STATUTORY INSTRUMENTS

1978 No. 611

OFFSHORE INSTALLATIONS

The Offshore Installations (Fire-fighting Equipment) Regulations 1978

Made - - - -	24*th April* 1978
Laid before Parliament	4*th May* 1978
Coming into Operation	1*st April* 1979

ARRANGEMENT OF REGULATIONS

1. Citation and commencement.
2. Interpretation.
3. Application.
4. Fire-fighting equipment—general.
5. Automatic fire detection systems.
6. Flammable gas detection and measuring equipment.
7. Fire alarm systems.
8. Remote control safety equipment.
9. Fire mains.
10. Hydrants and fire hoses.
11. Water deluge systems and water monitors.
12. Automatic sprinkler systems.
13. Fixed fire extinguishing systems.
14. Fire extinguishers.
15. Helicopter landing area equipment.
16. Fireman's equipment.
17. Fire blankets.
18. Operating instructions.
19. Fire-fighting equipment plans.
20. Examination of fire-fighting equipment.
21. Copies of Regulations.
22. Duties of persons.
23. Civil liability.
24. Offences.

SCHEDULE—Examination fees.

Whereas the Secretary of State has consulted pursuant to section 7(1) of the Mineral Workings (Offshore Installations) Act 1971(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 6 and 7 of, and paragraphs 1(1), 3, 4(1), 7, 9, 11, 12 and 14 of the Schedule to, the Act, as extended and amended by section 44 of the Petroleum and Submarine Pipe-lines Act 1975(b), and of all other powers enabling him in that behalf, hereby makes the following Regulations:

Citation and commencement

1. These Regulations may be cited as the Offshore Installations (Fire-fighting Equipment) Regulations 1978 and shall come into operation on 1st April 1979.

Interpretation

2.—(1) In these Regulations—

"accommodation space" means any room used for eating, sleeping, cooking or recreation, or as an office, sick bay, laundry room or locker room, any corridor giving access to any of these rooms, and any storeroom in the vicinity of any of these rooms;

"appropriate languages" in relation to any information to be displayed under these Regulations, means English and such other languages as are necessary to enable the information to be understood by all persons on the installation who may need to refer to it;

"ashore" means on land in the United Kingdom;

"the control point" has the meaning assigned to it by Regulation 5(2) below;

"fire-fighting equipment" means any equipment required under Regulations 5 to 17 below and any other equipment for the purpose of detecting or indicating the presence of, preventing the spread of, or extinguishing, a fire, or of detecting or indicating the presence of, or measuring, an accumulation of flammable gas;

"fixed offshore installation" means an offshore installation which is not a mobile offshore installation;

"inspector" means a person appointed under section 6(4) of the Act;

"installation manager" includes, where no manager of an offshore installation is appointed pursuant to section 4 of the Act, any person made responsible by the owner for safety, health and welfare on an offshore installation;

"mobile offshore installation" means an offshore installation which can be moved from place to place without major dismantling or modification, whether or not it has its own motive power;

"normally manned offshore installation" means an offshore installation on which persons are normally present;

"working space" means any workshop, engine room or generator room, and any space containing equipment in which petroleum or any other flammable substance is stored, conveyed, processed or consumed.

(a) 1971 c. 61. (b) 1975 c. 74.

(2) 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

3. These Regulations shall apply to —

(*a*) fixed offshore installations maintained for underwater exploitation or exploration to which the Act applies; and

(*b*) mobile offshore installations, not being dredging installations registered (whether in the United Kingdom or elsewhere) as vessels, when maintained for underwater exploitation or exploration to which the Act applies.

Fire-fighting equipment—general

4.—(1) Any fire-fighting equipment which is provided on an offshore installation shall be of a type for the time being approved by the Secretary of State for offshore installations of a class or description which includes that installation.

(2) All fire-fighting equipment shall be kept available for immediate use and shall, where necessary, be protected from damage.

Automatic fire detection systems

5.—(1) Every offshore installation shall be provided with an automatic fire detection system.

(2) The system provided under paragraph (1) above on a normally manned offshore installation shall be capable of—

(*a*) indicating both audibly and visibly the presence of a fire in any working space on the installation not protected by the automatic sprinkler system provided under Regulation 12 below—

(i) at a place (hereafter in these Regulations referred to as "the control point") at which the public address system provided on the installation may be operated; and

(ii) at another place on the installation where someone is present at all times when the control point is unmanned; and

(*b*) indicating the location of any such fire at the control point.

(3) The system provided under paragraph (1) above on an installation which is not normally manned shall be capable of indicating both audibly and visibly the presence of a fire in any working space on the installation at a place which is continuously manned either on another installation or ashore.

Flammable gas detection and measuring equipment

6.—(1) Every offshore installation shall be provided with an automatic flammable gas detection system capable of monitoring continuously every part of the installation in which flammable gas may accidentally accumulate.

(2) The system provided under paragraph (1) above on a normally manned offshore installation shall be capable of—

(*a*) indicating both audibly and visibly the presence of an accumulation of flammable gas in any part of the installation which is monitored by the system—

(i) at the control point on the installation; and

(a) 1889 c. 63.

(ii) at another place on the installation where someone is present at all times when the control point is manned; and

(*b*) indicating the location of any such accumulation at the control point.

(3) The system provided under paragraph (1) above on an installation which is not normally manned shall be capable of indicating both audibly and visibly the presence of an accumulation of flammable gas in any part of the installation which is monitored by the system at a place which is continuously manned either on another installation or ashore.

(4) Whenever an offshore installation is manned it shall be provided with two portable devices capable of measuring accurately an accumulation of flammable gas.

Fire alarm systems

7. Every normally manned offshore installation shall be provided with a manually actuated fire alarm system by means of which—

(*a*) the presence of a fire in any part of the installation can be indicated both audibly and visibly by a person in or near that part—

(i) at the control point on the installation; and

(ii) at another place on the installation where someone is present at all times when the control point is unmanned; and

(*b*) the location of any such fire can be indicated by such a person at the control point.

Remote control safety equipment

8.—(1) Every offshore installation shall be provided with equipment for each of the following purposes—

(*a*) stopping any ventilator fan;

(*b*) closing any ventilator;

(*c*) stopping any pump used to discharge fuel for prime movers, boilers or other fired processes on the installation; and

(*d*) preventing the escape of fuel for prime movers, boilers or other fired processes on the installation from any pressure vessel or storage tank.

(2) Any equipment provided under paragraph (1) above shall be capable of operation from a position which is outside the relevant room and which will not be made inaccessible by a fire within the relevant room.

(3) In the foregoing paragraph "the relevant room" means, in relation to equipment provided in respect of a fan or ventilator, the space or room it ventilates, and in relation to equipment provided in respect of a pump, vessel or tank, the space or room in which the pump, vessel or tank is situated.

Fire mains

9.—(1) Every normally manned offshore installation shall be provided with a water main by means of which water can be supplied to any part of the installation.

(2) The main provided under paragraph (1) above shall be—

(*a*) connected to at least two pumps situated in different parts of the installation; and

(*b*) capable, when supplied by any pump, of maintaining a supply of

water to any part of the installation at a pressure sufficient for fire-fighting by means of hand-held hoses.

(3) The pumps which are connected to the main provided under paragraph (1) above—

(*a*) shall be so arranged that the pumps in any one part of the installation are connected to a source of power which is remote from the sources of power to which the pumps in other parts of the installation are connected; and

(*b*) shall each be capable, once actuated, of operating automatically for 12 hours.

Hydrants and fire hoses

10.—(1) Every normally manned offshore installation shall be provided with hydrants, which shall be connected to the main provided under Regulation 9 above, and fire hoses, one of which shall be kept next to each hydrant.

(2) Nozzles capable of producing a water jet, water spray and water fog shall be provided, and one shall be fitted to or kept next to each fire hose.

(3) The positions of the hydrants and the lengths of the fire hoses kept next to them shall be such that two hoses attached to separate hydrants may be promptly brought to bear upon a fire in any part of the installation.

Water deluge system and water monitors

11.—(1) Every normally manned offshore installation shall be provided with a water deluge system or water monitors (or both) by means of which any part of the installation containing equipment used for storing, conveying, or processing petroleum (other than petroleum intended as fuel for prime movers, boilers or other fired processes on the installation) can be protected in the event of a fire.

(2) If a deluge system is provided under paragraph (1) above, it shall be connected to a water main, and if water monitors are provided a main shall be provided which is so arranged that any monitor may readily be connected to it.

(3) Any main to which a deluge system is connected or to which water monitors may be connected shall be—

(*a*) connected to at least two pumps; and

(*b*) capable, when supplied by either pump if only two are connected or by any two pumps if more than two are connected, of maintaining a supply of water at a pressure sufficient to enable the system or the monitors (as the case may be) to operate efficiently.

(4) The pumps which are connected to a main to which a deluge system is connected or to which water monitors may be connected—

(*a*) shall be so arranged that, where only two pumps are connected, one pump, or, where more than two pumps are connected, two pumps and their sources of power shall be remote from any part of the installation containing equipment of the kind described in paragraph (1) above; and

(*b*) shall each be capable, once actuated, of operating automatically for 12 hours.

Automatic sprinkler systems

12.—(1) Every normally manned offshore installation shall be provided with an automatic sprinkler system capable of—

(*a*) detecting the presence of a fire in any accommodation space;

(*b*) operating automatically to protect any such space in which a fire is present;

(*c*) indicating both audibly and visibly that a sprinkler has come into operation—

(i) at the control point on the installation; and

(ii) at another place on the installation where someone is present at all times when the control point is unmanned; and

(*d*) indicating the location of any sprinkler which has come into operation at the control point.

(2) The system provided under paragraph (1) above shall be connected to a water main which is—

(*a*) connected to a pump which is—

(i) remote from any accommodation space;

(ii) connected to a source of power which is remote from any accommodation space; and

(iii) capable, once actuated, of operating automatically for 4 hours; and

(*b*) capable, when supplied by that pump, of maintaining a supply of water to the system at a pressure sufficient to enable it to operate efficiently.

Fixed fire extinguishing systems

13. The control point on an offshore installation and every space on an offshore installation which contains—

(*a*) internal combustion machinery having in aggregate a power of 750 kw or more;

(*b*) an oil or gas-fired boiler, heater or incinerator having a thermal rating of 75 kw or more; or

(*c*) any equipment through which fuel for prime movers, boilers or other fired processes on the installation is pumped at a pressure in excess of 10 kg/cm^2

shall be provided with a fixed fire extinguishing system.

Fire extinguishers

14.—(1) Fire extinguishers shall be provided on every offshore installation in such numbers and in such places that at least one extinguisher is readily accessible from any part of the installation.

(2) Each extinguisher provided under paragraph (1) above shall be of a type suitable for use in fighting a fire of the kind which is most likely to occur in the part of the installation in which it is placed.

Helicopter landing area equipment

15.—(1) Every offshore installation shall be provided with—

(*a*) one or more dry powder fire extinguishers having in aggregate a

capacity of not less than 45 kg; and

(*b*) either—

(i) one or more carbon dioxide fire extinguishers with applicators having in aggregate a capacity of not less than 18 kg; or

(ii) one or more halogenated hydro-carbon fire extinguishers with applicators having in aggregate a capacity of not less than 12 kg.

(2) The fire extinguishers provided under paragraph (1) above shall be kept at places which are readily accessible from the helicopter landing area.

(3) Every offshore installation which is normally manned shall be provided with—

(*a*) a low expansion foam application system capable of discharging foam solution onto the landing area at a rate of not less than 6 litres per minute per square metre of the prescribed area; and

(*b*) sufficient foam compound to enable the rate prescribed in sub-paragraph (*a*) above to be continuously maintained for a period of not less than five minutes.

(4) In this Regulation, "the prescribed area" means an area equal in size to $0.75(L)^2$ where L is the overall length of the longest helicopter which the landing area is designed to accommodate, measured along its rotors in a fore and aft line.

Fireman's equipment

16.—(1) Every normally manned offshore installation shall be provided with four sets of fireman's equipment and every offshore installation which is not normally manned shall be provided with two sets of such equipment.

(2) Each set of equipment provided under paragraph (1) above shall comprise the following—

(*a*) a protective outfit, including gloves, boots, a face mask or hood and a helmet;

(*b*) a self-contained breathing apparatus;

(*c*) a portable battery-operated safety lamp capable of functioning efficiently for a period of not less than 3 hours;

(*d*) a fireman's axe; and

(*e*) a safety harness and lifeline.

(3) The sets of equipment provided under paragraph (1) above shall be kept in pairs, and one pair shall be kept at a place which is readily accessible from the helicopter landing area.

Fire blankets

17.—(1) Every offshore installation which has a galley shall be provided with a fire blanket.

(2) Every blanket provided under paragraph (1) above shall be kept at a place which is readily accessible to anyone in the galley in a container which is marked with clear instructions in appropriate languages for the use of the blanket.

Operating instructions

18. Clear instructions in appropriate languages for operating the equip-

ment which is provided on an offshore installation under Regulation 5 to 8 and 11 to 15 above, and any breathing apparatus which is provided under Regulation 16 above, shall be displayed on the equipment if it is portable or if it is not portable on it or at or near to each place for operating it.

Fire-fighting equipment plans

19.—(1) There shall be kept on every offshore installation or at such other place as may be approved by an inspector a plan showing the position of all the fire-fighting equipment which is provided on the installation.

(2) Copies of or extracts from the plan with such explanation in the appropriate languages as may be necessary shall be so displayed as to enable a person in any accommodation or working space on an offshore installation readily to ascertain the position of all the fire-fighting equipment in the vicinity.

Examination of fire-fighting equipment

20.—(1) On or after 1st April 1980 no person shall be present on any offshore installation unless the fire-fighting equipment and the plans required to be kept or displayed under Regulation 19 above on that installation have been examined by a person acting at the direction of the Secretary of State since these Regulations came into operation and in any case within the preceding 2 years.

(2) A copy of any certificate issued by the Secretary of State as to the result of any such examination shall be kept on the installation or at such other place as the inspector may approve and shall be open to inspection by any person on or (as the case may be) about to visit the installation.

(3) There shall be furnished to the Secretary of State within 7 days of any replacement of any fire-fighting equipment on an offshore installation by fire-fighting equipment of a different type full particulars in writing of that replacement.

(4) The owner of any offshore installation in respect of which an examination has been carried out under paragraph (1) above shall pay to the Secretary of State on demand a fee for that examination calculated in accordance with the provisions of the Schedule to these Regulations.

Copies of Regulations

21. A copy of these Regulations shall be kept on every normally manned offshore installation and shall be open to inspection by any person on the installation.

Duties of persons

22. It shall be the duty of the owner of an offshore installation and of the installation manager and of the concession owner to ensure that these Regulations (except Regulation 20(4) above) are complied with.

Civil liability

23. The provisions of section 11 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

24.—(1) In the event of any contravention of any of these Regulations (except Regulation 20(4) above) on, or in connection with, or in relation to,

an offshore installation, the installation manager, the concession owner and the owner of the installation shall each be guilty of an offence.

(2) If any person enters any information which he knows to be false in any document issued under these Regulations or knowingly falsifies any such document or uses any such document for the purposes of these Regulations knowing it to be false, that person shall be guilty of an offence.

(3) It shall be a defence in any proceedings for an offence under paragraph (1) above for the accused to prove—

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

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

Tony Benn,
Secretary of State for Energy.

24th April 1978.

Regulation 20(4)

SCHEDULE

Examination Fees

The fee payable for an examination carried out in respect of any offshore installation under Regulation 20(1) shall be—

(*a*) a sum based on the time spent by the person carrying out the examination in carrying it out and in travelling to and from the installation calculated in accordance with the table below:

TABLE

Time spent	*Rate per hour or part thereof*
On any day except a Saturday, Sunday or public holiday—	
Between 6 a.m. and 6 p.m.	£18.50
Before 6 a.m. or after 6 p.m.	£55.50
On a Saturday, Sunday or public holiday	£64.75

and

(*b*) a sum equal to the cost of travelling and subsistence expenses reasonably incurred by the person carrying out the examination.

EXPLANATORY NOTE

(This Note is not part of the Regulations.)

These Regulations, which come into operation on 1st April 1979, are made under the Mineral Workings (Offshore Installations) Act 1971, as extended and amended by the Petroleum and Submarine Pipe-lines Act 1975, and apply to fixed and mobile offshore installations maintained for the underwater exploitation and exploration of mineral resources in waters to which the 1971 Act applies.

The Regulations require the provision of fire and flammable gas detection systems, remote control safety devices, fire extinguishers and fireman's equipment on all the installations to which they apply, and the provision of fire alarms, fire mains, hydrants and hoses, water deluge systems or water monitors, and automatic sprinkler systems on all such installations which are normally manned. Any equipment provided must be of a type approved by the Secretary of State, and must be protected from damage. The Regulations prohibit the presence of any person on an offshore installation on or after 1st April 1980 unless the fire-fighting equipment on that installation has been examined by a person acting at the direction of the Secretary of State since the Regulations came into operation and in any case within the preceding 2 years; a fee is required for any such examination.

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