

**REGULATIONS RELATING TO CONDUCT OF ACTIVITIES IN
THE PETROLEUM ACTIVITIES
(THE ACTIVITIES REGULATIONS)**

**Petroleum Safety Authority Norway (PSA)
Norwegian Pollution Control Authority (SFT)
Norwegian Social and Health Directorate (NSHD)**

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**CHAPTER I
INTRODUCTORY PROVISIONS**

Section 1

Systems and other equipment for manned underwater operations from vessels

Requirements to facilities in these regulations also apply to systems and other equipment necessary to carry out manned underwater operations from vessels.

**CHAPTER II
ARRANGEMENTS ACCORDING TO THE WORKING ENVIRONMENT ACT**

Section 2

Co-ordinating working environment committees for fields, and joint, local working environment committees for mobile facilities

A co-ordinating working environment committee shall be established for each field, or, if there is general agreement on it, a co-ordinating working environment committee that covers more than one field when these fields have joint management and operational organisation, joint contractors and contracts, and where considerable groups of personnel work on more than one of these fields. In addition, a joint, local working environment committee shall be established for each individual mobile facility. The committees shall co-ordinate and deal with matters concerning safety and environment, cf. the [Framework Regulations Section 45](#) on joint working environment committees, third paragraph.

Representatives of the employers and the employees from the various main activity areas of the field or on the mobile facility shall participate in the co-ordinating or the joint, local working environment committee, respectively. With regard to mobile facilities, a representative of the operator shall also participate, except during relocation.

When a mobile facility constitutes a part of the petroleum activities of a field, the operator shall ensure that the activities of the joint local working environment committee and the co-ordinating working environment committee are co-ordinated.

Section 3
Safety and health personnel

The employer shall ensure that the enterprise has safety and health personnel or has safety and health personnel available whose task it is to carry out preventive safety and environment work, cf. the [Working Environment Act Section 3-3](#).

The employer shall ensure that the safety and health personnel receive the information that is required in order to carry out the preventive safety and environment work as mentioned in the first paragraph.

The employer and the safety delegate may require information on health risk from the safety and health personnel, with the limitations that follow from the statutory requirements to professional secrecy applicable to health personnel.

The operator or the one responsible for the operation of a facility, shall ensure co-operation between his own safety and health personnel and such personnel from the other employers.

Section 4
Provision of medical examinations for employees

The employer shall ensure that all employees are offered regular medical examinations to ascertain any long-term effects of working environment on their health.

Any employee who has undergone such a medical examination, shall have access to those results that indicate the degree to which that employee has been exposed to health hazards

The employer shall also ensure that prior to any assignment which may entail a specific health risk, those who are so assigned are offered a medical examination, so that preventive action could be taken, cf. [the Working Environment Act Section 3-1](#) second paragraph litera g and [Section 10-11](#) seventh paragraph.

Employees who have been subjected to exposure to health hazards in their work, shall be offered separate medical examination if a situation of employment still exists, to allow corrective actions to be taken

Section 5
Recording of work hours

The employer shall establish a system to record and follow up work hours for all employees of the individual enterprises. The same applies to personnel in senior or particularly independent positions as mentioned in the [Working Environment Act Section 10-12](#) first and second paragraph, when the position is of significance to safety.

When work is performed at more than one workplace for the same employer, this employer shall record the total work hours.

The worked hours records shall be available to the elected representatives of the employees.

CHAPTER III
HEALTH SERVICES

Section 6
Availability of the health service

The operator or the one responsible for the operation of a facility shall ensure that all on board have access to adequate professional health services, cf. the [Framework Regulations Section 12](#): on health related matters.

A medical practitioner shall have the professional responsibility for such a health service.

On a facility, there shall be maintained at all times, a sufficient number of nurses to ensure the adequate performance of the health service.

The health service at a facility shall employ or have on-call other health care personnel deemed necessary.

Such a health service shall be professionally independent and autonomous.

Section 7 Duties of the health service

The health service shall

- a) promote good health, and contribute to prevention of disease and injury through
 - a) collection and dissemination of information on such features of the workplace that may affect health,
 - b) ensuring that adequate standards of hygiene are maintained,
 - c) taking appropriate preventive action within its area of responsibility,
- b) diagnosis and treatment of disease and injury, and first aid after accidents,
- c) incorporating health emergency preparedness into the general emergency preparedness of the enterprise, including transport of the sick and injured.

Section 8 Doctor on call

The health service shall have a medical practitioner on call at all times, who could be summoned to the facility on the shortest notice.

Section 9 Medicinal products and medical equipment

The stock of medicinal products in the health service shall comply with the [Regulations of 18 November 1987 No.1153 relating to the supply of medicinal products etc. in the municipal health service](#), Sections 3 to 8 inclusive.

Medicinal products and medical equipment used in the health service shall be appropriate for the needs of a facility under normal operation and foreseeable emergencies therein. Furthermore, medicinal products and medical equipment shall be regularly checked, and supplies replenished.

Section 10 Dealing with communicable diseases

The medical officer in charge of the health service of an installation shall have the same responsibility concerning cases of communicable diseases as a district medical officer as laid down in [Act of 5 August 1994 No. 55 relating to control of communicable diseases](#), and other relevant regulations.

Section 11 Food and drinking water

There shall at all times be food of such quality and in such quantity on a facility, which is adequate to provide all the nutritional needs of the personnel thereon.

The water supply and the standard of drinking water at a petroleum facility shall comply with the regulations laid down by the Ministry of Health and Social Affairs.

Section 12
General cleaning

General cleaning shall be planned and carried out in such a way so that the indoor environment remains pleasing and hygienic at all times.

CHAPTER IV
PRE-SURVEYS AND INSTALLATION

Section 13
Pre-surveys

Prior to placing of facilities the necessary preliminary surveys ensuring the safe installation, operation and disposal of facilities shall be carried out.

Section 14
Installation and commissioning

During installation of facilities and parts thereof it shall be ensured that the loads to which they are subjected do, not exceed the loads as mentioned in the [Facilities Regulations Section 10](#): Loads, load effects and resistance.

On commissioning of facilities it shall be ensured that they are in compliance with the requirements of the [Facilities Regulations](#), cf. also the [Framework Regulations Section 18](#) on documentation. The technical condition of plants, systems and equipment shall be maintained until the plants, systems and equipment are taken into service.

CHAPTER V
TRANSPORT AND STAY

Section 15
Transport

The operator shall ensure that persons and supplies can be transported safely to, from and between facilities and vessels during placing, installation and operation, and in respect of the selected disposal alternative.

It shall be possible to co-ordinate the transport with the emergency preparedness as mentioned in [Section 64](#) on establishment of emergency preparedness.

Section 16
Stay on facilities

Only those working on a facility have admittance to the facility. Others must have permission from the operator or someone authorised by the operator.

The operator shall ensure that there at all times exists a complete list of all persons staying on or on their way to or from a facility or a vessel participating in the petroleum activities.

All persons staying on such facilities or vessels shall receive adequate information on the rules applicable to the stay, and it shall be ensured that they comply with these rules.

In the interest of safety the Petroleum Safety Authority may by individual decision determine the number of persons allowed to stay on a facility. In particular cases the Petroleum Safety Authority may prohibit visits.

Section 17 Accommodation

The number of persons accommodated on a facility may in particular cases and in consultation with the elected representatives of the employees exceed the number that the facility was designed for, cf. [Section 59 of the Facilities Regulations](#) on living quarters.

When decision is made concerning the duration and extent of such accommodation, cf. also the [Management Regulations Section 8](#) on basis and criteria for decision, the consequences shall be considered and compensating actions shall be taken to ensure safety and necessary restitution and rest as mentioned in [Section 31](#) on arrangement of work, third paragraph.

CHAPTER VI OPERATIONAL PREREQUISITES

VI-I PREREQUISITES FOR START-UP

Section 18 Start-up and operation of facilities

Prior to first time start-up of facilities and parts of facilities or following technical modifications the commissioning as mentioned in [Section 14](#) on installation and commissioning shall be completed.

In addition, at start-up as mentioned in the first paragraph, and during operation,

- a) the management system with associated processes, resources and operational organisation shall be established,
- b) steering documents, including technical documents for operation, shall be available in an updated version and the operation personnel shall be acquainted with it,
- c) systems for employee contribution shall be established, cf. [the Framework Regulations Section 6](#) on arrangements for employee contribution,
- d) the health service shall be in accordance with [Section 6](#) on the availability of the health service,
- e) the safety and health personnel shall be in accordance with [Section 3](#) on safety and health personnel.

VI-II COMPETENCE

Section 19 Competence

It shall be ensured that the personnel at all times have the competence necessary to be able to carry out the activities safely and in accordance with the legislation relating to health, environment and safety. In addition the personnel shall be capable of handling situations of hazard and accident, cf. the [Management Regulations Section 11](#) on manning and competence and these regulations [Section 21](#) on practice and drills.

Personnel intending to carry out bell diving or surface oriented diving, shall have a valid certificate. The Petroleum Safety Authority appoints suitable enterprises to issue certificates on its behalf. Issuance of such certificates may be liable to payment.

Section 20 Safety and working environment training according to the [Working Environment Act](#)

Leaders and others with responsibility for decisions which affect the working environment shall be given the same training as members of the working environment committees and safety delegates, cf. [Regulations of 29 April 1977 No.07 relating to safety delegates and working environment committees](#), Section 12.

The individual employee and the executive shall be given training in working environment factors which are of significance to the execution of the work.

Leaders with responsibility for work with radioactive sources shall have theoretical and practical radiation protection training.

The employees shall be given the necessary safety and health training, and the training shall take place during work hours. Criteria shall be established as to what is to be deemed necessary training.

Training as mentioned in the fourth paragraph shall be given in connection with engagement, transfer or change of work tasks, introduction of new work equipment or alterations in the equipment and introduction of new technology affecting the individual workplace or tasks.

The training shall be adapted to altered or new risks in the enterprise and shall be repeated whenever necessary.

Section 21

Practice and exercises

The party responsible shall ensure that necessary practice and drills are carried out, so that the personnel are capable of handling operational disturbances and situations of hazard and accident effectively at all times.

VI-III

PROCEDURES

Section 22

Procedures

The party responsible shall establish criteria for when procedures are to be used as means to prevent faults and situations of hazard and accident.

It shall be ensured that procedures are established and used in such way as to fulfil their intended functions.

VI-IV

PREREQUISITES FOR USE

Section 23

Use of facilities

Use of facilities and parts of facilities shall take place in accordance with requirements stipulated in and pursuant to the health, environment and safety legislation and possible additional limitations following from fabrication, installation and commissioning. The use shall at all times be in accordance with the technical condition of the facility and the operational prerequisites stipulated in the risk analyses.

When setting limitations to the activity level on the facility, the status of the maintenance shall also be taken into account.

Section 24

Safety systems

The actions and limitations necessary in the event of overriding or disconnection of safety systems or parts of such systems, or when the systems are otherwise impaired, shall be established beforehand.

The status of all overriding, disconnections and other impairments shall be known at all times.

Section 25
Critical activities

It shall be ensured that critical activities are conducted within the operational limits assumed in the design and in the risk analyses as mentioned in the [Management Regulations Section 13](#) on general requirements to analyses, cf. also these regulations [Section 28](#) on actions during conduct of activities.

Section 26
Simultaneous activities

The party responsible shall define which activities that in combination with other activities shall be considered to be simultaneous activities.

In the event of conduct of simultaneous activities that contribute to a non-acceptable risk increase, necessary actions shall be taken, cf. [Section 6 of the Management Regulations](#) on acceptance criteria for major accident risk and environmental risk.

CHAPTER VII
PLANNING AND CONDUCT OF ACTIVITIES

Section 27
Planning

In the planning of activities on the individual facility the party responsible shall ensure that important contributors to risk are kept under control, both individually and collectively, cf. also the [Management Regulations Section 9](#) on planning.

The planning shall take into account the status of important contributors to risk and to the change in risk that appears from the risk indicators, cf. the [Management Regulations Section 7](#) on monitoring parameters and indicators.

Section 28
Actions during conduct of activities

Planned activities shall be safety cleared before they are conducted. The safety clearance shall show which conditions have to be met, including the actions required to be taken before, during and after the work so that those who participate in or may be affected by the activities are not injured, and so that the probability of mistakes that can result in situations of hazard and accident is reduced.

Section 29
Monitoring and control

The party responsible shall ensure that matters of significance to prudent conduct of activities with respect to health and safety, are monitored and kept under control at all times, cf. the [Management Regulations Section 18](#) on collection, processing and use of data.

Activities in connection with aviation weather services shall be conducted in accordance with section 31 in the [Civil Aviation Authority's regulations of 26 October 2007 No. 1181 relating to continental shelf aviation – commercial air transport to and from helidecks on facilities and vessels at sea](#), last amended 28 January 2008 and in the [Civil Aviation Authority's regulations of 28 January 2008 no. 81 relating to meteorological services for aviation](#).

Suitable arrangements shall be made for personnel with control and monitoring functions to be able to get hold of and handle information on such matters efficiently, cf. also the [Management Regulations Section 11](#) on manning and competence.

Section 30

Transfer of information

In connection with shifts and change of personnel, the party responsible shall ensure the necessary transfer of information to oncoming personnel on the status of safety systems and ongoing activities, as well as other information of importance to health, environment and safety in the conduct of activities, cf. the [Management Regulations Section 12](#) on information.

CHAPTER VIII

WORKING ENVIRONMENT FACTORS

Section 31

Arrangement of work

The employer shall ensure that the work is arranged so that the individual employee avoids health hazardous exposure and adverse physical or mental strain, and so that the probability of mistakes that can lead to situations of hazard and accident, is reduced. An individual as well as an overall evaluation of acute and long-term effects of the various working environment factors shall constitute the basis of such arrangement of the work.

The work shall furthermore be arranged so as to ensure a meaningful work situation.

The work shall be planned so that as much work as possible is done daytime, and so that the employees are assured necessary restitution and rest.

The employer shall reduce stress factors and risk of injury to health based on objective risk and the risk perceived by the employees.

Section 32

Ergonomic aspects

The employer shall ensure that the work is arranged so that the employees are not subjected to adverse strain as a consequence of manual handling, work position, repetitive movements, work intensity and similar, cf. also the [Facilities Regulations Section 19](#) on ergonomic design.

Work comprised by Sections 1, 2 and 4 of [Regulations of 20 January 1995 No.156 on heavy and monotonous work](#) shall be carried out according to the provisions of the said regulations.

Work carried out at a computer screen, and which is comprised by Sections 1 and 2 of [Regulations of 15 December 1994 No.1259 relating to computer screen work](#), shall be carried out as mentioned in the said regulations Sections 1, 2, 5, 6, 7, 8, 9, 10, 11, 12 and 13.

Section 33

Psychosocial aspects

The employer shall ensure a favourable psychosocial working environment by taking into account aspects that can affect the health, safety and well being of the employees. Particular emphasis shall be placed on the interplay between requirements to work performance, the employee's perception of control of own work and social support in the working environment.

Section 34

Chemical health hazard

The employer shall ensure that health detrimental chemical exposure in connection with storage, use, handling and disposal of chemicals and of processes releasing chemical components, is avoided, cf. the [Facilities Regulations Section 14](#) on chemicals and chemical exposure.

Before health hazardous substances are taken into use or stored, a record of substances shall be established with HSE (health, safety and the environment) data sheets as mentioned in [Regulations of 14 April 2000 No. 412 on the establishment and use of records of health hazardous substances and in enterprises](#) (the Substances Records Regulations), last amended 29 June 2005, Sections 1, 2, 5, 6, 7, 8 and 9.

Chemicals comprised by Section 2, cf. Section 4 of [Regulations of 30 April 2001 No.443 relating to protection against exposure to chemicals in the workplace](#) (the Chemicals Exposure Regulations), last amended 26 April 2005, shall be dealt with according to the provisions of the Chemicals Exposure Regulations, with the exception of Section 30 and Section 33..

In work where there exists biological factors comprised by Sections 2 and 3 of [Regulations of 19 December 1997 No. 1322 relating to protection of employees against dangers of work with biological factors](#), last amended 20 June 2002 No. 825, the work shall be carried out according to the provisions of the said regulations.

[Regulations of 26 April 2005 No. 362 relating to asbestos](#), last amended 16 November 2005, shall apply to the scope of application of these regulations.

Section 35 Radiation

The employer shall ensure that health detrimental exposure during storage, use, handling and disposal of sources giving off radiation is avoided, cf. the [Facilities Regulations Section 25](#) on radiation.

Section 36 Noise and vibrations

The employer shall ensure that no employee is exposed to noise which is damaging to hearing as mentioned in the [Facilities Regulations Section 22](#) on noise and acoustics, first paragraph, or vibrations damaging to health, cf. the [Facilities Regulations Section 23](#) on vibrations. Cf. also [these regulations Section 28](#) on actions during conduct of activities. [Regulations of 6 July 2005 No. 804 relating to protection against mechanical vibrations](#), last amended 19 December 2006, shall apply to the scope of application of these regulations.

Section 37 Outdoor work

Criteria shall be established for what climatic conditions require protective actions for outdoor work, and under what conditions such work is to be restricted or halted, cf. also the [Facilities Regulations Section 21](#) on outdoor work areas.

Section 38 Safety signs and signalling in the workplace

The employer shall ensure that safety signs and signalling in the workplace comprised by Sections 1, 2, 3 and 5 of [Regulations of 6 October 1994 No.972 relating to safety signs and signalling in the workplace](#), last amended 30 June 2003, shall be carried out according to the provisions of the said regulations.

Section 39 Personal protective equipment

The employer shall ensure that personal protective equipment comprised by Sections 1 and 2 of [Regulations of 24 May 1993 No. 1425 relating to use of personal protective equipment in the workplace](#) is used as mentioned in the said regulations Sections 6, 8, 9 and 10. The same applies to Section 7 of the said regulations, with the exception of Section 49 on diving equipment subsection 2 of [Regulations of 19 August 1994 No. 819 relating to construction, design and production of personal protective equipment](#), last amended 20 February 2004.

The employer shall place the personal protective equipment at the disposal of the employees free of charge.

Section 40

Use of work equipment

Work equipment comprised by Sections 2 and 4 of [Regulations of 26 June 1998 No. 608 relating to use of work equipment](#), last amended 13. September 2004 No. 1291, shall be used according to the provisions of the said regulations, with the exception of Section 16, Chapter VIII and Chapter IX.

Section 41

Information on risk during conduct of work

It shall be ensured that the employees are given information on the health hazards and the risks of accident in connection with the work to be carried out.

Results of evaluations, analyses, measurements, mapping of causes of work related diseases, investigation of accidents and near accidents in the workplace, as well as the significance of these results to the execution of the work, shall be available.

The employees and their elected representatives shall make themselves acquainted with this information.

CHAPTER IX MAINTENANCE

Section 42

Maintenance

The party responsible shall ensure that facilities or parts thereof are maintained, so that they are capable of carrying out their intended functions in all phases of their lifetime.

Section 43

Classification

The systems and equipment of facilities shall be classified with regard to the consequences for health, environment and safety of potential functional failures.

With regard to functional failures that may entail serious consequences, the party responsible shall identify the different fault modes with associated failure causes and failure mechanisms, and estimate the failure probability in respect of the individual fault mode.

The classification shall constitute the basis for the choice of maintenance activities and maintenance frequency, for the priority of different maintenance activities and for the assessment of the need for spare parts.

Section 44

Maintenance programme

Fault modes which constitute a risk to health, environment or safety, cf. [Section 43](#) on classification, shall be systematically prevented by means of a maintenance programme.

The programme shall comprise activities for monitoring of performance and technical condition, which will ensure that fault modes that are developing or have occurred, are identified and corrected.

The programme shall also contain activities for monitoring and control of failure mechanisms that may lead to such fault modes.

Section 45

Planning and priorities

An overall plan shall be prepared for conduct of the maintenance programme and corrective maintenance activities, cf. the [Management Regulations Section 9](#) on planning.

There shall exist criteria for giving priority with associated time-limits for the conduct of the individual maintenance activities. The criteria shall take into account the classification as mentioned in [Section 43](#) on classification.

Section 46 **Maintenance effectiveness**

The effectiveness of the maintenance shall be evaluated systematically on the basis of recorded data for performance and technical condition in respect of facilities or parts thereof.

The evaluation shall be used for a continual improvement of the maintenance programme, cf. the [Management Regulations Section 22](#) on improvement.

Section 47 **Specific requirements to condition monitoring of structures, maritime systems and pipeline systems**

Condition monitoring shall be carried out in respect of new structures and maritime systems during their first year of service.

With regard to loadbearing structures of a new type, data shall be collected from two winter seasons in order to compare them with the design calculations, cf. the [Facilities Regulations Section 16](#) on instrumentation for monitoring and recording.

In case the facility's use extends the lifetime planned originally, instrumentation of relevant parts of the structure shall be considered, in order to measure possible effects of ageing.

When facilities are being disposed of, the operator shall carry out examinations to determine the condition of the structures. The results shall be used to assess the safety of similar facilities.

With regard to pipeline systems where fault modes may constitute an environment or safety risk, cf. [Section 43](#) on classification, inspections shall be carried out to map possible fault modes in the pipeline system. Parts of the pipeline system where the lay condition or other factors may cause high loads, shall also be checked.

The first inspection shall be carried out in accordance with the maintenance programme as mentioned in [Section 44](#) on maintenance programme, however at the latest two years after the system has been put into operation.

Section 48 **Specific requirements to testing of blow out preventer and other pressure control equipment**

The blow out preventer with associated valves and other pressure control equipment on the facility shall be pressure and function tested, cf. [Section 42](#) on maintenance and [Section 44](#) on maintenance programme.

The blow out preventer with associated valves and other pressure control equipment on the facility shall be subjected to a complete overhaul and shall be recertified every five years.

CHAPTER X **MONITORING OF THE EXTERNAL ENVIRONMENT**

X-I **MONITORING OF THE EXTERNAL ENVIRONMENT**

Section 49 **Cooperation on and planning of environmental monitoring**

The operators shall cooperate in the monitoring of the external environment in regions as defined in the Guidelines for environmental monitoring of the petroleum activities on the Norwegian continental shelf.

The monitoring shall be adapted to the existing pollution risk, be able to discover and map pollution of the external environment and identify development trends with respect to the condition of the environment.

Environmental monitoring of pollution from regular discharges shall comprise both sea bed habitats (the sediments, soft and hard substrate fauna) and the water column.

Provision shall be made for personnel with monitoring functions to be able to acquire and handle information on such matters efficiently at all times.

The operator shall contribute to the further development of the guidelines and relevant monitoring tools.

The Norwegian Pollution Control Authority may in specific cases impose additional requirements regarding environmental monitoring in addition to the guidelines that are applicable at the time in question.

Section 50

Remote measurement of acute pollution

Placed after [section 52c](#) and amended somewhat.

Section 51

Baseline surveys

In order to map the environmental status the operator shall carry out baseline surveys

- a) prior to exploration drilling in new and earlier not surveyed exploration areas,
- b) prior to exploration drilling in areas where the presence of particularly vulnerable environmental resources (species and habitats) has been established or where the presence of such is probable,
- c) prior to development drilling.

Baseline surveys of sediments and relevant fauna elements on the sea bed shall be conducted in accordance with the Guidelines for environmental monitoring of the petroleum activities on the Norwegian continental shelf. A baseline survey shall be valid for six years.

Section 52 a

Environmental monitoring of sea bed habitats

Plans for environmental monitoring of sea bed habitats (sediments, soft and hard substrate fauna) shall be prepared in accordance with the Guidelines for environmental monitoring of the petroleum activities on the Norwegian continental shelf and be sent to the Norwegian Pollution Control Authority by 1 February in the year the monitoring is going to take place.

Monitoring in each region shall, as a rule, be conducted every three years. The monitoring alternates between these regions. The extent of the monitoring shall be in proportion to the shelf activities taking place in the separate regions. Monitoring of new activities comes in addition to, and shall be adapted to, existing monitoring.

The samples from the regional and field specific stations shall be collected on the same trip. The regional stations shall describe the general background levels in the area containing the components that are to be monitored, and act as references for conditions expected to be normal. The field specific stations shall supply information about the condition found around the separate facilities in the region.

The operators shall, as part of the environmental monitoring, contribute to the development of new methods for monitoring sediments and substrate fauna.

The monitoring shall provide information about the vertical as well as the horizontal spread of relevant parameters.

The Norwegian Pollution Control Authority may in specific cases order other types of environmental surveys, and surveys covering other parts of the influence area, than those covered by the Guidelines for environmental monitoring of the petroleum activities on the Norwegian continental shelf.

Section 52 b

Environmental monitoring of the water column

Plans for environmental monitoring of the water column shall be prepared in accordance with the Guidelines for environmental monitoring of the petroleum activities on the Norwegian continental shelf and be sent to the Norwegian Pollution Control Authority by 1 April in the year the monitoring is going to take place.

The monitoring of the water column shall consist of two main elements, monitoring of condition and monitoring of effects. The extent of the monitoring shall be in proportion to expected risk.

The condition monitoring shall apply to fish and shall be conducted every three years. The monitoring shall document whether fish from Norwegian sea areas are affected by pollution from the petroleum activities.

The monitoring of effects shall be conducted in one region per year and shall as a minimum include fish and edible mussel.

The operators shall, as part of the environmental monitoring, contribute to the development of methods for monitoring effects in the water column. Gradually, as convenient methods for monitoring effects and long term effects of discharges are being established, a selection of these shall be applied in a more standardised programme.

The Norwegian Pollution Control Authority may in specific cases order other types of environmental surveys, and surveys covering other parts of the influence area, than those covered by the Guidelines for environmental monitoring of the petroleum activities on the Norwegian continental shelf.

Section 52 c

Reporting of monitoring results

The deadline for submitting the final reports on monitoring of sea bed habitats (sediments and fauna), base line surveys, condition monitoring and effects monitoring to the Norwegian Pollution Control Agency is 1 April in the year after said monitoring took place. Template for reporting is found in the Guidelines for environmental monitoring of the petroleum activities on the Norwegian continental shelf.

Section 52 d

Remote measurement of acute pollution

The operator shall establish a remote measurement system that provides sufficient information to ensure that acute pollution from the facility is quickly discovered and mapped so that the amount and the spread can be determined. The remote measurement system shall be seen in relation to the regional remote measurements plans as mentioned in these regulations [section 69](#) on regional emergency preparedness against acute pollution.

Section 52 e

Environmental surveys in case of acute pollution

Environmental surveys shall be implemented as soon as possible in case of acute pollution in order to identify and describe damage to vulnerable resources on the open sea, at the coast and in the shore zone.

Section 53

Follow-up surveys

Repealed.

Section 54

Characterisation of oil and condensate

If oil or condensate is found in connection with exploration activities, a characterisation of the oil or the condensate shall be carried out as soon as possible.

Oil and condensate that may be released to become acute pollution, shall be examined regularly with regard to physical and chemical parameters. If such measurements show significant changes, a new characterisation shall be carried out.

The characterisation shall be carried out with particular emphasis on disintegration properties and fate in a marine environment. The characterisation shall be adapted to the decision base which at any time is necessary to reduce risk, including effective emergency preparedness development.

X-II

EMISSION AND DISCHARGE TO THE EXTERNAL ENVIRONMENT

Section 55 a

Discharge of oil-contaminated water

Oil-contaminated water shall be cleaned before it is discharged to sea. This does not apply to displacement water.

Cleaning plants shall be operated with environmentally optimal effect even if the discharge limits, cf. third paragraph, can also be met with reduced cleaning effect. In the evaluation of what will give environmentally optimal effect, the degree of cleaning shall also be considered in relation to the use of chemicals.

The content of oil in water that is discharged shall be as low as possible, cf. the [Framework Regulations Chapter III](#) on principles relating to health, environment and safety and the [Management Regulations Section 4](#) on objectives and strategies and [Section 5](#) on internal requirements. The content of oil in water planned to be discharged to sea shall not exceed 30 mg oil per litre of water as a weighted average for one calendar month.

The operator must have permission in relation to the [Pollution Control Act, chapter 3](#) if oil contaminated water is planned to be injected.

Section 55 b

Emission to air

The operator must have a permit for emission to air issued pursuant to the [Pollution Control Act, chapter 3](#).

Section 56 a

Ecotoxicological testing of chemicals

The operator shall ensure that chemicals that are used or discharged have been tested with regard to eco-toxicological properties.

Ecotoxicological testing of substances shall be performed by laboratories that are approved in accordance with OECD's principles for good laboratory practice (GLP).

Ecotoxicological documentation in the form of OSPAR Harmonised Offshore Chemical Notification Format (HOCNF) shall exist for all chemicals that are being used. This requirement does not apply to lubricants which are not discharged and chemicals in closed systems where consumption is less than 3000 kg per facility per year, plus laboratory chemicals, dispersants and beach-cleaning agents to combat acute pollution, and to new chemicals during the period of field testing. Only part 1 and 3 of the HOCNF shall be completed for substances on the OSPAR PLONOR list.

Chemicals shall be tested for the following ecotoxicological properties:

- 1) Biodegradability

Chemicals that consist of several substances shall be tested for the individual organic substance's biodegradability. The substances shall preferably be tested in accordance with the seawater test OECD 306 "Biodegradability in Seawater". If this test is not applicable for the test substance, one of the following seawater tests shall be performed:

- Marine BODIS test (for insoluble substances), modified ISO 10708
- Marine CO₂ Headspace test, modified ISO/TC 147/SC 5/WG 4 N182

For substances known to be toxic to micro organisms (e.g. biocides), SFT must be contacted if alternative tests are planned to be used.

For substances with moderate biodegradability (equivalent to BOD₂₈ from 20 to 60%) also the properties of the degradation products shall be evaluated.

2) Bioaccumulation

Chemicals that consist of several substances shall be tested for the individual organic substance's bioaccumulation potential. This requirement applies to substances with a molecular weight below 700 g/mol. The substances shall be tested according to OECD 117 "Partition Coefficient (n-octanol/water), High Performance Liquid Chromatography (HPLC) Method" or OECD 107 "Partition Coefficient (n-octanol/water): Shake Flask Method". For substances where standardised tests are not applicable, as for surfactants, a calculation or a scientific evaluation of the bioaccumulation potential shall be performed. Scientific evaluations shall be documented and preferably be performed by an independent party.

3) Acute toxicity

Inorganic and organic chemicals shall be tested for acute toxicity at substance level. The requirement does not apply to substances/preparations on OSPAR's PLONOR list.

The following toxicity tests are required:

- *Skeletonema costatum*, ISO 10253
- *Acartia tonsa*, ISO 14669
- *Scophtalamus maximus*; Part B in the OSPAR Protocols on Methods for the testing of Chemicals Used in the Offshore Oil Industry, 2006. *Cyprinodon variegatus* is accepted as an alternative species.
- *Corophium*; Part A in the OSPAR Protocols on Methods for the Testing of Chemicals Used in the Offshore Oil Industry, 2006. Required if the chemicals absorb to particles ($K_{oc} > 1000$) and/or sink and end up in the sediments (e.g. surfactants)

Toxicity tests of fresh water organisms can be accepted if results from marine tests are not available, and they have been performed according to standardised methods.

Fish tests are not required if the chemical is

- inorganic and with a toxicity to the other test organisms of EC₅₀ or LC₅₀ • 1 mg/l
- organic and with a toxicity to the other test organisms of EC₅₀ or LC₅₀ • 10 mg/l.

Section 56 b

Categorization of chemicals

The operator shall categorise chemicals according to the ecotoxicological properties of the substances. This applies to all chemicals with documentation in the form of a HOCNF.

Substances are categorised as follows:

1) Black category

Black category consists of chemicals on the following lists:

- Prioritized list of White Paper No. 21 (2004-2005)

- OSPAR List of Chemicals for Priority Action, ref. OSPAR Strategy with regard to Hazardous Substances

In addition, substances with the following ecotoxicological properties are categorized as black:

- Substances that have both a low biodegradability ($BOD_{28} < 20\%$) and a high bioaccumulation potential ($\log P_{ow} \bullet 5$)
- Substances that have both a low biodegradability ($BOD_{28} < 20\%$) and a high acute toxicity (EC_{50} or $LC_{50} \bullet 10$ mg/l)
- Substances that are detrimental in a mutagenic or reproductive way

2) Red category

Red category consists of substances with the following ecotoxicological properties:

- Inorganic substances which are acute toxic (EC_{50} or $LC_{50} \bullet 1$ mg/l)
- Organic substances with a low biodegradability ($BOD_{28} < 20\%$)
- Substances that meet two of the three following criteria:
 - Biodegradability equivalent to $BOD_{28} < 60\%$
 - Bioaccumulation potential equivalent to $\log P_{ow} \bullet 3$ and molecular weight < 700 or
 - Acute toxicity of EC_{50} or $LC_{50} \bullet 10$ mg/l

3) Yellow category

Yellow category consists of substances that from the ecotoxicological properties of the substances shall not be categorized as red or black, and that are not defined as PLONOR substances

4) Green category

Green category consists of substances on the OSPAR PLONOR list

Section 56 c

Environmental assessments

The operator shall perform holistic evaluations of the chemicals' potential of causing environmental damage based on the chemicals' intrinsic properties, time, place and amounts of discharge, and also other conditions of significance for the risk. These evaluations shall be performed:

- Before new chemicals are used
- When entering into new chemical contracts
- Minimum every three years for chemicals in green and yellow category
- Annually for chemicals in red and black category

The environmental evaluations shall be documented.

The operator shall have plans for substitution of chemicals in the red and black category. The plans shall give a description of which chemicals are prioritized to be replaced, and when this can take place. The plans shall be reported to SFT annually in accordance with the existing reporting requirements. The requirement also applies to chemicals in the yellow category with degradation products assumed to be hazardous to the environment.

Section 56 d

Choice of chemicals

The operator shall choose the chemicals which according to the environmental evaluations poses the lowest risk of harming the environment. Chemicals in the red and black category shall only be chosen if they are necessary for technical and safety reasons.

Section 57

Use and discharge of chemicals

The operator must have permission pursuant to the [Pollution Control Act, chapter 3](#) to use and to discharge chemicals and to inject chemicals or water containing chemicals.

Unused chemicals shall not be discharged to sea, cf. [regulations of 1 June 2002 no. 931 relating to limitation of pollution](#) (Norwegian only) chapter 22, on dredging and dumping to sea and rivers.

Chemicals shall be stored in a safe and prudent way.

Use and discharge of chemicals shall be reduced as much as possible.

The operator shall use chemicals with as little contamination from other substances as possible.

Field-testing of chemicals as alternatives for chemicals covered by the permit pursuant to the Pollution Control Act or testing of chemicals within new areas of use that are not included in the permit, is allowed. Such field-testing shall not last longer than 14 days and at the same time the total amount of chemicals used shall not exceed 50 kilogram of substances which are presumed to be categorised in red category. Chemicals which are presumed to be categorised in black category, and tracers, shall not be tested in the field.

Before it is decided at what time larger amounts of water containing chemicals from pipelines are to be discharged, relevant expertise shall be consulted.

Section 58

Chemicals for emergency preparedness

If the operator plans to keep chemicals in readiness for safety reasons, an inventory of these shall be available. The operator shall also have directions for when the chemicals for emergency preparedness are to be used, and what quantities may be used. The guidelines shall be based on risk analyses, cf. the [Management Regulations Chapter IV](#) on analyses.

Section 59

Discharge of cuttings, sand and solid particles

Cuttings from drilling and well activities, sand and other solid particles shall not be discharged to sea if the oil content of formation oil, other oil or base fluid in organic drilling fluid is more than ten grams per kilogram of dry matter.

The operator must have permission in relation to the [Pollution Control Act, chapter 3](#) if material such as cuttings, sand and solid particles is planned to be injected.

Section 60

Discharge from formation testing and cleanup of wells

Oil or oily water from well testing or from cleanup of wells shall not be discharged into the sea unless the discharge is cleaned, cf. [Section 55](#) on discharge of oil-contaminated water. This does not apply to testing or cleanup of exploration wells from facilities without water treatment equipment. The operator shall do an overall assessment to ensure that the best possible environmental solution for the facility is chosen.

Formation testing shall be carried out with the least possible strain on the external environment. Flaring of hydrocarbons shall be avoided to the extent this is possible.

The operator must have permission in relation to the [Pollution Control Act, chapter 3](#) if the well flow is intended to be injected.

Section 61

Measuring the quantity of discharged oil, other substances and water

The content of oil and other substances in the discharges shall be measured. Other substances mean substances for which there are reporting requirements, cf. the Norwegian Pollution Control Agency's Guidelines for reporting from offshore petroleum activities. The results from the measurement shall inter alia be used to verify the performance of the treatment system.

The frequency of measuring, the discharge parameters and the measuring methods shall be documented.

The programme for data collection shall be set up so that the extent of the measuring is sufficient in relation to the purpose, in order to ensure representative and comparable measurements.

Analyses shall be carried out in a systematic and standardised manner. Analyses of oil content in water shall be carried out according to OSPAR's method of reference for the determination of oil in water (OSPAR reference no. 2005-15, which is a modification of ISO 9377-2) or analysis methods calibrated against this standard.

With regard to drain water, displacement water and injected oily water, the quantity of water and the oil content shall be measured, calculated or estimated.

Section 62

Measuring associated fluids discharged with solids

The party responsible shall measure the quantity of organic drilling fluid and oil discharged with solids.

X-III

WASTE

Section 63

Waste

The operator shall to the extent possible avoid generation of waste.

The waste generated in connection with the activities shall be handled in an environmentally and hygienically adequate manner.

Waste oil may be added to the production flow. The operator must have permission in relation to the [Pollution Control Act, chapter 3](#) if waste oil is intended to be injected.

Solid waste shall not be thrown overboard. The operator shall prepare a plan for treatment of waste.

CHAPTER XI

EMERGENCY PREPAREDNESS

XI-I

GENERAL REQUIREMENTS TO EMERGENCY PREPAREDNESS

Section 64

Establishing emergency preparedness

The operator or the one responsible for the operation of a facility shall prepare a strategy for emergency preparedness against situations of hazard and accident, cf. also [Section 7](#) on the duties of the health service, litera c. The emergency preparedness shall be established on the basis of results from risk and preparedness analyses as mentioned in the [Management Regulations Section 15](#) on quantitative risk analyses and emergency preparedness analyses and [Section 16](#) on environmentally oriented risk and emergency preparedness analyses, the defined situations of hazard and accident and the performance criteria applicable to the barriers, cf. the [Management Regulations Section 2](#) on barriers.

The emergency preparedness against acute pollution shall provide for protection of ocean, coast and shore zones. Sufficient time in advance of planned start-up of an activity that may entail pollution or danger of pollution, the operator shall submit a summary of the results from the environmentally oriented risk and emergency preparedness analyses, together with a description of how the planned preparedness against acute pollution has been provided for. Where the emergency preparedness is associated with activities as mentioned in the [Information Duty Regulations Section 5](#) on requirement on consent to certain petroleum activities, the [Information Duty Regulations Section 6](#) on contents of application for consent shall apply.

The Norwegian Pollution Control Authority may in particular cases stipulate further requirements with regard to the establishment of this emergency preparedness.

Section 65

Joint use of emergency preparedness resources

In co-operation on joint use of the emergency preparedness resources of different operators as mentioned in the [Framework Regulations Section 30](#) on co-operation on emergency preparedness, second paragraph, the co-operation shall be regulated by agreement and the emergency preparedness shall be based on area specific emergency preparedness analyses, cf. also these regulations [Section 69](#) on regional emergency preparedness against acute pollution.

When using vessels and mobile facilities registered in a national shipping register, the operator shall co-ordinate his own emergency preparedness plans and those of the contractors, cf. the [Framework Regulations Section 29](#) on co-ordination of emergency preparedness, first paragraph.

The operator shall ensure that the emergency preparedness is co-ordinated with the public rescue service and the rest of the health service of the country, so that the chain of action in respect of rescued, sick or injured personnel is coherent and professionally adequate, cf. the [Framework Regulations Section 29](#) on co-ordination of emergency preparedness, second paragraph.

Section 66

Emergency preparedness organisation

The emergency preparedness organisation shall be robust so as to be capable of handling situations of hazard and accident effectively.

In the event of acute pollution the emergency preparedness organisation shall provide the necessary functions to be capable of implementing actions against acute pollution effectively.

Section 67

Emergency preparedness plans

Emergency preparedness plans shall be prepared which at all times describe the emergency preparedness and contain action plans in respect of the defined situations of hazard and accident.

XI-II

EMERGENCY PREPAREDNESS ACTIONS IN SITUATIONS OF HAZARD AND ACCIDENT

Section 68

Handling of situations of hazard and accident

The party responsible shall ensure that necessary actions are taken as quickly as possible in the event of situations of hazard and accident so that

- a) the right alert is given immediately, cf. also the [Facilities Regulations Section 17](#) on systems for internal and external communication and the [Activities Regulations Section 52 d](#) on remote measurement of acute pollution,
- b) situations of hazard do not develop into situations of accidents. In the event of situations of accident, combating actions shall be taken. Combating actions to limit acute pollution shall be taken as close to the discharging source as possible,
- c) personnel can be rescued in situations of accident, cf. also the [Facilities Regulations Section 40](#) on equipment for rescue of personnel,
- d) the personnel on the facility can be quickly and efficiently evacuated at all times, cf. also the [Facilities Regulations Section 43](#) on means of evacuation,
- e) the condition can be normalised when the development of a situation of hazard and accident has been stopped, inter alia by monitoring and cleanup of the pollution and restoring the environment, and thereby restore the condition to the state existing before the situation of hazard and accident occurred. Criteria shall be defined in respect of normalisation of the external environment.

XI-III EMERGENCY PREPAREDNESS AGAINST ACUTE POLLUTION

Section 69

Regional emergency preparedness against acute pollution

The regional emergency preparedness against acute pollution as mentioned in the [Framework Regulations Section 30](#) on co-operation on emergency preparedness shall be regulated by agreement and shall at all times provide for and be updated in relation to the environmental risk represented by the facilities in the region.

Regional plans for remote measurement of acute pollution on the open sea, at the coast and in the shore zone shall be established. The operators shall contribute to further development of relevant remote measurement tools.

In the case of new activities the operator shall take action, if necessary, in relation to the regional emergency preparedness, in order to ensure that the activity does not lead to unacceptable risk. .

Section 70

Action against acute pollution

In the case of action taken against acute pollution there shall as soon as possible be produced a plan for implementation of the action. The first version of the plan shall be ready at the latest one hour after the executive management group for the action has been established. The plan shall be sent to the Norwegian Coastal Administration and updated regularly through all the phases of the action.

The action shall not be concluded until the objectives have been achieved, and this has been documented.

CHAPTER XII COMMUNICATION

Section 71

Communication

At all times during installation and operation, as well as in situations of hazard and accident, the necessary internal and external alerts and communication shall be ensured, cf. the [Facilities Regulations Section 17](#) on systems for internal and external communication, and [Section 18](#) on communication equipment.

A person shall be designated on board to be responsible for the communication systems on manned facilities.

CHAPTER XIII DRILLING AND WELL ACTIVITIES

Section 72

Well programme

Prior to starting well activities, a programme shall be prepared with describes the individual activities to be carried out and the equipment to be used, cf. also the [Facilities Regulations Section 9](#) on plants, systems and equipment.

The programme shall be updated as mentioned in [Section 18](#) on start-up and operation of facilities, second paragraph litera b.

Section 73

Well location and well path

Well location and well path shall be known at all times and chosen on the basis of well parameters of importance to a safe drilling and well activity. In addition it shall be possible to drill a relief well from two alternative locations. The locations shall be mapped and known in advance, cf. also [Section 27](#) on planning.

If the distance to adjacent wells is less than the defined minimum distance, limitations shall be imposed, cf. also [Section 26](#) on simultaneous activities, first paragraph.

Section 74

Shallow gas and shallow formation fluids

The party responsible shall ensure that necessary actions have been planned and can be taken to handle situations of shallow gas or other formation fluids, cf. also [Section 73](#) on well location and well path.

When drilling in shallow formations, choice of well structure and drilling parameters shall prevent gas or formation fluid from the well from representing a hazard to personnel and facility.

Section 75

Monitoring of well parameters

During all drilling and well activities drilling and well data shall be collected to verify the well prognoses, in order that necessary actions may be taken and the well programme may be adjusted if necessary.

Section 76

Well barriers

During drilling and well activities there shall be tested well barriers of sufficient independence, cf. also the [Facilities Regulations Section 47](#) on well barriers.

If a barrier fails, no other activities shall take place in the well than those intended to restore the barrier.

When wells are handed over, the status of the barriers shall be tested, verified and documented.

Section 77

Well control

If well control is lost, it shall be possible to regain the well control by direct intervention or by drilling a relief well.

An action plan shall be produced describing how the lost well control can be regained.

Section 78

Controlled well flow

Operational limitations shall be set in relation to controlled well flow.

Section 79

Securing of wells

All wells shall be secured before they are abandoned so that well integrity remains intact during the time they are abandoned, cf. the [Facilities Regulations Section 47](#) on well barriers. With regard to subsea completed wells the well integrity shall be monitored if the wells are planned to be abandoned for more than twelve months.

It shall be possible to control the well integrity by reconnection to temporarily abandoned wells.

It shall not be planned to leave radioactive sources behind in the well. If the radioactive source cannot be removed, it shall be left behind in a secure manner.

Section 80

Remote operation of pipes and work strings

Remote-operated systems shall be used for handling of pipes and work strings, cf. [Section 31](#) on arrangement of work and the [Facilities Regulations Section 70](#) on lifting appliances and lifting gear.

Limitations shall be set for the access of personnel to the work area of remote-operated systems.

There shall be visual contact and radio communication between personnel when remote-operated pipe handling systems are in use, cf. [Section 83](#) on lifting operations, second paragraph.

CHAPTER XIV MARINE OPERATIONS

Section 81 Positioning

During conduct of marine operations, the party responsible shall take necessary actions so that those who take part in the operations, are not injured, and so that the probability of situations of hazard and accident is reduced.

Requirements shall be set to maintaining position in respect of vessels and facilities during implementation of such operations, and criteria shall be set for start up and suspension of activities, cf. the [facilities regulations section 64](#) on anchoring, mooring and positioning.

CHAPTER XV ELECTRICAL INSTALLATIONS

Section 82 Work on and operation of electrical installations

During work on live electrical systems, work near installations connected to an electrical power source, work in or close to earthed and short-circuited installations and during operation of low and high voltage installations, necessary actions shall be taken so that those who carry out the work, are not injured, and so that the probability of situations of hazard and accident is reduced, cf. [Section 28](#) on actions during conduct of activities and [Section 40](#) on use of work equipment.

The operator shall appoint a person to be responsible for the electrical installations.

CHAPTER XVI LIFTING OPERATIONS

Section 83 Lifting operations

Lifting operations shall be cleared, lead and conducted in a safe manner and it shall be ensured, inter alia, that personnel do not come under suspended loads, cf. [Section 28](#) on actions during conduct of activities. Cf. also [Chapter VII](#) on planning and conduct of activities and [Section 40](#) on use of work equipment.

Everyone participating in lifting operations, shall have a radio to communicate with, cf. [the facilities regulations Section 17](#) on systems for internal and external communication, and the radio shall be used unless everyone involved can communicate clearly with each other by direct speech. The party responsible shall ensure that all communication takes place in a clear and unambiguous way and without disturbance.

The party responsible shall also ensure that lifting operations with transfer of personnel are approved by the management of the facility individually, if offshore cranes are used for such lifting operations.

CHAPTER XVII MANNED UNDERWATER OPERATIONS

Section 84 Manned underwater operations

Operational actions shall be taken during manned underwater operations, so that those who take part in the operations, are not subjected to injury or illness, and so that the probability of mistakes that can

result in situations of hazard and accident, is reduced. Cf. [Chapter VII](#) on planning and conduct of activities.

Section 85

Provisions relating to time periods

The following provisions relating to time periods shall apply with regard to manned underwater operations:

a) stays at working depth:

in the case of diving down to 250 meters, the stay at working depth shall not exceed 14 days. With regard to deeper diving the stay at working depth shall not exceed 10 days,

b) the time between saturation periods:

the time between saturation periods shall be at least equal to the duration of the preceding saturation period. In the case of diving deeper than 250 meters, the time between saturation periods shall be at least twice the duration of the last saturation period,

c) bell run:

in the case of diving down to 200 meters, the bell run shall not exceed 8 hours. With regard to deeper diving the bell run shall not exceed 6 hours. If the divers are in the dry in a submerged habitat, the bell run may be extended to 8 hours. A bell run shall be calculated from the time when depressurisation of the lock between the bell and the compression chamber is commenced (and the divers in the bell consequently do not have access to the chamber complex), and until the bell again has been connected to the chamber complex and the pressure in the lock has been equalised (so that the divers again have access to the chamber complex).

d) Time in water:

in the case of diving down to 200 meters, the diver shall not be in the water more than 4 hours in the course of a twelve hour period. With regard to a three -man bell run the time in the water may be extended to 6 hours provided:

1) the diver returns to the diving bell in the course of the third or fourth working hour in the water for a break of at least 30 minutes with the diving helmet off. The bell break shall be entered in the log,

2) the diver has a “dry day” as standby diver in the bell at least every third day. In the case of diving deeper than 200 meters, the diver shall not be in the water more than 3 hours in the course of a twelve-hour period,

e) use of breathing mask:

after a maximum of 4 hours, divers using breathing mask in the submerged habitat shall have a rest period in an atmosphere that does not require the use of a breathing mask,

f) recompression following submerged operations:

After completed saturation period, divers shall have immediate access to therapeutic recompression for a minimum of 24 hours following completed decompression. In the case of surface oriented diving divers shall have immediate access to therapeutic recompression for a minimum of 12 hours following completed decompression,

g) work free period for work under increased pressure:

divers working in water or working or under increased ambient pressure shall in the course of a twenty-four hour period have a continuous work free period of at least 12 hours. Work and rest periods shall be specified in a shift program and shall be planned at regular hours,

h) surface personnel in direct communication with divers in the water:

surface personnel in direct communication with divers in the water shall not have this function for more than 4 consecutive hours without a break. Total time for this function shall be limited upwards to 8 hours in the course of a twelve-hour period.

**CHAPTER XVIII
ENTRY INTO FORCE**

**Section 86
Entry into force**

These regulations enter into force on 1 January 2002.

