

Guidelines to Regulations regarding health requirements for persons working on installations in petroleum activities offshore (including health requirements for commercial divers)

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Foreword

With effect from 01.01.2011, the Norwegian Directorate of Health has established new [Regulations regarding health requirements for persons working on installations in petroleum activities offshore](#), FOR-2010-12-20 no. 1780. These replace no. 1164 of 12.11.1990 on health requirements for workers in petroleum activities. The intention is to prevent persons from representing a danger to themselves or to others or to the safe operation of the installation as a consequence of their health status.

The regulations set out a number of main, general requirements regarding health. In addition, they describe a number of specific health requirements of a functional nature. The Directorate of Health is required to provide detailed rules concerning medical examinations and guidelines concerning the health requirements, cf. [Regulations, Section 2](#). There is compliance with these in these guidelines, which also provide some guidance in respect of giving dispensation from the health requirements. The first edition was published in February 2011.


In the preparatory stage we benefited substantially from a report from a professional group, Oljeindustriens Landsforening [*The Norwegian Oil Industry Association - OLF*], which was drafted together with the Directorate of Health. The guidelines were otherwise drawn up in accordance with national practice and administrative practice in previous dispensation cases.

These updated guidelines contain a number of changes resulting from experiences over the previous four years.

The initial guidelines addressed only petroleum workers. The regulations also address offshore divers. The biggest change now is that the additional requirements for divers, health requirements that are in addition to the offshore requirements, have been incorporated in the guidelines. The health requirements for inshore divers under the Norwegian Labour Inspection Authority's legislation are not specified in separate regulations. The Norwegian Directorate of Health and the Norwegian Labour Inspection Authority therefore find it natural that the requirements with which diving doctors must comply should still be in common guidelines. From 01.01.2015, IK-2708 *Retningslinjer for helseundersøkelse av yrkesdykkere* [*Guidelines for health examinations for commercial divers*] is repealed.

In the work on requirements for divers, we have received valuable assistance from Jan Risberg, chairperson of the AppealBoard. We have received a report from Norsk senter for dykkemedisin [*Norwegian Center for Diving Medicine*] and have collaborated with the Norwegian Labour Inspection Authority.

Queries concerning the Regulations or the Guidelines should be directed to Norwegian Directorate of Health, Department for Minority Health and Rehabilitation.



Bjørn Guldvog
Director General of Health

1 Introduction

It is important that persons who are to work on installations in petroleum activities offshore, potentially performing commercial diving as part of or outside petroleum activities, are medically fit to do so. If the person in question has a health deficiency, this may represent a danger to safe operation of the installation. Under the specific conditions that prevail offshore, they may also represent a danger to themselves or to others. There has therefore been for many years a "health requirement for persons in petroleum activities", cf. regulations of 12.11.1990 no. 1164, and for commercial divers, cf. *IK-2708 August 2000 Retningslinjer for helseundersøkelse av yrkesdykkere [Guidelines for health examinations for commercial divers]*.

It has subsequently been found necessary to revise the original regulations. Following lengthy work, completely new regulations for workers in petroleum activities at sea were established in December 2010. These are based on the regulations from 1990 and on experience of putting these into practice, including the dispensation practice established by the County Governor of Rogaland and the Appeal Board. No general restrictions were envisaged, but on the contrary there is a degree of liberalisation in the new regulations since dispensation can now be given in special cases where previously there had been an absolute prohibition against this. The matter of substantial changes to the regulations themselves has not arisen as yet, but some changes have been made in these updated guidelines based on experiences over the last four years.

The most important change to the guidelines is the additional requirements for divers, which have now been incorporated. As of 01.01.2015 *IK-2708 Retningslinjer for helseundersøkelse av yrkesdykkere [Guidelines for health examinations for commercial divers]* issued by the Norwegian Board of Health Supervision in August 2000 is repealed.

For many years it has been a requirement that medical certificates for divers can only be issued by authorised diving doctors. As of 01.01.2014 medical certificates for offshore workers can only be issued by authorised (certified) petroleum doctors.

The medical certificate must be general and allow the person in question to work anywhere in petroleum activities at sea. Some employers may have stricter health requirements for certain work operations. Additional requirements are applicable to commercial divers on a number of points. When it is considered appropriate or necessary in respect of the worker's health, the doctor may set a term of validity shorter than the usual two years or one year. The doctor may not issue other requirements or restrictions. If a general medical certificate is not issued, a certificate of medical unfitness (declaration of unfitness) must be issued. The applicant may submit the doctor's decision to the County Governor of Rogaland for re-examination. The County Governor of Rogaland may grant dispensation from the health requirements and impose conditions in so doing. An appeal against the County Governor of Rogaland's decision can be submitted to an Appeal Board appointed by

the Norwegian Directorate of Health.

Individuals holding medical certificates for commercial diving at sea do not require additional ordinary (topside) medical certification when travelling offshore in order to take part in diving operations.

Norwegian medical certificates are used in various countries and for various types of operations. The health requirements described in these guidelines are intended for petroleum activities at sea in Norway, and they do not describe any additional requirements that may be set for individuals, for example when working in tropical areas or in the offshore wind power industry.

Pursuant to section 20 of the *Helsekravforskriften* [*health requirement regulations*], in December 2012 the County Governor of Rogaland (FMRO) approved medical certificates (without restrictions) for working offshore from the UK and the Netherlands as equivalent to Norwegian medical certificates. In January 2013, FMRO approved medical certification for diving offshore issued in the UK and the Netherlands as being equivalent to Norwegian medical certification.

Although the health requirements for inshore divers are identical to those for divers at sea, the administrative routines are somewhat dissimilar for these medical certificates. Medical certification for inshore commercial divers examined in accordance with *Forskrift om utførelse av arbeid* [*Regulations on the performance of work*] cannot be brought before the County Governor of Rogaland or be the subject of appeal to an Appeal Board. These guidelines describe the administrative routines for medical certificates which may be the subject of appeals.

Information about the medical certificates, dispensations and the Appeal Board is available on the County Governor of Rogaland's website: [County Governor of Rogaland offshore](#).

2 Definitions and explanation of terms

2.1 Definitions in the regulations

The regulations refer to a number of specialised terms and expressions. These are defined in [Section 3](#):

Certificate of medical fitness: Certificate from a petroleum doctor, cf. Section 6, stating that a person has been examined in accordance with the regulations, cf. guidelines, and considered to satisfy the health criteria therein.

Certificate of medical unfitness: Certificate from a petroleum doctor, cf. Section 6, that a person has been examined in accordance with the regulations, cf. guidelines, and considered not to satisfy the health criteria therein.

Petroleum doctor: Doctor who is authorised to issue certificates of medical fitness and unfitness in accordance with these regulations for persons who do not work under raised ambient pressure.

Diving doctor: Doctor who is authorised to issue certificates of medical fitness and unfitness in accordance with these regulations for persons who work under raised ambient pressure.

Manned underwater operation: Activity in which people are submerged and/or exposed to raised ambient pressure.

Petroleum activities: All activities associated with subsea petroleum deposits, including exploration, exploratory drilling, production, transportation, utilisation and decommissioning, including planning of such activities, but not including, however, transport of petroleum in bulk by ship, cf. the Petroleum Activities Act, section 1-6 letter c.

Operator: Anyone executing on behalf of the licensee the day-to-day management of petroleum activities cf. the Petroleum Activities Act, section 1-6 letter k.

Supplier: Anyone who, in accordance with a contract with an operator or other suppliers, carries out activities in or in connection with petroleum activities.

3 Principles for issuing offshore medical certificates and medical certificates for commercial divers

3.1 Purpose

The purpose of [FOR-2010-12-20 nr. 1780](#) *Forskrift om helsekrav for personer i arbeid på innretninger i petroleumsvirksomheten til havs* [*Regulations regarding health requirements for persons working on installations in petroleum activities offshore*] (referred to in the following as the *Health requirement regulations*) is to contribute to persons working on installations in petroleum activities offshore and those who conduct offshore commercial diving operations not representing a danger to themselves or to others, or to the safe operation of the installation because of the condition of their health.

[FOR-2011-12-06 nr. 1357](#) *Forskrift om utførelse av arbeid, bruk av arbeidsutstyr og tilhørende tekniske krav* [*Regulations on the performance of work, use of work equipment and associated technical requirements*] (referred to in the following as *Regulations on the performance of work*) likewise sets out requirements in terms of the state of health of persons who conduct inshore diving. The requirements are identical in practice. These health requirements, with which the diving doctor must comply, have been incorporated in the guidelines.

3.2 Scope

These regulations apply to health requirements for persons working on and persons staying on installations in petroleum activities offshore that are included in the scope of the Petroleum Activities Act. The regulations also issue health requirements for persons who work under raised ambient pressure (divers).

The Directorate of Health may provide detailed rules concerning medical examinations and guidelines concerning the *Health requirement regulations*. The Norwegian Labour Inspection Authority fulfils a similar role for medical examinations covered by *Regulations on the performance of work*.

In special cases where it is defensible in terms of safety, the operator may exempt, fully or in part, persons who do not work for the operator from the provisions of these regulations. The operator shall have an overall view of such exemptions and the reasons for them.

3.3 Period of validity

As of 01.01.2014, a doctor who is to issue a medical certificate in accordance with the regulations must be authorised (certified) as a petroleum doctor or a diving doctor.

A medical certificate for diving is valid for a period of up to one year, and a medical

certificate for any other worker in petroleum activities is valid for up to two years. Employers and operators may require the presentation of a new medical certificate if there is reason to believe that there is non-fulfilment of the health requirements, cf. section 16 of the *Health requirement regulations* and sections 26-42 of the *Regulations on the performance of work*. The worker must be provided with written justification of the requirement.

3.4 Administrative procedures

The petroleum doctor or diving doctor shall verify the person's identity before the examination commences. The most recently issued medical certificate must be presented. The person to be examined shall be advised that he or she is obliged to provide as complete information as possible about the state of his or her health, and shall provide a health self-declaration on the designated form. The self-declaration shall be signed in the presence of the petroleum doctor or diving doctor and be retained by this doctor. The self-declaration shall confirm that, in signing the declaration, the person consents to the petroleum doctor or diving doctor obtaining such health information as is necessary in order to ensure a proper assessment.

The petroleum doctor and diving doctor shall obtain such information about the person's state of health, working conditions and duties as is required in order to reach a decision on whether a medical certificate can be issued. With regard to health matters, information and statements may be obtained from other doctors or health authorities, but only to the extent necessary for proper examination and assessment. The main findings, assessment and conclusion shall be noted on the designated form or an equivalent electronic documentation system. This shall be kept, together with other relevant material, in the person's medical records.

The petroleum doctor/diving doctor is an expert in this case and not a treating physician. If the doctor has any relevant information which the applicant is withholding or does not want to be used, the doctor must reject the application and not complete the medical certificate.

If the petroleum doctor or diving doctor receives information that is of significance for the case, this information shall be presented to the person who is being examined.

Following the medical examination, if the petroleum or diving doctor finds that a person satisfies the health requirements imposed in or pursuant to the regulations, the doctor shall immediately issue a medical certificate on the designated form.

The petroleum and diving doctor may restrict the period of validity, taking into account the applicant's health situation.

Following the medical examination, if the petroleum or diving doctor finds that a person does not satisfy the health requirements pursuant to these regulations, the doctor shall issue a certificate of medical unfitness on the designated form. For further procedures, see Section 17.

Copies of the above-mentioned forms are treated as part of the person's medical records and kept in accordance with the regulations regarding patient records.

The forms mentioned in the regulations are prepared by the County Governor of

Rogaland and the Norwegian Directorate of Health jointly. The Norwegian Labour Inspection Authority may issue further rules concerning which forms are to be used and concerning the registration of medical certificates for divers who have been examined in accordance with the *Regulations on the performance of work*. Unless otherwise specifically determined, the Norwegian Directorate of Health's forms for divers issued in accordance with *the Health requirement regulations* can also be used for examining divers in accordance with *Regulations on the performance of work*.

4 Professional requirements for the examining doctor (certification)

4.1 Qualification requirements for examining doctors

As of 01.01.2014, the medical certificates must be issued by specially authorised (certified) doctors, these being petroleum doctors and diving doctors. The Norwegian Directorate of Health has laid down curricula for training petroleum doctors and diving doctors, in addition to requirements for course organisers. The doctor must have general authorisation in the country in which he or she works, and must also have verbal and written proficiency in a Scandinavian language or in English. The training concludes with an exam, which the doctor must pass in order to gain authorisation. Following delegation from the Norwegian Directorate of Health, the County Governor of Rogaland (FMRO) grants authorisation to petroleum doctors for up to 5 years, and to diving doctors for up to 3 years. The County Governor of Rogaland keeps a public register of approved doctors.

Diving doctors must also be authorised as petroleum doctors. Courses in diving medicine may be completed before the course in petroleum medicine, but in order to obtain authorisation as a diving doctor, the petroleum doctor's course must be completed within 3 years of completion of the diving medicine course. If this deadline is missed, another basic course in diving medicine must be completed.

Doctors who examine divers in accordance with the *Regulations on the performance of work* must be authorised as diving doctors in accordance with the Health requirement regulations (by the County Governor of Rogaland).

4.2 Re-certification

In order to be re-certified as a petroleum doctor or diving doctor, the doctor is required to complete a compulsory update course and pass an examination. The purpose of this post-professional training is to ensure that the doctor maintains a professionally correct level of expertise (knowledge and skills). Curricula have been set for the update courses. The update course must be completed within the final 12 months before renewed authorisation. Diving doctors requiring re-certification may retain authorisation as petroleum doctors. Renewal of authorisation also requires that the doctor has not demonstrated inaptitude in performance of the duties of a petroleum doctor or diving doctor.

Authorisation as a petroleum doctor or diving doctor must be revoked if the doctor no longer satisfies the conditions set out in the Health requirement regulations, such as loss of authorisation. Approval may also be revoked if the doctor fails to perform his duties in accordance with these regulations in a satisfactory manner.

5 General requirements for the medical examination and the health certificate

5.1 General requirements

The purpose of the health requirement regulations is to contribute to persons working on installations in petroleum activities offshore or conducting offshore commercial diving not representing a danger to themselves or to others or to the safe operation of the installation because of the condition of their health. If the health requirements in the regulations are met, the applicant will be issued with a medical certificate for work offshore, or allowing the applicant to carry out commercial diving. Besides meeting the main, general requirements, the applicant is required to satisfy the specific health requirements set out in the following sections.

The *general health requirements* are:

- Be inappropriate physical and mental condition to cope with living and working on the installation and with an evacuation situation
- be able to work safely offshore
- not have a condition that could lead to alarms not being registered
- not have a disorder that, due to lack of necessary medication or for other reasons, could lead to a serious danger to the health and safety of him or herself or others.

Living and working on installations in petroleum activities offshore for an extended period of time may pose special challenges, including for persons at no demonstrable medical risk. This is compounded by the challenge of being able to evacuate from a helicopter or an installation in an emergency. The person must also not have a medical condition entailing a high risk of requiring emergency medical treatment that cannot be provided offshore. With regard to essential medicines, the doctor must inform the worker of the importance of bringing sufficient medicines and aids to last for an unanticipated extended stay on the installation. The worker must inform the health service on board.

Persons who must have technical medical equipment should be informed that the equipment may be affected by electromagnetic fields, and some types of equipment may also entail a risk of explosion.

The requirement that the worker must be able to work properly at sea in terms of safety means that the person in question must be able to be in areas where work is being done that is critical in terms of safety (control room, drilling deck, work areas for cranes/hoists) without presenting a risk to himself/herself or to others. The worker must be able to register safety-critical information (visually, acoustically) and must not have a health deficiency that restricts his or her ability to react to such information. The worker must be able to work shifts/nights, though the employer may exempt the person in question from such work.

As previously mentioned, a general medical certificate must be issued, which allows the person in question to work anywhere on an installation and/or conduct commercial diving. Where medical grounds exist, the petroleum doctor/diving doctor may set a period of validity of less than two years/one year, though the doctor cannot restrict the validity of a medical certificate in any other way. This can however be done by the County Governor of Rogaland under dispensation, or by the Appeal Board as part of its appeals procedure.

On examination in response to the first request by the person in question, a thorough medical history is particularly important. Additional health information should also be obtained if possible. There are only requirements that colour vision must be investigated as part of the first examination, but health requirements and scope of examination are otherwise identical to the first examination and subsequent renewals of the medical certificate. Note that for certain conditions, a specialist statement is required.

Some functions and tasks set stricter requirements in terms of health than those set out in these guidelines. It is the employer's responsibility to describe such health requirements and to obtain expanded medical certificates where necessary. (General industry requirements have been drawn up for certain job categories).

5.2 Additional requirements for divers

Divers shall satisfy the general health requirements for workers in petroleum activities. In addition, there shall not be any illness, injury or physical defect that might represent a safety risk in connection with diving. *The Health requirement regulations* state that workers must be able to work properly and safely at sea. This must be understood such that divers must be able to safeguard their own safety and that of others in normal work situations and emergency situations when conducting manned underwater operations.

When assessing the suitability of divers in terms of health, the diving doctor must take into account the special challenges in the diver's working environment. Raised ambient pressure and increased gas density, change in environmental pressure, change in partial pressure of metabolic and inert gasses, thermal stress, isolation and changed microbiological environment are just some of a long list of working environment factors that affect the diver. The diving doctor must take into account that the diver has a critical emergency response role if a fellow-diver falls ill/is injured and that opportunities for getting qualified medical assistance may be greatly reduced in diving of this kind. Temporary loss of alertness and of cognitive, mental and physical performance, which may be compatible with certain types of work on the surface, will as a rule be incompatible with work underwater.

The diving doctor is able only to limit the period of validity of the medical certificate. If the diver is not medically fit to carry out all types of diving, or his or her health condition justifies other types of restrictions in the medical certificate, the diving doctor must issue a certificate of medical unfitness. See Section 17.3. The diving doctor should therefore take account of the fact that the medical certificate must be valid for all diving – including for diving techniques for which the diver is not qualified at the time of the examination.

Some health conditions can be considered to represent a risk in the case of saturation diving while being acceptable for surface-orientated diving. With saturation diving, the time window will usually be several days before a sick/injured diver can be treated by the specialist health service on land. A number of slowly developing infectious and inflammatory conditions can, following thorough assessment, be considered acceptable for surface-orientated diving, though incompatible with saturation diving. At the time of issue of these guidelines, there is little scientific support for issuing a medical certificate with restrictions in terms of diving depth or diving method. Since there is such a meagre knowledge base for limiting the scope of the medical certificate (other than time limit), the authority to issue restricted medical certificates has been assigned to the County Governor of Rogaland.

The health requirements in this document represent guidelines to *the Health requirement regulations*. The regulations are applicable solely to the scope of the Petroleum activities act. Other legislation and *Regulations on the performance of work* regulate inshore commercial diving. The health requirements in these guidelines are also applicable to inshore diving. Reference is made to Section 5.3 concerning medical examination of inshore divers.

These guidelines describe the scope and health requirements for health certification for commercial divers. Diving can cause long-term damage to a number of organ systems (lungs, central nervous system, hearing/balance, skeleton, etc.). A professional norm for the targeted health monitoring of divers falls outside the scope of these guidelines.

5.3 Health requirements for divers covered by *Regulations on the performance of work*

[*Regulations on the performance of work*](#) state that inshore divers must be able to safeguard their own safety and that of others while diving and must not themselves have any health condition that may be aggravated by diving, cf. sections 26 – 42.

There are a number of factors that distinguish inshore and offshore diving (distance to treating health service on land, travel out by helicopter, isolation, some diving methods (saturation diving) and work tasks, though the principles for risk assessment of the divers' health are identical. The Norwegian Directorate of Health recommends that the general health requirements described in Sections 5.1 and 5.2 also be used as a basis for the health examination of inshore divers in accordance with the cited regulations.

If the diving doctor concludes that there is no fulfilment of the health requirements, he or she must issue a certificate of medical unfitness. The decision must be justified. Referrals to the County Governor of Rogaland as the body granting dispensation are restricted to applying only to divers who attend for health examination for diving in petroleum activities.

6 Vision

6.1 Requirements of the regulations

Section 11, item 1) of the regulations, Vision.

Visual acuity must be sufficiently good that the person in question can work in a safe manner on installations in petroleum activities offshore.

There must be a normal field of vision in at least one eye.

6.2 Visual acuity

Visual acuity must be adequate to permit the individual to work safely in an offshore environment. This must be confirmed at each medical examination. Visual acuity must be investigated without correction and with the glasses/contact lenses the person otherwise uses. Any eye disease or visual defect rendering the applicant incapable of safe conduct in his or her own or others' interests offshore constitutes an unacceptable risk.

Visual acuity must be at least 0.5 when both eyes are tested simultaneously, including with the use of optical correction. Without correction, binocular visual acuity must be at least 0.1 binocularly in order to be able to evacuate safely in an emergency. If the person uses contact lenses continuously day and night while he or she is offshore, then the requirement will only be applicable for visual acuity with correction. The person in question must take along additional sets of lenses.

In the event of sudden loss of or change in visual acuity, a medical certificate cannot be issued until after the expiry of at least 6 months.

Monocular vision is acceptable provided the above minimum requirements of acuity as described above are met and the individual demonstrates appropriate adaptation to the loss of binocular vision.

Diplopia can pose a safety hazard and is not compatible with issuance of a medical certificate.

6.3 Visual field

The visual field must be normal when investigated using Donders' method. Persons with restricted visual fields must be referred for assessment by a specialist in eye diseases. If, based on the eye specialist's examination, the petroleum doctor finds that the worker, in spite of having a restricted field of vision, is medically fit in respect of safety, a medical certificate may be issued. In the event of sudden change in or significant loss of visual field, a medical certificate cannot be issued until after the expiry of at least 6 months. In the case of monocular vision, the requirement for normal visual fields in the functioning eye is absolute.

6.4 Colour vision

Colour vision shall be assessed at the initial examination. Colour vision deficiency and colour blindness shall not result in forfeiture of a medical certificate, but the individual must be informed of the finding. Additional requirements may exist for certain functions (maritime positions, certain types of skilled workers), though these must not influence issuance of a general medical certificate.

6.5 Additional requirements for divers

There are no additional requirements in terms of a diver's vision, visual field or colour vision, but divers with uncorrected binocular visual acuity of less than 0.5 must use optical correction in the form of mask glass, glasses or contact lenses. If contact lenses are used, these must be soft. Hard contact lenses must be fenestrated. Particularly with saturation diving, the use of contact lenses may entail a risk of infection, and the diver must be informed of this.

Individuals who have undergone refractive surgery must be assessed on an individual basis. There are no grounds for refractive surgery to be generally contraindicated in divers or indicating that diving/increased ambient pressure entails a greater risk of complications.

7 Hearing

7.1 Requirements of the regulations

Section 11, item 2) of the regulations, Hearing

Hearing must not be impaired to the extent that acoustic alarms critical for safety and verbal communication may not be perceived.

7.2 Hearing requirements

The hearing threshold shall be determined by pure tone audiometry (PTA).

Mean hearing loss in an individual's best ear may be no less than 35 dB for the frequencies 500-1,000-2,000 Hz. For the frequencies 3,000-4,000 Hz, the mean hearing loss shall not exceed 60dB. The hearing loss shall be calculated as an absolute value relative to a zero value on the dB scale, without adjustment in relation to the normal hearing threshold for age or use of a hearing aid.

It is also a requirement that normal speech is to be perceived at a distance of 2 metres.

It is a requirement that the individual must meet *both* the requirements for speech perception at the 2 m distance *and* the requirements for PTA-tested threshold set out above. Persons who fail to meet the requirements for speech perception or PTA-tested threshold shall be referred to an ENT specialist for investigation, including assessment of the need for a hearing aid. On conclusion of a specialist investigation, a medical certificate may be issued if speech at the 2 m distance is perceptible with or without a hearing aid. A specialist referral will not usually be necessary for an application for certificate renewal.

If the requirement for speech-perception at 2 m can be met only by the use of a hearing aid, the hearing aid must be worn throughout the offshore period.

7.3 Additional requirements for divers

The requirement for speech perception must be met without use of a hearing aid. Cochlear implants are not compatible with diving. See also 16.9.3 on ENT conditions.

8 Cardiovascular system

8.1 Requirements of the regulations

Section 11, item 3) of the regulations, Cardiovascular disease

There must be no cardiovascular disease that might increase the probability of an acute illness requiring treatment.

8.2 Ischaemic heart disease

Persons, who have had myocardial ischemia, including myocardial infarction, angioplasty or coronary bypass surgery, are required to meet the following criteria for the risk to be compatible with work offshore:

- The individual must not have had symptoms of heart disease for at least 6 weeks.
- The individual is required to complete a cardiac stress test without showing symptoms of heart disease or ischemia. The individual's work capacity must be sufficient to satisfy the general health requirements.
- A specialist statement must have been obtained concerning the risk of future cardiac dysrhythmia, new ischaemic episodes or the development of heart failure. The specialist statement should as a rule include the results of an ultrasound scan, 24-hr ECG recording and cardiac stress test.

A medical certificate may be issued at the earliest 6 weeks after invasive investigation/revascularisation, 3-6 months after aortocoronary bypass surgery (individual assessment), and 12 months if there has not been any invasive investigation.

The petroleum doctor should assess general risk factors such as smoking, cholesterol count, overweight, diabetes (see Section 11) and physical activity/exercise. Together with other clinical information, including specialist assessments, the doctor shall also determine whether a medical certificate can be issued and with what period of validity. The doctor should as a general guide issue certificates in such cases for a maximum of 1 year.

For renewal applications, the requirement for supplementary investigation shall be considered based on a risk assessment. The results of such investigation shall form the basis for the renewal and its period of validity.

8.3 Cardiac dysrhythmia

Workers with dysrhythmia affecting their functional capacity are not medically fit for work offshore.

Persons with dysrhythmia, where there is a significant risk of syncope (statement from a cardiologist, or an episode within the last 12 months), are not medically fit for work offshore.

A medical certificate may be issued to applicants with atrial fibrillation if the condition, following adequate investigation, is not found to be attributable to any other cardiac disease, and has not given rise to symptoms other than an irregular pulse. The likelihood of the recurrence of more severe symptoms must be assessed as low. If the investigation reveals signs of some other heart disease as a possible cause, the individual must be assessed in accordance with the relevant point concerning the identified heart disease.

For Persons who have undergone ablation, at least 3 months must have elapsed since treatment before a medical certificate can be issued.

8.4 Pacemakers/ICDs

Applicants with pacemakers are required to undergo periodic examination as recommended by a heart specialist. The risk assessment concerns the risk of dysrhythmia as discussed in the previous section. Patients with properly-functioning pacemakers are as a rule fit for work offshore.

Persons with an implantable cardioverter defibrillator (ICD) are medically unfit for work offshore owing both to their underlying heart condition and the effects on that condition caused by a state of shock.

8.5 Hypertension

Hypertension will not normally constitute a serious risk during work offshore, provided the condition is uncomplicated.

Any individual with a blood pressure of less than 140/90 is regarded as medically fit.

Persons with systolic blood pressure of between 140 and 180 and/or a diastolic blood pressure of between 90 and 110 mm Hg must be assessed on a case-by-case basis. The doctor must ensure that the person receives satisfactory medical investigation and follow-up.

The doctor must assess whether a medical certificate can be issued, if necessary with a restricted period of validity.

Persons with a systolic blood pressure higher than 180 and/or diastolic blood pressure higher than 110 are not medically fit for work offshore.

8.6 Peripheral circulation

Persons with deep vein thrombosis (DVT) should be assessed with respect to the risk of recurrence, the risk of complications (notably pulmonary embolism) and adverse effects of medication, notably anticoagulant therapy. Persons who have sustained DVT or pulmonary embolism, and who, following any treatment, are not regarded as being at significantly elevated risk of new thromboembolic events may as a rule be certified as medically fit for work offshore.

Persons with heterozygous Leiden mutation are assessed as above on condition that there are no other risk factors for DVT. Persons with homozygous Leiden mutations do not satisfy the health requirements.

8.7 Cerebrovascular disorders

Persons who within the last six months have sustained a cerebral infarction, intracerebral haemorrhage, transient ischaemic attack (TIA) or transient monocular vision loss (amaurosis fugax), are regarded as high-risk and are not medically fit for work offshore.

Persons with no function-impairing sequelae and who are at negligible risk of recurrence are eligible for reassessment after 6 months. A statement must have been obtained from the treating specialist. The patient must have been investigated for underlying causes and risk factors (hypertension, atrial fibrillation, atherosclerosis etc.) and preventive therapy/treatment for risk factors must have been tried. If a medical certificate has to be issued with restrictions, the case must be submitted to the County Governor of Rogaland.

Complications following stroke (e.g. mobility impairments and visual field deficits) must be assessed in accordance with the guidelines in the respective sections. Cognitive impairment or neglect is incompatible with work offshore, and the petroleum doctor must in particular ascertain that neither of these is present.

8.8 Additional requirements for divers

8.8.1 Generalities

A 12-lead ECG must be taken at the first examination, and subsequently every 5 years from the age of 40.

Diseases of the heart and circulatory organs must be strictly assessed. In addition to looking after themselves in the work situation, divers must also be able to satisfy major requirements in terms of physical performance in emergency situations involving themselves and fellow colleagues. Cardiovascular diseases that impair physical performance are a contraindication for diving. Conditions producing unforeseen or varying affection of physical and mental performance (dysrhythmia, angina) will represent contraindications.

Divers who have undergone treatment for cardiovascular disease must be assessed by a specialist before the issue of a medical certificate. The results of a stress test must be normal and the likelihood of recurrence assessed as low. See the section on medications with regard to the need for medicinal treatment of these conditions.

8.8.2 Ischaemic heart disease

Persons who are dependent on pharmacological treatment for symptomatic control (e.g. nitroglycerin) are not suitable for diving. Drug prophylaxis (lipid-reducing drugs, platelet coagulation inhibitors, etc.) must be assessed on an individual basis. Divers who have undergone aortocoronary bypass surgery must undergo suitable imaging studies to exclude the presence of post-surgical scar formation in the pleurae or pulmonary parenchyma.

8.8.3 Cardiac dysrhythmia

Persons with symptomatic dysrhythmia are unfit for diving.

8.8.4 Pacemaker

An implanted pacemaker is incompatible with diving.

8.8.5 Hypertension

The diving doctor shall conduct a risk assessment in accordance with recognised guidelines. The diving doctor can issue a medical certificate in the presence of isolated (absence of other risk factors) mild (Grade 1) hypertension, with a period of validity of up to 6 months. During this period, the blood pressure must be checked and all relevant risk factors must be ascertained. The issue of a medical certificate after this period is conditional on medicinal treatment having been initiated without any side effects affecting functional performance, and satisfactory regulation of blood pressure.

Sequelae to hypertension (nephropathy, retinopathy etc.) are usually incompatible with diving. A medical certificate can be issued following an individual assessment once a specialist statement has been obtained. The issue of a medical certificate is conditional on the hypertension being adequately controlled and an absence of progression in the sequelae. The sequelae may not affect the diver's ability to safeguard his or her own safety or that of others.

8.8.6 Peripheral circulation

Disorders of the peripheral circulation are incompatible with diving. A medical certificate can be issued following an individual assessment where it is unlikely that the condition could affect gas exchange in the tissues or cause a predisposition to frostbite. The issue of a medical certificate following an episode of deep vein thrombosis is conditional on an observation period of at least 12 months and an assessment of the likelihood of recurrence by a specialist as small. A history of pulmonary embolism disqualifies an individual from continued diving.

8.8.7 Cerebrovascular disorders

General reference is made to Section 9 on brain dysfunction. Persons with a history of TIA or stroke are not fit for diving.

9 Brain dysfunction

9.1 Requirements of the regulations

Section 11, item 4) of the regulations, Disturbances to brain function

There must be no condition that might increase the probability of episodic brain dysfunction or other attacks of reduced consciousness.

9.2 Conditions resulting in the health requirement not being regarded as met

Conditions that might cause sudden loss of consciousness are incompatible with work offshore. Episodic brain dysfunction (including epilepsy and disturbances of consciousness due to other or unknown causes) must not have occurred within the last twelve months.

Any CNS disorder that might cause a reduced state of consciousness or reduced motor or mental skills is usually incompatible with work offshore. In addition, such persons must be assessed with respect to:

- Potential alteration in level of consciousness
- Changes in cognitive function, especially with regard to recall and concentration
- Loss of muscle tone
- Disturbances in balance or coordination ability

Guidelines have been issued concerning special factors in the sections below, but persons presenting with any of the functional impairments listed above are unlikely to satisfy the health requirements.

9.3 Episodic brain dysfunction – disturbances of consciousness

"Episodic" implies *sudden* occurrence and the *potential* for recurrence. "Brain dysfunction" covers not only generalised tonic-clonic seizures, but also reduced consciousness, deficits of attention, concentration and/or reaction, e.g. in simple partial epileptic seizures, hypoglycaemia or transient insufficient blood flow to the brain (e.g. syncope). In that sense, the term is very comprehensive. It should be noted that "episodic" refers to different types of seizures, and not multiple instances of seizure in an individual. "Disturbances of consciousness" accordingly comprises more than (suspected) epilepsy.

Following an episode of reduced consciousness of unknown cause, there is in principle a not-insubstantial risk of recurrence, even if epilepsy has not been

diagnosed with certainty. It is irrelevant for the safety implications of a recurrence whether the cause is e.g. cardiac dysrhythmia, epilepsy, alcohol-provoked seizures, alcohol-withdrawal seizures, reflex syncope (cardio-inhibitory, vasovagal or carotid sinus), narcolepsy, cataplexy, aortic stenosis or migraine with aura. Cause unknown does not preclude recurrence. The cause may however be crucial in determining the probability of recurrence, and is therefore essential in assessment of medical fitness.

Although the term “loss of consciousness” is wide-ranging, see above, not all states of loss of consciousness will necessarily be covered. The episode must in such cases be patently irrelevant in a work context or entail little risk of recurrence. Examples would include loss of consciousness following concussion, seizure-like states during induction of or emergence from general anaesthesia, fainting following injury/blood loss and trivial isolated vasovagal syncope.

Micturition syncope and defecation syncope do not give rise to medical unfitness unless there have been episodes of suspected seizure beyond these situations.

Loss of consciousness in connection with cardiac arrest/cardiac dysrhythmia should be assessed in respect of the underlying cardiovascular disease. Banal, isolated syncope in the presence of intercurrent conditions, e.g. severe gastroenteritis, is not automatically a contraindication for work offshore. Clinical best judgement must be exercised. *Specialist statements must be obtained in any cases of doubt.*

When assessing medical fitness for work and issuance of a medical certificate, the examining doctor must have:

- Obtained a statement from the applicant's GP and specialist to confirm the case history and relevant investigative findings on which to base the individual risk assessment.
- Assessed the following:
 - The risk of recurrence must be assessed as negligible.
 - The individual must have been free of seizures for at least 24 months, with or without medication. Persons who cease taking medication must be able to prove that they have had a seizure-free period of twelve months before returning to work offshore.
 - There must be no significant side effects from medication intake.
 - Where the individual is on medication, the GP's/specialist's statement must confirm that the patient has had satisfactory effect from the therapy.

In the case of alcohol-related episodes, the person is required to have been seizure-free and unmedicated for at least twelve months before being permitted to return to any form of work offshore.

Following head trauma or cranial surgery (with no epileptic seizures) the risk of post-operative or post-traumatic epilepsy must be assessed as low. Persons may be regarded as medically fit if the risk of epilepsy is minimal, possibly after a seizure-free minimum period of 6 months. Persons who cease taking prophylactic medication must either be able to provide proof of a very low risk of epileptic seizure, or provide proof of a seizure-free period of 12 months after medication was withdrawn. In all such cases, a statement must be obtained from a *neurological specialist*.

9.4 Loss of consciousness/altered level of consciousness

In all cases of loss of/altered consciousness, the individual must be examined by a relevant specialist. If an underlying cause is identified, the assessment of medical fitness shall be informed by that cause. If no underlying cause is demonstrated, a medical certificate may be issued by the County Governor of Rogaland after a minimum period of twelve months without attacks.

Persons with unpredictable drowsiness as a result of narcolepsy/sleep disturbances during periods when they should normally be wakeful, pose a risk that is incompatible with work offshore. Persons who have been successfully treated for such disorders may however be certified as medically fit. In such cases, a specialist statement containing an assessment of the effectiveness of the treatment must be obtained.

9.5 Additional requirements for divers

Epilepsy is incompatible with diving. Persons who have previously undergone treatment for epilepsy may apply for dispensation from the health requirements. The County Governor of Rogaland may grant dispensation on condition that the likelihood of recurrence is considered to be small. *A specialist statement must be obtained.* The individual must have been free of seizures without the use of antiepileptic medication for the last 5 years. Imaging of the brain and EEG must not show any changes that could indicate the likelihood of recurrence.

Individuals with a history of neurological decompression sickness can be approved no sooner than 3 months after suffering injury on condition that there is a neurological specialist statement proving the absence of sequelae. Minor neurological deficiencies in the form of sensory affection may be allowed on condition that a neurologist specifically experienced in following-up divers finds good cause for such allowance. Previous episodes of decompression sickness that have resulted in permanent motor, cognitive or autonomic sequelae are incompatible with diving.

10 Mental disorders

10.1 Requirements of the regulations

Section 11, item 5) of the regulations, Mental disorders

There must be no mental disorder or personality disturbance that might lead to reduced judgement, lack of impulse control or behavioural disturbances.

10.2 Assessment

In assessing persons with a known mental disorder, the examining doctor must determine whether the condition might potentially be aggravated or accelerated by factors such as social isolation, disruption of habitual social patterns, shift work and the possibility that the environment might be perceived as stressful.

The examining doctor should assess the functional effects of symptoms of the conditions, e.g.:

- Mood
- Recall
- Concentration
- Agitation, emotion
- Psychotic symptoms
- Behavioural disturbances
- Side-effects of medication

Reference is made to the items below concerning specific factors, but persons demonstrating significant deviations from the items listed above will in all probability pose a risk that is incompatible with work offshore.

10.3 Notes concerning specific factors

10.3.1 *Anxiety and depressive disorders*

In assessing the risk of mild anxiety and depressive disorders, the examining doctor shall ascertain that the individual does not suffer from severe recall or concentration problems, suicidal tendencies, behavioural disturbances or agitation, and that factors at the workplace will not aggravate a mild disorder. If the person is on medication, the doctor shall ascertain that the applicant's mood is stable and that there are no severe side effects.

Severe anxiety and depressive disorders are not compatible with work offshore. This applies especially if the condition has given rise to recall or concentration problems, behavioural disturbances, agitation or suicidal tendencies. Examples of such conditions may be panic disorders and phobias with evident behavioural effects that

the individual himself or herself is unable to control, recurring depression with at least one severe episode and bipolar conditions of all types. The County Governor of Rogaland may grant a dispensation if a satisfactory therapeutic effect has been achieved by use of medication or in some other way. A specialist statement must be available.

10.3.2 Psychoses

Persons who have had psychosis or psychosis-like conditions do not satisfy the health requirements. This is irrespective of the cause of the psychosis. After the patient has been satisfactorily treated, is recovered and a specialist statement has been obtained, an application may be made for dispensation. The specialist statement must confirm that the person:

- Is fully recovered functionally
- Has adequate understanding of his or her disorder
- Follows the agreed treatment programme in full
- Cooperates fully with the health service
- Has no significant side effects from the medication (such as reduced attentiveness, concentration or motor performance)
- Is at low risk of relapse

The risk associated with persons who have exhibited violent behaviour during previous psychotic episodes will almost without exception not be compatible with work offshore.

10.3.3 Developmental disorders (including Asperger's Syndrome, autism and ADHD)

An individual with such a diagnosis will have to apply for dispensation from the County Governor of Rogaland. The reason for this is that this group of patients is highly heterogeneous and it is difficult to arrive at a correct assessment. In order for the County Governor of Rogaland to be able to assess the case, an account is required of impulsivity and how the person's behaviour affects others. It is especially important that conditions in respect of the risk factors of attention deficit, impulsiveness, aggression/mood, substance abuse and criminal behaviour are ascertained. Any consequences of lapse of medication while living and working offshore should be assessed. These risks may be so considerable as to be incompatible with the security requirements applicable to work offshore, or with the ability to co-exist in a closed community.

Persons with behavioural disturbances, problems with impulse control and asocial behaviour will pose a safety risk and are unsuitable for working offshore. The threshold for granting dispensation will accordingly be high. In order to be able to grant dispensation, a specialist statement must be available indicating the probability that the behavioural disorders will not recur.

Traditionally, a distinction has been drawn between those who take CNS stimulants and those who manage without them. However, the use of such medication will often be what enables the person to function satisfactorily. Following a specific and individual assessment, it will be possible to issue a medical certificate to well-functioning persons with ADHD. When making an assessment for a medical certificate, the County Governor of Rogaland will decide whether the period of validity of the medical certificate must be restricted to one or more definite working conditions/work operations. The use of CNS medication to treat ADHD does not in itself constitute a contraindication for the issuance of a medical certificate (see section 15.3.2).

10.4 Additional requirements for divers

Mental illnesses which have entailed a need for treatment within the specialist health service within the past 5 years are not compatible with diving. The County Governor of Rogaland can issue dispensation from the health requirements if a specialist statement proves that the condition is properly controlled, there is normal functional capacity and there is no significant likelihood of relapse. When assessing an application for dispensation, account must be taken of diving method (saturation diving or surface-orientated diving) in respect of the likelihood of relapse.

The diving doctor may, irrespective of this, issue a medical certificate in case of situation-dependent sleep disorders that have been medicinally treated.

11 Diabetes

11.1 Requirements of the regulations

Section 11, item 6) of the regulations, Diabetes

There must be no insulin-dependent diabetes mellitus or other anti diabetic medication and that might lead to hypoglycaemia.

11.2 General considerations in case of diabetes mellitus

Persons with diabetes must be assessed with respect to:

- Risk of hypoglycaemic attacks
- Acute and long-term complications which may affect mobility or the ability to react in emergencies, and risk of acute cardiovascular events.

11.3 Type 1 diabetes

The risks associated with type 1 diabetes are incompatible with work offshore. Dispensation can be granted for a restricted medical certificate (e.g. installation, length of the work period or service/position). The following requirements must be met when assessing an application for dispensation:

- The examining doctor must obtain the necessary clinical data from the applicant's treating physician.
- A statement by a specialist in internal medicine must be obtained.
- The extent of any long-term vascular complications (retinopathy, nephropathy or neuropathy) must be documented and assessed.
- There must be no known coronary disease (see section 8).
- The person must not have been hospitalised with ketoacidosis within the last twelve months (aside from at onset of condition).
- The person must not have had severe hypoglycaemic attacks (insulin shock = dependent on help from others) or hospitalisations due to hypoglycaemia in the last two years. Recurring symptomatic hypoglycaemic episodes are incompatible with work offshore.
- The person must have a good understanding of his or her medical condition.
- The person must have maintained good diabetic control within the 6 preceding months, and HbA1c < 9%.

- The person must be able to manage his or her own insulin therapy and regular blood glucose monitoring.
- The health service at the worker's installation must be informed of the condition.

The risk of hypoglycaemia is lower in persons with some residual insulin production (C-peptide measurement). The symptoms may recede in case of long-term diabetes or low HbA1c value (<7.0%).

Latent autoimmune diabetes (LADA) shall be assessed as diabetes type 1, i.e. the health requirements are not considered to be satisfied. Persons with LADA will however often have some residual insulin production. There may therefore be justification for granting dispensation if the requirements listed above are met and the likelihood of for hypoglycaemia is considered to be low.

11.4 Type 2 diabetes

As a general rule, persons with type 2 diabetes will be medically fit to work offshore if there are no organ complications or particular risk of hypoglycaemia associated with their treatment.

The use of certain peroral hypoglycaemic medications can cause serious hypoglycaemic attacks (sulfonylureas), but this is extremely rare and should not prevent certification unless the individual has had several hypoglycaemic attacks in the past. The certifying doctor should obtain relevant information from the treating physician.

As a rule, type 2 diabetes treated with insulin tends to present a lower risk of hypoglycaemia than type 1 diabetes, owing to some residual production of insulin. For a first-time medical certificate, a specialist statement must be obtained, and the risk of hypoglycaemia must be specifically assessed. Over time, natural insulin production may cease altogether and the risk of hypoglycaemia will increase. This must be periodically assessed by a specialist. In case of deficient insulin production or if organ complications occur, the person must be certified as medically unfit. For reassessment and dispensation, see section 18.

11.5 Additional requirements for divers

All cases of insulin-treated diabetes are incompatible with diving. Persons with type 2 diabetes (that are not treated with insulin) can be approved by the diving doctor following individual assessment based on the likelihood of hypoglycaemia. Approval requires the condition to be stable and a specialist statement to have been obtained.

12 Substance abuse

12.1 Requirements of the regulations

Section 11, item 7) of the regulations, Substance abuse

There must be no abuse of alcohol or xdrugs and no use of tranquilisers or sedatives in doses that reduce alertness and working ability.

12.2 Concerning substance abuse

Substance abuse in this context is taken to mean use of alcohol or other intoxicants (including medications) impairing the ability to work offshore. The use of tranquilisers or sedatives in doses that reduce alertness and the ability to work is also prohibited. Neither may there be any substance abuse during free time that impairs the ability to work offshore.

The term "substance abuse" covers addiction to intoxicants and harmful use of intoxicants. The use of illegal intoxicants will always result in disqualification for a medical certificate. The same applies if legally prescribed drugs are not used as prescribed (i.e. use which has the character of abuse). However use in accordance with prescription may also reduce alertness and ability to work to such a degree that a medical certificate cannot be issued.

Illegal use of anabolic steroids/doping agents may cause aggression and poor impulse control. Such use will result in non-fulfilment of the regulations' health requirements.

12.3 Alcohol addiction

Harmful use of alcohol refers to consumption of alcohol to a degree that can result in behavioural disorder, result in health failure and lead to addiction. Alcohol addiction is taken to mean behavioural, cognitive and physiological changes following long-term high intake of alcohol, where problems with controlled intake result in increased tolerance and harmful effects are ignored.

If alcohol addiction is identified, the worker is not medically fit for work offshore and the doctor must issue a certificate of medical unfitness. In particular it must be assessed whether the alcohol consumption has resulted in (or will probably result in) failing working capacity, substantial absence or repeated warnings/disciplinary cases.

Persons who have completed or are on a monitored rehabilitation programme for alcohol addiction may be granted a medical certificate subject to a risk assessment. The examining doctor must reduce the period of validity, which is recommended to be restricted to a maximum of 6 months in the first year of the monitoring period. The issuance of a medical certificate must be done in conjunction with the occupational health service and the treating physician. This joint issuance is conditional on the

informed consent of the worker. Persons who have had an alcohol-withdrawal induced seizure must also be assessed with reference to section 9 of these guidelines.

12.4 Drug abuse

On discovery of any abuse of narcotics (see above), the doctor shall issue a certificate of medical unfitness.

Persons who have completed or are on a supervised rehabilitation programme for drug addiction may be granted a medical certificate based on a risk assessment. Before the certificate can be issued, the person is required to have been drug-free for at least a year and to have taken a suitable, drug-screening test. Issuance of a medical certificate is subject to the worker's consent to an ongoing unannounced/random drug-testing programme for a minimum of 2 years. Testing positive for drugs during this period will normally result in medical unfitness and will in any event entail a review of the person's fitness for work offshore.

The examining doctor must adjust the period of validity, which is recommended to be 3 months in the first year of the monitoring period. The issuance of a medical certificate must be done in conjunction with the occupational health service and the treating physician. This requires the informed consent of the worker.

Abuse of addictive medication must be assessed according to the same principles as for abuse of narcotics.

Workers undergoing medication-assisted rehabilitation (MAR) do not in principle satisfy the health requirements and can only obtain a medical certificate if the County Governor of Rogaland or the appeals committee grants dispensation from the health requirements. When assessing any application for dispensation, strict requirements are made regarding follow-up, cessation of illegal drug-taking, non-use of other tranquilisers or sedatives, and sufficient observation time/stability of the condition.

12.5 Additional requirements for divers

Persons who are known substance abusers, or who are currently undergoing or have been undergoing for the last five years follow-up programmes for alcohol, narcotic or medication abuse, are not considered medically fit for diving.

13 Lung function

13.1 Requirements of the regulations

Section 11, item 8) of the regulations, Lung function

The lung function must be satisfactory.

13.2 General considerations concerning lung function

When assessing the effect of a respiratory disease on a person's fitness to work offshore, the examining doctor shall assess the following:

- Mobility and physical performance with special reference to general mobility in different sections of the platform (incl. stair-climbing), the ability to perform normal work duties, the ability to react appropriately and effectively in emergencies, and in particular to be able to participate in evacuations in a successful manner.
- The risk of suddenly developing life-threatening complications.
- The ability to take part in safety training, including exposure to smoke-filled environments while wearing smoke hoods and breathing apparatus, training in escape from a submerged helicopter and the use of underwater breathing equipment.
- Assessment of potential exposure to airways irritants and allergenic substances.

The doctor must have access to or be personally able to perform spirometric tests.

13.3 Notes concerning specific factors

13.3.1 Asthma – bronchial hyperreactivity

Recognised guidelines (national or international such as GINA or British Thoracic Society) should form the basis for diagnostics, treatment and monitoring. In the presence of bronchial hyperreactivity, this must be *investigated by a specialist* in order to exclude any risk in the worker of periodic/episodic reduction in lung capacity.

The following norms should be applied by the examining doctor when assessing the risk:

- Childhood asthma in remission poses no significant risk.
- In order for the risk profile to be compatible with work offshore, the examining doctor must ascertain whether the person has:

- Rare, non-disabling attacks
- Normal physical performance
- No attacks requiring hospitalisation
- Sound knowledge and awareness of the condition and the capacity to adjust own treatment as required

For persons who do not meet these criteria, specialist statements must be obtained in order to assess the situation fully.

13.3.2 Obstructive lung disease

Conditions such as chronic bronchitis, emphysema and other lung diseases shall be assessed with the aid of standardised spirometry.

Persons with $FEV_1 > 60\%$ of predicted value and $FVC > 70\%$ of predicted value are likely to have sufficient lung capacity to meet the requirements for travel and work offshore. On suspicion of bronchial hyperreactivity, this must be investigated by a specialist in order to exclude any risk in the worker of periodic/episodic reduction in lung capacity.

For persons who do not meet these requirements, the examining doctor should ascertain, by means of a practical assessment of lung function, whether the person is capable of working offshore, and has the capacity to react properly in emergencies and in any evacuation of the platform. As a minimum, the worker is required to be able to perform stair-climbing corresponding to 3 storeys at a normal pace without patent breathing difficulties. *Specialist statements must be obtained in cases of doubt.*

13.4 Additional requirements for divers

When first undergoing a health investigation, the diver must be investigated by means of ordinary chest X-ray (possibly CT or MRI scan if clinically indicated) provided that such investigation has not been performed in the last 3 years. The diver shall be investigated by means of dynamic spirometry using a recognised method. Measured results (including as a minimum FVC , FEV_1 and PEF) shall be compared with a relevant Norwegian reference population unless the diver's ethnic background justifies use of some other reference value. FVC and FEV_1 must be no less than 80% of the expected values. FEV_1/FVC must be no less than 75% at the first investigation, and subsequently no less than 70%. If these functional requirements are not met and the diving doctor does not suspect the presence of an underlying lung disease, a restricted medical certificate with a period of validity of up to 6 months can be issued.

A repeat health investigation on expiry of this period is conditional on investigation by a lung specialist not revealing the presence of lung disease. Imaging of the lungs from no more than one year ago must be normal.

The density of respiratory gasses increases with diving depth. Ventilatory capacity –

assessed as maximum voluntary ventilation – limits physical capacity in divers with healthy lungs. Any lung disease that limits the flow rates in the airways is therefore incompatible with diving. With regard to "physical capacity", see section 14.4.

Chronic obstructive lung disease and all cases of exercise and cold induced asthma are incompatible with diving. This is still the case if the symptoms are being controlled by means of medication.

Bullous lung disease, possibly a history of spontaneous pneumothorax, is incompatible with continued diving due to the likelihood of recurrence. Following traumatic pneumothorax (including pulmonary decompression barotrauma), diving can be permitted if the likelihood of recurring lung damage is considered to be slight and imaging of the lungs indicates the absence of scar formation. *A specialist statement must be obtained.*

14 Mobility

14.1 Requirements of the regulations

Section 11, item 9) of the regulations, Mobility

The mobility must be sufficient that the person in question can work in a safe manner and cope with an emergency and evacuation.

14.2 Assessment

Disorders of the musculoskeletal system must be specifically assessed in terms of:

- Mobility and the ability to move about the installation during an evacuation procedure
- Balance and coordination
- Joint stability and the risk of dislocation/subluxation
- The ability to put on a rescue suit

14.3 Prostheses

Joint prostheses pose no special risk in themselves, but must be assessed in respect of the foregoing criteria.

Arm or leg prostheses must be assessed in terms of functionality/mobility and any limitations in an evacuation situation. In addition, the prosthesis must be compatible with a rescue suit. The petroleum doctor should ascertain that the prosthesis can be fitted rapidly and correctly in an emergency or evacuation situation, including in the dark/reduced visibility.

14.4 Additional requirements for divers

Divers must have sufficient physical capacity to safeguard their own safety and that of others both in normal work situations and in emergency situations. Together with increased age and overweight, poor physical capacity is associated with an increased risk of decompression sickness.

"Physical capacity" represents a number of different subsidiary factors that include endurance, strength, agility, articular range of motion and biomechanical efficiency. It is not practical to test all of these factors – divers who are physically active (who exercise regularly) are best able to meet the demands in terms of performance. The diving doctor must therefore register the diver's level of physical activity. Physical endurance is tested using a standardised method. Capacity shall be equivalent to 13

metabolic equivalents (METs) as a minimum. Measured by estimated or directly measured maximum oxygen uptake, this must be a minimum of 45 ml/min/kg for male divers under 30 years, a minimum of 40 ml/min/kg for divers aged 30 – 50 years and a minimum of 35 ml/min/kg for divers over 50 years. For women, the requirement is 10% lower.

Such investigation of physical endurance can be conducted by an independent test body and must be done in the last 6 months before the medical examination. If, for practical reasons, it has not been possible to conduct the test during this period or if the requirement cannot be met, the diving doctor can issue a medical certificate with a period of validity of 6 months as long as a risk assessment indicates that this is justified.

A medical certificate cannot otherwise be issued unless physical capacity has been proven to be satisfactory according to the above requirements.

15 Medication use

15.1 Requirements of the regulations

Section 11, item 10) Use of medication

There must be no use of medication, whether prescribed by a doctor or not, that reduces the ability of the person in question to work in a safe manner and cope with an emergency and evacuation.

15.2 General assessment

Persons who take prescription or over-the-counter medication should be assessed with regard to:

- The nature of the underlying condition and whether the person in question still has symptoms which might affect his or her ability to work offshore (see comments under the relevant category).
- The extent of any side effects, especially with respect to alterations in level of consciousness, impaired recall, concentration or wakefulness.
- The scale of the risk of complications (e.g. prolonged bleeding, convulsions) as a result of the therapeutic effects or side effects of the medication. Such complications should be seen in the light of the installation's capacity to deal with such medical emergencies and the probability of completing evacuation successfully.
- Whether the person in question will comply with the prescribed medication regimen and the effect on the person if the medication were not available.

Persons who are greatly affected by one or more of the issues of concern above will not normally be fit for work offshore.

The petroleum doctor must inform the worker that:

- All use of medication (both prescription and OTC) must be reported to the offshore services nurse.
- The person must bring sufficient medication for the entire stay, plus additional supplies in case the stay is extended for unforeseen reasons.

15.3 Special considerations

15.3.1 Anticoagulants

Aside from the risk of spontaneous haemorrhaging, the petroleum doctor must inform any worker who takes anticoagulants (warfarin and new anticoagulants) that work tasks carrying a risk of trauma may pose a safety risk owing to the transportation time to hospital. The petroleum doctor must make a thorough assessment of the risk associated with the primary disease and the complications of anticoagulant therapy – if necessary with reference to specialist statements. The petroleum doctor must determine whether the risk of work offshore is so high that an application should be made for dispensation. In order to reduce the risk entailed by anticoagulant therapy, the doctor must ascertain that:

- The person's relevant INR value and medication dosage have been stable for at least two months
- The person understands the importance of the installation's nurse being informed that the person in question takes an anticoagulant.

15.3.2 Medication impairing attentiveness

Psychoactive drugs, strong analgesics, tranquilisers and sedatives (class A and B drugs) may cause adverse effects such as fatigue, attention deficit, impaired fine motor skills and confusion. Sedatives may produce adverse effects long after the therapeutic effect has worn off. Persons who take such medication on a regular basis are therefore in principle not medically fit for work offshore.

Note also that some group C medications (especially those bearing a warning triangle) affect alertness.

Treatment with CNS-stimulating medication in persons with ADHD does not in itself represent a contraindication; such persons should be assessed based on their primary disorder. Because CNS-stimulants may potentially be abused, the petroleum doctor must impress on the person concerned the importance of arranging for secure storage and dispensing of such medication with the offshore health service.

15.3.3 Immunosuppressive medications

Immunosuppressive medications may be prescribed in a number of circumstances, such as for example to prevent the rejection of transplanted organs, the treatment of a number of cancers, autoimmune disease such as rheumatoid arthritis, Crohn's disease and ulcerative colitis, as well as for the treatment of non-autoimmune diseases such as asthma and eczema. When assessing medical fitness for work offshore, the petroleum doctor must:

- Assess the underlying disease with reference to the criteria prescribed in this guide
- Assess the risk of complications as a result of increased infection risk.

- Assess the risk of other adverse effects such as hypertension, hyperglycaemia, gastric ulcer and liver and kidney damage.

15.4 Additional requirements for divers

There is little knowledge concerning pharmacodynamics and pharmacokinetics under hyperbaric conditions due to a historically restrictive attitude to the medicinal treatment of divers. The diving doctor must carefully assess the risk in connection with medicinal treatment.

Medicinal treatment that may mask symptoms of decompression sickness (NSAID, strong analgetics) or reduce the seizure threshold is generally incompatible with diving. Other medications (including disulfiram and certain cytostatics such as bleomycin and adramycin) have increased the likelihood of serious side effects on exposure to hyperbaric oxygen, and use of these is therefore incompatible with diving. All pharmacological treatment during diving must be carefully assessed for interaction with hyperoxia.

The diving doctor must make an individual assessment of medication use and *refer to a specialist if in doubt*. Anticoagulant therapy is incompatible with diving due to the risk of aggravating injury in case of decompression sickness.

16 Other disorders

16.1 Requirements of the regulations

Section 11, item 11) of the regulations, Other disorders

There must be no other disorders causing the requirements for health and mobility not being satisfied and that can lead to a need for acute medical treatment that cannot be given offshore.

There must be no degree of obesity that would represent a safety risk in an emergency.

16.2 Pulmonary tuberculosis

Owing to the contagion risk, persons with active pulmonary tuberculosis are not medically fit for work offshore. If a person with pulmonary tuberculosis has undergone treatment, the examining doctor is required to obtain a specialist statement confirming that the person in question is no longer infectious and that he or she has no side effects as a result of the treatment. See also section 13 Lung function.

The doctor must be particularly alert to workers from other countries, particularly those from highly endemic areas and who will be working in Norway for only a short period. These will often not be covered by the compulsory screening programme for tuberculosis.

16.3 HIV

Being HIV-positive without concomitant immune deficiency disease is compatible with work offshore. If the doctor is not certain whether a general medical certificate can be issued, a certificate of medical unfitness (declaration of unfitness) must be issued. The applicant may submit the decision to the County Governor of Rogaland for reassessment.

16.4 Hepatitis and chronic infectious diseases

Hepatic diseases in which the condition is serious or escalating, and/or where complications arise such as oesophageal varices and ascites, represent an unacceptable level of risk. Persons with active hepatitis must be thoroughly assessed and a specialist statement should be obtained. Hepatitis carries a risk of infection and due care must be exercised.

Persons afflicted by chronic infectious diseases must be examined to determine whether there is a risk of exacerbation and a risk of others being infected

Chronic carrier conditions (hepatitis virus, salmonella, paratyphoid fever, parasitoses such as malaria etc.) must be assessed in respect of the risks described above.

Certain work tasks (health service, catering, food preparation) may have restrictions not covered by the present guide.

16.5 Cognitive impairment and dementia

A number of medical conditions may cause cognitive impairment. Dementias (Alzheimer's disease, vascular dementia, etc.), stroke, traumatic brain injury and mental disorders may result in such complications. The health requirements set out in the regulations are not deemed as satisfied in the case of a cognitive impairment/dementia which may be assumed to render the person incapable of safe conduct in his or her own or others' interests (see the main requirements listed in section 5).

At the slightest suspicion of cognitive impairment in younger workers, a referral should be made for neuropsychological examination. This is particularly important following a stroke and head trauma.

If there is a suspicion of incipient dementia, a dementia investigation must be conducted. The recommended investigative tool can be downloaded from the *Nasjonalt kompetansesenter for aldring og helse* [Norwegian National Advisory Unit on Ageing and Health] website.

The most common form of dementia is Alzheimer's type dementia (AD). In typical cases, this debuts as a reduced memory for new information. Other symptoms in the initial phase are searching for words, lack of initiative and depressive traits. A diagnosis of AD is made based on a typical medical history (with information for comparison being important), testing of cognitive functions, findings from an MRI scan of the head (atrophy is usually seen in parts of the brain) and findings from spinal fluid ("dementia markers"). In many cases it may be easy to make the diagnosis, while in other cases it may be necessary to follow the patient for some time before a final diagnosis can be made.

16.6 Overweight

The Regulations require that there must be no degree of overweight that would represent a safety risk in an emergency.

16.6.1 Definition

Overweight is taken to mean excess weight for a person's height. A common measure of overweight/obesity is body mass index (BMI, body weight in kg divided by the square of the person's height in metres). WHO defines a BMI of more than 25 as overweight and a BMI of more than 30 as obesity. BMI may not be used in isolation in diagnosing obesity. Persons with high muscle mass may have a high BMI. The health risk is associated with abdominal obesity in particular. By measuring the waist (and hip) circumference it is possible to obtain a reliable estimate of abdominal obesity. Abdominal obesity is present if the waist to hip ratio exceeds 1.0 in men and 0.85 in women.

16.6.2 Health problems

Obesity is known to predispose persons for conditions such as cardiovascular disease and diabetes and for wear of the locomotor system. A high BMI does not in itself disqualify anyone from obtaining a medical certificate under the regulations, but the risk of "complications" increases with BMI. The risk of metabolic syndrome is higher for men with a waist circumference of more than 102 cm and for women with a waist circumference of more than 88 cm.

If the BMI is more than 35, the petroleum doctor must examine the applicant particularly carefully for such conditions, which may mean that the doctor has to issue a certificate of medical unfitness. A waist measurement should be obtained for all persons with a BMI of over 30 (please refer to [IS-1735](#), national guidelines for primary health care: Prevention, investigation and treatment of overweight and obesity in adults). With regard to physical capacity, see the final item of 13.3.2.

No weight limits have been prescribed in the current safety regulations, but a body weight of more than 120 kg with a waist circumference of more than 115 cm is to be regarded as posing a safety challenge, with a view to, among other things, evacuation and stretcher transportation.

In the interests of both health and safety, doctors are therefore strongly recommended to try to persuade persons with a BMI of over 35 to take part in a structured weight-reduction programme. To that end, the validity period of the medical certificate can be restricted to, for example, 6 months initially. If this fails to have any effect and the person's weight is not reduced, the doctor may issue a certificate of medical unfitness.

16.6.3 Conclusion

In the absence of any medical complications, a high BMI, as stated, shall not in itself result in a rejection of an application for a medical certificate. In persons who are overweight, the limiting factor for medical fitness for work offshore will in all likelihood be related more to safety than to medical problems. This applies especially to the ability to react to emergencies, and in particular to evacuations/being evacuated successfully without risk to the person's own health or that of others. It is therefore important, and may be made a condition for issuance of a medical certificate, that the individual attends a weight-reduction programme.

16.7 Dental health

The applicant's dental health must be checked. Pay particular attention to poor/missing fillings, broken teeth, signs of periodontitis etc. If there is any doubt concerning dental health, the petroleum doctor must obtain a statement from a dentist before issuing a medical certificate.

16.8 Pregnancy

The Regulations reiterate previous provisions that after the 28th week of pregnancy, the health requirements are not satisfied. The effects of the working environment on the pregnant woman and the foetus fall under the authority of the Petroleum Safety Authority Norway and they are regulated in the Norwegian Working Environment Act

and regulations.

16.9 Additional requirements for divers

16.9.1 Generalities

There are a number of conditions that can represent a safety risk for the diver working underwater/under increased external pressure without this necessarily representing a hindrance to work at the surface. The following sections set out the special conditions that require thorough risk assessment. *Specialist statements must be obtained in any cases of doubt.*

16.9.2 Teeth

The diver must have satisfactory dental health and a properly cleaned set of teeth. The bite function must be such that a mouthpiece can be used unhindered. Caries entails a disposition to dental barotrauma aerotitis. Examination must emphasise dental conditions that could potentially cause problems under pressure. Examples are loose/fractured fillings or teeth, caries and periapical changes around root-filled teeth or palpable changes. Loose dental prostheses should be removed prior to diving.

Divers should visit a dentist regularly.

16.9.3 Conditions of the ENT organs and cranium

It must be possible for the air-filled cavities in sinuses and ears to be equalised with the ambient pressure in order to avoid injuries resulting from pressure changes. Conditions preventing equalisation result in temporary unfitness until they have been successfully treated.

Cranial fractures with permanent fracture lines between sinuses and eye socket or cranial cavity can cause pneumocephalus or retrobulbar air expansion with serious consequential injury. Barotraumas can also occur in case of fracture lines involving air-filled cavities in the temporal bone. Previous fractures in these regions must be sealed for diving to be permitted. Previous ear bone surgery must be assessed on a case-by-case basis.

Previous ear bone surgery (for otosclerosis etc.) entails an increased likelihood of dislocation of the auditory ossicular chain and damage to the inner ear caused by ambient pressure changes. A *specialist statement* must be obtained from an ENT specialist experienced in assessing divers, describing the risk for complications secondary to aerotitis. Diving cannot be permitted until at least one year after surgery. Divers must be able to equalise pressure in the middle ear using passive techniques rather than depending on the Valsalva manoeuvre.

Persons with benign paroxysmal positional vertigo can be approved for diving once the condition has resolved. Active Ménière's disease is not compatible with diving. The issue of a medical certificate is conditional on a *specialist statement* and a minimum of one year without symptoms.

Obstructive sleep apnoea syndrome requiring use of continuous positive airway pressure masks (CPAP) is incompatible with diving. The County Governor of Rogaland can issue dispensation from the health requirements for surface-orientated diving as long as there is a specialist statement proving that the condition has been successfully treated, as assessed using objective methods (AHI or similar).

16.9.4 Overweight

At BMI over 30, the body fat fraction must be measured using a recognised method (e.g. bioimpedance or measuring skin fold thickness). The diving doctor must make an overall assessment of whether combined risk factors for incapacitating illness (ischaemic heart disease, stroke, decompression sickness) such as obesity, reduced physical capacity and advanced age represent a safety risk in case of continued diving. If the body fat fraction is greater than 30%, the diver must be told of the importance of achieving a weight reduction.

If the body fat fraction is greater than 30%, the diving doctor can issue a medical certificate with a maximum period of validity of 6 months. If the body fat fraction cannot be reduced to below this threshold limit during the observation period, a dispensation application must be submitted. Granting of dispensation is conditional on satisfactory physical capacity (see section 14.4) and the absence of other risk factors for decompression sickness or cardiovascular disease.

16.9.5 Pregnancy

Pregnancy is incompatible with diving.

16.9.6 Chronic infectious diseases

For technical reasons, it is difficult to maintain adequate barriers preventing the transmission of infectious matter (both airborne and contact contagion) when diving. Ongoing infectious diseases and carrier conditions of infectious diseases will therefore be incompatible with diving.

16.9.7 Gastrointestinal conditions

Untreated hernia is incompatible with diving. Symptomatic and/or drug treated inflammatory bowel disease (Crohn's disease, ulcerative colitis) is incompatible with diving. The County Governor of Rogaland can issue dispensation from the health requirements for surface-orientated diving if the condition is well regulated.

In case of gallstones, a *specialist statement* must be obtained, and the diving doctor can issue a medical certificate if the likelihood of relapse is slight. A medical certificate cannot be issued if there have been two or more episodes of gallstones over the last 5 years, though the County Governor of Rogaland can issue dispensation from the health requirements if the likelihood of relapse is considered to be slight.

16.9.8 Conditions of the urinary tract

A diving doctor can issue a medical certificate for diving no sooner than 3 months after symptomatic kidney stones. Issue of a medical certificate is conditional on a specialist statement assessing the likelihood of a relapse as slight. A medical

certificate cannot be issued if there have been two or more episodes of urinary tract concretion over the last 5 years, though the County Governor of Rogaland can issue dispensation from the health requirements if the likelihood of relapse is considered to be slight.

16.9.9 Blood diseases

Diseases that can affect the oxygentransporting capacity of blood will be fundamentally incompatible with diving. The medical examination must include measurement of haemoglobin concentration.

17 The doctor's remarks and conclusion

17.1 Examination by the doctor

Section 3 details the administrative procedure for when an applicant requests a medical certificate.

It is important to obtain a full *medical history* covering both health and employment.

In addition to the usual medical *examination* including pulse and blood pressure measurement and urine analysis, there is also measurement of visual acuity and visual field, colour vision (if examined for the first time), pure tone audiometry (see section 7) and BMI is also ascertained (see section 16.6). For patients with a BMI of more than 30, a waist measurement will also be obtained. Further investigations are based on the doctor's assessment, for example blood tests, ECG and spirometry (see section 13).

If the doctor finds it necessary, the person will be referred for X-ray etc. and the results of any tests and statements from medical specialists will be obtained (see for example Section 8).

17.2 Assessment and decision

All findings must be noted down on the designated form or, alternatively, documented electronically. Supplementary information may be taken down in the applicant's ordinary medical records.

If the doctor concludes that the health requirements are satisfied, a *medical certificate* will be issued on the designated form. Medical certificates may be issued with a shorter period of validity (shorter than two years or one year, respectively) if dictated by any problems in the applicant's health, or if a check-up and fresh assessment will be required within a shorter interval. The doctor is required to explain this to the applicant. The doctor is not authorised to impose any conditions on issuance of the medical certificate.

If one or more of the health requirements are not met or if the doctor is in doubt, the doctor issues a *certificate of medical unfitness* on the designated form. In this case the doctor is also required to account for the reasons for the decision to the applicant. Copies of the above mentioned forms are to be regarded as part of the person's medical records and kept in accordance with the regulations relating to patient records.

In accounting for the medical decision, the doctor shall also advise the applicant of his or her opportunity and right to have the application referred to the County Governor of Rogaland for assessment. The provision of this information must be recorded in the applicant's medical record. See section 18.

17.3 Additional requirements for medical examinations for divers

In addition to the above, the following additional requirements are also applicable in case of medical examinations for divers.

The diver is required to fill-in a self-declaration, and to go through this with the diving doctor. The doctor must record a detailed medical history and document previous diving activity, and especially any diving activity since the previous examination. The diving doctor shall in particular ask about any illnesses, injuries and complications in connection with diving since the previous medical examination.

A full medical examination must be carried out as set out on the examination form. In addition to what is specified, health examination of workers in petroleum activities offshore must also include the following additional investigations:

- Spirometry, including measurement of FVC, FEV1 and PEF as a minimum requirement
- 12-lead resting ECG on initial examination and every 5 years from the age of 40
- Chest X-ray (or more detailed imaging of the lungs if clinically indicated) on initial examination if this has not been performed in the last 3 years prior to the examination
- Hb

Imaging of the skeleton in order to identify aseptic dysbaric osteonecrosis is considered to be part of health monitoring and is not included in the medical examination.

As stated in section 5.2, the diving doctor is required to ascertain whether the diver satisfies the health requirements for diving. It may be appropriate to shorten the period of validity of the medical certificate. If it is the diving doctor's opinion that the diver who is to conduct offshore diving operations is not medically fit for some types of diving (e.g. saturation diving), a certificate of medical unfitness must be issued. In such cases the diver can submit an application to the County Governor of Rogaland for dispensation from the health requirements. The diving doctor is required to give reasons for the measure (certificate of medical unfitness) and if the diving doctor is of the opinion that the diver is medically fit for certain types of diving, details of this must be provided. Decisions on restricted medical certificates of this kind are however made by the County Governor of Rogaland (and potentially the Appeal Board)

For divers who are to dive inshore only, the medical examination is based on *Regulations on the performance of work*. Details concerning rules of administrative procedure, the issue of medical certificates, medical certificates with restrictions and certificates of medical unfitness are provided in section 5.3. The County Governor of Rogaland may not consider medical certificates for inshore divers and the appeals committee may not re-examine decisions.

18 Referral to the County Governor of Rogaland. Appeal.

18.1 Referral to the County Governor of Rogaland

Sections 18.1, 18.2 and 18.3 are applicable only to workers examined in accordance with *the Health requirement regulations*.

Where a person who has been issued with a certificate of medical unfitness, or whose certificate has been issued with a period of restricted validity, that person may have the case considered and reassessed by the County Governor of Rogaland. This body may grant dispensation from specific health requirements where the intention of the regulations to protect safety can be fulfilled by other means. A written application must be submitted stating that the person in question wishes/requests that the County Governor of Rogaland consider the case. The application must be addressed to the County Governor of Rogaland and sent to the petroleum doctor/diving doctor. The doctor must assess whether or not any new information has come to light in the case that would justify any other decision. If the petroleum doctor/diving doctor upholds his or her decision, the case must be referred to the County Governor of Rogaland, with all the relevant clinical details enclosed. This must be done without undue delay.

The applicant is required to account for his or her request for a medical certificate, and to provide information on his or her work duties, including in emergencies, and how often and for what periods he or she works offshore, the arrangements for shift work etc. A letter from the employer/operator to confirm this information may be enclosed.

The doctor is required to provide a detailed account of why the health requirements are not found to have been met. Where at all possible, the doctor should provide his or her opinion as to the probability of the person's medical condition causing problems offshore/when diving. Any compensatory or risk-reducing measures should be described.

The doctor should, in conclusion, offer an opinion as to whether or not dispensation should be granted, in view of the work tasks to be carried out by the worker.

18.2 Processing by the county governor

On receipt of a certification referral case, the County Governor of Rogaland must first determine whether or not the health requirements have been satisfied. If the conclusion is that the health requirements have been satisfied, a medical certificate will be issued, with a restricted period of validity where applicable.

If the health requirements are not satisfied, a decision will be made as to whether dispensation can be granted. Such dispensation shall only be granted if

considerations of safety do not suggest otherwise. The county governor will carry out an individual assessment of the health status in view of the worker's work tasks. Dispensation may be granted to cover a period of no more than two years (one year for divers), and may be subject to special conditions.

The county governor's administrative procedure complies with the Norwegian Public Administration Act. It may consequently be necessary for this body, in the interests of proper procedure, to request additional information or medical investigation. These are normally obtained from the relevant petroleum doctor. The decision of the County Governor of Rogaland must be accounted for.

The county governor's dispensation from the health requirements is valid for the period indicated in the decision. With subsequent health examinations, the doctor must decide in the usual way whether the health requirements have been satisfied. If the health requirements have not been satisfied, a new medical certificate can only be issued if the county governor has issued a new dispensation. The petroleum doctor/diving doctor is not therefore entitled to issue a new dispensation from the health requirements, even if there are no changes in the worker's health. However, if the county governor decides that the health requirements have been satisfied, the doctor can renew the medical certificate as long as there have been no changes in the worker's health and work situation.

The county governor's dispensation practice states that dispensation may not be issued to persons who are to have roles in the emergency response organisation. The reason is that performing such tasks would be critical for the outcome of situations entailing hazards and accidents. The emergency response organisation must therefore be robust and consist of individuals who satisfy the health requirements without dispensation. The county governor is also reticent in issuing dispensation to individuals who take part in safety-critical safety operations, e.g. hoisting operations (crane lifts), drilling operations (drilling deck) and various work tasks in processing installations and control rooms.

The County Governor of Rogaland has issued further guidelines concerning dispensation applications on the county governor's website: [fylkesmannen offshore](#)

18.3 Appeals

The county governor's decision is made on a case-by-case basis, and an appeal against it may be submitted to an Appeal Bord within 3 weeks. The Appeal Board is made up of four members, all of whom are appointed by the Norwegian Directorate of Health. In the event of a tied vote, the chair's vote counts double. The County Governor of Rogaland is the secretariat of the Appeal Board and it is a requirement that the secretariat possess legal competence.

The person bringing the appeal has the right to attend the appeal hearing and to bring an agent.

The Board may consider all aspects of the case. If the Board decides that the person is to be issued with a medical certificate, it may impose limitations and conditions.

The period of validity of the certificate may not exceed two years or one year respectively. The Board may decide that if a dispensation renewal is applied for once the period of validity has expired, and that if there have been no changes with respect to the person's health or employment, the application may be processed by the County Governor of Rogaland.

The decision of the Appeal Board is final and no further appeal is possible.

19 Reference documents

19.1 Links to relevant documents

[Regulations regarding health requirements for persons working on installations in petroleum activities offshore](#)

[Norwegian Public Administration Act](#)

[Norwegian Health Personnel Act](#)

[Working Environment Act](#)

[Regulations of 6 December 2011 no. 1357 Performance of work](#)



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