STATUTORY INSTRUMENTS

1976 No. 923

PIPE-LINES

SUBMARINE PIPE-LINES

The Submarine Pipe-lines (Diving Operations) Regulations 1976

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Whereas the Secretary of State has consulted pursuant to section 32(1) of the Petroleum and Submarine Pipe-lines Act 1975**(a)** (hereinafter referred to as "the Act") with organisations in the United Kingdom appearing to him to be representative of those persons who will be affected by the following Regulations:

Now, therefore, the Secretary of State in exercise of his powers under sections 26 and 32 of the Act and any other powers enabling him in that behalf hereby makes the following Regulations:—

Citation, commencement and interpretation

1.—(1) These Regulations may be cited as the Submarine Pipe-lines (Diving Operations) Regulations 1976 and shall come into operation on 10th July 1976.

(2) In these Regulations, unless the context otherwise requires:—

"ambient pressure" means the external pressure to which the body of a diver is for the time being subjected under water or, as the case may be, in a compression chamber;

"appropriate breathing mixture" means a breathing mixture which, having regard to the plant and equipment used in the diving operations, the work undertaken in those operations and the conditions in which and the depth at which they are to be carried out, is suitable in content and temperature and of adequate pressure;

"approved doctor" means a qualified medical practitioner approved by the Secretary of State as a competent person to issue a certificate that a person is fit to take part as a diver in diving operations;

"breathing mixture" means any mixture of gases which is fit for breathing and free from contamination;

"controlled waters" has the meaning assigned thereto by section 20(2) of the Act;

"diver's indicator lamp" means a lamp attached to a diver's personal diving equipment for the purpose of indicating the position of a diver when he is on the surface of the water;

"diving manual" means the diving manual referred to in Regulation 9(1);

"diving operations" means diving operations such as are mentioned in Regulation 2(1);

"diving plant and equipment" means plant and equipment intended to form part of the life-support system of a diver;

"diving supervisor" means, in relation to any diving operations, the competent person referred to in Regulation 5(2) who has been appointed by the employer of divers to supervise those operations;

(a) 1975 c. 74.

"employer of divers", in relation to any diving operations, has the meaning assigned thereto by Regulation 3(2);

"master" in relation to a vessel, includes the captain or any other person made responsible by the owner thereof for safety, health and welfare on board the vessel;

"personal diving equipment" means equipment carried by a diver on his person and includes his diving suit, breathing apparatus and gas bottles;

"pipe-line works" has the meaning assigned thereto by section 26(2) of the Act;

"proposed owner" in relation to a proposed pipe-line means the person for the time being designated as the proposed owner of the proposed pipe-line by an order made pursuant to section 33(3) of the Act and where no such order has been made the person on whose behalf the pipe-line works are being executed;

"saturation techniques" means procedures in accordance with which a diver is continuously subjected to an ambient pressure greater than atmospheric pressure so that his body tissues and blood become saturated with the inert element of the breathing mixture;

"self-contained" in relation to any diving plant and equipment means diving plant and equipment in which the supply of breathing mixture is carried by the diver independently of any other source;

"vessel" includes an aircraft, a hovercraft and any floating structure.

(3) The Interpretation Act 1889**(a)** shall apply to the interpretation of these Regulations as it applies to the interpretation of an Act of Parliament.

Application of Regulations

2.—(1) These Regulations shall apply to all diving operations, other than diving operations to which the Offshore Installations (Diving Operations) Regulations 1974**(b)** and the Merchant Shipping (Diving Operations) Regulations 1975**(c)** apply, carried on in connection with pipe-line works executed in, under or over any controlled waters, except pipe-line works executed in respect of a pipe-line of which no initial or terminal point is situated in the United Kingdom or controlled waters.

(2) In relation to any provision of these Regulations, the discharge of any function or responsibility which is required to be discharged by any person under any other enactment shall, if it is a function or responsibility required to be discharged by that person, or any other person, under these Regulations (whether or not that person bears the same designation in these Regulations), be a sufficient discharge of that function or responsibility under these Regulations.

Owners and proposed owners

3.—(1) It shall be the duty of the owner of the pipe-line or the proposed owner of the proposed pipe-line in connection with which any diving operations are, or are to be, carried on to secure that effective arrangements are made in order to ensure that all provisions of these Regulations which impose duties on other persons are in all respects complied with by those persons and to secure that such arrangements are efficiently carried out.

(a) 1889 c. 63.
(b) S.I. 1974/1229 (1974 II, p. 4645).
(c) S.I. 1975/116 (1975 I, p. 320).

(2) The arrangements mentioned in the foregoing paragraph shall, without prejudice to the generality thereof, provide for a competent person, in these Regulations referred to as "the employer of divers", to carry out the duties imposed by these Regulations upon the employer of divers who shall be the person who employs under contract of service all divers engaged to carry on any diving operations to which those arrangements apply and, where there is no such person, shall be the owner of the pipe-line or the proposed owner of the proposed pipe-line in connection with which those diving operations are to be carried on.

(3) It shall be the duty of the owner of the pipe-line or the proposed owner of the proposed pipe-line in connection with which any diving operations are, or are to be, carried on to secure that all plant and equipment, other than diving plant and equipment, being plant and equipment which is necessary for the safe conduct of those operations, is available and that the plant and equipment is of sound construction and suitable material, in good working order and adequate for the purpose for which it is to be used.

Masters of vessels

4. It shall be the duty of the master of a vessel from which diving operations are, or are to be, carried on—

(*a*) to secure that no operations or activities which might be a danger to any person engaged in those diving operations are carried on from or on the vessel and to consult the diving supervisor about those operations or activities and any other matter which may affect the safety of those diving operations before they are commenced;

(*b*) to make available to the diving supervisor any plant, equipment or facilities reasonably required by the diving supervisor to secure the safety, health and welfare of any diver engaged in those diving operations;

(*c*) to make available a suitable and safe place, from which those diving operations may be carried on, to the persons carrying them on;

(*d*) to secure that no such diving operations are carried on unless adequate flags, lights and other warning devices are exhibited by the vessel, to inform all persons in the vicinity that diving operations are in progress or are about to begin;

(*e*) to secure that signs are displayed on the control panel, or controls, of any plant or equipment on or forming part of the vessel the operation, or cessation of operation, of which is likely to be a danger to any diver, warning persons of that danger;

(*f*) to secure that the diving supervisor is provided before such diving operations begin, and at adequately frequent intervals during the duration of those operations, with adequate meteorological and oceanological forecasts for the area in which those operations are, or are to be, carried on and for their expected duration;

(*g*) to give the master or other person in control of any ship or other manned structure in the vicinity of the diving operations, whose presence may be a hazard to, or which may be endangered by, those diving operations, prior notice thereof; and

(*h*) to provide and maintain effective means of communication between the vessel from which those diving operations are, or are to be, carried on and any ship or other manned structure referred to in paragraph (*g*).

Employers of divers

5.—(1) Subject to Regulation 3, it shall be the duty of the employer of divers to secure that effective arrangements are made in order to ensure that all provisions of these Regulations which impose duties upon the diving supervisor, or upon divers, are complied with by those persons and to secure that such arrangements are efficiently carried out.

(2) The employer of divers shall appoint in writing a competent person, who has adequate knowledge of the diving techniques to be used in the diving operations for which he is so appointed and who is or has been qualified to be employed as a diver in accordance with these Regulations, to carry out in relation to those operations the duties imposed by these Regulations upon the diving supervisor and shall secure that all divers engaged in diving operations and the diving operations carried on, or to be carried on, by them are under the immediate and effective control of that person.

(3) It shall be the duty of the employer of divers:—

(*a*) to secure that all diving operations are carried out in accordance with these Regulations;

(*b*) to issue the diving manual referred to in Regulation 9;

(*c*) to retain the diving operations logbook for a period of not less than 2 years after the date of the last entry made therein by the diving supervisor under Regulation 10(1);

(*d*) to secure that the provisions of Regulation 12(1) in relation to certificates of medical fitness are complied with;

(*e*) to secure that the provisions of Regulation 13 in relation to qualifications of divers are complied with;

(*f*) to provide or arrange for the provision of all diving plant and equipment necessary for the safe conduct of the diving operations and to secure that it is of sound construction and suitable material, is in good working order at all times and is adequate for the purpose for which it is to be used and in particular that all such plant and equipment which is to be used at low temperatures is adequately protected against malfunctioning at low temperatures;

(*g*) not to provide for, or permit to be used, in diving operations, any of the equipment mentioned in Regulation 16(2);

(*h*) subject to the provisions of the remainder of these Regulations, to secure that all diving plant and equipment used, or to be used, in or in connection with diving operations is examined, tested, overhauled and repaired as required and to ensure that a proper record of such measures is kept; and

(*i*) to secure that emergency services are available, and able to proceed, in accordance with the provisions of Regulation 20.

Diving supervisors

6.—(1) A diving supervisor shall secure that all diving operations are carried on in accordance with the provisions of the diving manual, and that—

(*a*) the diving operations are carried on from a suitable and safe place on the surface;

(*b*) all plant, equipment and facilities necessary for the safe conduct of the diving operations have been provided for and are used by the persons carrying on those operations;

(*c*) no diving plant or equipment is used in or in connection with the diving operations unless it complies with the provisions of Regulations 16 and 17;

(*d*) he is present at the place from which the diving operations are being carried on, together with such number of persons with the requisite knowledge as may be necessary to operate the plant, equipment and facilities referred to in sub-paragraph (*b*), while any diver is under water;

(*e*) there are at all times when diving operations are, or are about to be, carried on present at the place from which those operations are, or are to be, carried on, apart from any diver who is below water or is about to dive, at least 2 divers, hereinafter referred to as "stand-by divers", except that—

(i) where a submersible compression chamber is used in the diving operations one stand-by diver may be located therein,

(ii) where 2 divers are working under water at the same time and are connected to each other by a life-line, the requirement of this sub-paragraph shall be satisfied if there is only one stand-by diver, and

(iii) where, in case of emergency, a stand-by diver goes to the assistance of any diver under water it shall not be a contravention of this sub-paragraph that only one diver or (as the case may be) no diver remains at the place from which the diving operations are carried on, so long as that emergency continues;

(*f*) where there are 2 or more stand-by divers at the place from which the diving operations are, or are to be, carried on at least one of them shall be in a state of immediate readiness to dive and where there is only one stand-by diver at that place he shall be in that state;

(*g*) where any submersible compression chamber is used in the diving operations—

(i) at least 2 divers are in the submersible compression chamber as it descends to the depth at which work is to be carried on, and

(ii) at least one diver remains in the submersible compression chamber to monitor the diver who has left the submersible compression chamber and to be available to go out of that chamber should that diver require assistance in the event of an emergency, and it shall not be a contravention of this sub-paragraph that in such an event the diver who has left that chamber remains absent therefrom so long as that emergency continues; and

(*h*) all reasonable precautions against danger to, illness of and injury to the divers and other persons engaged in the diving operations are taken.

(2) A diving supervisor shall not permit any diver to take part as a diver in diving operations if in his opinion the diver is not fit to dive in those operations.

(3) A diving supervisor shall consult the master of the vessel from which diving operations are to be carried on, about the conduct of those operations.

Prohibited diving operations

7.—(1) It shall be the duty of the employer of divers and the diving supervisor each to secure that no diving operations are carried on, and the duty of a diver not to carry on any diving operation—

(*a*) from a vessel which is under way;

(*b*) unless the diver at all times while he is under water is equipped with and securely connected to a lifeline or a breastrope which is connected to—

(i) a person on the surface, or

(ii) a submersible compression chamber, if one is being used in the diving operations, or

(iii) another diver who is so equipped and connected to a person on the surface, or to a submersible compression chamber, if one is being used in the diving operations;

(*c*) at depths greater than 50 metres unless, except in case of emergency every descent to and ascent from the depth at which the diver is to work is made in a submersible compression chamber;

(*d*) at depths greater than 125 metres, except in case of emergency, unless particulars of the procedures to be followed in carrying on the operations have been submitted to the Secretary of State not less than 21 days, or such lesser period as may, in a particular case, be approved by the Secretary of State, before the operations are to be carried on and he has approved the use of those procedures and in such case this sub-paragraph shall have effect with the substitution for 125 metres of such greater depth as the Secretary of State may in his approval specify; or

(*e*) using saturation techniques, unless particulars of the techniques to be used and the procedures to be followed in carrying on the operations have been submitted to the Secretary of State not less than 21 days, or such lesser period as may, in a particular case, be approved by the Secretary of State, before the date on which the operations are to be carried on and he has approved the use of those techniques and procedures.

(2) For the purposes of this Regulation, a vessel is "under way" when it is not at anchor, aground, or made fast to the shore or a fixed structure:

Provided that a vessel using its propulsion system or a dynamic positioning system shall not be regarded as under way if either or both of those systems are in operation and are maintaining the vessel in a stationary position on a fixed heading and precautions are taken to secure the safety of the divers from those systems and the flows of water thereby created.

Restrictions on diving

8.—(1) No diver engaged in diving operations shall remain under water and the employer of divers and the diving supervisor shall secure that no diver remains under water, for an aggregate period in excess of 3 hours in any period of 24 hours unless that diver is using saturation techniques.

(2) No diver engaged in diving operations shall go or remain under water if he is unfit to do so or knows of any other sufficient reason why he should not do so and he shall inform the diving supervisor of his unfitness or such other reason.

Diving manual

9.—(1) Every employer of divers shall issue a diving manual containing such information and instructions as may be necessary to enable all persons engaged in diving operations under his control to carry them out safely and competently.

(2) The diving manual shall include provisions—

(*a*) for securing compliance with these Regulations;

(*b*) for securing the safety, health and welfare of persons engaged in diving operations; and

(*c*) relating to the matters specified in Schedule 1;

and shall include diving tables approved by the Secretary of State for use in decompression procedures and in therapeutic decompression procedures.

(3) The employer of divers shall, if the Secretary of State so requires, furnish to him a copy of the diving manual issued by him for any diving operations or intended operations, or such part of the diving manual as the Secretary of State may consider relevant for the purpose.

(4) If the Secretary of State is of the opinion that the diving manual does not in any respect make sufficient provision for the matters mentioned in paragraph (2), he may serve on the employer of divers who issued the diving manual a notice in writing stating that he is of that opinion, specifying the matter for which, in his opinion, provision, or (as the case may be) different provision, ought to be made as aforesaid, and the nature of the provision that, in his opinion, ought to be made, and the employer of divers shall, before the expiration of such period beginning with the day on which the notice becomes operative as may be specified therein, amend the diving manual accordingly.

(5) A notice for the purposes of paragraph (4) shall be sufficiently served on the employer of divers by addressing it to him and delivering it to him, or sending it by post addressed to him at any address in the United Kingdom of the employer of divers known to the Secretary of State, or by delivering it to the diving supervisor on the vessel from which the diving operations to which the diving manual in question applies, are or are to be, carried on.

(6) It shall be the duty of the employer of divers to supply to any person engaged in or likely to be engaged in diving operations a copy of the diving manual or a document setting out the effect of the diving manual so far as it concerns that person.

Diving operations logbook

10.—(1) The diving supervisor shall, in relation to each diving operation, enter an accurate record in a diving operations logbook of—

(*a*) the name of the employer of divers;

(*b*) the date on which and the period during which the diving operation was carried on;

(*c*) the name or other designation of the vessel from which the diving operation was carried on and the location of that vessel;

(*d*) his own name and the period for which he acted as diving supervisor;

(*e*) the names of the other persons engaged in the diving operation including those operating any diving plant or equipment and their respective duties;

(*f*) the procedures followed in the course of the diving operation;

(*g*) the maximum depth reached in the course of the diving operation and the time spent under water by each diver;

(*h*) the type of equipment and breathing mixture used;

(*i*) the nature of the diving operation;

(*j*) any decompression sickness or other illness or injury suffered by any of the divers;

(*k*) particulars of any meteorological or oceanological factors affecting the diving operation; and

(*l*) any other factors relevant to the safety or health of the persons engaged in the diving operation.

(2) For the purposes of this Regulation the entries in the diving operations logbook shall be signed by the diving supervisor.

Diver's logbook

11.—(1) Each diver shall maintain a diver's logbook being a personal logbook in which he shall enter his name and in which on every day on which he takes part in a diving operation he shall enter an accurate record of—

(*a*) the name and address of the employer of divers;

(*b*) the date;

(*c*) the name or other designation of the vessel from which the diving operation is carried on and the location of that vessel;

(*d*) the name of the diving supervisor;

(*e*) the maximum depth reached on each occasion;

(*f*) the time he spent under water on each occasion;

(*g*) the type of equipment and breathing mixture used by him;

(*h*) the work done by him on each occasion;

(*i*) the decompression procedures followed by him on each occasion;

(*j*) any decompression sickness or other illness or injury suffered by him; and

(*k*) any other factor which is relevant to his safety or health.

(2) Each entry shall be signed by the diver and countersigned by the diving supervisor.

(3) Every diver's logbook shall be retained by the diver for a period of not less than 2 years from the date of the last entry made therein.

Certificate of medical fitness

12.—(1) No person shall take part, and no person shall be employed or be permitted to take part as a diver, in any diving operations unless—

(*a*) not more than 12 months prior to the date on which the diving operations are carried on, an approved doctor has, after examination, issued a certificate that that person is fit to dive; and

(*b*) that certificate is in the possession of the employer of divers and is valid for the diving operations in question.

(2) A certificate given for the purposes of paragraph (1) may state that the person to whom the certificate relates should be medically examined within a specified period of less than 12 months and, where such a period is specified in a certificate, paragraph (1) above shall have effect with the substitution for the reference to 12 months of a reference to the period specified in the certificate.

(3) A certificate given for the purpose of paragraph (1) may be issued subject to conditions, such as a condition as to the depth to which a person is fit to dive, and where such a certificate is conditional it shall not be valid for diving operations other than diving operations in which those conditions are satisfied.

(4) If by reason of illness or physical injury a person is unable for a continuous period exceeding 7 days to work under water as a diver, any certificate in respect of that person issued pursuant to paragraph (1) above shall cease to be valid.

Qualifications of divers

13. No person shall take part, and no person shall be employed or be permitted to take part as a diver, in diving operations unless he is over 18 years of age and, either—

(*a*) he—

(i) has had previous experience in, and is competent in, the use of the kind of diving plant and equipment and breathing mixture he is to use when diving,

(ii) has had experience in diving (including decompression procedures) to, and has a knowledge of diving practice (including decompression procedures) for, the depth (actual or simulated) of water to which, and in the conditions in which, he is to dive, and

(iii) has had experience in the kind of work he is to carry out under water; or

(*b*) he—

(i) has received adequate theoretical and practical instruction in the use of the kind of diving plant and equipment and breathing mixture he is to use when diving, in diving to the depth of water and in the conditions to and in which he is to dive, and in the kind of work he is to carry out under water,

(ii) is competent in the use of that kind of diving plant and equipment and breathing mixture, and

(iii) is, whilst under water during diving operations, under the close personal supervision of a diver who has the experience, competence and knowledge required for those operations by paragraph (*a*).

Restrictions on use of compressed natural air

14. The employer of divers shall not permit the use, by divers engaged in diving operations, of compressed natural air at a pressure which exceeds the pressure of water at a depth of 50 metres—

(*a*) as a breathing mixture; or

(*b*) to raise the internal pressure of any compression chamber, except for the purpose of the chamber tests required under Regulation 17(1)(*b*).

Breathing mixtures

15.—(1) The diving supervisor shall not permit any diving operations to be carried on unless—

(*a*) an adequate quantity of the appropriate breathing mixture and suitable plant and equipment for supplying the mixture to the divers is available for use, and is used, by the divers engaged in those diving operations;

(*b*) a reserve supply of the appropriate breathing mixture together with any necessary plant and equipment is kept readily available for immediate use in the event of an emergency, and is kept on the vessel from which the diving operations are carried on; and

(*c*) where a submersible compression chamber is being used in the diving operations, a reserve supply of the appropriate breathing mixture together with any necessary plant and equipment is also kept in, or attached to, the submersible compression chamber and is kept readily available for immediate use, in the event of an emergency, by divers associated with, whether inside or outside, that submersible compression chamber.

(2) Each diver shall on making a dive carry with him a reserve supply of the appropriate breathing mixture which is adequate to enable him to reach the reserve supply kept in pursuance of the preceding paragraph from the maximum depth to which he is to dive.

(3) The total quantity of breathing mixture supplied for the use of a diver pursuant to paragraphs (1) and (2) above shall be sufficient for the period it will take a stand-by diver to reach the first-mentioned diver and to enable both the stand-by diver and the first-mentioned diver—

(*a*) to return to the surface and to carry out the appropriate decompression procedures during the return; or

(*b*) where a submersible compression chamber is being used in the diving operations, to return to that chamber and then to surface in that chamber and to start the appropriate decompression procedures at the surface.

Diving plant and equipment

16.—(1) The diving plant and equipment provided in pursuance of Regulation 5(3)(*f*) shall include—

(*a*) equipment for supplying breathing mixture;

(*b*) a deck compression chamber with all necessary ancillary equipment;

(*c*) lifelines or breastropes;

(*d*) equipment to provide an effective means of communication with every diver;

(*e*) shotropes or other depth measuring devices;

(*f*) where the diving operations are to be carried out at a depth of more than 50 metres, a submersible compression chamber with its associated equipment and facilities;

(*g*) where the diving operations are to be carried on during the hours of darkness, diver's indicator lamps;

(*h*) first aid equipment;

(*i*) such other equipment as may be necessary to ensure that each diver's body temperature is kept within safe limits; and

(*j*) such plant and equipment as may be necessary for the use of the divers in entering and in leaving the water.

(2) The diving supervisor shall secure that there shall not be used, and no diver shall use, in diving operations—

(*a*) any self-contained breathing apparatus which works on a closed or semi-closed circuit system; or

(*b*) any personal diving equipment providing a breathing mixture which is not capable of supplying the appropriate breathing mixture at a rate adequate to sustain prolonged vigorous physical exertion at any ambient pressure.

(3) A diving supervisor shall secure that—

(*a*) all diving plant and equipment, other than plant intended to be mobile in the course of diving operations, is secured firmly in place at all times when diving operations are in progress;

(*b*) all diving plant and equipment required to be provided in pursuance of Regulation 5(3)(*f*) is, unless actually in use by divers engaged in diving operations for which he is the diving supervisor, kept at all times when required for use in diving operations, either—

(i) at the place from which those operations are, or are to be, carried on, or

(ii) as the case may require, below water with any submersible compression chamber being used in those operations or with the divers so engaged,

and in all cases readily available for use;

(*c*) the air intake for any compressor is situated outside any area where dangerous gases occur, or might occur; and

(*d*) the deck compression chamber is so placed as to be readily accessible to the divers on their return from the diving operations to the place from which those operations were undertaken.

(4) The provisions of Schedule 2 shall apply to all compression chambers used in diving operations.

(5) Without prejudice to the generality of Regulation 5(3)(*f*), any skip provided for the use of the divers entering or leaving the water shall—

(*a*) be large enough to carry at least 2 divers with their personal diving equipment and associated equipment, in uncramped conditions;

(*b*) be reasonably secure against tipping or spinning;

(*c*) not contain any equipment, other than that of the divers, which might interfere with an occupant's foothold or handhold; and

(*d*) be so constructed or equipped that its occupants are reasonably secure against falling out of the skip.

Testing, etc., of diving plant and equipment

17.—(1) The employer of divers shall secure that—

(*a*) all diving plant and equipment used, or to be used, in or in connection with diving operations is examined and tested—

(i) after it has been altered or repaired, before being used again in diving operations, and

(ii) in any event not more than 3 months before any day on which it is used in diving operations;

(*b*) in addition to the tests required by sub-paragraph (*a*) every compression chamber used in or in connection with diving operations has been subjected not more than 2 years before any day on which it is so used, to a complete survey, and an air pressure leak test, to working pressure, and has been subjected not more than 5 years before any such day, to an internal hydrostatic test; and

(*c*) in addition to the tests required by sub-paragraph (*a*) every transportable pressure vessel used in or in connection with such diving operations has been subjected not more than 2 years before any day on which it is so used, to an internal pressure test.

(2) In the case of a compression chamber, the test carried out in pursuance of paragraph (1)(*a*)(i) shall be a hydrostatic test.

(3) The employer of divers shall ensure that a certificate with details and results of each survey and test carried out in pursuance of this Regulation, is entered in, attached to or inserted into a register kept for the purpose in relation to each piece of plant and equipment and that each such certificate is signed by a person by whom, or under whose close supervision, the survey or test was carried out.

(4) The employer of divers shall retain each register kept for the purpose of this Regulation for a period of at least 2 years after the date of the last entry therein and in the case of a register containing certificates relating to compression chambers or pressure vessels a period of at least 5 years after the date of the last entry therein.

(5) The employer of divers shall secure that each test, examination and survey carried out in pursuance of this Regulation is carried out by, or under the close supervision of, a competent person.

(6) The employer of divers shall secure that no plant or equipment which any examination or test shows to be unsafe for its purpose is used in diving operations and, in particular, that no pressure gauge is so used if it shows an error of 2·5 per cent or more of any reading of that gauge when compared with an accurate test gauge.

(7) The diving supervisor shall secure that no diving plant or equipment is used in or in connection with the diving operations unless he has in his possession the register kept in pursuance of this Regulation in relation to that plant or equipment.

Daily examination of diving plant and equipment

18.—(1) The diving supervisor shall secure that no diving plant and equipment is used in or in connection with any diving operations unless, not more than 24 hours before such use, he has examined all that plant and equipment and found it to be in good working order.

(2) The diving supervisor shall secure that in any diving operations no pump, compressor, cylinder or pipeline is used for conveying breathing mixture to a diver unless, not more than 24 hours before such use, it has been tested for leaks by, or in accordance with the directions of, the diving supervisor or the diver and found to be in good working order.

(3) The diving supervisor shall secure that in any diving operations no oxygen analyzer is used unless, not more than 24 hours before such use, it has been recalibrated in accordance with the manufacturer's instructions for that analyzer.

(4) The diving supervisor shall secure that no deck compression chamber is used in any such diving operations unless the atmosphere within it contains not more than 25 per cent oxygen at a pressure of one atmosphere.

Use of certain equipment

19. No diver engaged in diving operations shall go or remain under water, and the employer of divers and the diving supervisor shall secure that no diver goes or remains under water, unless—

(*a*) that diver has a means of communication with the diving supervisor, or with the diver in the submersible compression chamber if such a chamber is being used in the diving operations;

(*b*) a system is provided, in addition to the said means of communication, whereby signals may pass in an emergency between the diver and diving supervisor, or between the diver and the diver in the submersible compression chamber if such a chamber is being used in the diving operations;

(*c*) during hours of darkness, that diver is provided with and uses a diver's indicator lamp and the vessel from which the diving operations are carried on is adequately illuminated; and

(*d*) if a submersible compression chamber is not being used in the diving operations, there is provided and used, in respect of that diver, a means whereby the depth at which he is during the operations may be constantly monitored by the diving supervisor.

Emergency services

20.—(1) At all times while diving operations are being carried out emergency services must be available and be able to proceed, by a suitably fast means of transport, to the location of the diving operations in the event of an emergency which threatens the safety, health or welfare of any diver.

(2) The emergency services referred to in the preceding paragraph shall include medical and diving personnel, medical and diving equipment and all other necessary supplies.

Provisions as to approvals

21. Any approval given by the Secretary of State under these Regulations may be without limit of period or limited so as to expire on a specified date unless renewed, may be absolute or conditional and may be varied or revoked.

Civil liability

22. The provisions of section 30 of the Act (which makes provision for civil liability for breach of statutory duty) shall apply to the duties imposed on any person by these Regulations.

Offences

23.—(1) A person who contravenes any provision of these Regulations shall be guilty of an offence.

(2) The punishment for an offence created by this Regulation shall be—

(*a*) on summary conviction a fine not exceeding £400;

(*b*) on conviction on indictment imprisonment for a term not exceeding 2 years, or a fine, or both.

(3) In proceedings for an offence under this Regulation it shall be a defence for the accused to prove—

(*a*) that he has exercised all due diligence to prevent the commission of the offence; and

(*b*) that the contravention was committed without his consent, connivance or wilful default.

J. Dickson Mabon,
Minister of State,
Department of Energy.

14th June 1976.

(Regulation 9)

SCHEDULE 1

MATTERS IN RESPECT OF WHICH PROVISION IS TO BE MADE IN THE DIVING MANUAL

Planning

1. Consideration of:—

(*a*) foreseeable meteorological and oceanological conditions;

(*b*) sea bed conditions;

(*c*) depth and type of operation;

(*d*) suitability of plant and equipment;

(*e*) availability and qualifications of personnel.

Preparations

2. (*a*) consultation with the masters of any vessel from which the diving operations are to be carried on;

(*b*) selection of breathing mixtures and equipment;

(*c*) check of plant and equipment;

(*d*) allocation of personnel;

(*e*) personal fitness of divers for underwater operations;

(*f*) precautions against cold;

(*g*) arrangement of signalling procedures.

Procedures during diving

3. (*a*) responsibilities of diving supervisor, divers and surface support;

(*b*) use of all types of personal diving equipment;

(*c*) supply of gases and gas mixtures, including maximum and minimum partial pressures of gases;

(*d*) diving operations direct from vessel;

(*e*) diving operations in relation to submersible compression chambers;

(*f*) working in different locations;
(*g*) operation and use of equipment under water;
(*h*) limits on depth and time under water;
(*i*) descent of divers and submersible compression chamber;
(*j*) ascent and recovery of divers and submersible compression chamber;
(*k*) compression and decompression;
(*l*) control in changing meteorological and oceanological conditions;
(*m*) maintenance of logbooks.

Emergency procedures

4. (*a*) emergency signalling;
(*b*) emergency assistance under water;
(*c*) therapeutic decompression;
(*d*) first aid;
(*e*) medical assistance;
(*f*) calling in assistance from emergency services;
(*g*) precautions in the event of evacuation of the vessel.

(Regulation 16(4))

SCHEDULE 2

Compression Chambers

1. A deck compression chamber shall—

(*a*) comprise at least 2 compartments with doors each of which acts as a pressure seal and which may be opened from either side;

(*b*) have sufficient space in at least one of its compartments to enable 2 adults to lie down inside the chamber without difficulty and, if the chamber is to be used in circumstances in which a person may be required to remain inside under pressure for a continuous period of 12 hours or more, to enable 2 adults to stand upright in the chamber without difficulty;

(*c*) where a submersible compression chamber is used, be capable of allowing a person to transfer under pressure from the submersible compression chamber to the deck compression chamber (and vice versa);

(*d*) provide a suitable environment and suitable facilities for the persons who are to use it, having regard to the kind of diving operation in connection with which, and the period of compression or decompression for which, it is to be used;

(*e*) be so designed as to minimize the risk of fire;

(*f*) have a lock through which food and medical supplies may be passed into the chamber while its occupants remain under pressure;

(*g*) be equipped with such valves, gauges and other fittings (which are to be made of suitable materials and so designed as to minimize the noise inside the chamber during rapid pressurisation) as are necessary to control and record the internal pressures of each compartment from outside the chamber;

(*h*) be fitted with adequate equipment for supplying and maintaining the appropriate breathing mixture to its occupants, and for lighting and heating the chamber; and

(*i*) be equipped with a two-way oral communication system, a time clock and adequate first aid and sanitary facilities.

2. A submersible compression chamber shall—

(*a*) be equipped with means whereby each diver using the chamber is able to enter and leave it without difficulty;

(*b*) be capable of allowing a person to transfer under pressure from it to a deck compression chamber (and vice versa);

(*c*) be equipped with doors which act as pressure seals and which may be opened from either side;

(*d*) contain such valves, gauges and other fittings (which are to be made of suitable materials) as are necessary to control and record the pressures within the chamber and to ascertain the external pressures on the chamber;

(*e*) contain adequate equipment for supplying the appropriate breathing mixture to persons occupying or working from the chamber;

(*f*) be equipped with a two-way oral communication system whereby contact may be maintained both with persons at the place from which the diving operations are carried on and with divers while they are outside the chamber;

(*g*) contain a time clock and equipment for lighting and heating the chamber; and

(*h*) contain adequate first aid facilities and lifting equipment sufficient to enable an unconscious or injured diver to be hoisted into the chamber by a person located therein.

3. A submersible compression chamber shall—

(*a*) be used in association with lifting gear which enables the chamber to be lowered to the depth at which the diving operations are to be carried on, maintained in its position and raised, without excessive lateral, vertical or rotational movement taking place; and

(*b*) be provided with means whereby, in the event of failure of the main lifting gear, the chamber can be returned to the surface. If these means involve the shedding of weights, they shall be capable of being shed from the chamber by a person inside it and means shall be incorporated to prevent their accidental shedding.

EXPLANATORY NOTE

(*This Note is not part of the Regulations.*)

These Regulations relate to diving operations carried on in respect of submarine pipe-lines and associated works located in United Kingdom territorial waters and areas designated pursuant to the Continental Shelf Act 1964 (c. 29). They do not however apply to diving operations covered by the Offshore Installations (Diving Operations) Regulations 1974 or the Merchant Shipping (Diving Operations) Regulations 1975.

The Regulations lay duties on the owners and proposed owners of submarine pipe-lines, on masters of vessels from which such diving operations are carried on, and on the employers of divers, relating to the provision of necessary equipment and the procedures to be followed in diving operations. They provide for the appointment of diving supervisors to exercise immediate control of diving operations and for the keeping of logbooks. They require that divers shall be certified fit for diving and shall, unless experienced, dive only after instruction and under close supervision by another diver. Requirements are imposed for periodic testing and daily examination of diving equipment and for the provision of rescue services.

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