



# *MARINE ORDERS*

## *Part 60*

### *Floating Offshore facilities*

#### *Issue 1*

Order No 2 of 2000

Pursuant to Section 425(1AA) of the *Navigation Act 1912*, I hereby make this Order issuing the attached Marine Orders, Part 60, Issue 1, to come into operation on 1 March 2000.

Clive Davidson  
Chief Executive Officer  
8 February 2000

## Table of Contents

- 1 Interpretation
  - 2 Purpose & application
  - 3 Equivalents and exemptions
  - 4 Review of decisions
  - 5 Offences
  - 6 Requirements—survey & certification
  - 7 Certificate of Compliance
  - 8 Operational matters
- Appendix Requirements

---

## 1 Interpretation

**1.1** In this Part, unless the contrary intention appears, the following definitions apply:

**AMSA** means the Australian Maritime Safety Authority established by the *Australian Maritime Safety Authority Act 1990*;

**Chief Marine Surveyor** means the Manager (Ship Inspection Group) in AMSA or, in respect of any particular purpose under this Part, a suitably qualified person authorised by the Manager (Ship Inspection Group) for that purpose;

**FPSO** means a ship that is:

- (a) constructed or modified to accept petroleum, directly or indirectly, from a sub-sea well or pipeline;
- (b) capable of storing the petroleum and delivering it to another ship or pipeline;
- (c) capable of modifying the petroleum while in storage on the ship to suit it for transport or to fit it for the commercial requirements of the consignees; and
- (d) designed to be disconnected from its mooring during bad weather or for the purposes of survey;

**FSU** means a ship that is:

- (a) constructed or modified to accept petroleum, directly or indirectly, from a sub-sea well or pipeline;
- (b) capable of storing the petroleum and delivering it to another ship or pipeline; and
- (c) designed to be disconnected from its mooring during bad weather or for the purposes of survey,

but which is not capable of modifying the petroleum while in storage on the ship;

**IMO** means the International Maritime Organization;

**petroleum** has the same meaning as in the *Petroleum (Submerged Lands) Act 1967*; and

**Safety Case**, in relation to a ship, means the Safety Case approved for that ship for the purposes of the *Petroleum (Submerged Lands) Act 1967*.

**1.2** The expression **to the satisfaction of the Chief Marine Surveyor**, or any similar expression appearing in this Part, means that the Chief Marine Surveyor, or a survey authority authorised by the Chief Marine Surveyor for the purpose, may require the fitting, material, appliance, apparatus or arrangement referred to, to be demonstrated to be safe and effective for its intended purpose.

**1.3** In this Part:

- (a) headings and sub-headings are part of the Part;
- (b) each Appendix is part of the Part;
- (c) a note included in the text and printed in italics is not part of the Part.

## **2 Purpose & application**

### **2.1 Purpose**

This Part:

- (a) for the purpose of section 190B of the Navigation Act, specifies the requirements, additional to those specified in other Parts of Marine Orders, with which the construction, hull, equipment and machinery of FPSOs and FSUs must comply; and
- (b) for the purposes of paragraph 425(1)(db) of the Navigation Act, generally makes provision for the safe navigation and operation of FPSOs and FSUs,

but does not apply to a ship to which Marine Orders, Part 47, applies.

### **2.2 Application**

**2.2.1** This Part applies to:

- (a) an FPSO or FSU registered in Australia; and
- (b) an FPSO or FSU registered in a country other than Australia that is operating as an off-shore industry mobile unit under section 8 of the Navigation Act.

**2.2.2** Where a provision of this Part is inconsistent with a provision of another Part of Marine Orders, the provision of this Part will prevail to the extent of the inconsistency.

---

## **3 Equivalents & exemptions**

### **3.1 Equivalents**

If a provision of this Part requires a particular fitting, material, appliance or apparatus or type thereof to be fitted or carried in an FPSO or FSU, or particular provision to be made in relation to an FPSO or FSU or its equipment, the Chief Marine Surveyor may, upon written request, allow a modification or variation of that requirement if satisfied that the fitting, material, appliance or apparatus or type thereof or other provision so allowed is at least as effective as that required by this Part.

### **3.2 Exemptions**

The Chief Marine Surveyor will, upon written request, if satisfied that compliance with a requirement of a code or other provision of this Part would in a particular case be unreasonable or impracticable, allow exemption in relation to an FPSO or FSU from compliance with such requirement or provision to such extent and subject to such conditions as that officer determines.

## **4 Review of decisions**

### **4.1 Application to the Administrative Appeals Tribunal**

Application may be made to the Administrative Appeals Tribunal for a review of a decision by the Chief Marine Surveyor:

- (a) not to allow a modification or variation under 3.1;
- (b) not to allow an exemption in relation to an FPSO or FSU under 3.2;
- (c) not to issue a Certificate of Compliance under 7.1;
- (d) to cancel a Certificate of Compliance under 7.2.3(a);
- (e) not to be satisfied with a fitting, material, appliance or apparatus, or type thereof, or an arrangement, where under this Part a discretion to do so lies with that officer.

### **4.2 Statements to accompany decisions**

A person making a decision referred to in this Part may give to a person whose interests are affected by the decision a notice in writing of the decision. The notice must:

- (a) include a statement to the effect that, if the person is dissatisfied with the decision, application may, subject to the *Administrative Appeals Tribunal Act 1975*, be made to the Administrative Appeals Tribunal for review of the decision;
- (b) except where subsection 28(4) of that Act applies, also include a statement to the effect that the person may request a statement under Section 28 of that Act.

### 4.3 Validity of decisions

Failure to comply with 4.2 in relation to a decision does not affect the validity of that decision.

## 5 Offences

**5.1** Provisions 6.1, 6.2.1, 6.2.2 and 6.2.3 are penal provisions.

**5.2** Failure to comply with 6.1 constitutes an offence by the owner.

**5.3** Failure to comply with 6.2.1, 6.2.2 or 6.2.3 constitutes an offence by the master.

**Note:** *Regulation 4 of the Navigation (Orders) Regulations provides:*

*'4. A person who contravenes a provision of an order made under subsection 425(1AA) of the Act that is expressed to be a penal provision is guilty of an offence and is punishable on conviction:*

- (a) if the offender is a natural person—by a fine not exceeding \$2,000; or*
- (b) if the offender is a body corporate—by a fine not exceeding \$5,000.*

## 6 Requirements—survey & certification

### 6.1 Certificates required

The owner of an FPSO or FSU must ensure that:

- (a) there is maintained in force in respect of the vessel certificates of survey and equipment appropriate to the size and class of vessel; and
- (b) either:
  - (i) the Safety Case in respect of the vessel adequately provides for the matters covered by a Certificate of Compliance; or
  - (ii) there is maintained in force in respect of the vessel a Certificate of Compliance issued under 7.

**Note 1:** *A vessel that is not self-propelled and is not intended to be attached permanently to the well riser should have certificates of survey appropriate for a ship of its size, and should comply with all requirements for issue of the certificates other than those relating to propelling machinery.*

**Note 2:** *In accordance with internationally agreed interpretations, an FPSO or FSU is required to comply with MARPOL Annex I, except regulations 13G(4), (5) and (6). 13G(7) will only apply if a commercial voyage is undertaken.*

## **6.2 Maintenance of condition after survey**

**6.2.1** If a surveyor determines that, in any respect, an FPSO or FSU does not comply with this Part or that the FPSO or FSU is not fit to be engaged in operations without danger to itself or to persons on board, the surveyor may direct the master to cease such operations and the master must comply with such a direction.

**6.2.2** If the safety of the FPSO or FSU or persons on board is endangered by the occurrence of an incident referred to in section 268 of the Navigation Act or by any defect, other than in the production operations of the FPSO or FSU, the master must report the accident or defect in accordance with 12 of Marine Orders, Part 31.

**6.2.3** If an FPSO or FSU becomes less efficient or seaworthy by reason of any alteration or damage or by reason of any alteration or damage to any fitting, material, appliance or apparatus of the FPSO or FSU, the master must give notice in accordance with 5 of Marine Orders, Part 31.

## **7 Certificate of Compliance**

### **7.1 Issue**

A Certificate of Compliance will be issued by the Chief Marine Surveyor or a survey authority that is a full member of the International Association of Classification Societies in respect of an FPSO or FSU surveyed in accordance with the Appendix and found to be in compliance.

### **7.2 Duration**

**7.2.1** A Certificate of Compliance is valid for the same period as the Safety Construction Certificate or similar certificate applicable to the vessel, unless earlier cancelled by the Chief Marine Surveyor.

**7.2.2** A Certificate of Compliance must be endorsed annually in the same manner as the Safety Construction Certificate or similar certificate applicable to the vessel.

**7.2.3** A Certificate of Compliance ceases to be valid:

- (a) when cancelled by the Chief Marine Surveyor for failure of the FPSO or FSU to comply with the Appendix;
- (b) on transfer of the registration of the FPSO or FSU from one country to another; or
- (c) if it is not endorsed in accordance with 7.2.2 within the required period.

## **8 Operational matters**

### **8.1 Transfer of material, appliances or personnel**

**8.1.1** A transfer operation, the mass of the loads to be handled and emergency procedures must be discussed and agreed between personnel on the FPSO or FSU and on attending vessels prior to commencement of the operation.

**8.1.2** Throughout a transfer operation, direct communication must be maintained with the crane operator.

**8.1.3** A personnel basket may be used to transfer persons between an FPSO or FSU and a vessel if the following precautions are observed:

- (a) regard is to be given to the experience of the personnel with the use of such a device;
- (b) all personnel are to be briefed on the correct means of boarding, riding and disembarking the basket, with particular attention being paid to those who may not have used it previously;
- (c) an experienced person must accompany novices;
- (d) personnel baskets are not to be used for cargo except for small items of luggage that are being carried by passengers;
- (e) the maximum number of 4 passengers must never be exceeded; and
- (f) each person must wearing an approved life jacket or survival suit.

**8.1.4** Transfer operations must be undertaken only in accordance with the operating manual.

## 8.2 Helicopter arrivals and departures

During helicopter arrivals at and departures from an FPSO or FSU, the person-in-charge must ensure that:

- (a) there is present on or near the helideck, persons who:
  - (i) have been trained in fire-fighting procedures; and
  - (ii) are appropriately dressed and equipped for rescuing any persons aboard the helicopter and for fighting any outbreaks of fire; and
- (b) no person other than a person referred to in (a) is present on or near the helideck.

## 8.3 Helicopter transfers

The master of an FPSO or FSU must not permit the transfer of persons and goods between helicopter and FPSO or FSU unless:

- (a) the owner or master has provided such arrangements, equipment, instructions and training as:
  - (i) are necessary and reasonable for emergency evacuation of persons from the FPSO or FSU; and
  - (ii) are appropriate and reasonable for the normal operations of the FPSO or FSU; and
- (b) the master is satisfied that:
  - (i) the equipment is maintained in working order and readily available for use; and
  - (ii) the specified training has been carried out.

**Note:** Arrangements, equipment, instructions and training that comply with:  
(a) the Australian Code of Safe Practice for Ship-Helicopter Transfers, published by AMSA and available at any AMSA office; or  
(b) the International Chamber of Shipping Guide to Helicopter/Ship Operations, to the extent that it is not inconsistent with (a), will be regarded as meeting the requirements of 8.3.

## 8.4 Crew members' responsibility

Every crew member must:

- (a) carry out the instructions determined by the owner or master under 8.3; and

(b) generally take such action as is reasonable to ensure that transfers are carried out safely.

\* \* \* \* \*

---

## Appendix

### Requirements

#### 1 Helicopter facilities

##### 1.1 Securing helicopters

A helicopter deck on an FPSO or FSU must be provided with recessed tie-down points suitable for securing a stationary helicopter.

##### 1.2 Helicopter deck

Where a high fire risk space is located below a helicopter deck, such space must be insulated to a standard to the satisfaction of the Chief Marine Surveyor.

##### 1.3 Helicopter facilities

An FPSO or FSU constructed or converted on or after 1 July 2000 must comply with IMO Resolution A.855(20) *Standards for on-board helicopter facilities*.

**Note:** Attention is drawn to the booklet *Ship-Helicopter Transfers—Australian Code of Safe Practice*, published by AMSA. So far as possible, masters of FPSOs and FSUs should follow the guidelines in this booklet.

#### 2 Fire detection and extinction

##### 2.1 Fire pumps

**2.1.1** At least one fire pump must be dedicated to fire-fighting duty in order to be available for such duty at all times.

**2.1.2** Each fire pump must at least have the capacity to:

- (a) deliver simultaneously a jet from each of any two fire hydrants fitted with a hose and 19 millimetre nozzle while maintaining a minimum pressure of 350 kilopascals at all hydrants; and
- (b) in the case of a pump supplying a foam system for the protection of a helicopter deck, maintain a pressure of 700 kilopascals at the foam installation.

**2.1.3** Where a fire pump is located in a space not normally manned, the Chief Marine Surveyor may require suitable provision to be made for remote starting of the pump and remote operation of associated suction and discharge valves.

**2.1.4** A centrifugal pump connected to the fire main must be fitted with a non-return valve.

## **2.2 Fire main and hydrant valves**

**2.2.1** The fire main must, where practicable, be routed clear of hazardous areas and be arranged in such manner as to make maximum use of any thermal shielding or physical protection afforded by the structure of the FPSO or FSU.

**2.2.2** The fire main must be provided with isolating valves so located as to permit optimum utilisation in the event of physical damage to any part of the main.

## **2.3 Firehoses**

**2.3.1** A fire hose must be provided for every hydrant.

**2.3.2** A fire hose must be:

- (a) constructed of material acceptable to the Chief Marine Surveyor;
- (b) not more than 18 metres in length;
- (c) provided with a dual purpose nozzle and the necessary couplings; and
- (d) together with any necessary fittings and tools, kept ready for use in a conspicuous position near a hydrant or other connection.

## **2.4 Fire detection and alarm system**

Manual fire alarm stations must be fitted at suitable locations throughout an FPSO or FSU.

## **2.5 Gas detection and alarm system**

**2.5.1** A fixed automatic gas detection and alarm system must be provided to the satisfaction of the Chief Marine Surveyor, so arranged as to:

- (a) monitor continuously all enclosed areas of an FPSO or FSU in which an accumulation of flammable gas may occur; and
- (b) indicate at the main control point by aural and visual means, the presence and location of an accumulation of flammable gas.

**2.5.2** An FPSO or FSU must be provided with at least two portable gas monitoring devices, capable of accurately measuring a concentration of flammable gas.

## **2.6 Firemen's outfits**

**2.6.1** Each breathing apparatus provided must be self-contained.

**2.6.2** Firemen's outfits must be so stored as to be easily accessible and ready for use, one such outfit being located within easy access of the helicopter deck.

## **2.7 Storage of gas cylinders**

**2.7.1** A cylinder of breathing medium for use in diving operations must be stowed separately from other gas cylinders.

**2.7.2** Fire-extinguishing arrangements for the protection of areas or spaces where gas cylinders are stored, must be to the satisfaction of the Chief Marine Surveyor.

# **3 Radiocommunication installations**

In addition to the equipment required by Marine Orders, Part 27, an FPSO or FSU must be fitted with radio equipment suitable for communicating with helicopters and, if in range, with the helicopter base station.

# **4 Operating manual**

The ship's Safety Management System required under the International Safety Management Code must include an operating manual to cover the ship's operation as an FPSO or FSU.

\* \* \* \* \*