrangements in place, if fully implemented, will enable the installation owner to comply with all the relevant health and safety laws

Italian Legislation

Legislative Decree N ^{o.} 624, 25 th November 1996 (Decreto Legislativo 25 novembre 1996, n. 624)			
Article	Requirement	HSE Case Ref	
Part 1 – General Provision	ns (Disposizioni Generali)		
Section 1 – Area of Applic	cation (Campo di Applicazione)		
Article 1	Activities covered (Attivitá soggette)	NA / information only	
Article 2	Definitions (<i>Definizioni</i>)	NA / information only	
Article 3	Supervision by the Authorities <i>(Vigilanza)</i>	NA / information only	
Article 4	Powers of Supervision (Esercizio della vigilanza)	NA / information only	
Article 5	General protection measures (Misure generali di tutela)	NA / information only	
Section 2 – Employers' Obligations (Obblighi del Datore di Lavoro)			
Article 6	Safety and Health Document (Documento di sicurezza e di salute [DSS])	Parts 1 - 6	
Article 7	Obligations <i>(Obblighi)</i>	Part 1	
Article 8	Risk Prevention and Protection Consultation (<i>Riunione di prevenzione e protezione dai rischi</i>)	2.2.1.3, 2.2.3.2 & Part 4	
Article 9	Safety and Health Document Coordination (DSS coordinato)	1.2.4 & 2.2	
Article 10	Safety and Health Document Contents (Contenuti del DSS)	1.1 & 1.2.2	
Article 11	Protection from Fires, Explosions and Harmful Atmospheres (Protezione contro gli incendi, le esplosioni e le atmosfere nocive)	2.3.4, 2.3.5, 2.3.7 & 2.3.17	
Article 12	Evacuation and Rescue Facilities (Mezzi di evacuazione e di salvataggio)	Part 5	
Article 13	Communication, Warning and Alarm Systems (Sistemi di comunicazione, di avvertimento e di allarme)	2.3.9, 3.4.6, 3.5.2 & 3.6	
Article 14	Keeping Workers Informed (Informazione dei lavoratori)	2.3.1 & 4.9	
Article 15	Health Surveillance (Sorveglianza sanitaria)	2.3.7	

Article	Requirement	HSE Case Ref		
Section 3 - General Rule	Section 3 - General Rules (Norme Generali)			
Article 16	Permanent Advisory Commission for the prevention of accidents and workplace hygiene (Commissione Consultiva Permanente per la prevenzione degli infortuni e l'igiene del lavoro)	NA / information only		
Article 17	Modifications to article 83 of Presidential Decree n. 886 of 1979 (Modifiche all'articolo 83 del decreto del Presidente della Repubblica n. 886 del 1979)	NA / information only		
Article 18	Submission of Documentation (<i>Trasmissione documentazione</i>)	NA / information only		
Article 19	Organisation of the Workplace (Sistemazione dei luoghi di lavoro)	2.2.1 & 2.2.2		
Article 20	Person in Charge and Supervision (Direttore responsabile e sorvegliante - Denunce di esercizio)	2.2.2		
Article 21	Competent Workers (Lavoratori competenti)	2.2.4		
Article 22	Written Instructions (Istruzioni scritte)	2.3.5 & 2.3.8		
Article 23	Work Permits (Incarichi scritti per attivita' in situazioni pericolose)	2.3.4		
Article 24	Pregnant and Handicapped Workers (Lavoratori portatori di handicap)	2.3.1		
Article 25	Accidents and Incidents (Infortuni ed incidenti)	2.4.2 & 2.4.3		
Article 26	Accident Investigations (Inchieste sugli infortuni)	2.4.2		
Article 27	Maritime Accidents (Infortuni in mare)	2.4.2		
Article 28	Accident Statistics (Statistiche degli infortuni)	NA / information only		
		Section 4 – Mechanical and Electrical Equipment and Plant (Attrezzature ed impianti Meccanici, Elettrici ed Elettromeccanici)		

Meccanici, Elettrici ed Elettromeccanici)

Article 29	General Measures (Misure di carattere generale)	NA / information only
Article 30	Specific Provisions (Disposizioni specifiche)	3.2, 3.3, 3.4, 3.5 & 3.6
Article 31	Periodic Verification (Verifiche periodiche)	2.4.6, 2.4.7 & Part 6
Section 5 – Maintenance (M	anutenzione)	
Article 32	Maintenance Obligations (Obblighi di manutenzione)	2.3.19

Article	Requirement	HSE Case Ref
Article 33	Safety Equipment Maintenance (<i>Misure generali di manutenzione del materiale di sicurezza</i>)	2.3.14, 2.3.15, 2.3.19 & Part 6
Article 34	Pressure Vessels (Recipienti a pressione)	3.1.2, 3.1.6, 3.3.2, 3.3.3 & 3.4.3
Section 6 – Technical Prov	visions (Disposizioni Tecniche)	
Article 35	Transportation of explosives at the worksite (Sosta e trasporto degli esplosivi nel cantiere)	2.3.17 & 3.4.9
Article 36	Use of motor vehicles for loading mine bores (Impiego di automezzi per il caricamento dei fori da mina)	2.3.13, 2.3.15 & 3.1.7
Article 37	Emergency Routes and Exits (Vie ed uscite di emergenza)	3.6 & 5.3.3
Article 38	Natural and Artificial Lighting (Illuminazione naturale ed artificiale)	3.4.7
Article 39	Traffic Routes and Danger Areas (Vie di circolazione ed aree con pericolo)	3.5.1 & 3.6
Article 40	Outdoor Workplaces (Luoghi di lavoro esterni)	3.1.4
Article 41	Sanitary Equipment (Attrezzature igienico-sanitarie)	3.4.5
Υ	Applicable Rules (Norme applicabili)	3.1

Part 2 – Specific Safety and Health Rules Applicable for Open Air,NA /Subterranean and Surface Extraction Activities (norme specifiche in
materia di sicurezza e di salute applicabili alle attivitá estrattive a cielo
aperto o sotterranee, nonché agli impianti pertinenti di superficie)NA /

Part 3 – Specific Safety and Health Rules Applicable for all Drilling Activities (norme specifiche in materia di sicurezza e di salute applicabili alle attivitá estrattive condotte mediante perforazione)

Section 1 – Common Rules *Applicable to all Land and Sea Activities* (norme comuni applicabili alle *attivitá* di terraferma ed in mare)

Article 64	Area of application (Campo di applicazione)	1.2.2 & 4.3.1
Article 65	Drilling Authorisation and Protection Systems (Autorizzazione alla perforazione e sistemi di protezione)	2.3.12, 3.3, 3.4, 3.5, 3.6 & 3.8
Article 66	Well Control (Controllo dei pozzi)	2.3.12 & 3.3
Article 67	Competency of Personnel Assigned to Well Control <i>(Personale addetto)</i>	2.2.4

Article	Requirement	HSE Case Ref
Article 68	Cementing (Cementazioni)	3.3
Article 69	Mud Circulation (Circolazione del fango)	3.3
Article 70	Drilling with Various Mud Fluids (Perforazioni con fluidi diversi dal fango)	3.3
Article 71	Drilling for Salt (Perforazioni per minerali salini)	2.3.12 & 3.3
Article 72	Protection from Harmful Atmospheres and Explosion Risks (Rivelazione delle atmosfere nocive o potenzialmente esplosive)	2.3.17, 2.3.7, 2.3.8, 3.4.9 & Part 4
Article 73	Use of Explosives during Drilling Operations (Uso di esplosivo nelle operazioni di prospezione e di perforazione)	2.3.1, 2.3.5 & 2.3.12
Article 74	Doors and Gates (Porte e portoni)	2.3.11, 2.3.13 & 2.3.15
Article 75	General Measures for the Freedom of Movement at the Worksite (Misure generali per la libertà di movimento nel posto di lavoro)	2.3.13
Article 76	Simultaneous Operations (Operazioni simultanee)	2.3.12.1
Article 77	Well Intervention (Intervento ai pozzi)	2.3.12
Article 78	Communication during Normal and Emergency Conditions (Comunicazioni in condizioni normali e in caso di emergenza)	2.3.9, 3.4.6 & 5.2
Article 79	Emergency Exercises (Esercitazioni di sicurezza)	5.3

Section 2 – Common Rules Applicable to all Land Activities (norme applicabili alle attivitá di terraferma)

Article 80	Safety and Fire Fighting (Sicurezza e lotta antincendio)	2.3.3, 3.5 & 5.4
Article 81	Rules for Fighting Well Fires (Norme antincendio per i pozzi)	2.3.3, 2.3.12, 5.1 & 5.2
Article 82	Safety Distances (Distanze di sicurezza)	3.1.4 & 3.5.1
Article 83	Emergency Fire Service (Servizio antincendio e piano di emergenza)	5.2.2
Article 84	Submission of Plans (Presentazione dei progetti)	Appendix 3
Article 85	Verification and Testing of Safety Systems (Verifica e collaudo degli impianti)	2.4.6 & Part 6

Article	Requirement	HSE Case Ref
Article 86	Electrical Installation (Impianti elettrici)	2.3.14 & 3.4
Article 87	Rescue Equipment (Attrezzature di salvataggio)	3.6 & 5.4
Section 3 – Common Rules <i>Applicable to all Offshore Activities</i> (norme applicabili alle attivitá a mare)		NA / information only
Section 4 – Transitional and Final Rules (norme transitorie e finali)		
Article 100	Final Rules (<i>Norma Finale</i>)	NA / information only
Article 101	Technical Adaptation (Adeguamento tecnico)	NA / information only
Article 102	Financial Provisions (<i>Disposizioni finanziarie</i>)	NA / information only
Article 103	Repealed Rules (Norme soppresse)	NA / information only
Section 5 – Penalties <i>(sanzioni)</i>		
Article 104	Infringements by Employers, Licence Holders, Managers and Directors (Contravvenzioni commesse dai datori di lavoro, dai titolari, dai dirigenti e dai direttori responsabili)	NA / information only
Article 105	Infringements by Designated Persons and Supervisors (Contravvenzioni commesse dai preposti e dai sorveglianti)	NA / information only
Article 106	Administrative Violations (Violazioni amministrative)	NA / information only
Article 107	Repayment of the Fines (Estinzione delle contravvenzioni)	NA / information only

A4.6 THE NETHERLANDS

Regulator:	State Superv	ision of Mines (Staatstoezicht op de Mijnen)
Location:	(visiting address)	Princes Beatrixlaan 428
		VOORBURG (CBS building)
	Postal Address:	Inspector General of Mines
	(all)	State Supervision of Mines
		Postbus 8
		2270 AA VOORBURG
		The Netherlands
	Telephone:	+31 70 39 56 500 (reception)
	Fax:	+31 70 39 56 555
	E-mail:	info@sodm.nl
	Web-site:	www.sodm.nl

Safety and Health Document Submission Requirements:

For Land Drilling Rigs entering The Netherlands, a Safety and Health Document must be submitted to the Inspector General of Mines at least eight weeks before entry and commencement of operations. This guideline shall form the basis of such documents.

Where a Land Drilling Rig already has an accepted Safety and Health Document, it must be revised, updated and re-submitted based on the following criteria:

At least eight weeks prior to the 5th year anniversary of first submission of the current Safety and Health Document;

Prior to carrying out any major modifications or material changes to the Land Drilling Rig or to any of its safety critical systems; or,

Where the current Safety and Health Document is no longer representative of the Land Drilling Rig or the operations it performs.

In this context, major modifications and material changes include, change of owner / Management System, major structural changes, any change to protective and safety critical systems as well as additional operations not covered by the current Safety and Health Document.

Acceptance Regime:

Legislation requires that a Safety and Health Document be submitted to State Supervision of Mines for review and assessment before operations commence.

A key condition for acceptability is that the Safety and Health Document complies with the requirements of the Working Conditions Act - Revision 1st January 2007

State Supervision of Mines has developed a three-phase review and assessment strategy to determine whether an adequate "Case for Safety and Health" has been made. An overview of this Strategy together with the key elements that assessors will examine is provided in the "Report to Industry" issued by State Supervision of Mines. The first phase is an administrative overview to ensure that the document is complete and generally complies with legislation. The second phase is a detailed technical review to ensure that the demonstrated case for safety is robust. The third phase is on-site / location verification that the written word is put into practice.

Once satisfied that the Case for Safety and Health has been made, State Supervision of Mines will issue a letter of "no further questions" (acceptance). Re-submission of the Safety and Health Document is required every five years.

State Supervision of Mines does not have a charging regime. State Supervision of Mines will therefore only review a submitted Safety and Health Document if the Drilling Contractor can demonstrate they will execute operations in The Netherlands.

Other Information:

Dutch Safety and Health documents have to demonstrate compliance with all legislation applicable to the extractive industries. These documents must include an objective assessment of the adequacy and applicability of a Drilling Contractor's management system to effectively control risks and manage operational and maintenance activities. These management systems must also comply with all legislation applicable to the extractive industries.

It is common practice in The Netherlands for companies to submit an integrated Safety, Health and Environment Document to State Supervision of Mines for review and assessment. Risks to the environment caused by oil and gas activities should also be addressed. Similarly, an integrated Safety, Health and Environment management system, demonstrating adequate and effective management control of business process(s) are also commonplace.

State Supervision of Mines advocates and actively encourages all companies to address safety, health and environmental issues and risks in an integrated manner.

In the Netherlands it is acceptable to submit one hard copy plus one digital copy in ".PDF" format of the HSE Case.

A preface is required with a senior member of management signing for "acceptance" of the HSE case and thereby assuming legal responsibility for the case.

Additional Dutch Requirements

When developing an HSE Case for use in The Netherlands, Drilling Contractors should ensure that the following additional country specific requirement is adequately addressed and incorporated within the body of documentation submitted to State Supervision of Mines. As this item is not addressed within Parts 1 to 6, inclusive, of this global version of the IADC HSE Case Guideline, it is important that Drilling Contractors discuss it with the State Supervision of Mines, prior to developing their HSE Case.

Working Environment Act 2004, Executive Order 559 – 17th June 2004.

Regulation	Requirement
Article 2.15	Measures to prevent or reduce psychosocial workload
	(maatregelen ter voorkoming of bepreking van psychosociale arbeidsbelasting zijnde seksuele intimidatie, agressie en geweld, pesten en werkdruk)

DUTCH LEGISLATION

Working Conditions Act – revision 1st January 2007

(Arbeidsomstandighedenwet - Revisie 2007)

Article	Requirement	HSE Case Reference	Other Relevant Article
Article 3	Policy with respect to working conditions circumstances	2.1	
Article 4	<i>(Arbobeleid)</i> Policy with respect to sickness <i>(Beleid t.a.v. Ziekteverzuim)</i>	2.1 2.3.7	
Article 5	Risk inventory and evaluation of risk <i>(Inventarisatie en evaluatie van risico's)</i>	Part 4 4.3 4.4.2	
Article 6	Prevention and avoidance of accidents in which dangerous goods are involved (Voorkoming en beperking van zware ongevalen waarbij gevaarlijke stoffen zijn betrokken)	Part 4	
Article 8	Training and information (<i>Voorlichting en Onderricht</i>)	2.2.4.4 2.2.4.5 2.3.3 & 4.9	
Article 9	Reporting of accidents and occupational illnesses (<i>Melding ongevallen en beroepsziekten</i>)	2.4.2	NOGEPA Guideline N ^{o.} 5
Article 10	Prevention of hazards to third parties (Voorkomen van gevaar voor derden)	2.2.2.3	
Article 11	Responsibilities of the employees (Verplichtingen van de werknemers)	2.2.1.3 2.2.2.3	
Article 12	Employee representation (Personeelsvertegenwoordiging)	2.2.3.2	
Article 13	Professional support in the area of prevention and protection (<i>Deskundige bijstand op het gebied</i> van preventie en bescherming)	2.2.3.3	
Article 14	Additional professional support of specific tasks in the area of prevention and protection (Maatwerkregeling aanvullende deskundige bijstand bij specifieke	2.2.3.3	

Article	Requirement	HSE Case Reference	Other Relevant Article
	taken op het gebied op het gebied van preventie en bescherming)		
Article 14a	Fall back option for the professional support of specific tasks in the area of prevention and protection (Vangnetregeling aanvullende deskundige bijstand op het gebied van preventie en bescherming)	2.2.3.3	
Article 15	Professional support in the area of emergency response (<i>Deskundige bijstand op het gebied van bedrijfs hulpverlening</i>)	2.2.3.3 2.2.4.4, 2.3.3 Part 5	
Article 15a	Right to access information for professional employees and persons, emergency response persons and working conditions services (Arbodienst) (Informatierechten deskundige werknemers en personen, bedrijfshulpverleners en arbodiensten)	2.2.3.3 2.4.2	
Article 18	Work related medical advice and investigation. (Arbeidsgeneeskundig onderzoek)	2.2.3.7 2.3.7	
Article 19	Cooperation between several employers (Samenwerking tussen verschillende werkgevers)	2.2.3.4 2.2.3.5 2.3.12.1.1 2.3.12.1.2 2.3.13.2 2.3.20 4.1.2 4.7.3	
Article 29	Discontinuation of activities in case of imminent danger (Onderbreking van werkzaamheden bij dreigend gevaar)	2.2.2.3	

Working Conditions Decree – Revision 1st January 2007

Arbeidsomstandighedenbesluit – Revisie 2007

Article	Requirement	HSE Case Reference	Other Relevant Article
Article 1.40 – 1.42	Arrangements to protect and guide pregnant employees (Zwangere werknemers)	2.2.3.7	
Article 2.41.1	Supervision from a responsible	2.2.1.4	
	person (Toezicht door en verantwoordelijk	2.3.1	
	persoon)	6.3	
Article 2.41.2	Competent personnel in case of hazardous work	2.2.4	
	(Vakbekwaam personeel bij gevaarlijk werk)		
Article 2.41.4	Regular safety drills	2.3.3	Emergency
	(Regelmatige veiligheids oefeningen)	Part 5	Response Plan
Article 2.41.5	Alarm and communication systems	3.4.6	Station bills
	(Alarm en communicatie systemen)		
Article 2.41.6	Alarm and communication systems	3.4.6	Station bills
	(Alarm en communicatie systemen)		
Article 2.42.1	Obligation to cooperate as	2.3.12.1.1	
	requested in article 19 of the Labour Circumstances law	2.2.3.4	
	(Verplichting tot samenwerking	2.2.3.5 2.3.1	
	zoals in art 19 ARBOWET gevraagd)	2.3.20	
		4.1.2	
		4.7.3	
Article 2.42.2 a	Risk inventory and evaluation	Part 4	
	(Risico inventarisatie en evaluatie)	4.7	
Article 2.42.2b	Actions with respect to findings from the Risk Inventory & Evaluation (RIE) <i>(Maatregelen)</i>	1.2.7	
Article 2.42.2c	Actions taken with respect to	2.3.9	
	preventing the repetition of an accident	2.3.10	
	(Maatregelen t.b.v. herhaling)	4.6, 4.7	
		4.9.2, 4.9.3 & 4.9.4	
Article 2.42.2d	Cooperation between several	2.2.3.4	

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Article	Requirement	HSE Case Reference	Other Relevant Article
	employers (<i>Samenwerking diverse werkgevers)</i>	2.2.3.5 2.3.12.1.1 2.3.12.1.22.3. 13.2 2.3.20 4.1.2 4.7.3	
Article 2.42.2e	Providing information that the design and use of the workplace is safe (Gegevens waaruit blijkt dat het ontwerp, gebruik etc. v/d arbeidsplaats veilig is)	2.4.6 2.4.7 Part 3 4.7	
Article 2.42.3	Description of purpose and measurements taken by the employer with respect to the coordination between employers (Doel, maatregelen, en wijze van coördinatie))	2.2.3.4 2.2.3.5 2.3.12 2.3.13 2.3.15	Emergency Response Plan
Article 2.42.4	Revisions (revisies)	1.2.5 2.5.1	
Article 2.42.5	Issue a copy of the HSE case to the employees council or the workforce concerned (Afschrift vg-document zenden aan ondernemingsraad of	4.9.4	
Article 2.42.6	belanghebbende werknemers) Work in accordance to the HSE case (Werkzaamheden uitvoeren overeenkomstig het vg-document)	1.2.12	
Article 2.42.a	Permit to work system (Werkvergunning)	2.3.4	
Article 2.42 b	P.O.B. list <i>Personen register</i>	2.3.16.1	
Article 2.42c	Accident and near miss reporting system (Ongevals & Bijna ongevals rapportage system)	2.4.2	NOGEPA Guidelines N ^{o.} 5
Article 2.42e	Safety and Health Management system (Veiligheids en Gezondheids zorg systeem)	Part 2	
Article 2.42 f 1 a	Inventory and reporting of risk sources related to the workplace (<i>Opgave van de aan een</i> <i>arbeidsplaats verbonden risico</i>	4.2 4.3.1 4.4 & 4.4.2	

Article	Requirement	HSE Case	Other Relevant
	bronnen)	Reference	Article
Article 2.42 f 1.b	Evaluation of risks <i>(Evaluatie van de risico's)</i>	4.2, 4.3.2, 4.5 & 4.6	
Article 2.42 f 1.c	Proof that adequate measures are taken to prevent or mitigate accidents and their effect. Also proof that the workplace can be evacuated in an efficient and controlled manner in case of emergencies (Bewijs dat afdoende maatregelen zijn genomen om de ongevallen onder a genoemd te vermijden, uitbreiding te beperken en de Arbeidsplaats in noodsituaties op een doelmatige en beheerste wijze te kunnen evacueren)	4.3.3, 4.6, 4.7, 4.7.3 & Part 5	
Article 2.42 f 1.d	Proof that a Safety and Health Management system, as referred to in article 2.42e, that adequately complies with the rules of this Decree, relating to the safety and health protection of employees, both in normal and emergency situations, is used (Het bewijs dat er een veiligheids- en gezondheidssysteem gehanteerd wordt dat adequaat is om voorschriften bij of krachtens dit besluit die betrekking hebben op de veiligheid en de bescherming van de gezondheid van de werknemers, zowel in gewone situaties als in noodsituaties na te leven)	2.4 2.5 Part 1	
Article 2.42 f 2	The procedures and rules referred to in the safety and health document must be observed during the planning and implementation of the phases detailed in article 3.2, subparagraph 1 of the Decree (<i>Bij de planning en tenuitvoerlegging van alle in artikel</i> 3.2., eerste lid, tweede volzin, bedoelde fasen, worden de in het desbetreffende veiligheids- en gezondheidsdocument vermelde procedures en uitvoeringsbepalingen in acht genomen)	1.2.12	
Article 2.42 f 3	The individual employers responsible for the various work places must co-operate	2.2.3.4 2.2.3.5	

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Article	Requirement	HSE Case Reference	Other Relevant Article
	where necessary when formulating the safety and health document referred to in article 2.42, and the preparation of measures necessary to guarantee the safety and health of employees	2.3.12.1.1 2.3.12.1.2 2.3.13.2 4.1.2 4.7.3	
	(De verschillende werkgevers die verantwoordelijk zijn voor de verschillende arbeidsplaatsen werken in voorkomend geval samen bij het opstellen van de veiigheids- en gezondheidsdocumenten, bedoeld in artikel 2.42, en het voorbereiden van de maatregelen die nodig zijn om de veiligheid en de gezondheid van de werknemers te garanderen)		
Article 2.42 g a	Emergency training	2.2.4.4	
	(Emergency training)	2.3.3	
		2.3.13.2	
		Part 5	
Article 2.42 g b	Checks on equipment which	2.3.17	
	has been used during	2.3.19	
	exercises	3.6	
	(Controle op tijdens oefeningen gebruikte aparatuur)	Part 5	
Article 2.42 h 1	Training in actions to be taken	2.3.13.2	
	during emergencies	2.2.4.4	
	(Training in handeling tijdens noodgevallen)	2.3.3 & Part 5	
Article 2.42 i	Employee consultation	2.2.1.3	
	(Raadpleging en deelneming werknemers)	2.2.3.2	
Article 2.43	Work related medical	2.2.3.7	
	investigations for working	2.3.7	
	during nights		
	(Arbeidsgeneeskundig onderzoek t.a.v. nachtarbeid)		
Article 3.2 -1, -2,	General requirements with	2.3.19	
& -3	regard to workplaces	Part 3	
	(Algemene vereisten	4.9.3	
	Arbeidsplaatsen)	6.2	
		6.3	
		6.3.3	
Article 3.3	Stability and strength	2.3.13	A3.1
	(Stabiliteit en stevigheid)	3.2.3	A3.2
			A3.3
			A3.4
Article 3.4.1 - 4	Electrical installations	3.4.1	A3.8
		4.4.2	A3.9

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Article	Requirement	HSE Case Reference	Other Relevant Article
	(Elektrische installaties)		A1.1.7
Article 3.5 .1-7	Competent management with respect to the electrical installations (Deskundige leiding t.a.v. Elektrische Installaties)	2.2.4	
Article 3.6 1, 2	Escape ways and emergency exits (Vluchtwegen en nooduitgangen)	3.5.6 3.6 4.4.3 Part 5	A3.12
Article 3.7 1 - 6	Safe use of Escapes and emergency exits (Veilig gebruik noodwegen en nooduitgangen)	3.5.6 3.6 Part 5	A3.12
Article 3.8 1 - 4	Fire alarms and fire fighting (<i>Brand melding en</i> <i>brandbestrijding</i>)	3.5.2 3.5.4 3.5.5 4.4.3	A3.10 A3.11
Article 3.9	Emergency lighting (Noodverlichting)	3.4.7 3.6	
Article 3.11 1 - 4	Requirements regarding the organisation of the workplace (Inrichtingseisen)	2.3.5 6.3.3	
Article 3.15	Identification of Hazardous Areas (Markering gevaarlijke plaatsen)	3.5.1 2.3.5	A3.10
Article 3.16	Fall Prevention (Voorkomen valgevaar)	2.3.5 & Part 4	
Article 3.17	Prevention of danger caused by moving objects (Voorkomen gevaar van bewegende voorwerpen)	2.3.5 & 2.3.15	
Article 3.20	Recreation rooms (Ontspanningsruimten)	2.2.3.6 & 3.7	
Article 3.21	Cabins to be used by persons of equal gender (Nachtverblijven / voor personen zelfde geslacht)	2.2.3.6 & 3.7	
Article 3.22	Changing rooms (<i>Kleedruimten)</i>	2.2.3.6 & 3.7	
Article 3.23	Areas for Showers and washing (Wasgelegenheden en douche ruimten)	2.2.3.6 & 3.7	
Article 3.24	Toilettes	2.2.3.6 & 3.7	

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Article	Requirement	HSE Case Reference	Other Relevant Article
	(Toiletten, urinoirs en wasbakken)		
Article 3.25 1 - 6	First Aid <i>(Eerste-hulpposten)</i>	2.2.3.7 5.4.1	
Article 3.33	Written induction	2.2.4.5	
	(Schriftelijke voorlichting)	5.3.3	
Article 3.34	Danger of explosive atmospheres <i>(Gevaar voor explosieve atmosferen)</i>	3.5	
Article 3.35	Resuscitation equipment (Reanimatie apparatuur)	2.2.3.7	
Article 3.37 k 1 / 2	Mining installations design to	3.2.2	A3.10
/ 3	take in account its ability to with stand fires and structural	3.2.3	
	failures. The availability of potable water (Vereisten Inrichting mijnbouwinstallaties)	3.5.1	
Article 3.37 m	Safety Equipment maintenance (Onderhoud veiligheids apparatuur)	2.3.19	
Article 3.37 n 1 / 2 / 3	Emergency exits (Nooduitgangen)	3.6 3.7	A3.12
		5.4	
Article 3.37 o	Disabled employees (Gehandicapte werknemers)	2.2.3.7	
Article 3.37 p 1 / 2	Hazardous areas <i>(Gevarenzones)</i>	3.5.1	A3.10
Article 3.37 q 1 -	Remote controls in case of	2.3.3	
4	emergencies (Afstand bediening in Noodgevallen)	3.4.6	
Article 3.37 r 1 a. b. c 2 - 4	Communication systems (Communicatie systemen)	3.4.6	
Article 3.37 s 1 – 6	Assembly and muster role (Verzamelen en monsterrol)	2.3.16.1, 5.2.1, 5.4.1	A3.12
Article 3.37 t 1 – 4	Rescue equipment (<i>Reddingmiddelen)</i>	3.6 & 5.5.2	Station bill A3.12
Article 3.37 u	Protection of emergency	3.5.2	
	systems	5.4.1	
	(Beveiliging Noodsystemen)	5.4.2	
Article 3.37 w	Living quarters	2.2.3.6	A3.10
1 – 4	(Verblijfsaccomodatie)	3.4.4	A3.11

Article	Requirement	HSE Case Reference	Other Relevant Article
		3.4.5	
		3.7	
		6.3.3	
Article 3.37 y	Safety and Stability	2.3.13	
Anticle 3.37 y	(Veiligheid en Stabiliteit)	3.2.3	
Article 4.2 1 – 9	Further requirement to judge	2.3.17	
	the Risk inventory and	3.4.9	
	evaluation: hazardous substances/ chemicals	Part 4	
	(Nadere Voorschriften inventarisatie en evaluatie,	6.3.3	
	beoordelen)		
Article 4.2a	Further risk inventory and	2.3.17	
	evaluation registration requirements: additional	3.4.9	
	registration on hazardous	Part 4	
	substances/ chemicals	6.3.3	
	(Nadere Voorschriften inventarisatie en evaluatie, aanvullende registratie)		
Article 4.3 1 - 4	Limiting values of hazardous substances/ chemicals <i>(Grenswaarden)</i>	3.4.9	
Article 44 1 - 6	Strategic risk treatment (Arbeidshygienische strategie)	4.7	
Article 4.5 1 - 4	Ventilation	3.4.4	
	(Ventilation)		
Article 4.– 6 1 - 3	Prevention of unwanted situations	Part 4	
	(Voorkomen van ongewilde gebeurtenissen)		
Article 4.7 1 - 5	Special measures to prevent unwanted situations	4.7	
	(Bijzondere maatregelen ter voorkoming van ongewilde gebeurtenissen)		
Article 4.8 1 - 4	Explosives	3.4.9	
	(Explosieve stoffen)	2.3.17	
Article 4.10 a 1 - 5	Medical examination in relation	2.2.4.1	
	to hazardous substances/ chemicals	6.3.3	
	(Arbeidsgezondheidskundig onderzoek)		
Article 4.10 b 1 - 5	Medical examination and	2.2.4.1	
	biological limits (Onderzoek en biologische grenswaarden)	6.3.3	

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Article	Requirement	HSE Case Reference	Other Relevant Article
Article 4.10 c 1 - 5	Files and registration	2.2.4.1	
	(Dossiers en registratie)	6.3.3	
Article 4.10 d 1 - 4	Training and information on hazardous substances/ chemicals (Voorlichting en onderricht)	2.2.4.4 2.2.4.5 4.9	
Article 4.13	Further rules towards the inventory and evaluation of carcinogenic substances (Nadere voorschriften inventarisatie en evaluatie kankerverwekkende stoffen)	4.4	
Article 4.15 1 - 2	List of employees exposed to carcinogenic substances (Lijst van werknemers)	2.3.16.1	
Article 4.16 1 - 4	Limit values of carcinogenic	3.4.9	
	substances (Grenswaarden)	6.3.3	
Article 4.17	Prevention of exposure to	4.7.1	
	carcinogenic substances: substitution	4.7.2	
	(Voorkomen van blootstelling; vervangen)		
Article 4.18 1 - 4	Prevention or reduction of	4.7.1	
	exposure to carcinogenic substances	4.7.2	
	(Voorkomen of beperken van blootstelling)		
Article 4.19	Reduction of exposure to	4.7.1	
	carcinogenic substances (Beperken van blootstelling)	4.7.2	
Article 4.20 1 - 5	Hygienic measures against	4.7.1	
	carcinogenic substances (hygiënische beschermingsmaatregelen)	4.7.2	
Article 4.21	Abnormal exposure to carcinogenic substances (Abnormaal blootstellingsniveau)	2.2.3.2	
Article 4.23 1 - 2	Execution and scope of	2.2.4.1	
	medical examination in relation to carcinogenic substances	6.3.3	
	(Uitvoering en inhoud van onderzoek)		
Article 5.2	Avoiding hazards in manual	2.3.15	
	handling (Voorkomen gevaren bij fysieke	3.3.1	
	belasting)		
Article 5.3	Restricting the hazards and	2.3.15	
	risk inventory and evaluation	3.3.1	
	(Beperken gevaren en risico- inventarisatie en – evaluatei)		

Article	Requirement	HSE Case Reference	Other Relevant Article
Article 5.5	Information on manual handling (Voorlichting m.b.t. fysieke belasting)	2.2.4.4 2.2.4.5 4.9	
Article 6.1 1 - 4	Temperature (Temperatuur)	3.4.4	
Article 6.2 1 - 5	Airconditioning (Luchtverversing)	3.4.4	
Article 6.3	Daylight and artificial light (<i>Daglicht en kunstlicht</i>)	3.4.7	
Article 6.4	Daylight <i>(Daglicht)</i>	3.4.7	
Article 6.7 1 - 8	Further regulations towards the inventory, evaluation and judging of noise measurements (Nadere voorschriften inventarisatie en evaluatie, beoordelen en meten van geluid)	4.4.2	
Article 6.8 1 - 11	Prevention / limitation of harmfull noise (Voorkomen of beperken van schadelijk geluid)	4.7	
Article 6.9	Weekly average exposure to noise <i>(Weekgemiddelde geluid)</i>	4.4	
Article 6.10 1 - 8	Audiometric investigation (audiometrisch onderzoek)	2.2.3.7	
		2.3.7	
Article 6.10 a 1 - 2	Measures in case of hearing impairment <i>(Maatregelen bij gehoorbeschadiging)</i>	2.2.3.7	
Article 6.11	Information and training (Voorlichting en ondericht)	2.2.4.4 2.2.4.5 4.9	
Article 6.12 1 - 6	Testing the emission of non ionising radiation (Toestellen die niet ioniserende straling uitzenden)	4.4	
Article 7.3 1 - 4	Suitability of equipment (Geschiktheid arbeidsmiddelen)	Part 3	
Article 7.4	Suitability of equipment and unwanted events	Part 3	
	(Deugdelijkheid arbeidsmiddelen en ongewenste gebeurtenissen)		
Article 7.4a	Inspections (Keuringen)	2.3.15 2.3.16.2 2.4.1	A3.14

Article	Requirement	HSE Case Reference	Other Relevant Article
		3.2.2 3.4.2 3.4.8 6.3	
Article 7.5	Installation, removal, maintenance, repairs and cleaning, related to equipment used at the workplace (Montage, demontage, onderhoud, reparatie en reiniging van arbeidsmiddelen)	2.3.15 2.3.19	
Article 7.6	Competency of employees (Deskundigheid werknemers)	2.2.4	
Article 7.7	Safety precautions with respect to moving parts (Veiligheidsvoorzieningen ivm bewegende delen)	Table 4.9.1.1	
Article 7.8	Lighting (Verlichting)	3.4.7	
Article 7.9	High and low temperatures (Hoge en lage temperatuur)	Table 4.4.2.3	
Article 7.10	Alarm signals (Alarmsignalen)	3.4.6	
Article 7.11	Disconnection of equipment (Loskoppelen arbeidsmiddelen)	2.3.5	
Article 7.11a	Induction and information (Voorlichting)	2.2.4.4 2.2.4.5 4.9	
Article 7.13	Control systems (Bedieningssystemen)	Part 3	
Article 7.14	Equipment start-up (In werking stellen van Arbeidsmiddelen)	Part 3	
Article 7.15	Stopping of equipment (Stoppen van Arbeidsmiddelen)	Part 3	
Article 7.16	Emergency controls (Noodstop voorziening)	3.5.3	
Article 7.17 a	Mobile equipment, forklift trucks (Mobiele arbeidsmiddelen, heftrucks)	2.3.12.2 2.3.15	
Article 7.17 b	Mobile equipment with its own motive power (Mobiele arbeidsmiddelen met eigen aandrijving)	2.3.12.2 2.3.15	

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Article	Requirement	HSE Case Reference	Other Relevant Article
Article 7.17 c	Use of mobile euipment (Gebruik Mobiele Arbeidsmiddelen)	2.3.12.2 2.3.15	
Article 7.18	Lifting and hoisting equipment (Hijs en hefwerktuigen)	2.3.12.2 2.3.15 3.1.3 3.4.8	
Article 7.18 a	Lifting and hoisting equipment for non guided lifts (Hijs en hefwerktuigen voor niet geleide lasten)	2.3.12.2 2.3.15 3.4.8	
Article 7.18 b	Lifting and hoisting equipment for persons (Hijs en hefwerktuigen voor personen)	2.3.12.2 2.3.15 3.4.8	
Article 7.20	Lifting and hoisting equipment (Hijs en hefgereedschap)	2.3.15 3.4.8	
Article 7.22	Transport of persons in workbaskets (Vervoer van personen in werkbakken)	2.3.15 3.4.8	
Article 7.28	Containers (Containers)	2.3.15 3.4.9	
Article 7.36 b	Equipment used in the extraction industry (<i>Arbeidsmiddelen winnings industrie</i>)	Part 3	
Article 8.1	General requirements of personal protection equipment (Algemene vereisten persoonlijke beschermingsmiddel)	2.3.5 2.3.17 5.1.9	
Article 8.2	Selection of Personal Protective Equipment (PPE) <i>(Keuze PPE)</i>	2.3.5 2.3.17 5.1.9	
Article 8.3	Availability of PPE (Beschikbaarheid PPE)	2.3.5 2.3.17 5.1.9	
Article 8.4	Signs regarding safety and health (Veiligheids en gezondheids signalering)	2.3.9	

Working Conditions Regulations – Revision 1st January 2007

(Arbeidsomstandighedenregeling – Revisie 2007)

Article	Requirement	HSE Case Reference	Other Relevant Article
Chapter 3 Article 3.6.1c & d	Requires the manager of a mining or any other company to provide a safety and health document for each mobile mining installation	Parts 1 to 6	
Chapter 3 Article 3.8.2a	Requires a "Detailed Design, Start-up and Operation Safety and Health Document" for each mobile mining installation first entering The Netherlands	Parts 1 to 6	
Chapter 3 Article 3.8.2b	Requires an "Addendum Operations Safety and Health Document" for each mobile mining installation, within five years of a previous submission	Parts 1 to 6	
Chapter 3 Article 3.8.2c	Requires a "Addendum Major Alterations, Modification or Extensions Safety and Health Document" for each mobile mining installation, after major modification or changes to the installation have been made that alter the risk situation	Parts 1 to 6	
Chapter 3 Article 3.9a	Requires companies to provide a clear and precise description of the mobile mining installation and activities performed thereon.	Part 3 & Part 4	Report to Industry Section 4.2 – Factual Information & Section 5.0 – Factual Information
Chapter 3 Article 3.9b & Attachment IV	Requires companies to provide drawings, diagrams, plans and other relevant graphical information to compliment descriptions made	Part 3 & Part 4	Report to Industry Section 4.2 – Factual Information & Section 5.0 – Factual Information A3
Chapter 3 Article 3.9c, d & Attachment V	Requires companies to provide a fire fighting / emergency plan for each mobile mining installation	2.3.3, 3.5 & Part 5	Station Bill, Emergency Response Plan
Chapter 3 Article 3.9e	Provide a list of company acceptance criteria	4.5.2 & 4.6.2	Report to Industry Section 4.2 – Risk Identification & Section 5.0 – Risk Identification
Chapter 3 Article 3.9f & Attachment VI	List of all identified risks and their assessment / evaluation	4.4 4.5	Report to Industry Section 4.2 – Risk Identification & 5.0

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Article	Requirement	HSE Case Reference	Other Relevant Article
		4.6	 Risk Identification
Chapter 3 Article 3.9g	A specification of the sources used for evaluating the risks	4.2 & 4.3	Report to Industry 4.2 & 5.0
Chapter 3 Article 3.9h	Requires a review of the effectiveness and suitability of the HS&E management system	2.4, 2.5	
Chapter 3 Article 3.9i & j	A list of the risk reduction measures, including a summary of all the research conducted in this framework	4.7	Report to Industry 4.2
Chapter 3 Article 3.9k	Details of performance standards for all protective and critical systems	2.3.14, 2.3.19 2.4 4.5, 4.6.2 6.3	Report to Industry 4.2, 5.0
Chapter 3 Article 3.9I	Details of the environmental and functional boundaries within which the equipment and control systems of the mobile mining installation can function normally	3.2.1	
Chapter 3 Article 3.9m	Provide a remedial action plan with time schedule	1.2.7	
Chapter 3 Article 3.9n	Compare identified risks for compliance with their stated acceptance criteria	4.7	Report to Industry Section 5.0 – Risk Evaluation
Chapter 3 Article 3.9o	Testing the performance of a mobile installation, or its components, of equipment and control systems, with respect to the performance standards	6.5	
Chapter 3 Article 3.9p	A written declaration from the Managers of the relevant Drilling Contractor that the risks at least fall within their previously established acceptance criteria and performance standards	1.2.12	
Chapter 3 Article 3.11	Submission of Data	1.2.5	8.4.6 Safety and Health Document Submission Requirements
Chapter 3 Article 3.13 Clause 1 & 2	The managers must regularly and systematically assess compliance with and effectiveness of a Safety and Health Document	2.5	Report to Industry 5.3
Chapter 3 Article 3.13 Clause 3	If the results of the assessment referred to in Chapter 3 Art. 9.2, deem this necessary, the Managers must revise the Safety	1.2.5	Report to Industry 5.2

Article	Requirement	HSE Case Reference	Other Relevant Article
	& Health Document.		
Chapter 3 Article 3.14	Emergency control plan	2.3.3 5.1.3	A3.12
Other Relevant Inf	ormation		
Report to Industry 4.2 & 5.3	A justification for any assumptions, conclusions and decisions made.	1.2.12	
Report to Industry 4.2 & 5.5	Assessment and listing of the scenarios developed from escape, evacuation and rescue analysis	4.4.3	
Report to Industry 5.6	The process by which risks have been analysed (operational activities and critical tasks)	4.2, 4.3, 4.4, 4.5 & 4.6	
Report to Industry 4.2	Determine the degree of compliance with the stated acceptance criteria	4.7	
Report to Industry 4.2 & 5.4	Details of all key items, critical or protective systems	Part 3, 4.7.3	
Report to Industry 4.2	The process by which the performance standards of such key items, critical or protective systems, has been verified	2.3.14, 2.3.19 2.4 4.5, 4.6.2 6.3, 6.5	
Report to Industry 2.0, 4.2 & 5.1	Risks to personnel have been eliminated or reduced to a level 'As Low As Reasonably Practicable'	4.6	
Report to Industry 2.0	Advances in technology and technical knowledge are adopted to improve existing situation	1.2.6	
Report to Industry 4.2 & 5.2	A remedial action plan with priorities, dates and strategy for implementation	1.2.7	
Report to Industry 4.2 & 5.1	A detailed assessment of the review, to determine the adequacy, appropriateness and effectiveness of the management system	2.4, 2.5	
Report to Industry 4.2	Details of all software measures, appropriate or necessary to control risks	4.7	

Article	Requirement	HSE Case Reference	Other Relevant Article
Report to Industry 4.2	Details of the various independent, 2nd party and internal verification schemes in place and the frequency and type of examination selected for each safety critical element	2.4 & Part 6	
Report to Industry	Details of the verification scheme	1.2.5	
4.2	in place to monitor compliance with legislation and the safety and health document	1.2.6	
		4.5.2	
		6.5	

A4.7 POLAND

Regulator:	Wyższy Urząd Górniczy (State Mining Authority)
Location:	ul. Poniatowskiego 31 40-956 Katowice Poland
Telephone:	+48 32 736 17 00
Fax:	+48 32 251 48 84
E-mail:	wug@wug.gov.pl
Web-site:	www.wug.gov.pl

Safety and Health Document Submission Requirements and Acceptance

• To be completed

Polish Legislation

	Legislation	
Regulation	Requirement	HSE Case Ref

A4.8 UNITED KINGDOM

Regulator:	Offshore Safety Division
	Health & Safety Executive
	Lord Cullen House
	Fraser Place
	Aberdeen
	AB25 3UB
	United Kingdom
Telephone:	+44-1224-252500
E-mail:	mailto:hse.infoline@natbrit.com
Web-site:	www.hse.gov.uk

Health and Safety Document Requirements:

In the UK, the Extractive Industries Directive 92/91 was implemented by the Borehole Sites and Operations Regulations 1995 (BSOR) – Statutory Instrument 2038. The regulations implement the Directive in its entirety, with the addition of a requirement for notification of well operations (regulation 6) which was added to bring land operations in line with offshore.

The Health and Safety Document, as it is known in the United Kingdom, has to be prepared before the work on site begins. However, there is no requirement to submit the Health and Safety Document to the HSE and no approval of the document is necessary. The document must be kept up to date and revised if the borehole site has undergone major changes (including natural changes), extensions or conversions. The document has to be kept at the rig site, where in the case of an accident or incident it must to be made available to HSE inspectors investigating the event.

A UK Health and Safety Document has to:

- provide enough information to show that the required demonstrations have been made. These demonstrations are in addition to the descriptions and other details required by the relevant schedules to the Regulations;
- show that the land rig owner's management system is adequate to ensure compliance with the law in respect of matters within his control; and to ensure the satisfactory management of arrangements with contractors and subcontractors;
- show that adequate arrangements for audit, and for making audit reports, have been established;
- show that there is an effective safety management system which ensures that the organisational arrangements in place, if fully implemented, will enable the installation owner to comply with all the relevant health and safety laws; and
- show that hazards with the potential to cause a major accident have been identified and that the risks arising from those hazards are, or will be, adequately controlled.

UK Legislation

	Borehole Sites and Operations Regulations 1995 – SI 2	038
Regulation	Requirement	HSE Case Reference
Reg. 1	Citation and Commencement	N/A information only
Reg. 2	Interpretation	N/A information only
Reg. 3	Application	N/A information only
Reg. 4	Information to and general duties of the operator	2.2.1, 2.2.2,
	(1) Where the owner is not himself the operator of a borehole site, he shall furnish the operator with all information in his possession needed to enable the operator to perform his duties under these Regulations.	2.2.3, 2.3.9 & 2.3.20
	(2) In addition to any other duties imposed on the operator by these Regulations, it shall be the duty of the operator—	
	(a) to exercise overall control of the borehole site; and	
	(b) to co-ordinate the measures taken by himself and every employer and self-employed person at the site to comply with the requirements and prohibitions imposed upon them by or under the relevant statutory provisions.	
	(3) In relation to a borehole site, any duty imposed on an employer by these Regulations shall also be imposed on the operator in so far as it relates to matters under his control.	
Reg. 5	Co-operation	2.2.1, 2.2.2,
	Every employer of persons at work at a borehole site (other than the operator) shall co-operate with the operator, to the extent necessary to enable him to comply with the relevant statutory provisions at the site.	2.2.3, 2.3.9 & 2.3.20
Reg. 6	Notice of the commencement of drilling operations and the abandonment of boreholes	N/A information only
	(1) In the case of petroleum, the operator of a borehole site shall ensure that no drilling operation, abandonment operation or other operation on a well which would make a significant alteration to it, or involve a risk of the accidental release of fluids from the well or reservoir, is commenced at that site unless he has notified to the Executive the particulars specified in Part I of Schedule 1 at least 21 days in advance, or such shorter time in advance as the Executive may agree.	
	(2) The operator of a borehole site at which a borehole is intended to be drilled with a view to the extraction of minerals by mining shall not commence drilling such borehole unless he has notified to the Executive the particulars specified in Part II of Schedule 1 at least 21 days in advance, or such	

Borehole Sites and Operations Regulations 1995 – SI 2038

Requirement

HSE Case Reference

shorter time in advance as the Executive may agree.

(3) Where a borehole (not being a borehole to which paragraph (1) or (2) relates) is being drilled within a mining area to a depth of 30 metres or more, the person entitled to drill the borehole, within 30 days after the commencement of its drilling, shall notify to the Executive the particulars specified in Part III of Schedule 1.

(4) The operator of a borehole site at which a borehole, drilled with a view to the extraction of minerals by mining, is being abandoned shall, within 21 days after the commencement of its abandonment, notify to the Executive the particulars specified in Part IV of Schedule 1.

(5) The operator of a borehole site or, in the case of particulars previously notified under paragraph (3), the person entitled to drill the borehole shall ensure that the Executive is notified as soon as reasonably practicable of any material change of circumstances which would affect particulars previously notified under paragraph (1), (2), (3) or (4).

(6) Where, in pursuance of this regulation, plans and other documents have been sent to the Executive they shall be retained by the Executive or in accordance with arrangements approved by the Executive.

(7) In paragraph (1) "petroleum" means any mineral oil or relative hydrocarbon and natural gas existing in its natural condition in strata, but does not include coal or bituminous shales or other stratified deposits from which oil can be extracted by destructive distillation.

(8) Subject to paragraph (9) and to any of the provisions imposed by the Communities in respect of the encouragement of improvements in the safety and health of workers at work, the Executive may, by a certificate in writing, exempt any person, borehole, borehole site, or class of persons, boreholes or borehole sites from any requirement or prohibition imposed by the preceding provisions of this regulation and any such exemption may be granted subject to conditions and with or without limit of time and may be revoked by a certificate in writing at any time.

(9) The Executive shall not grant any such exemption unless, having regard to the circumstances of the case and, in particular, to—

(a) the conditions, if any, which it proposes to attach to the exemption; and

(b) any other requirements imposed by or under any enactments which apply to the case, it is satisfied that the health and safety of persons who are likely to be affected by the exemption will not be prejudiced in consequence of it.

Regulation	Requirement	HSE Case Reference
Reg. 7	The health and safety document	Parts 1 to 6
	(1) No borehole operation shall be commenced at a borehole site unless the operator has ensured that a document (in these Regulations referred to as "the health and safety document") has been prepared, which—	inclusive
	(a) demonstrates that the risks to which persons at the borehole site are exposed whilst they are at work have been assessed in accordance with regulation 3 of the Management Regulations;	
	(b) demonstrates that adequate measures, including measures concerning the design, use and maintenance of the borehole site and of its plant, will be taken to safeguard the health and safety of the persons at work at the borehole site; and	
	(c) includes a statement of how the measures referred to in sub-paragraph (b) will be co-ordinated.	
	(2) In addition to the matters referred to in paragraph (1), the health and safety document shall also include where appropriate—	
	(a) an escape plan with a view to providing employees with adequate opportunities for leaving work places promptly and safely in the event of danger and an associated rescue plan with a view to providing assistance where necessary;	
	(b) a plan for the prevention of fire and explosions including in particular provisions for preventing blowouts and any uncontrolled escape of flammable gases and for detecting the presence of flammable atmospheres;	
	(c) a fire protection plan detailing the likely sources of fire and the precautions to be taken to protect against, detect and combat the outbreak and spread of fire; and	
	(d) in the case of a borehole site where hydrogen sulphide or other harmful gases are or may be present, a plan for the detection and control of such gases and for the protection of employees from them.	
	(3) The operator shall ensure that the health and safety document is—	
	 (a) kept up to date and revised if the borehole site has undergone major changes (including natural changes), extensions or conversions; and 	
	(b) made available to each employer of persons at work at the site.	
	(4) Each employer of persons at work at the site shall have regard to the health and safety document in meeting his obligations under the relevant statutory provisions.	
	(5) In this regulation "the Management Regulations" means the Management of Health and Safety at Work Regulations 1992	

Regulation	Requirement	HSE Case Reference
Reg. 8	 Additional duties of the operator (1) The operator shall ensure that every workplace on a borehole site is designed, constructed, erected and maintained and has sufficient stability to afford adequate protection for employees and to withstand the environmental forces anticipated at the site. (2) The operator shall ensure that adequate means are 	2.3.1, 2.3.3, 2.3.5 & 5.2
	 provided and maintained for— (a) the prompt and swift escape and where necessary the rescue of employees from workplaces in the event of danger; and (b) communicating and giving warning when escape or rescue is necessary. (3) In this regulation "workplace" has the same meaning as in 	
	(3) In this regulation "workplace" has the same meaning as in regulation 2(1) of the Workplace (Health, Safety and Welfare) Regulations 1992	
Reg. 9	Additional health and safety requirements	Parts 2, 3, 4 & 5
	(1) Subject to paragraph (2), it shall be the duty of every employer of persons at work on a borehole site to ensure that the additional health and safety provisions set out in Schedule 2 are applied as they are appropriate having regard to the nature and circumstances of the work carried on there and to the provisions of the health and safety document.	
	(2) The additional health and safety requirements referred to in paragraph (1) shall apply without prejudice to the requirements of the other relevant statutory provisions relating to the borehole site.	
Reg. 10	Health surveillance	2.3.7
	(1) An employer of a person engaged in borehole operations shall ensure that he is provided with such health surveillance as is appropriate; and where that person is assigned to the work after the coming into force of these Regulations, the health surveillance shall be commenced before he is so assigned.	
	(2) In this regulation "appropriate" means appropriate having regard to the nature and magnitude of the risks to the safety and health of the person referred to in paragraph (1).	
Reg. 11	Defence	N/A information
	In any proceedings for an offence under these Regulations, it shall be a defence for any person to prove that he took all reasonable precautions and exercised all due diligence to avoid the commission of that offence.	only

Regu	ulation	Requirement	HSE Case Reference
		SCHEDULE 1	
	PAR	TICULARS REQUIRED FOR NOTIFICATIONS UNDER REGUL	ATION 6
	Part 1 -	The particulars required for a notification under regulation 6(1) are	e as follows:-
Para	1	Name and address of the operator.	Part 1
Para	2	Particulars of the type of well, its number and its name.	Part 1
Para	3	Particulars of the rig or other plant which is to be used in connection with the operations on the well.	Parts 1 & 3
Para	4	Particulars of the surface equipment and of the circulation fluids to be used to control the pressure of the well.	Part 3
Para	5	Particulars, with scale diagrams, where appropriate, of:-	Appendix 3
		(a) the Ordnance Survey National Grid reference of the location of the top of the well;	
		(b) the directional path of the borehole;	
		(c) the terminal depth and location; and	
		(d) its position and that of nearby wells and mine workings relative to each other.	
Para	6	A description of operations to be performed and a programme of works including:-	Part 1, 3.2 & Appendix 3
		(a) the dates on which operations are expected to start and finish; and	
		(b) a diagram showing details of the intended final completion or re-completion of the well.	
Para	7	A description of:-	Parts 1 & 4
		(a) any activities during operations on the well which will involve a risk of the accidental release of fluids from the well or reservoir; and	
		(b) such hazards.	
Para	8	In the case of a well which is to be drilled:-	Part 3
		(a) particulars of the geological strata and formations and fluids within them through which it may pass and of any hazards with the potential to cause fire, explosion or a blowout which they may contain;	
		(b) the procedures for effectively monitoring the direction of the borehole and the effects of intersecting nearby wells; and	
		(c) particulars of the design of the well, sufficient to show that it takes account of the matters in sub-paragraph (a) of this paragraph, and that it will so far as is reasonably practicable be safe.	
Para	9	In the case of an existing well:-	Part 3
		(a) a diagram of the well;	
		(b) a brief history of the well including a summary of previous	
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Regulation	Requirement	HSE Case Reference		
	operations and any problems encountered; and (c) its present status and condition.			
Para 10	In the case of an abandonment operation details of the proposed sealing or treatment.	N/A information only		
Part 2 - The p	particulars required for a notification under regulation 6(2) are as	follows:-		
Para 1	Name and address of the operator.	Part 1		
Para 2	Particulars with scale diagrams, where appropriate, of:-	Appendix 3		
	(a) the Ordnance Survey National Grid reference of the location of the top of the borehole;			
	(b) its directional path; and(c) its terminal depth and location.			
Para 3	A description of the operations to be performed and a programme of works which includes the dates on which operations are expected to start and finish.	Part 1, 3.1, 3.2 & 3.3		
Part 3 - The p	Part 3 - The particulars required for a notification under regulation 6(3) are as follows:-			
Para 1	Name and address of the person entitled to drill the borehole.	Part 1		
Para 2	Particulars with scale diagrams, where appropriate, of:-	Appendix 3		
	 (a) the Ordnance Survey National Grid reference of the location of the top of the borehole; 			
	(b) its directional path; and(c) its terminal depth and location.			
Para 3	A description of the operations to be, or being, performed and a programme of works which includes the dates on which operations are expected to start and finish or (if past) the dates they started and finished.	Part 1, 3.1, 3.2 & 3.3		
Part 4 - The p	particulars required for a notification under regulation 6(4) are as	follows:-		
Para 1	Name and address of the operator.	Part 1		
Para 2	Particulars with scale diagrams, where appropriate, of:-	Appendix 3		
	 (a) the Ordnance Survey National Grid reference of the location of the top of the borehole; 			
	(b) its directional path; and (c) its terminal depth and location.			
Para 3	Details of the sealing or other treatment.	Part 1, 3.1, 3.2		
		& 3.3		

Regulation	Requirement	HSE Case Reference
	SCHEDULE 2 ADDITIONAL HEALTH AND SAFETY REQUIREMENTS	
Para 1	Delineation and provision of safety signs Areas where there is a special hazard shall be delineated and appropriate safety signs placed.	2.3.1, 2.3.11 & 3.5.1
Para 2	Person in charge and supervision A competent person appointed by the operator shall be in charge of every borehole site where employees are present and there shall be sufficient competent persons appointed by the operator to exercise immediate supervision of borehole operations with a view to ensuring the health and safety of the persons at work at the site.	2.2.1, 2.2.2, 2.2.3 & 2.2.4
Para 3	Provision of competent persons Where borehole operations are carried on, there shall be provided a sufficient number of competent persons with a view to enabling those operations to be carried on safely.	2.2.3 & 2.2.4
Para 4	 Written instructions (1) Where borehole operations are carried on, employers shall provide written instructions containing: (a) rules necessary for ensuring the health and safety of their employees; and (b) information on the use of emergency equipment and the action to be taken in the event of an emergency at or near the borehole site. (2) Copies of the written instructions referred to in sub-paragraph (1) above shall be made available to all employees who may be affected by them. 	2.3.1, 2.3.5 & 2.3.8
Para 5	 Work permits (1) Where borehole operations are carried on and it is shown in the health and safety document that such a measure is necessary, a system of work permits shall be introduced for carrying out hazardous operations and usually straightforward operations which may interact with other activities to cause serious hazards. (2) Work permits shall specify the conditions to be fulfilled and the precautions to be taken before, during and after the work concerned and shall be issued by the person in charge of those operations in accordance with a scheme agreed with the operator of the borehole site. 	2.3.4
Para 6	Maintenance (1) Where borehole operations are carried on, a suitable scheme shall be set up for the systematic examination, maintenance and, where appropriate, testing of mechanical	2.3.19

	mes Appendix 4 – Land Drining	
Regulation	Requirement	HSE Case Reference
	and electrical equipment and plant.	
	(2) All examination, maintenance and testing shall be carried out by competent persons and a record of any examination and tests shall be made and kept for at least 3 years after the equipment or plant concerned was last used.	
	(3) The foregoing sub-paragraphs of this paragraph shall also apply in relation to the safety equipment provided, with a view to ensuring that it is ready for use and in good working order at all times having regard to the uses to which it may be put.	
Para 7	Well control	2.3.12
	(1) Suitable well control equipment shall be provided for use during borehole operations to protect against blowouts having regard to the provisions of the health and safety document.	
	(2) The deployment of such equipment shall take into account the prevailing well and operational conditions.	
Para 8	Harmful atmospheres	2.3.17
	Where there is a risk that employees may be exposed to atmospheres that are hazardous to health, there shall be provided:	
	 (a) sufficient appropriate breathing and resuscitation equipment and apparatus; and (b) a sufficient number of employees trained to use the apparatus present 	
	at the borehole site.	
Para 9	Prevention of explosions	3.5
	Where there is a risk of explosion, all necessary measures shall be taken with a view to:-	
	(a) preventing the occurrence and accumulation of explosive atmospheres; and	
	(b) preventing the ignition of explosive atmospheres.	
Para 10	Remote control in emergencies	3.3
	(1) Where the health and safety document shows that such a measure is necessary, certain equipment shall be capable of remote control from suitable locations in the event of an emergency.	
	(2) The equipment referred to in sub-paragraph (1) above shall, in any case, include systems for the isolation and blowdown of wells, plant and pipelines.	
Para 11	Communications, general and emergency	3.4.6 & 5.2
	(1) Where the health and safety document shows that such a measure is necessary, every borehole site at which employees are present shall be provided with:-	
	(a) an acoustic and optical system capable of transmitting an	

HSE Case Guidelines Appendix 4 – Land Drilling				
Regulation	Requirement	HSE Case Reference		
	alarm to every part of the site as necessary; and (b) an acoustic system capable of being heard distinctly at all parts of the site where employees are frequently present.			
	(2) The facilities for raising the alarm shall be situated at suitable places.			
	(3) Where employees are present at sites that are not usually manned, appropriate means of communication shall be placed at their disposal.			
Para 12	Means of evacuation and escape	5.3 & 5.4		
	(1) Employees shall be trained in appropriate action to be taken in the event of an emergency.			
	(2) Rescue equipment shall be provided at readily accessible and appropriately sited places and kept ready for use.			
	(3) Where escape routes are difficult and where irrespirable atmospheres are or may be present, self-contained escape apparatus shall be provided for immediate use by employees at the workstation.			
Para 13	Safety drills	5.3.1 & 5.3.2		
	(1) Safety drills shall be held at regular intervals at all borehole sites at which employees are usually present.			
	(2) The main purpose of such drills shall be to train and check the skills of persons to whom specific duties have been assigned in the event of an emergency involving the use, handling or operation of emergency equipment taking into account the criteria laid down in the health and safety document.			
	(3) Where appropriate, employees who have been so assigned shall also be drilled in the correct use, handling or operation of that equipment.			
Para 14	Fire detection and fire-fighting	3.5, 5.3.1 &		
	(1) Adequate measures shall be taken to prevent fires from starting and spreading from sources identified in the health and safety document.	5.3.2		
	(2) Provision shall be made for fast and effective fire-fighting.			
	(3) Borehole sites shall be equipped with appropriate fire- fighting equipment and as necessary with fire detection and alarm systems.			
	(4) Non-automatic fire-fighting equipment shall be easily accessible and simple to use and where necessary protected from damage.			
	(5) The fire protection plan referred to in regulation 7(2)(c) shall be kept available on the site.			
Para 15	Safe assembly points and muster list	5.4.1		
	Where required in the health and safety document, safe			

Requirement

HSE Case Reference

assembly points must be specified, muster lists maintained and the necessary action shall be taken.

The Management of Health and Safety at Work Regulations 1992 – SI 2051		
Regulation	Requirement	HSE Case Reference
Reg. 1	Citation, Commencement and Interpretation	N/A information only
Reg. 2	Disapplication of these Regulations	N/A information only
Reg. 3	Risk Assessment	Part 4
	(1) Every employer shall make a suitable and sufficient assessment of:-	
	(a) the risks to the health and safety of his employees to which they are exposed whilst they are at work; and	
	(b) the risks to the health and safety of persons not in his employment arising out of or in connection with the conduct by him of his undertaking, for the purpose of identifying the measures he needs to take to comply with the requirements and prohibitions imposed upon him by or under the relevant statutory provisions.	
	(2) Every self-employed person shall make a suitable and sufficient assessment of:-	
	(a) the risks to his own health and safety to which he is exposed whilst he is at work; and	
	(b) the risks to the health and safety of persons not in his employment arising out of or in connection with the conduct by him of his undertaking, for the purpose of identifying the measures he needs to take to comply with the requirements and prohibitions imposed upon him by or under the relevant statutory provisions.	
	(3) Any assessment such as is referred to in paragraph (1) or(2) shall be reviewed by the employer or self-employed person who made it if:-	
	(a) there is reason to suspect that it is no longer valid; or(b) there has been a significant change in the matters to which it relates;	
	and where as a result of any such review changes to an assessment are required, the employer or self-employed person concerned shall make them.	
	(4) Where the employer employs five or more employees, he shall record:-	
	(a) the significant findings of the assessment; and	
	(b) any group of his employees identified by it as being especially at risk.	

Regulation	Requirement	HSE Case Reference
Reg. 4	Health and safety arrangements (1) Every employer shall make and give effect to such arrangements as are appropriate, having regard to the nature of his activities and the size of his undertaking, for the effective planning, organisation, control, monitoring and	2.1, 2.2, 2.3, 2.4 & 2.5
	review of the preventive and protective measures.(2) Where the employer employs five or more employees, he	
Reg. 5	shall record the arrangements referred to in paragraph (1). Health surveillance	2.3.7
Reg. J	Every employer shall ensure that his employees are provided with such health surveillance as is appropriate having regard to the risks to their health and safety which are identified by the assessment.	2.3.1
Reg. 6	Health and safety assistance	2.2.3.3 & 2.2.4
	(1) Every employer shall, subject to paragraphs (6) and (7), appoint one or more competent persons to assist him in undertaking the measures he needs to take to comply with the requirements and prohibitions imposed upon him by or under the relevant statutory provisions.	
	(2) Where an employer appoints persons in accordance with paragraph (1), he shall make arrangements for ensuring adequate co-operation between them.	
	(3) The employer shall ensure that the number of persons appointed under paragraph (1), the time available for them to fulfil their functions and the means at their disposal are adequate having regard to the size of his undertaking, the risks to which his employees are exposed and the distribution of those risks throughout the undertaking.	
	(4) The employer shall ensure that:-	
	(a) any person appointed by him in accordance with paragraph (1) who is not in his employment:-	
	(i) is informed of the factors known by him to affect, or suspected by him of affecting, the health and safety of any other person who may be affected by the conduct of his undertaking, and	
	(ii) has access to the information referred to in regulation 8; and	
	(b) any person appointed by him in accordance with paragraph (1) is given such information about any person working in his undertaking who is:-	
	(i) employed by him under a fixed-term contract of employment, or	
	(ii) employed in an employment business,	
	as is necessary to enable that person properly to carry out the function specified in that paragraph.	

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(5) A person shall be regarded as competent for the purposes of paragraph (1) where he has sufficient training and experience or knowledge and other qualities to enable him properly to assist in undertaking the measures referred to in that paragraph.

(6) Paragraph (1) shall not apply to a self-employed employer who is not in partnership with any other person where he has sufficient training and experience or knowledge and other qualities properly to undertake the measures referred to in that paragraph himself.

(7) Paragraph (1) shall not apply to individuals who are employers and who are together carrying on business in partnership where at least one of the individuals concerned has sufficient training and experience or knowledge and other qualities:-

(a) properly to undertake the measures he needs to take to comply with the requirements and prohibitions imposed upon him by or under the relevant statutory provisions; and

(b) properly to assist his fellow partners in undertaking the measures they need to take to comply with the requirements and prohibitions imposed upon them by or under the relevant statutory provisions.

Reg. 7 **Procedures for serious and imminent danger and for** danger areas

2.4.2 & 6.2.1

(1) Every employer shall:-

(a) establish and where necessary give effect to appropriate procedures to be followed in the event of serious and imminent danger to persons at work in his undertaking;
(b) nominate a sufficient number of competent persons to implement those procedures insofar as they relate to the evacuation from premises of persons at work in his undertaking; and

(c) ensure that none of his employees has access to any area occupied by him to which it is necessary to restrict access on grounds of health and safety unless the employee concerned has received adequate health and safety instruction.

(2) Without prejudice to the generality of paragraph (1)(a), the procedures referred to in that sub-paragraph shall:-

(a) so far as is practicable, require any persons at work who are exposed to serious and imminent danger to be informed of the nature of the hazard and of the steps taken or to be taken to protect them from it;

(b) enable the persons concerned (if necessary by taking appropriate steps in the absence of guidance or instruction and in the light of their knowledge and the technical means at their disposal) to stop work and immediately proceed to a place of safety in the event of their being exposed to serious, imminent and unavoidable danger; and

(c) save in exceptional cases for reasons duly substantiated (which cases and reasons shall be specified in those procedures), require the persons concerned to be prevented

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Regulation	Requirement	HSE Case Reference		
	from resuming work in any situation where there is still a serious and imminent danger.			
	(3) A person shall be regarded as competent for the purposes of paragraph (1)(b) where he has sufficient training and experience or knowledge and other qualities to enable him properly to implement the evacuation procedures referred to in that sub-paragraph.			
Reg. 8	Information for employees	2.2.2, 2.2.3,		
	Every employer shall provide his employees with comprehensible and relevant information on:- (a) the risks to their health and safety identified by the assessment; (b) the preventive and protective measures; (c) the procedures referred to in regulation 7(1)(a); (d) the identity of those persons nominated by him in accordance with regulation 7(1)(b); and	2.3.9 & 4.9		
	(e) the risks notified to him in accordance with regulation 9(1)(c).			
Reg. 9	Co-operation and co-ordination	2.2.1, 2.2.2,		
	 (1) Where two or more employers share a workplace (whether on a temporary or a permanent basis) each such employer shall:- (a) co-operate with the other employers concerned so far as is necessary to enable them to comply with the requirements and prohibitions imposed upon them by or under the relevant statutory provisions; (b) (taking into account the nature of his activities) take all reasonable steps to co- ordinate the measures he takes to comply with the requirements and prohibitions imposed upon him by or under the relevant statutory provisions with the measures the other employers concerned are taking to comply with the requirements and prohibitions imposed upon them by or under the relevant statutory provisions; and (c) take all reasonable steps to inform the other employers concerned of the risks to their employees' health and safety arising out of or in connection with the conduct by him of his undertaking. (2) Paragraph (1) shall apply to employers sharing a 	2.2.3, 2.2.4, 2.3.9 & 4.9		
	workplace with self-employed persons and to self-employed persons sharing a workplace with other self-employed persons as it applies to employers sharing a workplace with other employers; and the references in that paragraph to employers and the reference in the said paragraph to their employees shall be construed accordingly.			
Reg. 10	Persons working in host employers' or self-employed persons' undertakings	2.2.1, 2.2.2, 2.2.3, 2.2.4, 2.3.9 & 4.9		
	(1) Every employer and every self-employed person shall ensure that the employer of any employees from an outside			

Requirement

undertaking who are working in his undertaking is provided with comprehensible information on:-

(a) the risks to those employees' health and safety arising out of or in connection with the conduct by that first-mentioned employer or by that self-employed person of his undertaking; and

(b) the measures taken by that first-mentioned employer or by that self-employed person in compliance with the requirements and prohibitions imposed upon him by or under the relevant statutory provisions insofar as the said requirements and prohibitions relate to those employees.

(2) Paragraph (1) shall apply to a self-employed person who is working in the undertaking of an employer or a selfemployed person as it applies to employees from an outside undertaking who are working therein; and the reference in that paragraph to the employer of any employees from an outside undertaking who are working in the undertaking of an employer or a self-employed person and the references in the said paragraph to employees from an outside undertaking who are working in the undertaking of an employer or a selfemployed person shall be construed accordingly.

(3) Every employer shall ensure that any person working in his undertaking who is not his employee and every selfemployed person (not being an employer) shall ensure that any person working in his undertaking is provided with appropriate instructions and comprehensible information regarding any risks to that person's health and safety which arise out of the conduct by that employer or self-employed person of his undertaking.

(4) Every employer shall:-

(a) ensure that the employer of any employees from an outside undertaking who are working in his undertaking is provided with sufficient information to enable that secondmentioned employer to identify any person nominated by that first-mentioned employer in accordance with regulation 7(1)(b) to implement evacuation procedures as far as those employees are concerned; and

(b) take all reasonable steps to ensure that any employees from an outside undertaking who are working in his undertaking receive sufficient information to enable them to identify any person nominated by him in accordance with regulation 7(1)(b) to implement evacuation procedures as far as they are concerned.

(5) Paragraph (4) shall apply to a self-employed person who is working in an employer's undertaking as it applies to employees from an outside undertaking who are working therein; and the reference in that paragraph to the employer of any employees from an outside undertaking who are working in an employer's undertaking and the references in the said paragraph to employees from an outside undertaking who are working in an employer's undertaking shall be construed

Regulation	Requirement	HSE Case Reference
	accordingly.	
Reg. 11	Capabilities and training	2.2.3 & 2.2.4
	(1) Every employer shall, in entrusting tasks to his employees, take into account their capabilities as regards health and safety.	
	 (2) Every employer shall ensure that his employees are provided with adequate health and safety training:- (a) on their being recruited into the employer's undertaking; and (b) on their being exposed to new or increased risks because of:- (i) their being transferred or given a change of responsibilities 	
	 (i) the introduction of new work equipment into or a change respecting work equipment already in use within the employer's undertaking, 	
	 (iii) the introduction of new technology into the employer's undertaking, or (iv) the introduction of a new system of work into or a change respecting a system of work already in use within the employer's undertaking. 	
	 (3) The training referred to in paragraph (2) shall:- (a) be repeated periodically where appropriate; (b) be adapted to take account of any new or changed risks to the health and safety of the employees concerned; and (c) take place during working hours. 	
Reg.12	Employees' duties	2.2.2
	(1) Every employee shall use any machinery, equipment, dangerous substance, transport equipment, means of production or safety device provided to him by his employer in accordance both with any training in the use of the equipment concerned which has been received by him and the instructions respecting that use which have been provided to him by the said employer in compliance with the requirements and prohibitions imposed upon that employer by or under the relevant statutory provisions.	
	 (2) Every employee shall inform his employer or any other employee of that employer with specific responsibility for the health and safety of his fellow employees:- (a) of any work situation which a person with the first-mentioned employee's training and instruction would reasonably consider represented a serious and immediate danger to health and safety; and (b) of any matter which a person with the first-mentioned employee's training and instruction would reasonably consider represented a serious and immediate danger to health and safety; and (b) of any matter which a person with the first-mentioned employee's training and instruction would reasonably consider represented a shortcoming in the employer's protection arrangements for health and safety, 	

insofar as that situation or matter either affects the health and safety of that first- mentioned employee or arises out of or in

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Regulation	Requirement	HSE Case Reference
	connection with his own activities at work, and has not previously been reported to his employer or to any other employee of that employer in accordance with this paragraph.	
Reg.13	Temporary workers	2.2.2, 2.2.4,
	 (1) Every employer shall provide any person whom he has employed under a fixed-term contract of employment with comprehensible information on:- (a) any special occupational qualifications or skills required to be held by that employee if he is to carry out his work safely; and 	2.3.7 & 4.9
	(b) any health surveillance required to be provided to that employee by or under any of the relevant statutory provisions, and shall provide the said information before the employee concerned commences his duties.	
	 (2) Every employer and every self-employed person shall provide any person employed in an employment business who is to carry out work in his undertaking with comprehensible information on:- (a) any special occupational qualifications or skills required to be held by that employee if he is to carry out his work safely; 	
	and (b) any health surveillance required to be provided to that employee by or under any of the relevant statutory provisions.	
	 (3) Every employer and every self-employed person shall ensure that every person carrying on an employment business whose employees are to carry out work in his undertaking is provided with comprehensible information on:-(a) any special occupational qualifications or skills required to be held by those employees if they are to carry out their work safely; and (b) the specific features of the jobs to be filled by those employees (insofar as those features are likely to affect their health and safety); 	
	and the person carrying on the employment business concerned shall ensure that the information so provided is given to the said employees.	
Reg.14	Exemption certificates	N/A information
	 (1) The Secretary of State for Defence may, in the interests of national security, by a certificate in writing exempt:- (a) any of the home forces, any visiting force or any headquarters from those requirements of these Regulations which impose obligations on employers; or (b) any member of the home forces, any member of a visiting force or any member of a headquarters from the requirements imposed by regulation 12; and any exemption such as is specified in sub-paragraph (a) or (b) of this paragraph may be granted subject to conditions and to a limit of time and may be revoked by the said 	only

Secretary of State by a further certificate in writing at any time.

Regulation	Requirement	HSE Case Reference		
	 (2) In this regulation:- (a) "the home forces" has the same meaning as in section 12(1) of the Visiting Forces Act 1952; (b) "headquarters" has the same meaning as in article 3(2) of the Visiting Forces and International Headquarters (Application of Law) Order 1965; (c) "member of a headquarters" has the same meaning as in paragraph 1(1) of the Schedule to the International Headquarters and Defence Organisations Act 1964; and (d) "visiting force" has the same meaning as it does for the purposes of any provision of Part I of the Visiting Forces Act 1952. 			
Reg.15	Exclusion of civil liability	N/A information only		
	Breach of a duty imposed by these Regulations shall not confer a right of action in any civil proceedings.	Uniy		
Reg.16	Extension outside Great Britain	N/A information only		
	(1) These Regulations shall, subject to regulation 2, apply to and in relation to the premises and activities outside Great Britain to which sections 1 to 59 and 80 to 82 of the Health and Safety at Work etc. Act 1974 apply by virtue of the Health and Safety at Work etc. Act 1974 (Application Outside Great Britain) Order 1989 as they apply within Great Britain.	Only		
	(2) For the purposes of Part I of the 1974 Act, the meaning of "at work" shall be extended so that an employee or a self- employed person shall be treated as being at work throughout the time that he is present at the premises to and in relation to which these Regulations apply by virtue of paragraph (1); and, in that connection, these Regulations shall have effect subject to the extension effected by this paragraph.			
Reg.17	Modification of instrument	N/A information		
	The Safety Representatives and Safety Committees Regulations 1977 shall be modified to the extent specified in the Schedule to these Regulations.	only		
	THE SCHEDULE			
Reg. 17	The following regulation shall be inserted after regulation 4 of the Safety Representatives and Safety Committees Regulations 1977:-	N/A information only		
Reg. 4A	Employer's duty to consult and provide facilities and assistance	2.2.4 & 2.3.9		
	 (1) Without prejudice to the generality of section 2(6) of the Health and Safety at Work etc. Act 1974, every employer shall consult safety representatives in good time with regard to:- (a) the introduction of any measure at the workplace which may substantially affect the health and safety of the employees the safety representatives concerned represent; 			
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(b) his arrangements for appointing or, as the case may be, nominating persons in accordance with regulations 6(1) and 7(1)(b) of the Management of Health and Safety at Work Regulations 1992;

(c) any health and safety information he is required to provide to the employees the safety representatives concerned represent by or under the relevant statutory provisions;
(d) the planning and organisation of any health and safety training he is required to provide to the employees the safety representatives concerned represent by or under the relevant statutory provisions; and

(e) the health and safety consequences for the employees the safety representatives concerned represent of the introduction (including the planning thereof) of new technologies into the workplace.

(2) Without prejudice to regulations 5 and 6 of these Regulations, every employer shall provide such facilities and assistance as safety representatives may reasonably require for the purpose of carrying out their functions under section 2(4) of the 1974 Act and under these Regulations.

OHSAS 18001 – OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT SYSTEM SPECIFICATION - 1999

Standard: Globally recognised Specification

Application: Compliance with this Occupational Health and Safety Assessment Series publication does not of itself confer immunity from legal obligations.

Scope

The Occupational Health and Safety Assessment Series (OHSAS) specification provides guidance on the development of an occupational health and safety (OH&S) management system. It can assist organizations in their efforts to control their OH&S risks and improve their performance. It does not state specific OH&S performance criteria, nor does it give detailed specifications for the design of a management system.

The OHSAS specification is applicable to any organization that wishes to:

- a. establish an OH&S management system to eliminate or minimize risk to employees and other interested parties who may be exposed to OH&S risks associated with their activities;
- b. implement, maintain and continually improve their OH&S management system;
- c. assure themselves of its conformance with their stated OH&S policy;
- d. demonstrate such conformance to others;
- e. seek certification/registration of their OH&S management system by an external organization if desired; or
- f. make a self-determination and declaration of conformance with the OHSAS specification.

All the requirements in the OHSAS specification are intended to be incorporated into the OH&S management system. The extent of their application will depend on such factors as the organizations OH&S policy, the nature of their activities and the risks and complexity of their operations.

IADC in Europe HSE Case Guidelines Ap	pendix 4 – Land Drilling	
OHSAS 18001 CLAUSE	REQUIREMENT	HSE CASE REF.
Clause 2 – Refe	N/A Information Only	
Clause 3 – Term	s and Definitions	N/A Information Only
Clause 4 – OH&	S Management System Elements	
4.1	General requirements: Establish and maintain an OH&S management system, the requirements for which are set out in Clause 4 .	Part 2
4.2	Occupational Health & Safety (OH&S) policy: An occupational health and safety policy authorized by top management that clearly states overall health and safety objectives is required along with a commitment to improving health and safety performance.	2.1
	The policy shall:	
	 a) be appropriate to the nature and scale of the organization's OH&S risks; 	
	b) be commitment to continual improvement;	
	 c) include a commitment to at least comply with current applicable OH&S legislation and with other requirements to which the organization subscribes; 	
	d) be documented, implemented and maintained;	
	 be communicated to all employees with the intent that employees are made aware of their individual OH&S obligations; 	
	f) be available to interested parties; and	
	 g) be reviewed periodically to ensure that it remains relevant and appropriate. 	
4.3	Planning;	
4.3.1	Planning for hazard identification, risk assessment and risk control:	2.3.1, 4.3, 4.4, 4.5, 4.6 & 4.7
	 The organization shall establish and maintain procedures for the ongoing identification of hazards, the assessment of risks, and the implementation of necessary control measures. These shall include: routine and non-routine activities; activities of all personnel having access to the workplace (including subcontractors and visitors); facilities at the workplace, whether provided by the organization or others. 	

E Case Guidelines Ap	opendix 4 – Land Drilling	
OHSAS 18001 CLAUSE	REQUIREMENT	HSE CASE REF.
	The organization shall ensure that the results of these assessments and the effects of these controls are considered when setting OH&S objectives. The organization shall document and keep this information up to date.	1.2.2, 1.2.5, 4.7, 4.8 & 4.9
	 The methodology for hazard identification and risk assessment shall: be defined with respect to its scope, nature and timing to ensure it is proactive rather than reactive; provide for the classification of risks and identification of those that are to be eliminated or controlled by measures as defined in clauses 4.3.3 and 4.3.4; be consistent with operating experience and the capabilities of risk control measures employed; provide input into the determination of facility requirements, identification of training needs and/or development of operational controls; provide for the monitoring of required actions to ensure both the effectiveness and timeliness of their implementation. 	4.2, 4.3, 4.4, 4.5, 4.6 & 4.7
4.3.2	Legal and other requirements:	1.2.5 & 1.2.6
	The organisation shall establish and maintain a procedure for identifying and accessing the legal and other OH&S requirements that are applicable to it.	
	The organisation shall keep this information up- to-date and communicate relevant information on legal and other requirements to its employees and other relevant interested parties.	
4.3.3	Objectives:	2.1.2
	The organisation shall establish and maintain documented occupational health and safety objectives, at each relevant function and level.	
	NOTE Objectives should be quantified wherever practicable.	

When establishing and reviewing its objectives, an organization shall consider its legal and other requirements, its OH&S hazards and risks, its technological options, its financial, operational and business requirements, and the views of interested parties. The objectives shall be consistent with the OH&S policy, including the commitment to continual improvement.

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1.2.6, 1.2.10, 2.2.1, 2.2.2, 2.2.3, 2.4 & 2.5

4.3.4 OH&S management programme(s):

The organization shall establish and maintain (an) OH&S management programme(s) for achieving its objectives. This shall include documentation of:

- a) the designated responsibility and authority for achievement of the objectives at relevant functions and levels of the organization; and
- b) the means and time-scale by which objectives are to be achieved.

The OH&S management programme(s) shall be reviewed at regular and planned intervals. Where necessary the OH&S management programme(s) should be amended to address changes to the activities, products, services, or operating conditions of the organization.

4.4 Implementation and operation

4.4.1 **Structure and responsibility:**

The roles, responsibilities and authorities of personnel who manage, perform and verify activities having an effect on the OH&S risks of the organization's activities, facilities and processes, shall be defined, documented and communicated in order to facilitate OH&S management.

Ultimate responsibility for occupational health and safety rests with top management. The organization shall appoint a member of top management (e.g. a Board or executive committee member) with particular responsibility for ensuring that the OH&S management system is properly implemented and performing to requirements in all locations and spheres of operation within the organization.

Management shall provide resources essential to the implementation, control and improvement of the OH&S management system.

NOTE Resources include human resources and specialized skills, technology and financial resources.

The organization's management appointee shall have defined roles, responsibilities and authority for:

 ensuring that OH&S management system requirements are established, implemented and maintained in accordance with this OHSAS specification;

2.2.1, 2.2.2 & 2.2.3

OHSAS 18001 CLAUSE REQUIREMENT

 ensuring that reports on the performance of the OH&S management system are presented to top management for review and as a basis for improvement of the OH&S management system.

All those with management responsibility shall demonstrate their commitment to the continual improvement of OH&S performance.

4.4.2 Training, awareness and competence:

Personnel shall be competent to perform tasks that may impact on OH&S in the workplace. Competence shall be defined in terms of appropriate education, training and/or experience.

The organization shall establish and maintain procedures to ensure that its employees working at each level are aware of:

- the importance of conformance to the OH&S policy and procedures, and to the requirements of the OH&S management system;
- the OH&S consequences, actual or potential, of their work activities and the OH&S benefits of improved personal performance;
- their roles and responsibilities in achieving conformance to the OH&S policy and procedures and to the requirements of the OH&S management system, including emergency preparedness and response requirements (see 4.4.7);
- the potential consequences of departure from specified operating procedures.

Training procedures shall take into account differing levels of:

- responsibility, ability and literacy; and
- risk.

4.4.3 **Consultation and communication**

The organization shall have procedures for ensuring that pertinent OH&S information is communicated to and from employees and other interested parties.

Employee involvement and consultation arrangements shall be documented and interested parties informed.

Employees shall be:

2.2.2.3, 2.2.4, 2.3.3, 2.3.8 & 2.3.9,

2.2.1.3, 2.2.3.2, 2.2.3.3, 2.2.3.4, 2.2.3.5, 2.3.9 & 4.9

OHSAS 18001 CLAUSE	REQUIREMENT	HSE CASE REF.
ULAUL	 involved in the development and review of policies and procedures to manage risks; consulted where there are any changes that affect workplace health and safety; represented on health and safety matters; and informed as to who is their employee OH&S representative(s) and specified management appointee (see 4.4.1). 	
4.4.4	Documentation	1.2.2 & 2.2.1.2
	 The organization shall establish and maintain information, in a suitable medium such as paper or electronic form, that: a) describes the core elements of the management system and their interaction; and b) provides direction to related documentation. 	
	NOTE It is important that documentation is kept to the minimum required for effectiveness and efficiency.	
4.4.5	Document and data control	2.2.1.2
	 The organization shall establish and maintain procedures for controlling all documents and data required by this OHSAS specification to ensure that: a) they can be located; b) they are periodically reviewed, revised as necessary and approved for adequacy by authorized personnel; c) current versions of relevant documents and data are available at all locations where operations essential to the effective functioning of the OH&S system are performed; d) obsolete documents and data are promptly removed from all points of issue and points of use or otherwise assured against unintended use; and c) archival documents and data retained for legal or knowledge preservation purposes or both, are suitably identified. 	
4.4.6	Operational control	2.3.5, 2.3.8, 2.3.12,
	The organization shall identify those operations and activities that are associated with identified	2.3.13, 2.3.15, 2.3.16 & 4.7.3

The organization shall identify those operations and activities that are associated with identified risks where control measures need to be applied. The organization shall plan these activities, including maintenance, in order to

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2.3.3 & Part 5

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ensure that they are carried out under

specified conditions by:

- a) establishing and maintaining documented procedures to cover situations where their absence could lead to deviations from the OH&S policy and the objectives;
- b) stipulating operating criteria in the procedures;
- c) establishing and maintaining procedures related to the identified OH&S risks of goods, equipment and services purchased and/or used by the organization and communicating relevant procedures and requirements to suppliers and contractors;
- b) establishing and maintaining procedures for the design of workplace, process, installations, machinery, operating procedures and work organization, including their adaptation to human capabilities, in order to eliminate or reduce OH&S risks at their source.

4.4.7 Emergency preparedness and response

The organization shall establish and maintain plans and procedures to identify the potential for, and responses to, incidents and emergency situations, and for preventing and mitigating the likely illness and injury that may be associated with them.

The organization shall review its emergency preparedness and response plans and procedures, in particular, after the occurrence of incidents or emergency situations.

Periodically test such procedures where practicable.

4.5 **Checking and corrective action**

4.5.1 **Performance measurement and monitoring** 2.4 & Part 6

The organization shall establish and maintain procedures to monitor and measure OH&S performance on a regular basis. These procedures shall provide for:

- both qualitative and quantitative measures, appropriate to the needs of the organization;
- monitoring of the extent to which the organization's OH&S objectives are met;
- proactive measures of performance that monitor compliance with the OH&S

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2.4.2 & 2.4.3

management programme, operational criteria and applicable legislation and regulatory requirements;

- reactive measures of performance to monitor accidents, ill health, incidents (including near-misses) and other historical evidence of deficient OH&S performance;
- recording of data and results of monitoring and measurement sufficient to facilitate subsequent corrective and preventative action analysis.

If monitoring equipment is required for performance measurement and monitoring, The organization shall establish and maintain procedures for the calibration and maintenance of such equipment. Records of calibration and maintenance activities and results shall be retained.

4.5.2 Accidents, incidents, non-conformances and corrective and preventive action

The organization shall establish and maintain procedures for defining responsibility and authority for:

- the handling and investigation of:
 - accidents;
 - incidents;
 - non-conformances;
- taking action to mitigate any consequences arising from accidents, incidents or nonconformances;
- the initiation and completion of corrective and preventive actions;
- confirmation of the effectiveness of corrective and preventive actions taken.

These procedures shall require that all proposed corrective and preventive actions will be reviewed through the risk assessment process prior to implementation.

Any corrective or preventive action taken to eliminate the causes of actual and potential nonconformances shall be appropriate to the magnitude of problems and commensurate with the OH&S risk encountered.

Implement and record any changes in the documented procedures resulting from corrective and preventive action.

OHSAS 18001 CLAUSE	REQUIREMENT	HSE CASE REF.
4.5.3	Records and records management	1.2.10, 2.2.1.2, 2.4
	The organization shall establish and maintain procedures for the identification, maintenance and disposition of OH&S records, as well as the results of audits and reviews.	2.6
	OH&S records shall be legible, identifiable and traceable to the activities involved. OH&S records should be stored and maintained in such a way that they are readily retrievable and protected against damage, deterioration or loss. Their retention times shall be established and recorded.	
	Records shall be maintained, as appropriate to the system and to the organization, to demonstrate conformance to this OHSAS specification.	
4.5.4	Audit	2.4.5 & 6.4
	 The organization shall establish and maintain an audit programme and procedures for periodic OH&S management system audits to be carried out, in order to: a) determine whether or not the OH&S management system: 1). conforms to planned arrangements for OH&S management including the requirements of this OHSAS specification; 2). has been properly implemented and maintained; and 3). is effective in meeting the organization's policy and objectives; b) review the results of previous audits; c) provide information on the results of audits to management. 	
	shall be based on the results of risk assessments of the organization's activities, and the results of previous audits. The audit	

procedures shall cover the scope, frequency, methodologies and competencies, as well as the responsibilities and requirements for conducting

Wherever possible, audits shall be conducted by personnel independent of those having direct responsibility for the activity being examined. NOTE The word "independent" here does not necessarily mean external

audits and reporting results.

to the organization.

4&

REQUIREMENT

HSE CASE REF.

OHSAS 18001 CLAUSE 4.6

Management review

The organization's top management shall, at intervals that it determines, review the OH&S management system, to ensure its continuing suitability, adequacy and effectiveness. The management review process shall ensure that the necessary information is collected to allow management to carry out this evaluation. This review shall be documented.

The management review shall address the possible need for changes to policy, objectives and other elements of the OH&S management system, in the light of OH&S management system audit results, changing circumstances and the commitment to continual improvement.

1.2.12 & 2.5

Corresponding Clauses within International Standards

Clause	OHSAS 18001	Clause	ISO 14001	Clause	ISO 9001
1	Scope	1	Scope	1	Scope
2	Reference Publications	2	Normative References	2	Normative References
3	Terms and Definitions	3	Definitions	3	Definitions
4	OH&S Management System	4	Environmental Management System	4	Quality System Requirements
4.1	General Requirements	4.1	General Requirements	4.2.1	General (1 st sentence)
4.2	OH&S Policy	4.2	Environmental Policy	4.1.1	Quality Policy
4.3	Planning	4.3	Planning	4.2	Quality System
4.3.1	Planning for hazard identification, risk assessment and risk control	4.3.1	Environmental aspects	4.2	Quality System
4.3.2	Legal and other requirements	4.3.2	Legal and other requirements	-	-
4.3.3	Objectives	4.3.3	Objectives and targets	4.2	Quality System
4.3.4	OH&S management programme(s)	4.3.4	Environmental management programme(s)	4.2	Quality System
4.4	Implementation and operation	4.4	Implementation and operation	4.2 4.9	Quality System Process control
4.4.1	Structure and responsibility	4.4.1	Structure and responsibility	4.1	Management responsibility
				4.1.2	Organization
4.4.2	Training, awareness and competence	4.4.2	Training, awareness and competence	4.18	Training
4.4.3	Consultation and communication	4.4.3	Communication	-	-
4.4.4	Documentation	4.4.4	Environmental management system documentation	4.2.1	General (without 1 st sentence)
4.4.5	Document and data control	4.4.5	Document control	4.5	Document and data control
4.4.6	Operational control	4.4.6	Operational control	4.2.2	Quality system procedures
				4.3	Contract review
				4.4	Design control
				4.6	Purchasing
				4.7	Customer supplied produc
				4.8	Product identification and traceability
				4.9	Process control
				4.15	Handling, storage, packaging, preservation and delivery
				4.19	Servicing
				4.20	Statistical techniques
4.4.7	Emergency preparedness and response	4.4.7	Emergency preparedness and response	-	-
4.5	Checking and corrective action	4.5	Checking and corrective action	-	-
4.5.1	Performance measurement	4.5.1	Monitoring and	4.10	Inspection and testing
	and monitoring		measurement	4.11	Control of inspection, measuring and test equipment
				4.12	Inspection and test status
4.5.2	Accidents, incidents, non- conformances and	4.5.2	Non-conformance and corrective and preventive	4.13	Control of nonconforming product
	corrective and preventive action		action	4.14	Corrective and preventive action

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Clause	OHSAS 18001	Clause	ISO 14001	Clause	ISO 9001
4.5.3	Records and records management	4.5.3	Records	4.16	Control of quality records
4.5.4	Audit	4.5.4	Environmental management system audit	4.17	Internal quality audits
4.6	Management review	4.6	Management review	4.13	Management review

A 4.9. European Directives

The Directives listed below are for historical reference purposes only. Legislation detailed within sections A4.2 – The Netherlands; A4.3 – Denmark; A4.4 – United Kingdom; and A4.6 – Germany takes precedence over the articles listed below which have been incorporated into national legislation. It is that legislation that must be complied with, these articles are for European Member State use only.

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

Official Journal L 183 , 29/06/1989 P. 0001 - 0008

Article

Description

SECTION I - GENERAL PROVISIONS

- Article 1 **Object**
 - 1. The object of this Directive is to introduce measures to encourage improvements in the safety and health of workers at work.
 - 2. To that end it contains general principles concerning the prevention of occupational risks, the protection of safety and health, the elimination of risk and accident factors, the informing, consultation, balanced participation in accordance with national laws and/or practices and training of workers and their representatives, as well as general guidelines for the implementation of the said principles.
 - 3. This Directive shall be without prejudice to existing or future national and Community provisions, which are more favourable to protection of the safety and health of workers at work.

Article 2 Scope

- 1. This Directive shall apply to all sectors of activity, both public and private (industrial, agricultural, commercial, administrative, service, educational, cultural, leisure, etc.).
- 2. This Directive shall not be applicable where characteristics peculiar to certain specific public service activities, such as the armed forces or the police, or to certain specific activities in the civil protection services inevitably conflict with it.

In that event, the safety and health of workers must be ensured as far as possible in the light of the objectives of this Directive.

Article 3 **Definitions**

For the purposes of this Directive, the following terms shall have the following meanings:

- (a). worker: any person employed by an employer, including trainees and apprentices but excluding domestic servants;
- (b). employer: any natural or legal person who has an employment relationship with the worker and has responsibility for the undertaking and/or establishment;
- (c). workers' representative with specific responsibility for the safety and health of workers: any person elected, chosen or designated in accordance with national laws and/or practices to represent workers where problems arise relating to the safety and health protection of workers at work;
- (d). prevention: all the steps or measures taken or planned at all stages of work in the undertaking to prevent or reduce occupational risks.

Article	Description
Article 4	 Member States shall take the necessary steps to ensure that employers, workers and workers' representatives are subject to the legal provisions necessary for the implementation of this Directive. In particular, Member States shall ensure adequate controls and supervision.
SECTION II - EI	MPLOYERS' OBLIGATIONS
Article 5	General provision
	 The employer shall have a duty to ensure the safety and health of workers in every aspect related to the work.
	 Where, pursuant to Article 7 (3), an employer enlists competent external services or persons, this shall not discharge him from his responsibilities in this area.
	The workers' obligations in the field of safety and health at work shall not affect the principle of the responsibility of the employer.
	4. This Directive shall not restrict the option of Member States to provide for the exclusion or the limitation of employers' responsibility where occurrences are due to unusual and unforeseeable circumstances, beyond the employers' control, or to exceptional events, the consequences of which could not have been avoided despite the exercise of all due care.
	Member States need not exercise the option referred to in the first subparagraph.
Article 6	General obligations on employers
	 Within the context of his responsibilities, the employer shall take the measures necessary for the safety and health protection of workers, including prevention of occupational risks and provision of information and training, as well as provision of the necessary organization and means.
	The employer shall be alert to the need to adjust these measures to take account of changing circumstances and aim to improve existing situations.
	 The employer shall implement the measures referred to in the first subparagraph of paragraph 1 on the basis of the following general principles of prevention:
	(a) avoiding risks;
	(b) evaluating the risks which cannot be avoided:
	(c) combating the risks at source;
	 (d) adapting the work to the individual, especially as regards the design of work places, the choice of work equipment and the choice of working and production methods, with a view, in particular, to alleviating monotonous work and work at a predetermined work-rate and to reducing their effect on health.
	(e) adapting to technical progress;
	 (f) replacing the dangerous by the non-dangerous or the less dangerous; (a) developing a coherent overall prevention policy which covers

- (g) developing a coherent overall prevention policy which covers technology, organization of work, working conditions, social relationships and the influence of factors related to the working environment;
- (h) giving collective protective measures priority over individual protective measures;

Article

Description

- (i) giving appropriate instructions to the workers.
- 3. Without prejudice to the other provisions of this Directive, the employer shall, taking into account the nature of the activities of the enterprise and/or establishment:
 - (a). evaluate the risks to the safety and health of workers, inter alia in the choice of work equipment, the chemical substances or preparations used, and the fitting-out of work places.

Subsequent to this evaluation and as necessary, the preventive measures and the working and production methods implemented by the employer must:

- assure an improvement in the level of protection afforded to workers with regard to safety and health,
- be integrated into all the activities of the undertaking and/or establishment and at all hierarchical levels;
- (b). where he entrusts tasks to a worker, take into consideration the worker's capabilities as regards health and safety;
- (c). ensure that the planning and introduction of new technologies are the subject of consultation with the workers and/or their representatives, as regards the consequences of the choice of equipment, the working conditions and the working environment for the safety and health of workers;
- (d). take appropriate steps to ensure that only workers who have received adequate instructions may have access to areas where there is serious and specific danger.
- 4. Without prejudice to the other provisions of this Directive, where several undertakings share a work place, the employers shall cooperate in implementing the safety, health and occupational hygiene provisions and, taking into account the nature of the activities, shall coordinate their actions in matters of the protection and prevention of occupational risks, and shall inform one another and their respective workers and/or workers' representatives of these risks.
- 5. Measures related to safety, hygiene and health at work may in no circumstances involve the workers in financial cost.

Article 7

Protective and preventive services

- 1. Without prejudice to the obligations referred to in Articles 5 and 6, the employer shall designate one or more workers to carry out activities related to the protection and prevention of occupational risks for the undertaking and/or establishment.
- Designated workers may not be placed at any disadvantage because of their activities related to the protection and prevention of occupational risks.

Designated workers shall be allowed adequate time to enable them to fulfil their obligations arising from this Directive.

- 3. If such protective and preventive measures cannot be organized for lack of competent personnel in the undertaking and/or establishment, the employer shall enlist competent external services or persons.
- 4. Where the employer enlists such services or persons, he shall inform them of the factors known to affect, or suspected of affecting, the safety and health of the workers and they must have access to the information referred to in Article 10 (2).
- 5. In all cases:

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Article	Description
	 the workers designated must have the necessary capabilities and the necessary means,
	 the external services or persons consulted must have the necessary aptitudes and the necessary personal and professional means, and
	 the workers designated and the external services or persons consulted must be sufficient in number
	to deal with the organization of protective and preventive measures, taking into account the size of the undertaking and/or establishment and/or the hazards to which the workers are exposed and their distribution throughout the entire undertaking and/or establishment.
	6. The protection from, and prevention of, the health and safety risks which form the subject of this Article shall be the responsibility of one or more workers, of one service or of separate services whether from inside or outside the undertaking and/or establishment.
	The worker(s) and/or agency(ies) must work together whenever necessary.
	7. Member States may define, in the light of the nature of the activities and size of the undertakings, the categories of undertakings in which the employer, provided he is competent, may himself take responsibility for the measures referred to in paragraph 1.
	 Member States shall define the necessary capabilities and aptitudes referred to in paragraph 5.
	They may determine the sufficient number referred to in paragraph 5.
Article 8	First aid, fire-fighting and evacuation of workers, serious and imminent danger
	1. The employer shall:
	 take the necessary measures for first aid, fire-fighting and evacuation of workers, adapted to the nature of the activities and the size of the undertaking and/or establishment and taking into account other persons present,
	 arrange any necessary contacts with external services, particularly as regards first aid, emergency medical care, rescue work and fire-fighting.
	2. Pursuant to paragraph 1, the employer shall, inter alia, for first aid, fire- fighting and the evacuation of workers, designate the workers required to implement such measures.
	The number of such workers, their training and the equipment available to them shall be adequate, taking account of the size and/or specific hazards of the undertaking and/or establishment.
	3. The employer shall:
	 (a) as soon as possible, inform all workers who are, or may be, exposed to serious and imminent danger of the risk involved and of the steps taken or to be taken as regards protection;
	(b) take action and give instructions to enable workers in the event of serious, imminent and unavoidable danger to stop work and/or immediately to leave the work place and proceed to a place of safety;
	(c) save in exceptional cases for reasons duly substantiated, refrain from asking workers to resume work in a working situation where there is still a serious and imminent danger.
	4. Workers who, in the event of serious, imminent and unavoidable danger, leave their workstation and/or a dangerous area may not be placed at any disadvantage because of their action and must be protected against any harmful and unjustified consequences, in accordance with national
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Article	Description
	 laws and/or practices. 5. The employer shall ensure that all workers are able, in the event of serious and imminent danger to their own safety and/or that of other persons, and where the immediate superior responsible cannot be contacted, to take the appropriate steps in the light of their knowledge and the technical means at their disposal, to avoid the consequences of such danger. Their actions shall not place them at any disadvantage, unless they acted
Article 9	 Carelessly or there was negligence on their part. Various obligations on employers The employer shall:
	 (a) be in possession of an assessment of the risks to safety and health at work, including those facing groups of workers exposed to particular risks; (b) decide on the protective measures to be taken and, if necessary, the protective equipment to be used;
	 (c) keep a list of occupational accidents resulting in a worker being unfit for work for more than three working days; (d) draw up, for the responsible authorities and in accordance with national laws and/or practices, reports on occupational accidents suffered by his workers. 2. Member States shall define, in the light of the nature of the activities and size of the undertakings, the obligations to be met by the different categories of undertakings in respect of the drawing-up of the documents
Article 10	provided for in paragraph 1 (a) and (b) and when preparing the documents provided for in paragraph 1 (c) and (d). Worker information
	 The employer shall take appropriate measures so that workers and/or their representatives in the undertaking and/or establishment receive, in accordance with national laws and/or practices which may take account, inter alia, of the size of the undertaking and/or establishment, all the necessary information concerning: (a) the safety and health risks and protective and preventive measures and activities in respect of both the undertaking and/or establishment
	 in general and each type of workstation and/or job; (b) the measures taken pursuant to Article 8 (2). 2. The employer shall take appropriate measures so that employers of workers from any outside undertakings and/or establishments engaged in work in his undertaking and/or establishment receive, in accordance with national laws and/or practices, adequate information concerning the points referred to in paragraph 1 (a) and (b) which is to be provided to the workers in question.
	3. The employer shall take appropriate measures so that workers with specific functions in protecting the safety and health of workers, or workers' representatives with specific responsibility for the safety and health of workers shall have access, to carry out their functions and in accordance with national laws and/or practices, to:

- (a) the risk assessment and protective measures referred to in Article 9 (1) (a) and (b);
- (b) the list and reports referred to in Article 9 (1) (c) and (d);
- (c) the information yielded by protective and preventive measures,

Article	Description
	inspection agencies and bodies responsible for safety and health.
Article 11	Consultation and participation of workers
	 Employers shall consult workers and/or their representatives and allow them to take part in discussions on all questions relating to safety and health at work.
	This presupposes:
	- the consultation of workers,
	 the right of workers and/or their representatives to make proposals, balanced participation in accordance with national laws and/or practices.
	 2. Workers or workers' representatives with specific responsibility for the safety and health of workers shall take part in a balanced way, in accordance with national laws and/or practices, or shall be consulted in advance and in good time by the employer with regard to: (a) any measure which may substantially affect safety and health;
	(b) the designation of workers referred to in Articles 7 (1) and 8 (2) and the activities referred to in Article 7 (1);
	(c) the information referred to in Articles 9 (1) and 10;
	 (d) the enlistment, where appropriate, of the competent services or persons outside the undertaking and/or establishment, as referred to in Article 7 (3);
	(e) the planning and organization of the training referred to in Article 12.
	3. Workers' representatives with specific responsibility for the safety and health of workers shall have the right to ask the employer to take appropriate measures and to submit proposals to him to that end to mitigate hazards for workers and/or to remove sources of danger.
	4. The workers referred to in paragraph 2 and the workers' representatives referred to in paragraphs 2 and 3 may not be placed at a disadvantage because of their respective activities referred to in paragraphs 2 and 3.
	Employers must allow workers' representatives with specific responsibility for the safety and health of workers
	adequate time off work, without loss of pay, and provide them with the necessary means to enable such representatives to exercise their rights and functions deriving from this Directive.
	7. Workers and/or their representatives are entitled to appeal, in accordance with national law and/or practice, to the authority responsible for safety and health protection at work if they consider that the measures taken and the means employed by the employer are inadequate for the purposes of ensuring safety and health at work.
	Workers' representatives must be given the opportunity to submit their observations during inspection visits by the competent authority.
Article 12	Training of workers
	 The employer shall ensure that each worker receives adequate safety and health training, in particular in the form of information and instructions specific to his workstation or job: on recruitment,
	 in the event of a transfer or a change of job, in the event of the introduction of new work equipment or a change in equipment,

- in the event of the introduction of any new technology.

Article

Description

- The training shall be:
 - adapted to take account of new or changed risks, and
- repeated periodically if necessary.
- 2. The employer shall ensure that workers from outside undertakings and/or establishments engaged in work in his undertaking and/or establishment have in fact received appropriate instructions regarding health and safety risks during their activities in his undertaking and/or establishment.
- 3. Workers' representatives with a specific role in protecting the safety and health of workers shall be entitled to appropriate training.
- 4. The training referred to in paragraphs 1 and 3 may not be at the workers' expense or at that of the workers' representatives.

The training referred to in paragraph 1 must take place during working hours.

The training referred to in paragraph 3 must take place during working hours or in accordance with national practice either within or outside the undertaking and/or the establishment.

SECTION III - WORKERS' OBLIGATIONS

- Article 13
 It shall be the responsibility of each worker to take care as far as possible of his own safety and health and that of other persons affected by his acts or Commissions at work in accordance with his training and the instructions given by his employer.
 - 2. To this end, workers must in particular, in accordance with their training and the instructions given by their employer:
 - (a) make correct use of machinery, apparatus, tools, dangerous substances, transport equipment and other means of production;
 - (b) make correct use of the personal protective equipment supplied to them and, after use, return it to its proper place;
 - (c) refrain from disconnecting, changing or removing arbitrarily safety devices fitted, e.g. to machinery, apparatus, tools, plant and buildings, and use such safety devices correctly;
 - (d) immediately inform the employer and/or the workers with specific responsibility for the safety and health of workers of any work situation they have reasonable grounds for considering represents a serious and immediate danger to safety and health and of any shortcomings in the protection arrangements;
 - (e) cooperate, in accordance with national practice, with the employer and/or workers with specific responsibility for the safety and health of workers, for as long as may be necessary to enable any tasks or requirements imposed by the competent authority to protect the safety and health of workers at work to be carried out;
 - (f) cooperate, in accordance with national practice, with the employer and/or workers with specific responsibility for the safety and health of workers, for as long as may be necessary to enable the employer to ensure that the working environment and working conditions are safe and pose no risk to safety and health within their field of activity.

SECTION IV - MISCELLANEOUS PROVISIONS

Article 14 Health surveillance

1. To ensure that workers receive health surveillance appropriate to the health and safety risks they incur at work, measures shall be introduced in accordance with national law and/or practices.

Article	Description
	2. The measures referred to in paragraph 1 shall be such that each worker, if he so wishes, may receive health surveillance at regular intervals.
	Health surveillance may be provided as part of a national health system.
Article 15	Risk groups Particularly sensitive risk groups must be protected against the dangers
	which specifically affect them.
Article 16	Individual Directives - Amendments -
	General scope of this Directive
	 The Council, acting on a proposal from the Commission based on Article 118a of the Treaty, shall adopt individual Directives, inter alia, in the areas listed in the Annex.
	2. This Directive and, without prejudice to the procedure referred to in Article 17 concerning technical adjustments, the individual Directives may be amended in accordance with the procedure provided for in Article 118a of the Treaty.
	3. 3. The provisions of this Directive shall apply in full to all the areas covered by the individual Directives, without prejudice to more stringent and/or specific provisions contained in these individual Directives.
Article 17	Committee
	 For the purely technical adjustments to the individual Directives provided for in Article 16 (1) to take account of:
	 the adoption of Directives in the field of technical harmonization and standardization, and/or
	 technical progress, changes in international regulations or specifications, and new findings, the Commission shall be assisted by a committee composed of the representatives of the Member States and chaired by the representative of the Commission.
	2. The representative of the Commission shall submit to the committee a draft of the measures to be taken.
	The committee shall deliver its opinion on the draft within a time limit which the chairman may lay down according to the urgency of the matter.
	The opinion shall be delivered by the majority laid down in Article 148 (2) of the Treaty in the case of decisions which the Council is required to adopt on a proposal from the Commission.
	The votes of the representatives of the Member States within the committee shall be weighted in the manner set out in that Article. The chairman shall not vote.
	3. The Commission shall adopt the measures envisaged if they are in accordance with the opinion of the committee.
	If the measures envisaged are not in accordance with the opinion of the committee, or if no opinion is delivered, the Commission shall, without delay, submit to the Council a proposal relating to the measures to be taken. The Council shall act by a qualified majority.
	If, on the expiry of three months from the date of the referral to the Council, the Council has not acted, the proposed measures shall be adopted by the Commission.
Article 18	Final provisions

1. Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive by 31

Article	Description
	December 1992.
	They shall forthwith inform the Commission thereof.
	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 covered by this Directive.
	 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 Advisory Committee on Safety, Hygiene and Health Protection at Work.
	 The Commission shall submit periodically to the European Parliament, the Council and the Economic and Social Committee a report on the implementation of this Directive, taking into account paragraphs 1 to 3.
Article 19	This Directive is addressed to the Member States.
	Done at Luxembourg, 12 June 1989.
	For the Council
	The President
	M. CHAVES GONZALES
	(1) OJ No C 141, 30. 5. 1988, p. 1.
	(2) OJ No C 326, 19. 12. 1988, p. 102, and OJ No C 158, 26. 6. 1989.
	(3) OJ No C 175, 4. 7. 1988, p. 22.(4) OJ No C 28, 3. 2. 1988, p. 3.
	(5) OJ No C 28, 3. 2. 1988, p. 1.(6) OJ No L 327, 3. 12. 1980, p. 8.
	(7) OJ No L 356, 24. 12. 1988, p. 74.
	(8) OJ No L 185, 9. 7. 1974, p. 15.
ANNEX	List of areas referred to in Article 16 (1)
	- Work places
	- Work equipment
	- Personal protective equipment
	- Work with visual display units
	 Handling of heavy loads involving risk of back injury
	- Temporary or mobile work sites
	- Fisheries and agriculture

Council Directive 92/91/EEC of 3 November 1992 concerning the minimum requirements for improving the safety and health protection of workers in the mineral- extracting industries through drilling (eleventh individual Directive within the meaning of Article 16 (1) of Directive 89/391/EEC)

Official Journal L 348 , 28/11/1992 P. 0009 - 0024

Description

SECTION I - GENERAL PROVISIONS

Article 1 Subject

- This Directive, which is the eleventh 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 mineral-extracting industries through drilling defined in Article 2 (a).
- 2. The provisions of Directive 89/391/EEC shall apply in full to the sphere referred to in paragraph 1, without prejudice to more stringent and/or specific provisions contained in this Directive.

Article 2 Definitions

For the purpose of this Directive:

- (a) mineral-extracting industries through drilling shall mean all the industries practising:
 - extraction, in the strict sense of the word, of minerals through drilling by boreholes, and/or
 - (&{È&};) OJ N° L 183, 29. 6. 1989, p. 1.
 - prospection with a view to such extraction, and/or
 - preparation of extracted materials for sale, excluding the activities of processing the materials extracted;
- (b) workplace shall mean the whole area intended to house workstations, relating to the immediate and ancillary activities and installations of the mineral-extracting industries through drilling, including accommodation, where provided, to which workers have access in the context of their work.

SECTION II - EMPLOYERS' OBLIGATIONS

Article 3 General obligations

- 1. To safeguard the safety and health of workers, the employer shall take the necessary measures to ensure that:
 - (a) workplaces are designed, constructed, equipped, commissioned, operated and maintained in such a way that workers can perform the work assigned to them without endangering their safety and/or health and/or those of other workers;
 - (b) the operation of workplaces when workers are present takes place under the supervision of a person in charge;
 - (c) work involving a special risk is entrusted only to competent staff and carried out in accordance with the instructions given;
 - (d) all safety instructions are comprehensible to all the workers concerned;
 - (e) appropriate first-aid facilities are provided;

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	 (f) any relevant safety drills are performed at regular intervals. 2. The employer shall ensure that a document concerning safety and health, hereinafter referred to as 'safety and health document`, covering the relevant requirements laid down in Articles 6, 9 and 10 of Directive 89/391/EEC, is drawn up and kept up to date.
	The safety and health document shall demonstrate in particular:
	 that the risks incurred by the workers at the work place have been determined and assessed,
	 that adequate measures will be taken to attain the aims of this Directive,
	 that the design, use and maintenance of the workplace and of the equipment are safe.
	The safety and health document must be drawn up prior to the commencement of work and be revised if the workplace has undergone major changes, extensions or conversions.
	Where workers from several undertakings are present at the same workplace, each employer shall be responsible for all matters under his control.
	The employer who, in accordance with national laws and/or practices, is in charge of the workplace, shall coordinate the implementation of all the measures concerning the safety and health of the workers and shall state, in his safety and health document, the aim of that coordination and the measures and procedures for implementing it.
	The coordination shall not affect the responsibility of the individual employers as provided for in Directive 89/391/EEC.
	 The employer shall, without delay, report any serious and/or fatal occupational accidents and situations of serious danger to the competent authorities.
	If necessary, the employer shall update the safety and health document recording measures taken to avoid any repetition.
Article 4	Protection from fire, explosions and health-endangering atmospheres
	The employer shall take measures and precautions appropriate to the nature of the operation:
	 to avoid, detect and combat the starting and spread of fires and explosions, and
	 to prevent the occurrence of explosive and/or health-endangering atmospheres.
Article 5	Escape and rescue facilities
	The employer shall provide and maintain appropriate means of escape and rescue in order to ensure that workers have adequate opportunities for leaving the workplaces promptly and safely in the event of danger.
Article 6	Communication, warning and alarm systems
	The employer shall take the requisite measures to provide the necessary warning and other communication systems to enable assistance, escape and rescue operations to be launched immediately if the need arises.
Article 7	Keeping workers informed Without prejudice to Article 10 of Directive 89/391/EEC, workers
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	and/or their representatives shall be informed of all measures to be taken concerning safety and health at workplaces, and in particular of those relating to the implementation of Article 3 to 6.
	2. The information must be comprehensible to the workers concerned.
Article 8	Health surveillance
	 To ensure that workers receive health surveillance appropriate to the health and safety risks they incur at work, measures shall be introduced in accordance with national law and/or practices.
	 The measures referred to in paragraph 1 shall be such that each worker shall be entitled to or shall undergo health surveillance before being assigned to duties related to the activities referred to in Article 2 and subsequently at regular intervals.
	 Health surveillance may be provided as part of a national health system.
Article 9	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.
Article 10	Minimum requirements for safety and health
	 Workplaces used for the first time after the date on which this Directive is brought into effect as referred to in Article 12 (1) must satisfy the minimum safety and health requirements laid down in the Annex.
	2. Workplaces already in use before the date on which this Directive is brought into effect as referred to in Article 12 (1) 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 changes, extensions and/or conversions after the date on which this Directive is brought into effect as referred to in Article 12 (1), the employer shall take the measures necessary to ensure that those changes, extensions and/or conversions are in compliance with the corresponding minimum requirements laid down in the Annex.
SECTION III - OT	HER PROVISIONS
Article 11	Adjustments to the Annexes
	Purely technical adjustments to the Annexes in line with:
	 the adoption of Directives in the field of technical harmonization and standardization concerning the mineral-extracting industries through drilling, and/or
	- technical progress, changes in international regulations or
	specifications, and new findings concerning the mineral-extracting

 technical progress, changes in international regulations or specifications, and new findings concerning the mineral-extracting industries through drilling,

shall be adopted in accordance with the procedure laid down in Article 17 of Directive 89/391/EEC.

Article 12 Final provisions

1. Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive not later than 24 months after its adoption. They shall forthwith inform

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Article	Description		
	 the Commission thereof. When Member States adopt the provisions referred to in paragraph 1, these shall contain a reference to this Directive or shall be accompanied by such reference at the time of their official publication. The procedure for such reference shall be adopted by Member States. 		
	 Member States shall communicate to the Commission the texts of the provisions of national law which they have already adopted or are adopt in the field governed by this Directive. 		
	 Member States shall report to the Commission every five years on the practical implementation of this Directive, indicating the views of employers and workers. 		
	The Commission shall inform the European Parliament, the Council, the Economic and Social Committee, the Safety and Health Commission for the Mining and Other Extractive Industries and the Advisory Committee on Safety, Hygiene and Health Protection at Work thereof.		
Article 13	 This Directive is addressed to the Member States. Done at Brussels, 3 November 1992. For the Council The President DENTON OF WAKEFIELD (1) OJ N° C 32, 7. 2. 1991, p. 7. (2) OJ N° C 280, 28. 10. 1991, p. 79; and OJ N° C 241, 21. 9. 1992, p. 88. (3) OJ N° C 191, 22. 7. 1991, p. 34. (4) OJ N° L 393, 30. 12. 1989, p. 1. 		
Article 13	 Member States shall communicate to the Commission the texts of the provisions of national law which they have already adopted or are adopt in the field governed by this Directive. Member States shall report to the Commission every five years on the practical implementation of this Directive, indicating the views of employers and workers. The Commission shall inform the European Parliament, the Council, the Economic and Social Committee, the Safety and Health Commission for the Mining and Other Extractive Industries and the Advisory Committee on Safety, Hygiene and Health Protection at Work thereof. This Directive is addressed to the Member States. Done at Brussels, 3 November 1992. For the Council The President DENTON OF WAKEFIELD (1) OJ N° C 32, 7. 2. 1991, p. 7. (2) OJ N° C 280, 28. 10. 1991, p. 79; and OJ N° C 241, 21. 9. 1992, p. 88. (3) OJ N° C 191, 22. 7. 1991, p. 34. 		

ANNEX

MINIMUM SAFETY AND HEALTH REQUIREMENTS AS REFERRED TO IN ARTICLE 10 OF THE DIRECTIVE

Preliminary note

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

PART A

Common minimum requirements applicable to the on-shore and off-shore sectors

1. Stability and solidity

Workplaces must be designed, constructed, erected, operated, supervised and maintained to withstand the environmental forces anticipated.

They must have a structure and solidity appropriate to the nature of their use.

2. Organization and supervision

2.1. Organization of the workplace

- 2.1.1. Workplaces must be so organized as to provide adequate protection against hazards. They must be kept clean, with any hazardous substances or deposits removed or controlled in order not to endanger the health and safety of workers.
- 2.1.2. Workstations must be designed and constructed according to ergonomic principles taking into account the need for workers to follow operations carried out at their workstations.

2.1.3. Areas within which there is a special hazard must be delineated and warning signs placed.

2.2. Person in charge

A responsible person who has the skills and competence required for this duty, in accordance with the national laws and/or practices, and who has been appointed by the employer, must at all times be in charge of every workplace when workers are present.

The employer may personally assume responsibility for the workplace as referred to in the first paragraph, if he has the skills and competence required for the purpose, in accordance with national laws and/or practices.

2.3. Supervision

To ensure workers' safety and health protection during all operations undertaken, the necessary supervision must be provided by persons having the skills and competence for this duty, in accordance with the national laws and/or practices, having been appointed by the employer or on his behalf and acting on his behalf.

The employer may personally undertake the supervision referred to in the first subparagraph if he has the skills and competence required for the purpose, in accordance with national laws and/or practices.

2.4. Competent workers

When workers are present at any workplace, there must be a sufficient number of workers with the requisite skills, experience and training to perform the tasks assigned to them.

2.5. Information, instructions and training

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

The employer must ensure that workers receive comprehensible instructions so as not do endanger their safety and health or those of other workers.

2.6. Written instructions

Written instructions specifying rules to be observed to ensure the safety and health of workers and the safe use of equipment must be drawn up for every workplace.

These must include information on the use of emergency equipment and action to be taken in the event of an emergency at or near the workplace.

2.7. Safe working methods

Safe working methods must be applied at each workplace or in respect of each activity.

2.8. Work permits

There required by the safety and health document, a system of work permits must be introduced for carrying out both hazardous activities and usually straightforward activities which may interact with other activities to cause serious hazards.

Work permits must be issued by a person in charge prior to the commencement of work and must specify the conditions to be fulfilled and the precautions to be taken before, during and after the work.

2.9. Regular review of safety and health measures

The employer must ensure that the measures taken to protect the safety and health of the workers, including the safety and health management system, are regularly reviewed to ensure compliance with this Directive.

3. Mechanical and electrical equipment and plant

3.1. General

Selection, installation, commissioning, operation and maintenance of mechanical and electrical equipment must take place with due regard for the safety and health of workers, taking into consideration other provisions of this Directive and of Directives 89/392/EEC (1) and 89/655/EEC (2).

If located in an area within which risk 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, if necessary, be fitted with suitable protective devices and failsafe systems.

3.2. Specific provisions

Mechanical equipment and plant must be of adequate strength and free from patent defect and suitable for the purpose for which it is intended.

Electrical equipment and plant must be of sufficient size and power for the purpose for which it is intended.

4. Maintenance

4.1. General maintenance

A suitable scheme should be set up 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.

4.2. Safety equipment maintenance

Adequate safety equipment must be maintained ready for use and in good working order at all times.

Maintenance must be undertaken with due regard to operations.

5. Well control

Suitable well control equipment must be provided for use during borehole operations to protect against blowouts.

Deployment of such equipment must take into account the prevailing well and operational conditions.

6. Protection from harmful atmospheres and explosion risks

6.1. Measures must be taken for assessing the presence of harmful and/or potentially explosive substances in the atmosphere and for measuring the concentration of such substances.

(¹) OJ N° L 183, 29. 6. 1989, p. 9. Directive as amended by Directive 91/368/EEC (OJ N° L 198, 22. 7. 1991, p. 16).

(²) OJ N° L 393, 30. 12. 1989, p. 13.

Where required by the safety and health document, 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.

Where automatic measurements are provided for, the values measured must be recorded and kept as stipulated in the safety and health document.

6.2. Protection from harmful atmospheres

6.2.1. Where harmful substances accumulate or may accumulate in the atmosphere, appropriate measures must be taken to ensure their collection at source and removal.

The system must be capable of dispersing such harmful atmosphere in such a way that workers are not at risk.

6.2.2. Without prejudice to Directive 89/656/EEC (¹), appropriate and sufficient breathing and resuscitation equipment must be available in areas where workers must be exposed to atmospheres which are harmful to health.

In such cases, a sufficient number of workers trained to use such equipment must be present at the workplace.

The equipment must be suitably stored and maintained.

6.2.3. Where hydrogen sulphide or other toxic gases are or may be present in the atmosphere, a protection plan detailing the protective equipment available and the preventive measures taken must be held at the disposal of the competent authorities.

6.3. Prevention of risks of explosion

- 6.3.1. All necessary measures must be taken to prevent the occurrence and accumulation of explosive atmospheres.
- 6.3.2. In areas where there are risks of explosion, all necessary measures must be taken to prevent the ignition of explosive atmospheres.
- 6.3.3. An explosion prevention plan detailing the equipment and measures required must be prepared.

7. Emergency routes and exits

- 7.1. Emergency routes and exits must remain clear and lead by the most direct means to the open air or to a safe area, a safe assembly point or a safe evacuation point.
- 7.2. In the event of danger, it must be possible for workers to evacuate all workstations quickly and as safely as possible.
- 7.3. 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.

Accommodation and rest rooms 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 a safe evacuation point.

- 7.4. Emergency doors must open outwards or, if this is impossible, be sliding doors. 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.
- 7.5. Specific emergency routes and exits must be indicated by signs in accordance with the national regulations transposing Directive 92/58/EEC (²) into law.
- 7.6. Emergency doors must not be locked.

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.

- 7.7. Emergency routes and exits requiring illumination must be provided with emergency lighting of adequate intensity in case the lighting fails.
 - (¹) OJ N° L 393, 30. 12. 1989, p. 18.

(²) OJ N° L 245, 26. 8. 1992, p. 23.

8. Ventilation of enclosed workplaces

8.1. 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 forced ventilation system is used, it must be maintained in working order. Any breakdown must be indicated by a control system where this is necessary for workers' health.

8.2. If air-conditioning or mechanical ventilation installations are used, they must operate in such a way that workers are not exposed to draughts which cause discomfort.

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

9. Room temperature

9.1. During working hours, the temperature in rooms containing workplaces must be adequate for human beings, having regard to the working methods being used and

the physical demands placed on the workers.

- 9.2. 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.
- 9.3. 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.

10. Floors, walls, ceilings and roofs of rooms

 10.1. The floors of workplaces must have no dangerous bumps, holes or slopes and must be fixed, stable and not slippery.
 Workplaces containing workstations must be adequately insulated against heat, bearing in mind the time of undertaking involved and the physical estivity of the

bearing in mind the type of undertaking involved and the physical activity of the workers.

- 10.2. The surfaces of floors, walls and ceilings in rooms must be such that they can be cleaned or refurbished to an appropriate standard of hygiene.
- 10.3. Transparent or translucent walls, in particular all-glass partitions, in rooms or in the vicinity of workplaces and traffic routes must be clearly indicated and made of safety material or be shielded from such place or traffic routes to prevent workers from coming into contact with walls or being injured should the walls shatter.
- 10.4. Access to roofs made of materials of insufficient strength must not be permitted unless equipment is provided to ensure that the work can be carried out in a safe manner.

11. Natural and artificial lighting

- 11.1. Every workplace must be provided throughout with lighting capable of supplying illumination sufficient to ensure the health and safety of persons therein.
- 11.2. Workplaces must as far as possible receive sufficient natural light and be equipped, taking into account climatological conditions, with artificial lighting adequate for the protection of workers' safety and health.
- 11.3. Lighting installations in rooms containing workplaces and in passageways must be placed in such a way that the type of lighting does not present a risk of accident to workers.
- 11.4. Workplaces in which workers are especially exposed to risks in the event of failure or artificial lighting must be provided with emergency lighting of adequate intensity.
- 11.5. Lighting installations must be designed to ensure that operational control areas, escape routes, embarkation areas and hazardous areas remain illuminated.Where workplaces are occupied only occasionally, the obligation referred to in the first paragraph is limited to the period during which workers are present.

12. Windows and skylights

- 12.1. Windows, skylights and ventilation devices which are meant to be opened, adjusted or secured must be designed so that these operations can be carried out safely.
 - They must not be positioned so as to constitute a hazard to workers when open.
- 12.2. It must be possible to clean windows and skylights without risk.

13. Doors and gates

- 13.1. The position, number and dimensions of doors and gates, and the materials used in their construction, are determined by the nature and use of the rooms or areas.
- 13.2. Transparent doors must be appropriately marked at a conspicuous level.
- 13.3. Swing doors and gates must be transparent or have see-through panels.
- 13.4. If transparent or translucent surfaces in doors and gates are not made of safety material and if there is a danger that workers may be injured if a door or gate should shatter, the surfaces must be protected against breakage.
- 13.5. Sliding doors must be fitted with a safety device to prevent them from being

derailed and falling over unexpectedly.

- 13.6. Doors and gates opening upwards must be fitted with a mechanism to secure them against falling back unexpectedly.
- 13.7. Doors along escape routes must be appropriately marked.

It must be possible to open them from the inside at any time without special assistance.

It must be possible to open the doors when the workplaces are occupied.

- 13.8. Doors for pedestrians must be provided in the immediate vicinity of any gates intended essentially for vehicle traffic, unless it is safe for pedestrians to pass through; such doors must be clearly marked and left permanently unobstructed.
- 13.9. Mechanical doors and gates must function without risk of accident to workers. They must be fitted with easily identifiable and accessible emergency shut-down devices and, unless they open automatically in the event of a power failure, it must also be possible to open them manually.
- 13.10. Where chains or similar devices are used to prevent access at any place, these should be clearly visible and appropriately identified by signs denoting any prohibition or warning.

14. Traffic routes

- 14.1. It must be possible to reach workplaces without danger and leave them quickly and safely in an emergency.
- 14.2. Traffic routes, including stairs, fixed ladders and loading bays and ramps, must be calculated, dimensioned and located to ensure easy, safe and appropriate access for pedestrians or vehicles in such a way as not to endanger workers employed in the vicinity of these traffic routes.
- 14.3. Routes used for pedestrian traffic and/or goods traffic must be dimensioned in accordance with the number of potential users and the type of undertaking.If means of transport are used on traffic routes, a sufficient safety clearance must be provided for pedestrians.
- 14.4. Sufficient clearance must be allowed between vehicle traffic routes and doors, gates, passages for pedestrians, corridors and staircases.
- 14.5. Traffic and access routes must be clearly identified for the protection of workers.

15. Danger areas

- 15.1. If the workplaces contain danger areas in which, owing to the nature of the work, there are risks including that of the worker or objects falling, the places must be equipped, as far as possible, with devices preventing unauthorized workers from entering those areas.
- 15.2. Appropriate measures must be taken to protect workers authorized to enter danger areas.
- 15.3. Danger areas must be clearly indicated.

16. Room dimensions and air space in rooms - freedom of movement at the workstation

- 16.1. 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.
- 16.2. The dimensions of the unoccupied area at the workstation must allow workers sufficient freedom of movement and enable them to perform their work safely.

17. Rest rooms

17.1. Where the safety or health of workers, in particular because of the type of activity carried out or the presence of more than a certain number of employees, so requires, workers must be provided with an easily accessible rest room.

This provision does not apply if the workers are employed in offices or similar workrooms providing equivalent relaxation during breaks.

17.2. Rest rooms must be large enough and equipped with an adequate number of

tables and seats with backs for the number of workers.

- 17.3. In rest rooms appropriate measures must be introduced for the protection of nonsmokers against discomfort caused by tobacco smoke.
- 17.4. If working hours are regularly and frequently interrupted and there is no rest room, other rooms must be provided in which workers can stay during such interruptions, wherever this is required for the safety or health of workers. Appropriate measures should be taken for the protection of non-smokers against discomfort caused by tobacco smoke.

18. Outdoor workplaces

- 18.1. Workstations, traffic routes 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.
- 18.2. Workplaces outdoors must be adequately lit by artificial lighting if daylight is not adequate.
- 18.3. When workers are employed at workstations outdoors, such workstations must as far as possible be arranged so that workers:

(a) are protected against inclement weather conditions and if necessary against falling objects;

(b) are not exposed to harmful noise levels nor to harmful external influences such as gases, vapours or dust;

(c) are able to leave their workstations swiftly in the event of danger or are able to be rapidly assisted;

(d) cannot slip or fall.

19. Pregnant women and nursing mothers

Pregnant women and nursing mothers must be able to lie down to rest in appropriate conditions.

20. Handicapped workers

Workplaces must be organized to take account of handicapped workers, if necessary.

This provision applies in particular to the doors, passageways, staircases, showers, washbasins, lavatories and workstations used or occupied directly by handicapped persons.

PART B

Special minimum requirements applicable to the on-shore sector

1. Fire detection and fire fighting

1.1. Wherever workplaces are designed, constructed, equipped, commissioned, operated or maintained, adequate measures must be taken to prevent fires from starting and spreading from the sources identified in the safety and health document.

Provision must be made for fast and effective fire fighting.

- 1.2. Workplaces must be equipped with appropriate fire-fighting equipment and, as necessary, with fire detectors and alarm systems.
- 1.3. Non-automatic fire-fighting equipment must be easily accessible and simple to use and, where necessary, protected from damage.
- 1.4. A fire protection plan detailing the precautions to be taken, in accordance with Articles 3, 4, 5 and 6 of this Directive, to protect against, detect and combat the outbreak and spread of fires must be kept on site.
- 1.5. The fire-fighting equipment must be indicated by signs in accordance with the

national regulations transposing Directive 92/58/EEC into law.

Such signs must be placed at appropriate points and be made to last.

2. Remote control in emergencies

Where required by the safety and health document, certain equipment must be capable of remote control at suitable locations in the event of an emergency. Such equipment must include systems for the isolation and blowdown of wells, plant and pipelines.

3. Communication, general and emergency

- 3.1. Where required by the safety and health document, every workplace at which workers are present must be provided with:
 - (a) an acoustic and optical system capable of transmitting an alarm indication to every manned part of the workplace as necessary;
 - (b) an acoustic system capable of being heard distinctly at all parts of the installation where workers are frequently present.
- 3.2. Facilities for raising the alarm must be provided at suitable locations.
- 3.2. When workers are present at workplaces which are not normally manned, appropriate communication systems must be placed at their disposal.

4. Safe assembly points and muster list

Where required by the safety and health document, safe assembly points should be specified, muster lists should be maintained and the necessary action should be taken.

5. Means of evacuation and escape

- 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 drills

Safety drills must be held at regular intervals at all workplaces at which workers are usually present.

The main purpose of such drills is to train and check the skills of workers to whom specific duties have been assigned in the event of emergency involving the use, handling or operation of emergency equipment, taking into account the criteria laid down in the safety and health document referred to in point 1.1.

Where appropriate, workers, who have been so assigned, should also be drilled 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 or propriety, they cannot be expected to change in another room.

Changing rooms must be easily accessible, be of sufficient capacity and be provided with seating.

7.1.2. Changing rooms must be sufficiently large and have facilities to enable each worker to lock away his/her clothes during working hours.

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

7.1.3. Provision must be made for separate changing rooms or separate use of changing rooms for men and women.

7.1.4. If changing rooms are not required under point 7.1.1. each worker must be provided with a place to store his/her clothes.

7.2. Showers and washbasins

7.2.1. Adequate and suitable showers must be provided for workers if required by the nature of the work or for health reasons.

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

- 7.2.2. The shower rooms must be sufficiently large to permit each worker to wash without hindrance in conditions of an appropriate standard of hygiene. The showers must be equipped with hot and cold running water.
- 7.2.3. Where showers are not required under the first subparagraph of point 7.2.1, adequate and suitable washbasins with running hot and could water must be provided in the vicinity of the workstations and the changing rooms. Such washbasins must be separate for, or used separately by, men and women when so required for reasons of propriety.
- 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.

7.3. Lavatories and washbasins

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

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

8. First aid rooms and equipment

8.1. First aid equipment must be appropriate to the type of activity carried out.

One or more first aid rooms must be provided.

Clearly visible first aid instruction in the event of accidents must be displayed in these rooms.

8.2. First aid rooms must be fitted with essential first aid installations and equipment and be easily accessible to stretchers.

They must be signposted in accordance with the national regulations transposing Directive 92/58/EEC into law.

8.3. In addition, first aid equipment must be available in all places where working conditions require it.

This equipment must be suitably marked and easily accessible.

8.4. A sufficient number of workers must be trained in the use of the first aid equipment provided.

9. Traffic routes

Where road vehicles enter the workplace, traffic regulations must be established as necessary.

PART C

Special minimum requirements applicable to the off-shore sector

1. Preliminary remark

1.1. Without prejudice to Article 3 (2), the employer who, in accordance with national legislation and/or practice, is responsible for the workplace covered by this Part C must ensure that the safety and health document shows that all relevant measures have been taken to protect the safety and health of workers in both normal and critical situations.

To this end, the document must:

(a) identify the special sources of hazard associated with the workplace, including any concomitant activity which could cause accidents likely to have serious consequences for the health and safety of the workers concerned;

(b) assess the risks involved in the special sources of hazard referred to in (a);

(c) show that adequate precautions have been taken to avoid the accidents referred to in (a), to limit the spread of accidents and to allow efficient and controlled evacuation of the workplace in emergency situations;

(d) show that the management system is adequate to comply with the provisions of Directive 89/391/EEC and this Directive in both normal and critical situations.

- 1.2. The employer shall observe the procedures and arrangements laid down in the safety and health document during the planning and implementation of all the relevant stages covered by this Directive.
- 1.3. Different employers who are responsible for different workplaces shall cooperate, where appropriate, in preparing safety and health documents and in measures necessary to ensure the safety and health of workers.

2. Fire detection and fire fighting

2.1. Appropriate precautions, as identified by the safety and health document referred to in 1.1, must be undertaken to protect against, detect and combat the outbreak and spread of fires.

Where appropriate, fire walls should be provided for the purpose of segregating fire risk areas.

2.2. Adequate fire detection and protection systems, fire-fighting systems and alarms must be provided at all workplaces in accordance with the risks identified in the safety and health document referred to in point 1.1.

These may include but are not limited to:

- fire detection systems,
- fire alarms,
- fire water mains,
- fire hydrants and hoses,
- water deluge systems and water monitors,
- automatic sprinkler systems,
- gas extinguishant systems,
- foam systems,
- portable fire extinguishers,
- fireman's equipment.
- 2.3. Non-automatic fire-fighting equipment must be easily accessible, simple to use and, where necessary, protected from damage.
- 2.4. A fire protection plan detailing the precautions to protect against, detect and combat the outbreak and spread of fires must be kept at the workplace.
- 2.5. Emergency systems must be segregated or otherwise afforded protection from accidents to the extent necessary to ensure that the emergency functions remain operational in an emergency.

Such systems shall be duplicated where appropriate.

2.6. The equipment must be indicated by signs in accordance with the national regulations transposing Directive 92/58/EEC into law.

Such signs must be placed at appropriate points and be made to last.

3. Remote control in emergencies

3.1. Where required by the safety and health document referred to in point 1.1, a remote control system in the event of an emergency must be set up.

That system must incorporate monitoring stations at suitable locations which may

be used in the event of an emergency including, if necessary, monitoring stations at safe assembly points and evacuation stations.

3.2. Equipment capable of remote control as referred to in point 3.1 must at least include systems for ventilation, emergency shutdown of equipment which could give rise to ignition, the prevention of the escape of flammable liquids and gas, fire protection and well control.

4. Communication: general and emergency

- 4.1. Where required by the safety and health document referred to in point 1.1, every workplace at which workers are present must be provided with:
 - an acoustic and optical system capable of transmitting an alarm to every manned part of the workplace as necessary,
 - an acoustic system capable of being heard distinctly in all parts of the installation where workers are frequently present,
 - a system capable of maintaining communication with the shore and rescue services.
- 4.2. Such system must be capable of remaining operational in the event of an emergency.

The acoustic system should be supplemented by communication systems which are not reliant on vulnerable power supplies.

- 4.3. Facilities for raising the alarm must be installed at suitable locations.
- 4.4. When workers are present at workplaces which are not normally manned, communications systems appropriate to the circumstances must be provided.

5. Safe assembly points and muster list

5.1. Adequate measures must be taken to protect evacuation points and safe assembly points from heat, smoke and, as far as possible, the effects of explosion, and to ensure that escape routes to and from evacuation points and safe assembly points remain passable.

These measures must be such as to provide protection to workers for a sufficient period to enable safe evacuation, escape and rescue to be organized and carried out where necessary.

- 5.2. Where required by the safety and health document referred to in 1.1, one of the protected locations specified in 5.1 must provide appropriate facilities to enable the equipment specified in point 3 of this Part C to be remote-controlled and the shore and emergency services to be communicated with.
- 5.3. Safe assembly points and evacuation points must be readily accessible from accommodation and work areas.
- 5.4. For each individual safe assembly point, a list containing the names of workers assigned to that safe assembly point must be kept up to date and displayed.
- 5.5. A list of persons assigned special duties in the event of an emergency must be provided and displayed at suitable locations at the workplace. Their names must be noted in the written instructions referred to in point 3.6 of

Their names must be noted in the written instructions referred to in point 3.6 of Part A.

6. Means of evacuation and escape

- 6.1. Workers must be trained in the appropriate actions to be taken in emergencies. In addition to general emergency training, workers must receive training specific to the workplace which should be specified in the safety and health document referred to in point 1.1 concerning that workplace.
- 6.2. Workers must be given suitable training in survival techniques, taking into account the criteria laid down in the safety and health document referred to in point 1.1.
- 6.3. Suitable and sufficient means of evacuation in an emergency and means of escape direct to the sea must be provided at every workplace.
- 6.4. An emergency plan for sea rescue and workplace evacuation situations must be

drawn up.

The plan, which must be based on the safety and health document referred to in point 1.1, must provide for the use of standby vessels and helicopters and include criteria concerning the capacity and response time of standby vessels and helicopters.

The required response time must be given in the safety and health document for each installation.

Standby vessels must be designed and equipped to meet evacuation and rescue requirements.

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

6.6. Adequate life-saving appliances must be available for immediate use.

7. Safety drills

At workplaces at which workers are usually present, safety drills must be held at regular intervals in which:

- all workers to whom specific duties have been assigned involving the use, handling or operation of emergency equipment are trained and examined in the execution of such duties, taking into account the criteria laid down in the safety and health document referred to in point 1.1.

Where appropriate, workers must also be drilled 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 verified for operation.

8. Sanitary equipment

8.1. Changing rooms and lockers

8.1.1. Appropriate changing rooms must be provided for workers if they have to wear special work clothes and where, for reasons of health or propriety, they cannot be expected to change in another rooms.

Changing rooms must be easily accessible, be of sufficient capacity and be provided with seating.

8.1.2. Changing rooms must be sufficiently large and have facilities to enable each worker to lock away his/her clothes during working hours.

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

- 8.1.3. Provision must be made for separate changing rooms or separate use of changing rooms for men and women.
- 8.1.4. If changing rooms are not required under point 8.1.1, each worker must be provided with a place to store his/her clothes.

8.2. Showers and washing facilities

In addition to those facilities provided in any accommodation area, suitable

showers and washing facilities must if necessary be provided in the vicinity of workstations.

8.3. Lavatories and washbasins

In addition to those facilities provided in any accommodation, lavatories and washbasins must if necessary be provided in the vicinity of workstations. Provision must be made for separate lavatories or separate use of lavatories for men and women.

9. First-aid rooms and equipment

- 9.1. One or more first-aid rooms must be provided according to the size of the installation and the type of activity being carried out.
- 9.2. The first-aid rooms must have suitable equipment, facilities and medicines and a sufficient number of specialized workers, as required by the circumstances, for giving first-aid or, where necessary, treatment under the direction of a registered medical practitioner (who may or may not be present).

They must be signposted in accordance with national rules transposing Directive 92/58/EEC into law.

9.3. In addition, first-aid equipment must be available in all places where working conditions require it.

This equipment must be suitably signposted and easily accessible.

10. Accommodation

- 10.1. If the nature, scale and duration of operations so require, the employer must also provide employees with accommodation which must be:
 - suitably protected against the effects of explosion, the infiltration of smoke and gas and the outbreak and spread of fire as identified in the safety and health document referred to in point 1.1,
 - 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 inclement weather,
 - separate from any workstation and located away from dangerous areas.
- 10.2. 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 occupants to store their clothes.

Separate sleeping rooms for men and women must be provided.

10.3. 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.

10.4. The accommodation must be equipped with a sufficient number of lavatories and washbasins.

Provision must be made for separate facilities or separate use of such facilities for men and women.

10.5. The accommodation and its equipment must be maintained to adequate standards of hygiene.

11. Helicopter operations

11.1. Helicopter decks at 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.

- 11.2. 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.
- 11.3. On installations with a resident workforce, a sufficient number of emergency response trained personnel for the purpose must be available on the helicopter deck during helicopter movements.

12. Positioning of installations at sea - safety and stability

- 12.1. All the necessary measures must be taken to ensure the safety and health of workers in the mineral-extracting industries through drilling while off-shore installations are being positioned at sea.
- 12.2. Operations in preparation for the positioning of off-shore installations must be carried out in such a way as to ensure their stability and safety.
- 12.3. Equipment used and procedures followed for the activities referred to in point 12.1 must be such as to reduce any risk to workers in the mineral-extracting industries through drilling, having regard to both normal and critical conditions.