

TUVALU SHIP REGISTRY

Singapore Operations Office:

10 Anson Road #25-16, International Plaza, Singapore 079903

Tel: (65) 6224 2345 Fax: (65) 6227 2345

Email: info@tvship.com Website: www.tvship.com

MARINE CIRCULAR

MC-2/2016/1

9/2016

FOR: Ship Owners, Ship Managers, Ship Operators, Ship Masters, Ship Officers, Classification Societies

SUBJECT: MOBILE OFFSHORE UNIT (MOU) SAFETY CERTIFICATE

DEFINITIONS:

The following abbreviations stand for:

- "GT" Gross Tonnage in accordance to ITC 69
- "ILLC1966" International Convention on Load Lines, 1966 and 1988 Protocol
- "ILO" International Labour Organization
- "IMO" International Maritime Organization
- "ISM Code" International Management Code for the Safe Operation of Ships and for Pollution Prevention
- "ISO" International Organization for Standardization
- "LSA Code" International Life-Saving Appliance Code
- "MARPOL" International Convention for the Prevention of Pollution from Ships 1973, as modified by the Protocol of 1978
- "MLC2006" Maritime Labour Convention, 2006
- "MODU" Mobile Offshore Drilling Unit
- "MODU Code" Code for the Construction and Equipment of MODU
- "MOU" Mobile Offshore Unit
- "OIM" Offshore Installation Manager
- "PSC" Port State Control
- "RO" Recognized Organization as defined by IMO Resolution A.789(19).
- "SEMS" Safety and Environmental Management System
- "SOLAS" International Convention for the Safety of Life at Sea (SOLAS), 1974, as amended
- "SPS2008" Code of Safety for Special Purpose Ships, 2008

The following terms shall mean:

- "Administration" shall mean the Tuvalu Ship Registry;
- "Existing unit" means any MOU built prior to 31 December 1981;
- "MOU" or "unit" means a unit or vessel capable of engaging in drilling operations and/or operations in support of the exploration or exploitation of resources beneath the seabed such as liquid or gaseous hydrocarbons, sulphur or salt. The term includes: floating units for drilling, production, storage, accommodation, maintenance and workover, etc.;
- "MOU Safety Certificate" means a certificate issued by the RO, to an existing MOU not engaged in drilling operations but in operations in support of the exploration or exploitation of resources beneath the seabed such as liquid or gaseous hydrocarbons, sulphur or salt. To be eligible for consideration for issuance of a MOU Safety Certificate, MOUs shall not be engaged in drilling operations. More specific requirements of the Classification Society may be applicable. In special circumstances, the Administration may grant approval for the RO to issue a MOU Safety Certificate to a MOU which was constructed on or after 31 December 1981 but does not fully comply with the provisions of the applicable MODU Codes (i.e. may have deviations from the MODU Codes on construction, arrangement, or equipment that exceed the scope for consideration as exemptions or

equivalents) if it can be demonstrated to the satisfaction of the RO and Administration that they do not adversely affect the safety and/or integrity of the unit.

• "MODU" means a unit capable of engaging in drilling operations for the exploration or exploitation of resources beneath the seabed such as liquid or gaseous hydrocarbons, sulphur or salt;

PURPOSE:

This circular serves to provide guidelines for the certification of the types of MOUs that are not engaged in drilling operations, but are only engaged in operations in **support** of the exploration or exploitation of resources beneath the seabed such as liquid or gaseous hydrocarbons, sulphur or salt.

REFERENCES:

- (a) 2009 International Association of Drilling Contractors (IADC) Health, Safety and Environmental (HSE) Case Guidelines for MOUs
- (b) IMO Resolution MSC.349(92)
- (c) Code for the Construction and Equipment of MODU, 1979
- (d) Code for the Construction and Equipment of MODU, 1989
- (e) Code for the Construction and Equipment of MODU, 2009
- (f) IMO Resolution MSC.266(84) of 13 May 2008, Code of Safety for Special Purpose Ships, 2008 (2008 SPS Code)

APPLICATION:

- 1. These requirements apply to all Tuvalu flagged MOUs as follows:
 - 1.1. A unit, the keel of which is laid or which is at a similar stage of construction on or after 1 January 2012 must meet the requirements of the 2009 MODU Code and be issued a 2009 MODU Code Safety Certificate.
 - 1.2. A unit, the keel of which was laid or which was at a similar stage of construction on or after 1 May 1991 but before 1 January 2012, must meet the requirements of the 1989 MODU Code and be issued a 1989 MODU Code Safety Certificate.
 - 1.3. A unit, the keel of which was laid on or after 31 December 1981 but before 1 May 1991 must meet the requirements of the 1979 MODU Code and be issued a 1979 MODU Code Safety Certificate.
 - 1.4. A unit constructed before 31 December 1981 is considered an existing unit and must meet the requirements below for the issuance of a MOU Safety Certificate.

CONTENTS:

2. General Requirements

- 2.1. All new and existing units shall be issued an IMO MODU Code Safety Certificate or a National MOU Safety Certificate by the RO on behalf of the Administration.
- 2.2. The MODU Code Safety Certificate or MOU Safety Certificate replaces all of the SOLAS Safety Certificates that may have been previously issued, except for Safety Radio Certificate, and for self-propelled MOUs, the Safety Management Certificate (ISM Code).
- 2.3. However, a unit which embarks upon an international voyage under its own power may be required, for the benefit of PSC authorities concerned, to be provided with other SOLAS, Load Line, and/or MARPOL Certificates.

3. Certification Requirements for MOUs not engaged in drilling operations

- 3.1. For existing units constructed before 31 December 1981:
 - 3.1.1. If in full compliance with 1979 MODU Code, as amended, then a 1979 MODU Safety Certificate may be issued by the RO upon request of Owner;
 - 3.1.2. If not meeting the requirements of 1979 MODU Code as amended MOU Safety Certificate may be issued.
- 3.2. For units constructed after 31 December 1981:
 - 3.2.1. If in full compliance with 1989 or 2009 MODU Code based on the construction date as applicable, then the appropriate 1989 or 2009 MODU Safety Certificate will be issued by the RO upon the request of the Owner.
 - 3.2.2. If not meeting the requirements of the 1989 or 2009 MODU Code based on the construction date as applicable, then the approval for issuance of a MOU Safety Certificate will be considered by the Administration on a case-to-case basis.
- 3.3. If a unit undergoes any form of conversion, modification, or change of use which substantially alters its service, dimensions, or capacity, then the provisions of the 2009 MODU Code shall apply as far as practicable.

4. Requirements for Issuance of a MOU Safety Certificate for Existing Units

4.1. General

- 4.1.1. A unit that was constructed before 31 December 1981 is classified as an existing unit. Existing units which do not fully meet the requirements of the 1979, 1989, 2009 MODU Codes, as applicable, shall comply with the guidelines specified herein and may be issued an MOU Safety Certificate.
- 4.1.2. As with all other units, existing units shall maintain appropriate class status with a Classification Society recognized by the Administration in accordance with the procedures contained in IMO Resolution MSC.349 (92) RO Code in force from 1 January 2015.
- 4.1.3. Upon initial application for registration, the RO shall survey the unit and review plans and calculations to determine the degree of compliance with the 1979 MODU Code as amended.
- 4.1.4. If found to be in full compliance, a 1979 MODU Code Safety Certificate may be issued upon request of the owner. Other relevant statutory certificates will be issued by the RO on behalf of the Administration upon satisfactory completion of the necessary technical reviews and surveys.
- 4.1.5. If the existing unit does not fully comply with the 1979 MODU Code, a listing of non-compliant items shall be compiled by the RO for review by the Administration. In general, a long-term history of safe and successful operation in the same or similar environment shall form the basis for the acceptance of construction, equipment, and arrangements which may not fully meet the 1979 MODU Code requirements. The Administration will consider the existing construction, equipment, and arrangements on the basis of alternatives and equivalences provided that they do not hazard the unit, environment, and/or personnel on board.
- 4.1.6. Existing equipment may normally be retained as long as it remains serviceable and significant upgrading to the latest MODU Code requirements will not be required unless

- there is an alteration of a major nature to the unit. Minor repairs may be made to the original construction standard.
- 4.1.7. Equipment or systems that are no longer serviceable shall be upgraded to the latest standard when replaced as long as the structure and arrangement of the unit will accommodate the new equipment or system.
- 4.1.8. The initial survey of the unit and any technical reviews performed by the RO is to ensure that there are no structural defects or excessive deterioration of the hull, that equipment is available and suitable for its intended purpose, and that there are no fire/explosion hazards or other unsafe conditions which would require rectification.

4.2. Surveys

Surveys, including underwater examinations, are to be performed in accordance with Section 1.6 of the 2009 MODU Code.

4.3. Subdivision, Stability, and Load Line

- 4.3.1. The existing level of subdivision will be accepted provided all watertight and weathertight boundaries, including closing devices, are maintained in serviceable condition and any operational limitations are satisfied at all times.
- 4.3.2. For unrestricted service, a unit shall meet the 70 knot offshore and 100 knot severe storm wind heel criteria specified in the 1979 MODU Code. Special consideration may be given to units designed to a lesser wind velocity; provided, the previous service was in an equal or more severe environment and/or if appropriate operational limitations are applied. Units operating in sheltered locations shall meet the 50 knot wind velocity criteria of the 1979 MODU Code.
- 4.3.3. All units required to meet the ILLC1996 shall have a valid International Load Line Certificate on board.

4.4. Machinery Installations

- 4.4.1. Machinery, including installed personnel protection and safety devices, shall be maintained and operated in a safe manner at all times. Engine exhausts piping and other high temperature components or equipment may become potential ignition sources and they shall be suitably insulated, isolated, or otherwise protected from contact by flammable liquids or vapors. Essential machinery shall be fitted with automatic devices which provide a controlled shutdown or slowdown of the machinery while minimizing the risk of serious damage, breakdown, fire, or explosion. On self-propelled units, the propulsion, steering, and navigation equipment should meet Chapter 7 of the 1979 MODU Code.
- 4.4.2. Essential propulsion and auxiliary equipment, including oil fired boilers and heating units, shall be periodically examined and tested as required by the Classification Society for maintenance of appropriate classification status and for validity of the MOU Safety Certificate. Industrial equipment is to be examined and tested in accordance with recognized offshore drilling unit standards or, alternatively, as required by the Classification Society.
- 4.4.3. Machinery and industrial equipment installed in hazardous locations shall be suitable for safe operation under anticipated environmental conditions. Any installed electronic control or monitoring devices shall be explosion proof or intrinsically safe, as applicable.

4.5. Electrical Installations

- 4.5.1. Electrical equipment, including motors, generators, cable, junction boxes, wire connections, lights, appliances, switches, switchboards, and other components shall be constructed to minimize electrical shock, fire, and explosion hazards. Electrical equipment installed in Zone 1 and Zone 2 locations shall be of suitable construction in accordance with Section 6.6.3 of the 1979 MODU Code. Existing equipment in Zone 1 or Zone 2 locations, which do not meet the 1979 MODU Code requirements, may be accepted if it can be shown that it does not produce personnel, fire, explosion, or other safety hazards.
- 4.5.2. The ability of the ventilation systems in battery rooms, paint and flammable liquid lockers, gas cylinder storage spaces, and other similar compartments to prevent concentrations of flammable or toxic vapors shall be verified. Only essential electrical equipment of appropriate construction shall be installed in these spaces.
- 4.5.3. The emergency electrical power source shall be capable of operating for at least 12 hours and shall supply the following equipment:
 - Emergency lighting as specified in Section 5.3.2.1 of the 1979 MODU Code;
 - Internal communications necessary during an emergency in accordance with Section 5.3.2.3.1 of the 1979 MODU Code (if suitable portable equipment is not readily available);
 - Fire detection and alarm system in accordance with Section 5.3.2.3.2 of the 1979 MODU Code; and
 - Fire pump in accordance with Section 5.3.2.4 of the 1979 MODU Code.

4.6. Fire Safety Equipment and Arrangements

- 4.6.1. Interior stairways penetrating a single deck shall be enclosed on at least one (1) of the two (2) levels served. Stacked stairways penetrating multiple decks may be accepted; provided, their enclosures maintain the integrity of each deck penetrated.
- 4.6.2. Accommodation or service spaces constructed of wood or other combustible material shall be fitted with a fire detection and alarm system having sensors in each compartment. The system may be activated by heat, smoke, flame, other products of combustion, or a combination of these factors. Newly installed systems shall meet the latest SOLAS requirements. Existing systems shall be suitable for marine applications and meet the requirements of a recognized fire standard or underwriting agency.
- 4.6.3. The bulkheads and decks separating paint lockers and other high hazard storage spaces from accommodations and/or control stations shall be at least "A-0" steel fire boundaries or lined with steel if they are of wood or other combustible material construction.
- 4.6.4. Public spaces, staterooms and other sleeping quarters, and normally manned compartments are to be fitted with at least two (2) means of escape which shall remain unobstructed at all times.
- 4.6.5. Each unit shall be fitted with at least two (2) independently driven fire pumps located in separate compartments. Any suitable capacity pump with a sea suction may be designated as a fire pump as long as it cannot be connected to a system conveying oil or other flammable liquid.
- 4.6.6. The arrangement and capacity of the fire main system shall permit any accessible location aboard the unit to be serviced by two (2) streams of water emanating from separate fire hoses which are not connected to the same hydrant. At least one (1) of

- the two (2) hoses specified above shall be a single length fire hose. A fire hose, nozzle, and associated equipment are to be installed at each hydrant.
- 4.6.7. Portable fire extinguishing equipment, fixed firefighting systems and their components, fireman's outfits, and other firefighting equipment shall, to the extent reasonable and practicable, meet or exceed the requirements of the 1979 MODU Code. Alternative equipment and arrangements may be considered if they provide an equivalent level of protection. All firefighting equipment and appliances are to remain in serviceable condition and ready for immediate use at all times.
- 4.6.8. "NO SMOKING" and/or "NO OPEN FLAME" signs and other applicable warnings are to be displayed in working and living spaces, as appropriate.
- 4.6.9. Existing firefighting equipment on helicopter decks may be retained as long as it is in serviceable condition and is considered effective. A helideck fixed firefighting system is required only when helicopter refueling capability is provided.

4.7. Lifesaving Appliances

- 4.7.1. Davit launched survival craft, having an aggregate capacity to accommodate at least all persons permitted on board, shall be provided. These survival craft shall preferably be rigid, totally enclosed, motor-propelled, and fire protected lifeboats. The Administration may give special consideration to other types of davit launched survival craft on the basis of the nature and arrangement of installed lifesaving equipment and the area of operation.
- 4.7.2. In addition to the davit launched survival craft, each unit shall be fitted with inflatable life rafts of an aggregate capacity to accommodate at least all persons permitted on board. Each life raft shall be equipped with a float free securing device which will automatically release the life raft when submerged.
- 4.7.3. Survival craft equipment, to the extent reasonable and practicable, shall meet SOLAS requirements.
- 4.7.4. A rescue boat shall be provided in accordance with Section 10.2 of the 1979 MODU Code.
- 4.7.5. A lifejacket meeting the requirements of paragraph 2.2.1 or 2.2.2 of the LSA Code shall be provided for every person on board the unit. In addition, a sufficient number of lifejackets shall be stowed in suitable locations for persons who may be on duty in locations where their lifejackets are not readily accessible.
- 4.7.6. For units other than those operating in warm climates, an immersion suit shall be provided for every person on board the ship. The stowage of immersion suits and thermal protective aids are to be assigned by the Master (it is recommended that immersion suits be kept in staterooms along with life jackets). Additional immersion suits shall be provided for each person on watch or at any normal work location that is remote from where immersion suits are normally stowed. For the purposes of this paragraph, a normal work location is a location where a crewmember regularly carries out normal work functions.
- 4.7.7. At least eight (8) lifebuoys are to be provided on each unit and stowed in accessible locations near debarkation points. Two (2) of these lifebuoys are to have self-igniting lights. Another two (2) are to be fitted with lifelines of a length at least equal to 1.5 times the distance from the working deck to the waterline.
- 4.7.8. The requirements for emergency procedures described in Sections 14.9 through 14.14 of the 2009 MODU Code shall be met. All drills and exercises shall be recorded in the official logbook aboard the unit as per 14.14.2 of the 2009 MODU Code as amended.

4.8. Radio Installations

While on location, the radio equipment installation shall meet or exceed the requirements of the coastal State in which the unit is operating. In the absence of coastal State regulations, radio equipment requirements will be established by the Administration on the basis of operating area and other relevant parameters.

4.9. Lifting Devices

- 4.9.1. Initial and renewal surveys of lifting devices for the issuance of a MOU Safety Certificate shall include the examination and testing of the lifting gear. In addition, a RO surveyor shall examine and witness the load testing of any lifting devices that have been repaired or altered.
- 4.9.2. A boom radius versus hook load chart, or similar operating aid, shall be available for use by the lifting device operator.

4.10. Operating Requirements

An Operating Manual complying with at least the 1979 MODU Code or the relevant MODU Code under which the MOU is certified shall be aboard the unit. The Operating Manual shall be approved by the RO on behalf of the Administration.

5. Application of Other Codes, Standards and Conventions

5.1. ISM Code

The Administration requires compliance with the ISM Code for all self-propelled units of 500 GT and over engaged on international voyages. Operators of units not subject to mandatory compliance are strongly encouraged to do so on a voluntary basis, and may be issued statements of compliance if the units meet all the requirements.

- 5.2. Safety and Environmental Management System (SEMS)
 - 5.2.1. An ISM Code compliant SEMS shall be established and maintained for all units. The SEMS shall address any coastal State "Safety Case" requirements being imposed.
 - 5.2.2. The 2009 International Association of Drilling Contractors (IADC) Health, Safety and Environmental (HSE) Case Guidelines for MOUs is recommended for use toward the development of SEMS.

5.3. ISO 31000:2009

Risk Management Consideration should be given by the owner/operator to the application of ISO 31000, published on 13 November 2009, to provide for the implementation of risk management principles. The purpose and scope of ISO 31000:2009 is to provide best practice structure and generic guidance for the design, implementation, and maintenance of risk management processes to all operations concerned with risk management throughout an organization.

5.4. MLC2006

- 5.4.1. The Administration considers units engaged in exploration, exploitation, and/or processing of sea-bed mineral resources, including production, storage and offloading, maintenance, construction, or accommodation units, when on location for the purpose of conducting or supporting operations subject to the jurisdiction of a host coastal State, to be installations and not ships.
- 5.4.2. Units flagged and certified in accordance with these guidelines and other relevant applicable national laws and regulations where the subject matter is dealt with

differently are considered to substantially meet the requirements of MLC2006 and thus are not subject to certification under MLC2006 in these circumstances. These units also are deemed to be substantially compliant with MLC2006 when underway for purposes of re-location or dry-docking, and therefore are not subject to certification in these circumstances.

5.4.3. Unit operators are encouraged, however, to voluntarily seek inspection and certification under the provisions of MLC2006, to the extent practicable.

6. Accommodation

- 6.1. All accommodations on board each unit built before 20 August 2013, including safety equipment; emergency signs; and the sanitary conditions in the galley, quarters, and work areas shall meet or exceed, as reasonable and practicable, those specified in the ILO Conventions 92 and 133.
- 6.2. For any unit built on or after 20 August 2013, accommodations for personnel working or living on board, or both, shall be safe, decent, and in accordance with MLC2006, Title 3, Accommodation, Recreational Facilities, Food and Catering.
- 6.3. In applying MLC2006, Title 3, Accommodation, Recreational Facilities, Food and Catering to units, the Administration considers the allowance for multiple-berth sleeping rooms in Standard A3.1-9(a) to be appropriate. A single room with two (2) berths, each assigned to one (1) crewmember on an opposite shift to the other, is acceptable. A limited number of rooms with up to four (4) berths may be allowed to accommodate persons on the unit for short durations (surveyors, technicians, visitors, etc.). It should be noted that the remaining conditions specified in A3.1.9, including minimum area, shall be met in all sleeping rooms.

7. Requirements based on Service & Industrial Operations

The MODU Codes provide an appropriate basis for the certification of a variety of MOUs with industrial functions other than drilling. Additional requirements and clarifications provided in this section are to be applied based on the specific industrial function of the unit.

7.1. Drilling, Production and Processing of Hydrocarbons

- 7.1.1. The MODU Codes do not include requirements for the drilling, production and processing of hydrocarbons or other subsea resources. Such industrial operations are subject to control by the coastal State and these guidelines do not specify equipment or procedures to carry out these operations.
- 7.1.2. This Administration recommends that the drilling, production, and processing equipment and systems on each unit be designed, constructed, maintained, and verified in accordance with recognized international standards. A Classification Society's notation or equivalent coastal State certification scheme may be considered acceptable.

7.2. Accommodation Units

7.2.1. Units where the primary service is to provide accommodation for offshore workers may be certified in accordance with the MODU Codes and these guidelines.

7.2.2. Lifesaving Appliances

- Lifesaving appliances shall in general be in accordance with the 2009 MODU Code.
- The Administration may consider applying the lifesaving arrangement and capacity requirements of the SPS2008 for units meeting intact and damage stability requirements of the Code.

7.2.3. Fire Protection of Accommodation Spaces

- For units accommodating on board a total of more than 240 persons in addition to crew, the requirements of Chapter II-2 of SOLAS as amended for passenger ships carrying more than 36 passengers shall be applied.
- For units accommodating on board a total of more than 60 (but not more than 240) persons, the requirements of Chapter II-2 of SOLAS as amended for passenger ships carrying not more than 36 passengers shall be applied.
- For units accommodating on board a total of not more than 60 persons, the requirements of Chapter II-2 of SOLAS for cargo ships shall be applied.
- Where exposed to 'open deck', all external boundaries of accommodation spaces shall be at least A-60 insulated.
- There shall be no dead-end corridors.

7.2.4. Training

All persons shall be provided with familiarization and training in personal safety and emergency response. Such familiarization and training shall be completed within the first 24 hours on board.

7.2.5. Personnel Transfer Gangways, Baskets, etc.

- When transfers of personnel are performed, the normal methods are by gangway, personnel basket, boat, helicopter, or any combination of these. The safety of personnel shall never be compromised and the highest level of control and communication shall be followed throughout these operations.
- No personnel transfer shall take place on location unless the consent of the Master or OIM has been obtained and procedures have been agreed upon by all responsible parties concerned, taking into account actual and forecast weather conditions, wind speed, sea state, and visibility.
- The Master or OIM shall ensure that personnel baskets and all associated rigging are designed and maintained to achieve a load factor of safety as per the requirements of the Classification Society certifying the lifting devices for the unit. Baskets shall be inspected daily and prior to use.
- The Master or OIM shall ensure that only certified cranes and crane operators are involved in personnel transfers. Direct communications shall be established, and maintained throughout the transfer, between vessel's deck crew, crane operators and vessel's bridge.
- Persons being transferred shall wear lifejackets, safety helmets, and boots. In addition, suitable protective and exposure suits shall be worn as appropriate for the conditions.

7.3. Other Service Units

Other service units not expressly covered by sections 7.1 through 7.2 of these guidelines will be considered on a case-by-case basis.

Yours sincerely,

Deputy Registrar Tuvalu Ship Registry