



Timor Sea Designated Authority for the Joint Petroleum Development Area

Interim Regulations issued under Article 37 of the Interim Petroleum Mining Code

Specific Requirements as to Petroleum Exploration and Exploitation in the Joint Petroleum Development Area

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PART I - INTRODUCTORY

Clause 101 Application of Regulations

1. These Regulations are issued for the purpose of elaborating various parts of the Timor Sea Treaty (Treaty) and its Annexes and the Interim Petroleum Mining Code.
2. Where there is any inconsistency, the Treaty and its Annexes and the Interim Petroleum Mining Code prevail.

Clause 102 Definitions

1. In these Regulations unless inconsistent with the context or subject matter;

“API” means the American Petroleum Institute.

“ANSI” means the American National Standards Institute.

“approval” or “approved” means the approval of or approved by the Managing Director.

“ASEG-GDF” means Australian Society of Exploration Geophysicists-General Data Format.

“ASME” means the American Society of Mechanical Engineers.

“bellbounce diving” means a diving operation where dives are made out of a diving bell, and where a transfer under pressure to a deck compression chamber is made while decompression procedures of short duration are being used.

“bell diving” means carrying out diving operations using a diving bell.

“bottom time” means in relation to a dive, the time from when a diver is subjected to pressure greater than atmospheric pressure until the time when that diver's decompression begins, and is used to determine that diver's decompression profile for that dive.

“breathing medium” means gas or gases delivered to a diver for the purpose of life support.

“classifying authority” means an approved body qualified to:

- (i) classify ships, barges or mobile platforms; or
- (ii) verify the design, construction and operating capability of diving plant and equipment.

“conductor casing string” means a pipe installed to cover unconsolidated surface formations, and which may provide a means for return of drilling fluid from the seabed to a platform.

“construction platform” means a ship, barge or other vessel or floating structure from which construction or installation operations for or in connection with the exploration for or recovery of petroleum are or are to be carried out.

“contract operator” means the contractor appointed and authorised by the contractors to be responsible for petroleum operations and for all dealings with the Designated Authority under the contract on behalf of the contractors.

“contractor” means a corporation or corporations which enter into a contract with the Designated Authority and which is registered as a contractor under Article 38 of the Interim Petroleum Mining Code.

“crane” means a specially designed structure with a means driven by manual or mechanical power for raising, lowering or transporting a load and includes the supporting structure and gear used in connection with such a structure; but does not include:

- (i) the derrick or draw-works of a drilling rig that has been constructed to an approved standard;
- (ii) approved wireline equipment that is used for well logging or well maintenance operations; and
- (iii) a winch.

“crane chaser” means a person who slings and directs movements of loads handled by a crane where such loads are usually in full view of the crane driver

“decompression control station” means a decompression control station for the purposes of clause 834(j).

“decompression schedule or procedure” means the schedule or procedure, which is a function of time, pressure and breathing medium, to be followed when subjecting a diver to greater than and restoring him to atmospheric pressure.

“decompression sickness” means trauma associated with and as a result of an inert gas coming out of solution and forming bubbles in the blood and tissues of a diver during or after their return from hyperbaric pressure to atmospheric pressure.

“dive” means the process of a diver or a diving bell containing divers entering the water and being subjected to pressure greater than normal atmospheric pressure.

“dive control station” means a dive control station for the purposes of clause 834(i).

“diver” means any person who is engaged in diving operations for the purpose of diving.

“diver medical technician” means a person who is engaged in carrying out the work of a diver medical technician referred to in clause 804(5).

“diver’s stage” means equipment, not being a diving bell, by which a diver is raised from or lowered to an underwater work-site and which is designed to carry more than one person.

“diver’s attendant” means a person, whether or not a diver, who is a member of a dive team and engaged in surface assistance to the diver.

“diving bell” means any compression chamber which:

- (i) is used to transport divers to and from the underwater worksite;
- (ii) is designed for use under the surface of water in supporting human life; and
- (iii) is a chamber in which a diver may be subjected to a pressure greater than atmospheric pressure.

“diving operations” means operations in which a dive is conducted and includes operations by the dive team in direct support of the diver and their subsequent decompression.

“diving superintendent” means a person placed in overall charge of an extensive diving operation to coordinate the diving activities and to act as a stand-in for the diving supervisor where necessary.

“diving supervisor” means a person who is appointed in writing to supervise diving operations.

“dogman” means a person who slings and directs the movements of loads handled by a crane where such loads are usually not in full view of the crane driver.

“drilling operations” means the making of wells by means of rotary or other drilling equipment.

“dynamic positioning” means the positioning of or re-positioning of a vessel in or to a chosen location by automatic means and without recourse to any physical mooring arrangements.

“emergency” means an emergency affecting or likely to affect the health or safety of any person, the environment or the integrity of the facilities in the JPDA.

“explosimeter” means an apparatus for the detection of flammable gases in the atmosphere calibrated to measure the concentration of such gases in terms of their explosive potential in mixtures with air.

“fixed platform” means a structure (including a floating structure) that is-

- (i) fixed or connected to the sea-bed from which operations for the recovery of petroleum are or are to be carried out, or
- (ii) fixed or connected to the sea-bed otherwise than only by a part of the structure lowered to the sea-bed for the purpose of supporting the structure, from which petroleum exploration operations or operations for the recovery of petroleum are or are to be carried out and that is not or is not to be capable of being readily moved from one position to another as such a structure.

“geophysical survey” means a survey carried out in the search for petroleum using one of the following methods:

- (i) seismic;
- (ii) gravimetric;
- (iii) magnetic;
- (iv) electrical;
- (v) geochemical;
- (vi) well logging; and
- (vii) any other approved method.

“good oil-field practice” means all those things that are generally accepted as good and safe in the carrying on of exploration for petroleum, or in operations for the recovery of petroleum, as the case may be.

“helideck” means a deck on a platform designed to accept a helicopter for landing or take off.

“hot work permit” means a permit required for any work which could under any circumstances cause an ignition of hydrocarbon.

“inert gas” means a discrete, gaseous component of the breathing medium which does not react with body tissue and is not chemically altered through contact with it.

“intermediate casing string” means a pipe installed after the surface casing string to seal off unconsolidated formations, lost circulation zones, abnormal pressure zones and/or hydrocarbon zones.

“JPDA” means the Joint Petroleum Development Area established pursuant to Article 3 of the Timor Sea Treaty.

“lifeline” means a rope, gas hose, communication cable or any combination thereof which is adequate in strength and suitable for recovering and lifting a diver and their equipment from the water.

“life support control station” means a life support control station for the purposes of clause 834(k).

“life support technician” means a person who is engaged in carrying out the work of a life support technician referred to in clause 804(3).

“limiting line” means a line shown in air tables which indicates time limits (bottom times) beyond which decompression schedules are less safe. Diving for periods indicated below this line carries a greater risk of decompression sickness and this risk increases with the increase in time.

“liner string” means pipe which is an intermediate or production casing string but does not extend to the wellhead.

“Managing Director” is the person appointed by the Executive Director of the Designated Authority from time-to-time to be the Managing Director - Technical responsible for petroleum operations in the JPDA.

“manned submersible craft” means any manned submersible craft, whether or not self-propelled, which is designed to maintain some or all of its occupants at or near atmospheric pressure.

“medical practitioner” means a legally qualified medical practitioner.

“mixed gas” means a mixture of discrete gases delivered to a diver as a breathing medium.

“mobile drilling unit” means a ship, barge or other vessel or floating structure including a structure any part of which may be lowered to the sea-bed for the purpose of supporting the structure that carries or includes equipment for drilling, or carrying out other operations on, a well from the vessel or structure.

“mobile platform” means a construction platform, floating service platform or mobile drilling unit, that is capable of being readily moved from one position to another.

“NATA” means the National Association of Testing Authorities, Australia.

“platform” means a construction platform, fixed platform, service platform or mobile drilling unit.

“production casing string” means a pipe installed to isolate one or more hydro-carbon zones for testing or producing purposes.

“production equipment” means any equipment for the regulation or measurement of the flow of petroleum or other material obtained from a well, the sampling of such petroleum or other material, the storage of such petroleum or other material or the separation of such petroleum from such other material.

“production test” in relation to a well means an operation (other than a formation fluid sample test into a container which has been positioned by wireline methods) carried out on that well to recover from that well petroleum or water or a sample of petroleum or water or for or in connection with estimating the rate of recovery of petroleum or water from that well.

“pumping station” means equipment for pumping petroleum or water and includes any structure associated with that equipment.

“repetitive dive” means any dive made by a diver within a 12 hour period of a previous dive by that diver or when excess residual inert gas is still present in the body tissues of that diver as a result of a previous dive.

“saturation diving” means procedures by which a diver avoids repeated decompressions to atmospheric pressure by being continuously subjected to a pressure greater than atmospheric pressure so that their body tissues and blood become saturated with the inert element of the breathing mixture.

“SAA AS” means an Australian Standard issued by the Standards Association of Australia.

“SCUBA” means self-contained, underwater breathing apparatus.

“selfcontained breathing equipment” means equipment supplying a diver with breathing medium from cylinders carried by that diver.

“service platform” means a ship, barge or other vessel, or floating or fixed structure that in connection with petroleum exploration operations or operations for the recovery of petroleum provides a base from or on which services such as diving, firefighting, accommodation, processing or storage are controlled, mounted or performed.

“structural or drive casing string” means a pipe:

- (i) cemented in a pre-drilled hole; or
- (ii) driven or jetted;

to cover soft or unstable formations immediately below the seabed and to provide structural strength to the guide structure.

“surface oriented diving” means diving operations conducted from the surface not involving a diving bell.

“surface supply breathing equipment” means equipment supplying a diver with breathing medium through a hose from a compressor or cylinders on the surface.

“surface casing string” means a pipe installed after the conductor casing string to provide blow-out protection, and to seal off water sands, weak formations and/or lost circulation zones.

“systems maintenance technician” means a person who is engaged in carrying out the work of a systems maintenance technician referred to in clause 804(1).

“toxic atmosphere” means an atmosphere that could be injurious to the health of any person breathing it.

“verifying body” means an approved body qualified to:

- (i) verify the design, construction and installation of structures fixed or intended to be fixed to the sea-bed;
- (ii) verify the design, construction and operating condition of cranes; or
- (iii) carry out such verification as the Managing Director may require.

“wet bell” means a specially designed, fully submersible diver's stage which can entrap a bubble of air or mixed gases and be used under water by a diver as a simple habitat or as a supply point for lightweight equipment required at a work-site.

“winch” means a hoisting, hauling or tensioning apparatus consisting essentially of a revolving drum worked by a crank, gear or other operating mechanism.

“wireline operation” means the use of a device lowered into a well by a cable or wire for the purpose of surveying the well or its surrounding rock formation, or moving or actuating an item of subsurface equipment.

“wireline survey” means the determination of one or more physical characteristics of a well or its surrounding rock formation as a function of depth by means of a sensor lowered into the well by a cable or wire, and the recording of those characteristics.

“workover operation” means a maintenance operation carried out on a well in order to improve productivity or to remedy some defect.

2. In this Schedule a reference to the requirements of a code, standard or specification is a reference to such of those requirements as are not inconsistent with this Schedule.
3. In this Schedule reference to a clause without more is a reference to a clause which is part of this Schedule, reference to a sub-clause without more is a reference to a sub-clause of the clause in which such reference occurs, and reference to an appendix without more is a reference to an appendix to the Part in which such reference occurs.

Clause 103

Tests

Except where otherwise specified in this Schedule, any test required under this Schedule shall be carried out in such a manner as will enable the results to be recorded and certified:

- (a) in an endorsed test document within the meaning of the By-laws of the National Association of Testing Authorities, Australia; or
- (b) where the test is not a test in respect of which an endorsed test document of the kind referred to in paragraph (a) can be given, to the satisfaction of the Managing Director; or
- (c) where the test is a test in respect of which an endorsed test document of the kind referred to in paragraph (a) can be given but for practical reasons acceptable to the Managing Director the requirement for such endorsement has been waived, to the satisfaction of the Managing Director.

Clause 104
Codes, Standards and Specifications

1. Reference in this Schedule to a code, standard or specification, unless inconsistent with the context or subject matter, is a reference to the latest edition of that code, standard or specification issued by the authority or organisation which made the code, standard or specification.
2. In sub-clause (1) “edition” includes an issued code, standard or specification and amendments thereto issued by the authority or organisation which made the code, standard or specification.

PART II - GENERAL SAFETY

Division 1 - General Requirements

Clause 201 Safety Manual

1. Operations shall not be carried out unless subject to and in accordance with an approved safety manual.
2. In the event of and to the extent of any conflict or inconsistency between an approved safety manual and the requirements of these Regulations, these requirements shall prevail.

Clause 202 Emergency Response Manual

1. Operations shall not be carried out unless there is an approved emergency response manual which sets out the procedures to be followed and actions to be taken, and identifies the persons to be responsible for following these procedures and taking these actions, in the event of an emergency arising during the operations by reason of-
 - (a) the escape or ignition of petroleum;
 - (b) serious injury to a person;
 - (c) a vessel or aircraft failing to arrive at its destination when it is expected to arrive unless a report has been made as to the reason for the non-arrival;
 - (d) a vessel or aircraft sending a distress signal;
 - (e) conditions requiring the evacuation of a platform;
 - (f) a person overboard; or
 - (g) any other emergency associated with the operations.
2. In the event of an emergency of a kind identified in sub-clause (1) arising, operations shall where applicable be carried out in accordance with the procedures set out in the emergency response manual referred to in sub-clause (1).

Clause 203 Updating of Manuals

1. In this clause “the manuals” means the manuals referred to in clauses 201 and 202.
2. The manuals shall be updated as required by changed circumstances or as required by the Managing Director.
3. Any update of the manuals shall be submitted to the Managing Director for approval.

Clause 204
Availability of Manuals, and Regulations and Directions

The manuals referred to in clauses 201 and 202 and all relevant Regulations and Directions shall be readily available at all times to every person on every platform in the JPDA.

Clause 205
Instruction of Personnel

1. The manuals referred to in clauses 201 and 202, and the Regulations and Directions shall be drawn to the attention of every person on or before the date on which that person commences to be engaged in or concerned with the conduct of operations or the execution of works in the JPDA, and each such person shall be advised to comply with the provisions of the manuals and Regulations and Directions issued pursuant to Section 37 of the Interim Petroleum Mining Code.
2. Any amendments to the manuals referred to in clauses 201 and 202, and any amendments to the Regulations, shall be drawn to the attention of every person engaged in or concerned with the conduct of operations or the execution of works in the JPDA and each such person will be advised to comply with the provisions of the amended manuals and Regulations.
3. On entering the work place each person shall be required to sign the arrival log or Person on Board (POB) card which will include an acknowledgement that the Manuals referred to in clauses 201 and 202, and the Regulations (and any amendments there to) have been drawn to their attention and that they have been advised to comply with the provisions of the Manuals and Regulations.
4. Records of all acknowledgements shall be held by the Operator for a period of not less than 6 years and made available for inspection by the Managing Director or the Managing Director's nominee.

Clause 206
Admittance to Platforms

A person who is not engaged in or directly concerned with the carrying on of operations or the execution of works in the JPDA shall not be admitted to a platform without approval and, where such approval has been granted, that person shall be given all necessary instructions required by the manuals referred to in clauses 201 and 202 and relevant Regulations on or before the arrival of that person at the platform.

Clause 207
Continued Presence on Platforms

Any person on a platform in the JPDA, shall vacate the platform in a safe and orderly manner when instructed to do so by the person in command of the platform.

Clause 208
Entry into the JPDA

1. The entry into the JPDA of employees of contractors and the employees of their sub-contractors shall not be permitted without the authorisation of the Designated Authority.

2. In order to avoid as far as possible the necessity for repeated applications for authorisation to enter the JPDA, blanket authorisation for entry into the JPDA will normally be granted by the Designated Authority for the entire shift roster of a platform and in cases such as recurring visits by nominated employees.
3. In addition to and consistent with the requirements of Clause 209 below, the contract operator is to advise the Designated Authority of all such persons, including shift rotations, entering or leaving the JPDA, together with their nationality and permanent-residency status.

Clause 209
Record of Arrivals and Departures by Sea or Air Transport

1. A record in accordance with this clause is one:
 - (a) in writing;
 - (b) relating to each platform;
 - (c) containing:
 - (i) the date and time at which each person arrives at the platform;
 - (ii) the date and time at which each person leaves the platform;
 - (iii) the date and time at which each person leaving the platform reached shore, and at which each person travelling to a platform left shore; and
 - (iv) the name, nationality and permanent residency status of each person travelling to or from the platform and, where that person is travelling to or from the platform in the course of that person's employment, the name of their employer.
2. Subject to sub-clause (3) there shall be kept at each platform and at each place on shore from which persons depart when travelling to the platform, a record in accordance with this clause.
3. Where there is in operation a central control system which coordinates every movement of persons between the shore and the platform within the contract area, or a part of the JPDA, a record in accordance with this clause maintained at the headquarters or main operations' point of that system may be kept in lieu of a record at each place on shore from which persons travelling to the platform depart.

Clause 210
Notices

1. At the exits from the accommodation, office and designated smoking areas of a platform on which flammable gases or liquids may be present, notices shall be displayed stating that no smoking or naked lights are permitted.
2. At the exits from the accommodation and office areas of a platform, notices shall be displayed stating that safety helmets and safety footwear must be worn.
3. Emergency assembly locations' notices shall be prominently displayed on a platform.

Clause 211

Emergency Drill Exercises

All persons on a platform shall participate in escape drill exercises and fire drill exercises which shall be carried out under the control of the designated person in command at random times not exceeding seven days, and a record shall be kept of such drills.

Clause 212

Maximum Number of Persons on Platform

Subject to clause 319, the number of persons on a platform at any time shall not exceed the normal persons on complement within the meaning of clause 318.

Clause 213

Person in Command of Platform

1. Unless the platform is unmanned, there shall be one person in command of a platform and of the operations and activities carried out on or from it.
2. The name of the person for the time being in command of a platform shall be at all times prominently displayed on that platform.

Clause 214

Interference with Operations

A person shall not engage in or cause any person to engage in any unauthorised activity which may either directly or indirectly:

- (a) endanger the safety of persons on or about a platform;
- (b) endanger the platform or any facilities or equipment associated therewith;
- (c) interfere with the safe operations of any facilities or equipment associated therewith;
- (d) cause pollution of the sea or seabed.

Clause 215

Communication and Stand-by

1. Where there is a manned platform in the JPDA there shall at all times be maintained a shore station from which radio or telephone communication is made to and received from the platform.
2. Radio or telephone communication shall be made from the shore station to the platform at least once in each period of three hours except in a period in respect of which the person in command of the platform has ordered that, by reason of operations being carried out on or from the platform, such communication shall not be made.
3. During a period when communication by radio between the shore station and the platform is impossible or uncertain, a stand-by vessel shall be stationed in the immediate vicinity of the platform and shall remain so stationed until such period is ended, except if required for the purpose of dealing with a more serious emergency.

4. When, other than during a period when an order referred to in sub-clause (2) is in force, communication cannot be made between the shore station and the platform by radio or by telephone, then unless a stand-by vessel is stationed in the immediate vicinity of the platform arrangements shall be made for communication forthwith with the platform by sea or by air.

Clause 216 **Vessel and Aircraft Control**

1. Each vessel or aircraft in the JPDA in connection with operations to which these Regulations relate, shall be controlled and monitored from a shore station or a platform, or both a shore station and a platform.
2. The Contract operator is obliged to report and secure from the Designated Authority an authorization to enter the JPDA for vessels (including drillships, semi-submersibles and other floating equipment) and aircraft the services of which are acquired for petroleum operations.
3. The position/location and activity of such vessels and aircraft shall be reported daily to the Managing Director.
4. A copy of the document evidencing that the vessels or aircraft has reported its departure for, or arrival from the JPDA, to the Timor-Leste or Australian customs, or port authority or airfield authority, shall be lodged with the Managing Director in compliance with Article 15 of the Treaty, within 48 hours of such arrival or departure.

Clause 217 **Rescue Craft**

1. Subject to this clause, a suitable helicopter service shall be maintained between a platform in the contract area and shore station.
2. Where it is not possible to maintain a suitable helicopter service pursuant to sub-clause (1), there shall where weather conditions permit be provided a suitable surface craft able to come to the assistance of that platform within one hour.
3. A surface craft referred to in sub-clause (2) shall be so designed, equipped and crewed as to be able safely to retrieve persons from the sea under adverse sea and weather conditions.
4. An emergency response manual for the purposes of clause 202 shall be prepared having full regard to the provision of rescue resources appropriate for the type and location of the platform.

Clause 218 **Restriction of Usage of Radio and Telephone**

The radio and telephone equipment referred to in clause 322 shall not be operated during a period during which the person in command of the platform has for safety reasons so ordered and the person in command shall ensure that during such a period:

- (a) a stand-by vessel with suitable radio communication equipment is stationed in a safe position close to the platform; and
- (b) the shore station has been advised of the period during which the equipment is not to be used and of the name of the vessel referred to in paragraph (a).

Clause 219

Helicopter Operations

1. When a helicopter is arriving at or departing from a manned platform there shall be a person or persons on the platform whose duties include:
 - (a) the transmission and receipt of radio messages between the helicopter and the platform;
 - (b) ascertaining weather, wind and sea conditions at the platform and advising the helicopter pilot of such conditions;
 - (c) ascertaining and advising the helicopter pilot whether all requirements as to safety on the platform related to helicopter movements have been complied with;
 - (d) supervising the movements of passengers, baggage and cargo from and to the helicopter;
 - (e) ascertaining the weight of each passenger and of baggage and cargo proposed to be taken from the platform by the helicopter and advising the helicopter pilot of the proposed total weight to be carried; and
 - (f) advising the shore station controlling helicopter movements of the times of arrival and departure of a helicopter.

2.
 - (a) A person shall not be on the helideck of a platform on which or from which a helicopter is about to land or take off except for the purpose of handling an external load on the helicopter.
 - (b) Notices shall be prominently displayed at the access points to the helideck on a platform warning of the danger from helicopter tail and main rotors.
 - (c) Persons entering or leaving a helicopter shall be advised of the route to take to avoid the tail and main rotors, and persons due to enter a helicopter shall not be permitted to approach the helicopter until all disembarking passengers and any cargo unloaded from the helicopter are clear of the helideck.
 - (d) When a helicopter is about to land on or take off from a platform, a revolving crane on or near a helideck shall not be operated and the jib of any such crane shall be placed in such a position as not to interfere with the landing or taking off of a helicopter.
 - (e) A person operating a crane referred to in sub-clause (2)(d) shall be advised in advance of the landing or taking off of a helicopter.
 - (f) When a helicopter is about to land on or take off from a platform, any handrails on the helideck shall be folded onto the deck.

Clause 220

Record of Arrivals and Departures

1. Arrivals and departures by Air Transport are to be authorised under the provisions of Clause 208 and a record of such arrivals and departures is to be maintained in accordance with Clause 209:
 - (a) in writing;
 - (b) relating to one platform;
 - (c) containing:
 - (i) the date and time at which each person arrives at the platform;
 - (ii) the date and time at which each person leaves the platform;

- (iii) the date and time at which each person leaving the platform reached shore, and at which each person travelling to a platform left shore; and
- (iv) the name, nationality and permanent residency status of each person travelling to or from the platform and, where that person is travelling to or from the platform in the course of that person's employment, the name of their employer.

Clause 221 **Fire Extinguishing Equipment**

The fire extinguishing equipment referred to in clause 321 shall be:

- (a) kept in good working order at all times;
- (b) tested and/or inspected at least once in each period of six months; and
- (c) kept in a place or places on the platform that are readily accessible.

Clause 222 **Lifejackets and Buoyancy Vests**

1. Unless otherwise approved, a person shall wear a lifejacket referred to in sub-clause 317
 - (a) when engaged in an emergency drill or when evacuating a platform.
2. A person who is in an unguarded area over water shall wear an approved buoyancy vest.
3. A person on an open deck of a fixed platform, which open deck is at a level close to the maximum wave height, shall be accompanied by at least one other person and shall wear an approved buoyancy vest.
4. A person being transferred between a platform and a vessel shall wear an approved buoyancy vest.

Clause 223 **Accidents**

1. If in the JPDA, a person dies or suffers a serious injury as a result of which that person requires immediate attention by a medical practitioner, a person shall not interfere with the place at which the death or injury occurred, except in so far as may be necessary for the comfort, removal or treatment of an injured person or for safety, without the approval of an inspector.
2. Where property suffers serious damage within the meaning of clause 282, a person shall not, except in so far as may be necessary for safety, interfere with or further use the property without the approval of an inspector.

Clause 224 **Oil Spills**

1. Where an escape or ignition of petroleum spills occurs, such action as is necessary to minimise the loss of petroleum and the pollution of the area and to protect persons and property shall be taken.
2. No chemical dispersants shall be used on oil spills without approval.

Clause 225 **Protective Equipment**

1. Except in the accommodation area or when equipment approaching or leaving a helicopter, a person on a platform shall wear a safety helmet (other than a metal safety helmet) conforming to SAA AS 1800 and AS 1801 Industrial Safety Helmets.
2. Where the eyes of a person may be damaged by flying particles and fragments, dusts, splashing materials and molten metals, harmful gases or vapours or optical radiation, that person shall be provided with, and wear eye protectors in accordance with SAA AS 1336, 1337 and 1338 and Industrial Eye Protection, and that person shall follow the practices set forth in those standards.
3. A person handling equipment or materials which might cause injury to the hands shall be provided with and wear safety gloves that are approved as suitable for the purpose.
4. A person on a platform shall wear safety footwear conforming to SAA AS 2210, in an area where the lifting or moving of heavy objects is carried out, in the galley and store-room areas of quarters, and when working in any other area except the office, accommodation and dining or recreation areas of the quarters. This sub-clause shall not apply to a person arriving at or departing from a platform by helicopter whilst that person is on, going to or coming from the helideck. However such person shall wear substantial footwear.
5. Hearing protection devices shall be provided for and worn by a person who is in a high noise area. These devices shall conform to SAA AS 1270.
6. At least two units of approved self-contained breathing apparatus shall be provided on a platform.
7. A person engaged in operations in the JPDA shall wear adequate clothing for protection from substances or environmental conditions which are injurious or would be potentially injurious in the absence of such clothing.

Clause 226 **Housekeeping**

1. The decks and floors of a platform shall be kept clean and free from oil and grease.
2. Adequate storage space for tools and equipment shall be provided on a platform.
3. No waste materials other than food scraps, sanitary effluents, drilling fluid or formation water conforming to the requirements of sub-clause 616(6) shall be released into the sea.
4. Foodscraps, sanitary effluents may only be released into the sea after the material has passed through a comminuter or grinder such that the material to be released is capable of passing through a screen with openings no greater than 25 millimetres.
5. Waste materials other than the waste materials which by sub-clause (3) may be released into the sea shall be stored on the platform in suitable metal containers or in some other approved way and returned to shore for disposal.
6. Adequate space shall be provided around equipment on a platform to ensure safe working conditions.

7. Drum stocks of fuel or lubricating oil on a platform shall be stored as far as reasonably possible from areas where drilling operations are being carried out.
8. Gas cylinders on a platform shall be properly secured.
9. Liquefied gas cylinders on a platform shall be in the upright position to ensure communication of the safety relief device with the vapour phase at all times.
10. No flammable liquids with a flashpoint below 38° C, as determined by the method IP 170 set out in “Standard Methods for Testing Petroleum and its Products” published by the Institute of Petroleum, London, England, shall be kept on a platform without approval.
11. The stairways and walkways of a platform shall be kept free from obstruction.
12. A workplace shall fulfil the conditions that:
 - (a) it shall be adequately ventilated for the persons working there;
 - (b) where the noise level cannot be kept below the allowed threshold level of 50 decibels, the employer shall equip the workers with ear-protectors; and
 - (c) prohibition of smoking and lighting a fire is made very obvious to workers.
13. Liquid wastes including wash-water from decks of offshore structures shall be collected at central points of a sewerage system to facilitate control of meeting the requirements under sub-clause 616(6).

Clause 227
Electric Hand Tools

1. All electrically operated hand tools shall comply with SAA AS 3160 and Hand-held Portable Electric Tools.
2. Electrically operated hand tools shall be checked at regular intervals by a person trained in such checking and any defects shall be corrected. Marking of these tools for checking purposes is required.
3. Electrically operated hand tools which have been found to be defective shall not be used until such time as the defects have been corrected.

Clause 228
Plant and Machinery Guards

1. Wherever possible plant and machinery on a machinery platform shall be provided with remote guards controls to permit shutting down from a safe distance.
2. Fences or guards shall be provided for all dangerous parts of machinery and dangerous appliances and such fences or guards shall be kept in position when the machinery or dangerous appliance is operating.
3. Moving parts of machinery or dangerous appliances shall not be cleaned or adjusted while the machinery or appliance is operating.

Clause 229

Unguarded Edges and Openings

Where it is impracticable to provide fixed guard railings, effective removable barriers shall be provided at unguarded openings in guard railing and unguarded openings in floor or deck areas, and shall be maintained in position at all times when such openings are not in use. When such openings are in use, the absence of guard rails shall be clearly indicated by means of warning signs. Such removable barriers shall not consist of fibre rope, unless otherwise approved.

Clause 230

Cutting Heating and Welding

1. No cutting, heating or welding shall be carried out on a platform unless:
 - (a) the operation is carried out in accordance with SAA AS 1674, Fire Precautions in Cutting and Heating and Welding Operations;
 - (b) the person in command of the platform has determined that it is safe to carry out the cutting, heating or welding operation, and has issued a 'hot work permit' complying with the standard referred to in this sub-clause; and
 - (c) any shielding or screening used in the hot work operation is of a material which is combustion resistant.
2. The safety manual referred to in clause 201 shall contain provisions relating to the special precautions to be taken during cutting, heating or welding near:
 - (a) drilling operations;
 - (b) well-head and production areas;
 - (c) tanks containing flammable or combustible liquids; and
 - (d) diving operations.
3. Electric welding neutral returns shall be connected directly to the equipment being welded.
4. The issue of a "hot work permit" shall take into account any adverse conditions arising from the operations such as the transfer of diesel or other flammable or combustible liquids between supply boat and platform.

Clause 231

Explosimeters

The explosimeters referred to in sub-clause 326(10) shall be regularly inspected, checked and maintained by a person competent in such inspection, checking and maintenance so that they are ready for use at all times.

Clause 232

Emergency

The emergency shutdown devices on internal shutdown combustion engines referred to in sub-clause devices on 326(8) shall be checked regularly to ensure that engines they are operational.

Clause 233

Exhaust

The lagging of exhaust piping of internal lagging combustion engines referred to in sub-clause 326(9) shall be checked regularly for signs of deterioration and replaced if necessary.

Clause 234

Pneumatic

Every “quick connect type” connection in flexible and pneumatic and hydraulic lines shall be fitted hydraulic with safety clips or restraints.

Clause 235

Scaffolding

1. All scaffolding on platforms shall be in accordance with the following standards:
SAA AS 1576, SAA Metal Scaffolding Code;
SAA AS 1575, Tubes, couplers and accessories used in metal scaffolding; and
SAA AS 1577, Solid timber scaffold planks.
2. Any person directly responsible for the erection and dismantling of scaffolding shall be the holder of a current approved certificate of competence.

Clause 236

Medical

1. On each platform there shall be provided first-aid equipment and medical supplies which have been approved for the purpose by a medical practitioner and shall be kept secure from unauthorized access or use.
2. On each platform there shall be at least two portable stretchers, one of which shall be a rescue stretcher suitable for the transfer of injured persons on to a helicopter or vessel and thence by the helicopter or vessel to shore.
3. On each platform, other than a permanently crewed platform, there shall be a registered general nurse, a person who is a member of or is qualified :
 - (a) for membership of the Institute of Ambulance Officers (Aust);
 - (b) or a person having an equivalent qualification and experience acceptable to the Managing Director.
4. On each permanently crewed platform, there shall be a qualified medical practitioner.
5. When drilling or any construction is in progress a person referred to in sub-clause (3) shall be available at all times.

Clause 237
Medicinal and Therapeutic

1. A person who brings onto a platform any medicinal or therapeutic drug, shall on arrival report to the relevant person referred to in sub-clauses 236(3) and 236(4), the nature and quantity of each such drug in that person's possession or control and, where it is prescribed, by whom it was prescribed.
2. The relevant person referred to in sub-clauses 236(3) and 236(4), shall maintain a record of the information given to that person pursuant to sub-clause (1).
3. On each platform the relevant person referred to in clauses 236(3) and 236(4), shall maintain a register in which are recorded in respect of each use on that platform of a medical or therapeutic drug:
 - (a) the date and dosage of every such use known to that person;
 - (b) the name of the person to whom the drug was administered; and
 - (c) the name of the person who authorized the use of the drug.
4. If any person on a platform is taking medication, whether prescribed or not, which impairs that person's ability safely to perform that person's duties, that person shall not remain on duty.

Clause 238
Unauthorized Use of Drugs and Intoxicants

1. A person on a platform shall not (otherwise than in the course of that person's duties have in that person's possession or control any drug (which that person is prohibited by law from having in that person's possession or control) or any intoxicant.
2. A person on a platform who (otherwise than in the course of that person's duties or as a result of any medical treatment or therapy administered to that person) has in that person's possession or control or is adversely affected by any intoxicant or by any drug which that person is by law prohibited from having in that person's possession or control shall immediately be relieved of that person's duties and removed to shore as soon as practicable. A report of the incident shall be sent to the Managing Director.

Clause 239
Entry Into Confined Spaces

Wherever a person is required to enter into a confined space, where the presence of gas, vapours, fumes, mist or dust, or the absence of oxygen, is such as may cause injury to a person who enters such a space, approved procedures shall be followed.

Clause 240
Dangerous Atmospheres

1. In the event that the gas detection equipment referred to in sub-clauses 326(3) and (10) indicates the existence of a flammable or toxic atmosphere, immediate steps shall be taken to render the atmosphere safe.

2. No person shall enter or remain in an area where there is flammable or toxic atmosphere unless that person wears a self-contained breathing apparatus referred to in sub-clause 225 (6) or an airline mask drawing air from a safe location

Clause 241 Explosives

1. Explosives shall be transported, stored and handled in accordance with approved procedures.
2. Detonators or ignitor needles shall not be stored with other explosives.
3. All explosives shall be kept in a locked storage magazine which is clearly marked with the words "EXPLOSIVES - DANGER". The storage magazine shall be in an approved location, near the perimeter of the platform to facilitate jettison in an emergency. Explosives shall not be stored in the vicinity of flammable, combustible, corrosive, oxidizing or radio-active materials.
4. Explosives shall be handled only by qualified personnel and in accordance with approved procedures.
5. Explosives no longer required on a platform or showing signs of deterioration shall as soon as possible be removed from the platform.
6. Packaging having contained explosives shall as soon as possible be removed from the platform.
7. A record of amounts and types of explosives held in the magazines shall be maintained at all times and such record shall be accessible to an inspector on request.

Clause 242 Radio-active Substances

A person engaged in the handling of, or the use of, radiation apparatus or radio-active substances shall comply with the requirements of all applicable radiation control legislation.

Clause 243 Maintenance

All operating and safety equipment shall be maintained in good working condition.

Clause 244 Gas Cylinder Transfer

No gas cylinders shall be transferred between a platform and a vessel, unless those cylinders are contained in an approved cargo tray or container.

Clause 245 Warning Notices

Warning notices shall be displayed, where appropriate, warning all persons of any specific condition which in the interests of the protection of persons and property should be made known. Such notices shall be in accordance with SAA AS 1319, Rules for the Design and Use of Safety Signs for the Occupational Environment.

Clause 246 Storage of Nitrates

Potassium and sodium nitrates shall be stored in leak-proof containers, away from combustible materials and food storage areas.

Clause 247 Certificate of Competence

1. Subject to sub-clause (2), where a person carries out an activity for which that person is required to have a certificate of competence, an authorization or a qualification by a law of either Timor-Leste, the Commonwealth of Australia, or a State or Territory of Australia such person shall have such certificate, authorisation or qualification.
2. In circumstances where the Managing Director determines that a particular activity or operation needs to be undertaken and there is insufficient time for a person to obtain a certificate, authorisation or qualification referred to in sub-clause (1) or the operating requirements of the industry specific equipment do not fall within the normal certificate/authorisation procedures, the Managing Director may exempt a person from the requirements of sub-clause (1) for the purpose of undertaking that activity or operation provided the Managing Director is satisfied that person is competent to be engaged in the particular activity or operation to be carried out.

Clause 248 Personnel Qualifications and Performance

The Managing Director may at any time require that such information be furnished as the Managing Director considers necessary to enable the Managing Director to determine whether a person is competent to be engaged in any activity or operation carried out on or from a platform.

Clause 249 Vessels Near Platform During Diving

Where diving operations are being carried out from a platform, the person in command of a vessel shall not cause it to approach or depart from that platform, or cause its propellers or thrusters to be engaged, without notifying the person in charge of the diving operations.

Clause 250 Other Operations During Diving

Where diving operations are being carried out from a platform, a person shall not:

- (a) where the dive being carried involves decompression of the diver, unless otherwise approved, weld within 5 metres of any processing equipment that contains hydrocarbons, except that such welding operations are permitted where they are carried out in a pressurised enclosure or where the welding site and nearest processing equipment containing hydrocarbons are clearly separated by a solid plate deck or a continuous firewall;
- (b) carry out any activity requiring the use of a Hot Work Permit at a place from which sparks or slag could fall upon any item of diving equipment being used for diving operations;
- (c) operate a crane or other equipment not associated with diving operations or carry out any activity if diving personnel or diving equipment engaged in or being used for the diving operations could be struck by any material moving or falling as a result of the use of the crane or other equipment or the carrying out of the activity;
- (d) transfer methanol, diesel fuel or other flammable or combustible substances between supply vessels and the platform;
- (e) where the dive being carried out involves decompression of the diver, carry out any wireline operations on the platform; or
- (f) carry out operations associated with depressurising vessels or pipelines as a result of which hydrocarbons could be released on or near the platform.

Clause 251 Radio Operators

Radio operators on platforms shall hold at least a restricted radiotelephone operators certificate of proficiency or equivalent and shall have experience in radio operations associated with offshore operations. Radio operators without that experience shall be supervised and instructed in offshore safety communications (including helicopter control communications) by an experienced radio operator for at least one month or such other period as is approved.

Clause 252 Explosive-powered Tools

Explosive-powered tools shall be designed, operated and maintained in accordance with the requirements of SAA AS 1873, Explosive-powered hand-held fastening tools, fasteners and explosive charges.

Clause 253 Sandblasting

Sand blasting operations shall be carried out by competent persons in an approved manner to ensure safe operations.

Clause 254 Dangerous and poisonous substances

A person engaged in the handling of, or the use of dangerous or poisonous substances shall comply with the requirements of any applicable control legislation on handling and use of such substances.

Clause 255

Chemicals

Any chemical for use in petroleum operations including drilling, production and pollution clean-up chemicals shall fulfil specifications issued by the SAA AS and shall be subject to approval of the Managing Director.

Clause 256

Duration of Working Hours

1. A person carrying out work as part of an operation shall not be allowed to become so fatigued as to adversely affect their own health and safety or that of any other person.
2. The normal hours of work should not extend beyond 12 hours in any one day. Relief personnel are to be provided if it can reasonably be anticipated that the work will continue for an extended period.
3. In any case except in an emergency, no person shall be allowed to carry out work if he or she has had less than 10 consecutive hours rest in any 24 hours period.

Division 2 - Reporting and Data Submission

Clause 280

Reporting of Death and Serious Injury

1. In this clause and clauses 281 and 282 a reference to a serious injury is a reference to an injury to a person as a result of which the person requires immediate attention by a medical practitioner.
2. Where a person dies or suffers a serious injury-
 - (a) a report of the death or injury shall forthwith be made to an inspector; and
 - (b) a report in writing giving full particulars of the death or injury and all related circumstances shall be transmitted to the Managing Director as soon as practicable, and in any case within 48 hours after the occurrence of the death or injury.

Clause 281

Written Records of Death and Injury

1. A record in an approved form and as far as practicable in accordance with SAA AS 1885, Code of Practice for Recording and Measuring Work Injury Experience , shall be kept of each death and injury, whether or not a serious injury, suffered by a person including :
 - (a) particulars of the death or injury;
 - (b) the circumstances leading to the occurrence of the death or injury; and
 - (c) the treatment (if any) given to the injured person and the name of each medical practitioner (if any) consulted in relation to the injury.
2. A copy of the records, referred to in sub-clause (1), of injuries shall be transmitted to the Managing Director not later than the 15th day of each month covering injuries that occurred during the last preceding calendar month together with such statistical analyses and injury indices as the Managing Director determines.

Clause 282 **Reporting Serious Damage**

1. In this clause and clauses 283 and 284 a reference to serious damage to property is a reference to:
 - (a) the loss or destruction of property with a value exceeding \$US20,000;
 - (b) damage to property, the repair of which damage would cost an amount exceeding \$US20,000; and
 - (c) the loss or destruction of any property, or any damage to property, by reason of which any person dies or suffers serious injury.
- (2) Where serious damage to property occurs:
 - (a) a report of such occurrence shall forthwith be made to an inspector; and
 - (b) a report in writing of such occurrence shall be submitted to the Managing Director as soon as practicable specifying:
 - (i) the date, time and place of such occurrence;
 - (ii) particulars of the damage;
 - (iii) the events so far as they are known or suspected that caused or contributed to the occurrence;
 - (iv) particulars of repairs carried out or proposed to be carried out to damaged property; and
 - (v) measures taken, or to be taken, to prevent a possible recurrence.

Clause 283 **Reporting Potentially Hazardous Event**

Where an event occurs which is not in the normal or ordinary course of a particular operation and which is professionally considered to be likely to cause injury to a person or serious damage to property, but such event does not cause injury or serious damage:

- (a) a report of the event shall forthwith be made inspector; and
- (b) a report in writing of the event shall be submitted to the Managing Director as soon as practicable specifying measures taken or to be taken to prevent a possible recurrence.

Clause 284 **Reporting Damage Less Than \$US20,000**

Where damage to property occurs which is not serious damage to property but which result in a significant loss of structural integrity or load bearing capacity in the property damaged or result in some other significant unsafe condition:

- (a) a report of the damage shall forthwith be made to an inspector; and
- (b) a report in writing of the damage shall be submitted to the Managing Director as soon as practicable specifying measures taken or to be taken to prevent a possible recurrence.

Clause 285
Reporting Escape or Ignition of Petroleum and Other Material

1. A report shall forthwith be made to an inspector upon the occurrence of:
 - (a) an escape or discharge into the sea of a mixture of petroleum and water in which the petroleum concentration was greater than 25 parts per million;
 - (b) an escape or discharge into the sea of more than 80 L of petroleum, not being an escape or discharge into the sea of petroleum in a mixture of petroleum and water in which the petroleum concentration was greater than 25 parts per million; and
 - (c) any uncontrolled escape or ignition of petroleum or any other flammable or combustible material causing a potentially hazardous situation.
2. A report in writing of any occurrence referred to in sub-clause (1) shall be submitted to the Managing Director as soon as practicable, and in any case within 48 hours after the occurrence specifying:
 - (a) the date, time and place of the occurrence;
 - (b) the quantity or approximate quantity of liquid that escaped or burned;
 - (c) particulars of damage caused by the escape or ignition;
 - (d) the events so far as they are known or suspected that caused or contributed to the escape or ignition;
 - (e) particulars of methods used to control the escape or ignition;
 - (f) particulars of methods used or proposed to be used to repair property damaged by the escape or ignition; and
 - (g) measures taken, or to be taken, to prevent a possible recurrence of the escape or ignition.

Clause 286
Reporting of Emergencies

Any emergency shall be reported forthwith, and in any case within 48 hours to an inspector. In addition marine emergencies involving platforms, vessels or aircraft shall be reported forthwith to the Federal Sea Safety and Surveillance Centre in Canberra and the Fire, Rescue and Emergency Services, Civil Protection Minister of the Interior in Dili.

Clause 287
Reporting Radiation Monitoring

Where by any relevant legislation relating to radiation control a report is prepared in respect of the monitoring of radiation in connection with the operations, a copy of that report shall be sent to the Managing Director in a manner satisfactory to the Managing Director.

PART III - MARINE FACILITIES

Division 1 - General Requirements

Clause 300 Mobile Platform

1. A ship, barge, vessel or other floating structure forming part of a fixed platform shall be deemed for the purposes of clauses 301 and 302 to be a mobile platform when disconnected from the remainder of such platform.
2. The use of a mobile platform shall be subject to compliance with the Safety Case Regulations under Division 3 of this Part III of the Regulations.

Clause 301 Mobile Platform Approval

1. A Mobile platform shall not be used unless:
 - (a) either it complies with such provisions of the Navigation Act 1912 (Aust.) as applying to it by virtue of that Act or it meets the requirements of that Act (including regulations and orders made thereunder) relating to the safety and operation of vessel or structure performing the functions of the mobile platform;
 - (b) it has been classified by a classifying authority in accordance with the rules of that authority for classifying mobile platforms of that class and the classification has not been cancelled;
 - (c) it is used and maintained in accordance with those rules in force at the time at which it was classified;
 - (d) all equipment and facilities, including all drilling equipment, cranes and winches, diving facilities and safety systems, have, been inspected by an inspector and have been approved; and
 - (e) the Managing Director has given consent to the use of the mobile platform in the JPDA.
2. The written consents issued from time to time by the classifying authority under its rules which relate to the use and maintenance of a mobile platform shall be produced when required by the Managing Director or an inspector.
3. Except in an emergency, a mobile platform and its associated facilities (including its safety systems, personnel emergency facilities and accommodation) shall not be materially altered or reconstructed without approval and, where applicable, verification by the classifying authority.
4. An emergency alteration or reconstruction shall, as soon as practicable, be reported to the Managing Director.

Clause 302 Movement of Mobile Platform

1. Subject to sub-clause (4), a mobile platform shall not without approval of the Managing Director be moved:

- (a) into the JPDA;
 - (b) from a particular place in the JPDA to another place in the JPDA; or
 - (c) to a place outside the JPDA.
2. An application for approval by the Managing Director to move a mobile platform shall, unless the Managing Director permits in exceptional circumstances, be made in writing at least seven days before the proposed move and shall include particulars of:
 - (a) the dates and times at which the move is proposed to be carried out, and the locations concerned; and
 - (b) any buoy or underwater obstruction proposed to be left at a location from which the mobile platform is to be moved.
3. Notwithstanding sub-clause (1), a person may, in the case of an emergency, make any change in the location of a mobile platform necessary to protect personnel and property.
4. The movement of a mobile platform made in accordance with sub-clause (3) shall, as soon as practicable after that movement has taken place, be reported to the Managing Director and to the Federal Sea Safety and Surveillance Centre in Canberra.
5. Before a mobile platform is moved to another location, details of the move, including the present and new locations, the time of departure from the present location, and the estimated time of arrival and expected duration of stay at new location, shall be reported to the Managing Director and to the Federal Sea Safety and Surveillance Centre in Canberra.
6. When a mobile platform has arrived at a new location the actual time of arrival shall be reported to the Managing Director and to the Federal Sea Safety and Surveillance Centre in Canberra.

Clause 303
Raising or Lowering of a Mobile Drilling Unit

Except in an emergency, where a part of the structure of a mobile drilling unit supports the structure on the sea-bed, that part shall not be raised or lowered unless:

- (a) the operation is carried out, so far as practicable, during the hours of daylight;
- (b) the operation is commenced during weather and sea conditions that are not hazardous and, at that time, are expected not to become hazardous during the estimated duration of the operation;
- (c) the operation is supervised by a person suitably experienced to do so;
- (d) there is on that unit no more than the number of persons reasonably necessary for the carrying out of the operation;
- (e) persons on that unit are only on the deck unless it is reasonably necessary for any of them to be elsewhere;
- (f) a suitable rescue vessel is near the unit; and
- (g) radio or telephone contact between the mobile drilling unit and all other vessels involved in the operation is maintained;
- (h) the sea-bed at the location is verified as adequate for the foundations of that part in the conditions it is classified to operate.

Clause 304
Consent to Construct or Install a Fixed Platform

1. A fixed platform for installation in the JPDA shall not be constructed or installed unless consent in the requirements of the Safety Case Regulations under Division 3 of this Part III of the Regulations have been complied with, and consent in writing of the Managing Director has been obtained.
2. Notices acceptable to the Managing Director shall be given of the commencement of construction or installation of the platform.
3. Arrangements acceptable to the Managing Director shall be made to enable an inspector to examine the platform at any time during its construction or installation.
4. Where the Managing Director so requires in respect of sections of the platform made or assembled outside the JPDA for installation in the JPDA as prefabricated parts or sections, those parts or sections shall, before being so installed, be approved by the Managing Director and verified in such manner (if any) as the Managing Director determines.

Clause 305
Application for Consent to Construct or Install a Fixed Platform

An application for consent to the construction or installation of a fixed platform shall be included in the Development Plan to be prepared and submitted by the contract operator in accordance with Section 4.9 of the Model Production Sharing contract and shall include particulars of:

- (a) the location at which it is intended to construct or install the fixed platform;
- (b) the reason, including the geological evidence, for the selection of that location;
- (c) copies of reports and recommendations made by persons responsible for ascertaining the criteria determining the design;
- (d) design criteria including:
 - (i) the depth of the sea and the nature of the sea-bed and subsoil at the intended location;
 - (ii) the maximum and minimum air and sea temperatures likely to occur at that location;
 - (iii) the characteristics of the waves (including heights, periods and directions, and their probable distribution) at that location;
 - (iv) the relevant water current information;
 - (v) the maximum wind speeds and the direction of winds and the estimated maximum three second gust speed at that location;
 - (vi) details of estimated marine growth on the fixed platform;
 - (vii) the worst combination of dead and live loads likely to be applied to the fixed platform and;
 - (viii) taking account of the magnitude and distribution of production loads.
- (e) specifications and procedures for the construction and installation of the fixed platform;
- (f) drawings of the structure and of the equipment installed or to be installed on the structure;
- (g) the parts or sections constructed or proposed to be constructed before installation in the JPDA;
- (h) standards and codes followed or to be followed in the construction and installation;

- (i) the fire protection and fire extinguishing equipment installed or to be installed on the platform;
- (j) the communication equipment;
- (k) a certificate of the verification of design given by a verifying body in accordance with sub-clause 307(1) and a copy of the contract for that verification;
- (l) a Preliminary Environment report identifying the characteristics of the environment in the vicinity of the platform and an assessment of the impact of the platform on that environment;
- (m) design life expectancy of the platform; and
- (n) such other information as the Managing Director requires.

Clause 306
Consent To Use a Fixed Platform

1. A fixed platform shall not be used unless the requirements of the Safety Case Regulations under Division 3 of this Part III of the Regulations have been complied with, and the Managing Director has given consent in writing to the use of the fixed platform.
2. An application for consent to the use of a fixed platform shall be made in writing and shall be accompanied by a certificate of verification of construction and installation of the platform given by a verifying body in accordance with sub-clause 307(2) and a copy of the contract for that verification.
3. The structure of and installations on a fixed platform other than the drilling and production equipment, personnel emergency facilities and accommodation shall not be altered or reconstructed without approval and, where applicable, verification by the verifying body.

Clause 307
Certificate of Verification of Design, Construction and Installation of a Fixed Platform.

1. A certificate of verification of design of a fixed platform referred to in paragraph 306(k) is a certificate given by a verifying body certifying that the body is satisfied in relation to the design of the fixed platform that:
 - (a) the basic structural concept and configuration are appropriate for the conditions in which the fixed platform is proposed to be used;
 - (b) a structural analysis has been made for critical loadings including the magnitude and distribution of production loads, with particular attention to the interaction between the structure and the piling;
 - (c) a fatigue analysis has been made of critical joints;
 - (d) an assessment of steel grades has been made in relation to stress levels, minimum service temperature and other significant parameters;
 - (e) from an examination of the plans of the structure and the installations, the primary and secondary structures are suitable for the overall and local loadings to be imposed and the design is in accordance with good practice;
 - (f) the welding procedures used or proposed to be used are satisfactory and the design of the principal welds is satisfactory; and
 - (g) such other matters, as the Managing Director has required, have been taken into account.

2. A certificate of verification of construction and installation of a fixed platform referred to in sub-clause 306(2) is a certificate given by the verifying body that verified the design, certifying that the body is satisfied in relation to the construction of the fixed platform and its installation in the JPDA, that adequate and satisfactory inspection was carried out during the construction and installation and that:
 - (a) in relation to parts or sections of the platform constructed before installation in the JPDA, the parts or sections were not damaged before installation and were installed in accordance with the specifications for the construction and installation of the platform; and
 - (b) the construction and installation has been in accordance with the specifications for the construction and installation.

Clause 308 **Surveys of a Fixed Platform**

1. Where the Managing Director has consented to the use of a fixed platform, surveys shall be carried out from time to time to ascertain whether the structure of and installations on the platform are being maintained in a safe working condition.
2. Surveys under sub-clause (1) shall be carried out in the manner and at the intervals which the Managing Director approves, and shall be certified on completion in a way approved by the Managing Director.

Clause 309 **Safety Layout Maps**

Prior to the use of a fixed platform the contract operator shall lodge with the Managing Director, for the purpose of inspection, data as follows:

- (a) Name, type, particulars and a picture diagram of the platform;
- (b) A list of all relevant, required and valid integrity certificates for the platform and the equipment thereon, orderly categorised; all such certificates required under the contract operators safety manuals, the Regulations under Article 37 of the Interim Petroleum Mining Code, the prevailing safety codes and maritime regulations and conditions;
- (c) Layout maps of each level/deck of the platform of sufficient size and scale, which conveniently depict the spaces, rooms or chambers, corridors/alleys, and the position/location on each such level/deck of:
 - (i) the main process or operating equipment;
 - (ii) the safety equipment, installations and materials, including equipment and agents for fire control, personnel protection, escape and survival;
 - (iii) pollution control equipment and materials;
 - (iv) safety detectors and sensors;
 - (v) petroleum flow shut-off systems;
 - (vi) alarm system(s);
 - (vii) storage of dangerous substances, including poisonous, radio active and explosive substances, if any; and
 - (viii) medical facilities;

- (ix) other safety and survival system not covered above;
with a systematic and descriptive “legend” on the above items, specified in sufficient detail.
- (d) Safety and Accident Record over the past 3 years.
- (e) The operator’s most recent report of its safety inspections and drills performed.

Mobile Platforms and Mobile Drilling Units are also subject to compliance with the requirement under this Clause 309.

Clause 310 **Tests and Records on a Fixed Platform**

1. Where the Managing Director requires that a test in relation to the structural integrity of a fixed platform be carried out, that test shall be carried out and recorded in accordance with clause 103.
2. Records of or relating to inspections, surveys, examinations or quality surveillance in relation to a fixed platform shall not be destroyed or otherwise disposed of without approval.
3. A record of a test carried out in accordance with item 1 above shall be produced to an inspector upon demand and shall not be destroyed or otherwise disposed of without approval.

Clause 311 **Additional Requirements for a Platform**

1. A platform to be used or constructed or installed in the JPDA shall have:
 - (a) around the unprotected perimeter of the floor or deck areas of and openings on the platform (other than helidecks),:
 - (i) a wire mesh fence not less than 1 metre high; or
 - (ii) guards and rails not less than 1 metre high consisting of a guard and two intermediate rails so placed that they are approximately evenly spaced between the guard and the floor or deck area, or, where a toeboard is installed, a guard and one intermediate rail placed approximately halfway between the top of the toeboard and the guard;
 - (b) if the platform is a production platform having living quarters - a helideck;
 - (c) the perimeter of the helideck protected with a device of sufficient strength and size to provide an effective safeguard against a person falling from the helideck;
 - (d) suitable access ways to helidecks which will ensure the safety of embarking and disembarking passengers, including those carrying luggage, and which will not impede the embarkation of injured persons on stretchers or otherwise and, where there are to be handrails which extend above the level of the helideck, handrails so constructed that they can be folded onto the deck;
 - (e) landings or other suitable transfer facilities sufficient to ensure safe movement of persons onto and off boats;
 - (f) on any deck where there are survival craft, at least two walkways each at least one metre wide running either the full length or the full width of the deck leading to those craft;
 - (g) from any deck on which there are no survival craft, at least two separate stairways each of which leads either to a deck on which are survival craft or to a further stairway to a deck on which are survival craft;

- (h) on any deck on which there are no survival craft, at least two walkways each at least one metre wide running either the full length or the full width of the deck and leading to the stairways referred to in paragraph (f);
 - (i) stairways which comply with SAA AS 1657, SAA Code for Fixed Platforms, Walkways, Stairways, and Ladders, unless otherwise approved; and
 - (j) an appropriately equipped sick bay for the care of sick or injured persons unless otherwise approved.
2. In this clause “survival craft” means survival craft complying with clause 318.

Clause 312 Helideck

A helideck on a platform shall be designed, constructed and lighted in accordance with the requirements of the Commonwealth Civil Aviation Act 1988, Civil Aviation Regulations and Civil Aviation Orders issued thereunder and in accordance with FAA/ICAO Regulations.

Clause 313 Warning Lights

1. A platform other than:
- (a) a construction platform; or
 - (b) a mobile drilling unit that is being moved from one place to another shall, during the period between sunset and sunrise and during any other period when it is necessary by reason of reduced visibility, show white warning lights in accordance with sub-clause (2) and red warning lights in accordance with sub-clause (3).
2. White warning lights referred to in subclause (1) shall:
- (a) be not less than 6 metres and not more than 30 metres above mean high water;
 - (b) be of such a number and (subject to this sub-clause) so placed that from any position in the vicinity of the platform at least one light is visible;
 - (c) have an apparent intensity in the horizontal direction of not less than 1400 candelas and shall be such that they are visible for a distance of not less than 10 n mile from all points more than 5 metres above sea level when the meteorological visibility is not less than 10 n mile; and
 - (d) be operated in unison to show the letter “U” in Morse Code at intervals of not more than 30 seconds.
3. A red warning light referred to in subclause (1) shall:
- (a) be carried in such a position on the highest point of the equipment on the platform as to be visible for not less than 2 n mile from all points more than 5 metres above sea level when the meteorological visibility is not less than 10 n mile;
 - (b) unless the extremity of the platform carries a white light in accordance with sub-clause (2), be carried on each extremity in such a position as to be visible as required by paragraph (a); and
 - (c) have an apparent intensity in all directions, at and above the horizontal, of not less than 10 candelas.

4. Each obstruction (other than a buoy) associated with operations carried on in the JPDA shall be marked by a buoy unless otherwise approved.
5. There shall be:
 - (a) a flashing yellow light showing the letter “U” in Morse Code at intervals of not more than 30 seconds and visible for a distance of not less than 4 n mile from all points more than 5 metres above sea level when the meteorological visibility is not less than 10 n mile; and
 - (b) a radar reflector on each buoy (other than a mooring buoy or buoy marking a mooring associated with a platform).

Clause 314 Sound Signals

1. A platform shall be equipped with a device capable of emitting sound signals which satisfies the requirements of the International Association of Lighthouses Authorities (IALA) for 2 n mile usual range fog signals.
2. The device referred to in sub-clause (1) shall be operated at all times when the meteorological visibility is less than 0.5 n mile to sound the letter “U” in Morse Code at intervals of not more than 30 seconds.

Clause 315 Emergency Energy Source for Signals

1. The warning lights and sound signals referred to in clauses 313 and 314 on a platform shall have a reserve source of energy:
 - (a) that enables them to be operated for a period of 4 days in the event of the failure of the main energy supply on the platform; and
 - (b) that automatically comes into operation on the failure of the main energy supply.
2. A platform shall be equipped with a device:
 - (a) that indicates whether the lights and signals referred to in sub-clause (1) are operating on the main energy supply or the reserve source of energy; and
 - (b) that is readily observable by the person in command of the platform or, in the case of an unmanned platform by a person at a shore station.

Clause 316 Marking of Platforms

1. A platform shall be marked with a name not less than 600 mm high such that it can be readily identified during day and night when approached from any direction.
2. A helideck on a platform shall be so marked that the platform can be identified by a person in a helicopter which is landing on the deck.

Clause 317
Lifejackets and Lifebuoys

1. A platform shall carry lifejackets:
 - (a) in number not less than 150% of the number of persons on the platform;
 - (b) complying with the provisions of Marine Orders Part 25 (Equipment Lifesaving) issued pursuant to the Navigation (Orders) Regulations made under the Navigation Act 1912;
 - (c) kept in approved places that are readily accessible and prominently indicated; and
 - (d) available for inspection at least once in each year by an approved body or person at a time and place determined by the Managing Director.
2. A platform shall carry at least 8 lifebuoys of a type complying with the provisions of Marine Orders Part 25 (Equipment-Life-saving) issued pursuant to the Navigation (Orders) Regulations made under the Navigation Act 1912.

Clause 318
Survival Craft

1. In this and the next succeeding clause “normal complement” in relation to a platform means the number of people who are normally present on the platform.
2. Unless otherwise determined by the Managing Director, a platform other than a construction platform or a service platform shall carry survival craft with an aggregate capacity sufficient to accommodate twice the normal complement.
3. The survival craft referred to in sub-clause (2) shall include:
 - (a) rigid totally enclosed, motor propelled and fire protected survival craft that will accommodate the normal complement; and
 - (b) other survival craft, capable of floating free and breaking free in the event of the platform becoming submerged, that will accommodate the normal complement.
4. Unless otherwise determined by the Managing Director, a construction platform or service platform shall carry survival craft, capable of floating free and breaking free in the event of the platform becoming submerged, that will accommodate twice the normal complement.
5. Survival craft shall be constructed and equipped so as to comply with the provisions of Marine Orders Part 25 (Equipment-Life-saving) relating to lifeboats and liferafts and issued pursuant to the Navigation (Orders) Regulations made under the Navigation Act 1912 (Aust.).
6. Survival craft shall be prominently marked with an identifying name or number.
7. Survival craft referred in sub-clauses (3)(b) and (4) shall be provided on at least two opposite sides of the platform.
8. Survival craft referred to in sub-clauses (3)(b) and (4) on fixed platforms do not require the capability of floating free and breaking free.
9. Each person on a platform shall be informed, and prominent notices shall show, which survival craft that person is to occupy in the event of an emergency.

10. Survival craft carried on a platform shall be available for inspection at least once in each year by an approved body or person at a time and place determined by the Managing Director.

Clause 319
Exceeding the Normal Complement

The normal complement:

- (a) may, in approved circumstances, be exceeded by 25%; and
- (b) may be exceeded by more than 25% for a period not exceeding three hours during which there is a rostered shift change, if there is a helicopter or vessel so situated that it would arrive at the platforms within one hour if summoned.

Clause 320
Ropes, Ladders, etc

A platform shall not be used unless knotted ropes ladders or scramble nets are provided on at least two opposite sides of the platform to enable persons to be evacuated from the platform to the surface of the water by means other than the fixed stairways or ladders or walkways.

Clause 321
Fire Extinguishing of Equipment

Each platform shall be provided with items of fire extinguishing equipment in such number, of such types and in such locations as the Managing Director approves.

Clause 322
Communication Equipment

1. A platform shall be equipped with radio and, where feasible, telephone equipment which enables contact to be made at all times with the shore station referred to in clause 215 and with vessels and helicopters in transit between the platform and the shore.
2. The equipment referred to in sub-clause (1) shall include equipment which enables operation on an international distress frequency.
3. On a platform there shall be a public address system to enable communications to a person or persons anywhere on the platform.
4. On a platform there shall be a telephone system with a sufficient number of telephones appropriately located throughout the platform to enable two-way communications.
5. All communication equipment referred to in this clause shall have a source of energy that enables it to be operated in the event of the failure of the main electricity supply on the platform.

Clause 323
Buoys

1. A buoy including a buoy referred to in clause 313 shall be painted yellow and shall be marked with the name of its owner.

2. Where a buoy comes adrift from its moorings, steps shall be taken to recover it as soon as possible.

Clause 324 Electrical Installations

1. The classification of hazardous areas, electrical installations, wiring and fittings on a platform shall comply with SAA AS 3000, SAA Wiring Rules or other approved code.
2. A platform shall not be used for neutral returns from electrical installations.
3. There shall be installed an earthing system connected to the structure at one or more points, all of which are effectively equipotential by nature of the structure or by bonding, and there shall be connected to the system:
 - (a) earth conductors from electrical equipment;
 - (b) the frames of motors and generators;
 - (c) metallic housings of all other electrical apparatus; and
 - (d) armouring of cables.
4. The earth resistance or impedance of the earthing system shall be such as will permit the passage of a current from any point in a circuit at which a fault may occur equal to three times the current required to operate the circuit protective device or in the case of insulated neutral system, to operate an alarm device.
5. Provisions shall be made for the dissipation of static charges in accordance with SAA AS 1020, SAA Static Electricity Code or other approved code.
6. Provisions shall be made for lighting protection in accordance with SAA AS 1768, Lighting Protection or other approved code.
7. A marine facility shall be provided with adequate illumination lighting which follows approved codes.

Clause 325 Furniture and furnishings

In platform offices and accommodation for personnel:

- (a) all case furniture, including desks, wardrobes, dressing tables, bureaux, dressers, wallboards and sidings shall be constructed of approved non-combustible material, except that the working surface of such articles may have a combustible veneer not exceeding 2 mm in thickness;
- (b) all free standing furniture, including chairs, sofas and tables, shall be constructed with frames of non-combustible material;
- (c) all draperies, curtains and other suspended textile materials, and upholstery covers, shall have qualities of resistance to the propagation of flame not inferior to those of wool weighing 0.8 kg/m²;
- (d) all floor coverings shall have qualities of resistance to the propagation of flame not inferior to those of an equivalent woollen material used for the same purpose;

- (e) materials used for the items specified in this clause shall not be of the kind which releases toxic gasses upon heating.

Clause 326 **Flammable and Toxic Gases**

1. Any area in which operations could lead to the emission or accumulation of flammable or toxic gases shall be provided with suitable means of ventilation.
2. A drilling or workover installation shall have approved degassing equipment installed in the mud system.
3. A drilling, workover or production installation on a platform shall have flammable gas detection devices installed in any enclosed area containing petroleum handling equipment, mud tanks, mud pumps, shale shakers or other open parts of the mud system. An operation where an emission of flammable gases can result in hydrogen sulphide gas concentrations of greater than 20 ppm without the flammable gases emission being detected shall not be carried out unless hydrogen sulphide gas detection devices have been installed and are functioning.
4. A gas detection system required by sub-clause (3) shall be capable of continuously monitoring for the presence of gas in the area in which the detection devices are located.
5. The monitoring devices referred to in sub-clause (3), and the control mechanisms referred to in sub-clause (7), shall be so arranged that functional tests of the separate components and of the whole system can be carried out efficiently.
6. The functional tests referred to in subclause (5) shall be carried out by a person trained in such testing:
 - (a) at approved intervals; and
 - (b) immediately after any event indicating that the system or any part of the system is not operating correctly - and the results of any such test shall be recorded in an approved manner.
7. The central control for the gas detection system required by sub-clause (3) shall:
 - (a) be capable of giving an alarm at a point not higher than 60% of the lower explosive limit;
 - (b) automatically activate shut-in sequences at a point not higher than 70% of the lower explosive limit; and
 - (c) in the case of hydrogen sulphide detection be capable of giving an alarm before the concentration exceeds 20 ppm.
8. Internal combustion engines on a platform, other than engines operating fire pumps and pumps required for well control or which are situated in the open and are constantly attended when operating, shall be provided with emergency shutdown devices which are automatically activated when flammable gas is detected in the air intake or, where these engines are installed in pressurised housings, in the air intake of these housings and which are, where necessary equipped with remote control equipment that is:
 - (a) accessible to the driller on a drilling and workover rig; and
 - (b) at some readily accessible point on a production platform.

9. The exhaust piping of an internal combustion engine located on a platform shall be adequately lagged with approved material to prevent the ignition of any fuel accidentally coming into contact with the exhaust and shall be fitted with a water spray type spark arresting device or other approved type of spark arresting device.
10. At least two approved portable explosimeters shall be provided on a platform.
11. If workovers and drilling conditions are believed to be such that hydrogen sulfides or gasses containing sulfidic compounds will likely be encountered, procedures equivalent to API RP-49 for Safe Drilling of Wells Containing Hydrogen Sulfide will be followed.

Clause 327 Pipelines

A pipeline is a pipe or system of pipes and associated equipment necessary for conveying petroleum.

Clause 328 Consent to Construct or Install a Pipeline

1. A pipeline for installation in the JPDA shall not be constructed or installed unless:
 - (a) consent of the Managing Director has been obtained in writing;
 - (b) notices acceptable to the Managing Director have been given by the contract operator of the commencement of construction and installation of the pipeline; and
 - (c) arrangements acceptable to the Managing Director have been made by the contract operator to enable an inspector to examine the pipeline at any time during its construction and installation.
2. A contract operator shall ensure that in relation to a licensed pipeline in the JPDA:
 - (a) usage and maintenance is in accordance with an approved operating manual; and
 - (b) all equipment and facilities, including all valve and monitoring equipment, and safety systems, have, been inspected by an inspector or an approved certifying authority.
3. The written consents issued from time to time by the Managing Director which relate to the use and maintenance of a pipeline shall be produced when required by the Managing Director or an inspector.
4. Except in an emergency, a pipeline and its associated facilities (including its safety systems and emergency facilities) shall not be materially altered or reconstructed without the written approval by the Managing Director.
5. An emergency alteration or reconstruction shall, as soon as practicable, be reported to the Managing Director.

Clause 329 Anchoring Vessels Near Pipelines

The Managing Director may require a vessel associated with operations in the JPDA to drop anchor within a designated anchorage location provided for the purpose of safeguarding pipelines.

Clause 330

Application for Consent to Construct and Install a Pipeline

An application for consent for the construction and installation of a pipeline shall be included in the Development Plan to be prepared and submitted by the contract operator in accordance with Section 4.9 of the Model Production Sharing contract and shall include particulars of:

- (a) the location at which it is intended to construct and install the pipeline;
- (b) the reason for the selection of that location;
- (c) copies of reports and recommendations made by persons responsible for ascertaining the criteria determining the design;
- (d) design criteria including:
 - (i) the depth of the sea and the nature of the sea-bed and subsoil at the intended location;
 - (ii) the maximum and minimum sea temperatures likely to occur at that location;
 - (iii) the relevant water current information;
 - (iv) details of estimated marine growth on the pipeline;
 - (v) details of pipeline support method;
 - (vi) the worst combination of dead and live loads likely to be applied to the pipeline taking account of the magnitude and distribution of production loads; and
 - (vii) details of protective measures including anti-corrosion coatings and cathodic protection.
- (e) specifications for the construction and installation of the pipeline;
- (f) drawings of the pipeline and of the equipment installed or to be installed on the pipeline;
- (g) the parts or sections constructed or proposed to be constructed before installation in the JPDA;
- (h) standards and codes to be followed in the construction and installation;
- (i) a certificate of the verification of design given by a verifying body in accordance with sub-clause 332(1) and a copy of the contract for that verification;
- (j) a Preliminary Environment report identifying the characteristics of the environment in the vicinity of the pipeline and an assessment of the impact of the pipeline on that environment; and
- (k) such other information as the Managing Director requires.

Clause 331

Consent To Use a Pipeline

1. A pipeline shall not be used unless the Managing Director has given consent in writing to the contract operator for the use of the pipeline.
2. An application for consent to use a pipeline shall be made in writing and shall be accompanied by a certificate of verification of construction and installation of the pipeline given by a certifying body in accordance with sub-clause 332(2) and a copy of the contract for that verification.
3. The structure of and facilities associated with a pipeline shall not be altered or reconstructed without approval and, where applicable, verified by a certifying authority.

Clause 332

Certificate of Verification of Design, Construction and Installation of a Pipeline.

1. A certificate of verification of design of a pipeline referred to in clause 330(j) is a certificate given by a certifying authority verifying that the body is satisfied that:
 - (a) the basic structural concept and configuration are appropriate for the conditions in which the pipeline is proposed to be used;
 - (b) a structural analysis has been made for critical loadings including the magnitude and distribution of loads;
 - (c) a fatigue analysis has been made of critical joints;
 - (d) an assessment of material grades has been made in relation to pressure levels, minimum service temperature and other significant parameters;
 - (e) from an examination of the plans of the pipeline the pipeline is suitable for the overall and local pressure loadings to be imposed and the design is in accordance with good practice;
 - (f) the welding procedures used or proposed to be used are satisfactory and the design of the principal welds is satisfactory; and
 - (g) such other matters, as the Managing Director has required, have been taken into account.
2. A certificate of verification of construction and installation of a pipeline referred to in sub-clause 331(2) is a certificate given by the verifying body which certifies that the body is satisfied that adequate and satisfactory inspection was carried out during the construction and installation and that:
 - (a) in relation to parts or sections of the pipeline constructed before installation in the JPDA, the parts or sections were not damaged before installation; and
 - (b) the construction and installation has been in accordance with the design specifications for the construction and installation.

Clause 333

Surveys of a Pipeline

1. Where the Managing Director has consented to the use of a pipeline, the contract operator should ensure that surveys are carried out from time to time to ascertain whether the structure of and facilities associated with the pipeline are being maintained in a safe working condition.
2. Surveys under sub-clause (1) shall be carried out in the manner and at the intervals which the Managing Director approves, and shall be certified on completion in a way approved by the Managing Director.

Clause 334

Tests on a Pipeline

Where the Managing Director requires that a pressure test in relation to the structural integrity of a pipeline and associated facilities or pig testing of a pipeline be carried out, the contract operator shall ensure that the test is carried out and recorded in accordance with Clause 103.

Clause 335

Removal of Structures

On completion of production of petroleum, the contract operator is to remove all platforms, structures, pipelines, and associated structures and equipment from the contract area as provided for in paragraph (3) of Article 48 of the Interim Petroleum Mining Code and subsection 5(2)(e) of the Model Production Sharing Contract. Removal is to be carried out in accordance with any generally accepted international standards established in this regard by the competent international organisation.

Division 2 - Reporting and Data Submission

Clause 380

Report on Adrift Buoys

Where a buoy comes adrift from its mooring and is not recovered immediately, a report shall forthwith be made to the Managing Director and to the Federal Sea Safety and Surveillance Centre in Canberra, containing the following particulars:

- (a) a description of the buoy;
- (b) a statement of the location from which it came adrift; and
- (c) a statement of the date and time at which it came adrift.

Clause 381

Progress Report of Construction and Installation

1. Unless otherwise approved, there shall be submitted to the Managing Director not later than the 15th day of each month a report on progress made during the last preceding calendar month in the construction and installation of facilities for and in the JPDA.
2. A report referred to in sub-clause (1) shall contain all relevant information including progress reports of a verifying body, deviations from approved specifications for design, construction or installation, and proposed alternative courses of action.

Clause 382

Records of Tests on a Pipeline

1. Records of or relating to inspections, surveys, x-rays, including x-rays of each welded joint, examinations or quality surveillance of a pipeline and associated facilities shall not be destroyed or otherwise disposed of without approval.
2. A record of a test carried out in accordance with clause 332 shall be copied to the Managing Director, be produced to an inspector upon demand and not be destroyed or otherwise disposed of without approval.

Division 3 - Safety Case

Clause 390

Safety Case - General Scope

1. A Safety Case is a detailed document, prepared by the operator of an offshore facility, that outlines the types of safety studies undertaken and the results obtained, and the management arrangements, to ensure the continued safety of the facility and personnel on it. It must be consistent and comply with these Regulations. The preparation and submission of a Safety Case constitute a key strategy in the drive for improved safety in the offshore oil and gas industry.
2. A Safety Case, prepared in consultation with employees, must be a true reflection of the state of safety arrangements for the existing or proposed facility. It must demonstrate to the satisfaction of the Managing Director, by its contents and supporting material, that the operator knows what technical and human activities occur, how they are to be managed and how safety will be assured in the event of an emergency. It must also identify methods to be used for monitoring and reviewing all activities in connection with the facility, with a view to the continual improvement of the safety of the facility.
3. Once a Safety Case has been accepted, the Managing Director continually reviews the safety performance of the operator, through statistical analysis of incidents and on-site audits, to determine whether the applicable standards and arrangements are being followed.
4. These Regulations deal with matters relating to management of safety on a facility. An operator must not construct or install a facility until the operator has obtained a Consent to construct and install. Before this may be granted, the Managing Director must have accepted, in relation to the facility, A Facility Description, a Formal Safety Assessment and those parts of the Safety Management System that relate to construction and installation. See also Clauses 300, 304 and 306 of the Regulations, which are also subject to these Safety Case Regulations.
5. An operator must not operate a facility until the operator has obtained a Consent to use, under item 3 of Clause 392. This may only be granted if there is a Safety Case in force for the facility. For a Safety Case to be in force, it must have been submitted by the operator under item 1 of Clause 393, and it must have been accepted under item 2 of Clause 393 or provisionally accepted under item 3 of Clause 393, by the Managing Director.
6. Before accepting a Safety Case, the Managing Director must be reasonably satisfied of various matters, namely those set out in item 2 of Clause 393. In particular, where the Managing Director has required any validation relating to the facility, the specified criteria in relation to the validation, in relation to the person or relation to a particular stage of Safety Case, in the case of provisional acceptance (see item 3 of Clause 393)
7. In these Regulations, unless the contrary intention appears:
 - (a) facility means a vessel or structure that:
 - (i) is used or constructed for the recovery of petroleum, including Mobile Platform and Fixed Platforms;
 - (ii) carries, contains or includes equipment for drilling, or for carrying out other operations in connection with a well, from the vessel or structure;

and includes a combination or series of 2 or more related facilities, but excludes a vessel engaged merely in site surveys or investigations to a depth in the seabed not exceeding 100 metres;

- (b) ancillary unit means a structure or vessel, and includes a ship, barge or other vessel or floating structure that:
 - (i) is a vessel or structure on which, or from which, construction or installation operations for, or in conjunction with, the exploration for or recovery of petroleum are or may be carried out; or
 - (ii) provides a base on which, or from which, services (such as diving, firefighting, accommodation, processing or storage) in connection with operations of a kind referred to in paragraph (a) are controlled, mounted or performed;

but does not include a facility or a pipeline;

- (c) Operator, in relation to a facility, means the person from time to time registered or recorded by the Managing Director, in accordance with item 2(7) of Clause 397 as the operator in relation to the facility.

8. In these Regulations, unless the contrary intention appears:

- (a) a person who is not actually on a facility is taken to be on a facility if he or she:
 - (i) is in the vicinity of the facility; and
 - (ii) is under the direction or control or the operator of the facility or of a contractor working on or in connection with the facility; and
- (b) a person who, whilst not qualifying as an operator:
 - (i) operates the facility (whether directly or indirectly); or
 - (ii) causes or permits another person to operate the facility directly or indirectly;is taken, where the context so permits, to be an operator of the facility; and
- (c) a reference to a person involved with a facility includes a reference to a person on the facility; and
- (d) a reference to a facility includes, where the context so permits, a reference to an intended or proposed facility.

Clause 391

Consent To Construct And Install Facilities

1. Before commencing, the construction or installation of a facility, the operator of the facility must obtain, from the Managing Director a Consent to construct and install the facility.
2. An application for a Consent to construct and install must be lodged in writing and contain, or have with it, the following information and material:
 - (a) the reason, including the geological evidence, for the selection of the proposed location of the facility;
 - (b) a copy of each report or recommendation about the facility made by a person, or persons, responsible for deciding the criteria for the design of the facility;
 - (c) those criteria, including:
 - (i) the depth of the sea and nature of the sea-bed and subsoil at the proposed location; and
 - (ii) the maximum and minimum air and sea temperatures, at or near sea level, likely to occur at that location; and

- (iii) the characteristics of the waves (including heights, periods and direction) at that location; and
 - (iv) the relevant current water information for that location; and
 - (v) the likely maximum wind speeds, prevailing wind directions and estimated maximum 3-second gust speed at that location; and
 - (vi) details of estimated marine growth on the facility; and
 - (vii) the estimated worst combination of dead and live loads likely to be applied to the facility; and
 - (viii) evidence to demonstrate that the criteria take adequate account of the magnitude and distribution of production loads;
- (d) any other information or material that the Managing Director reasonably requires.
3. The Managing Director may grant a Consent to construct and install a facility if:
- (a) the Managing Director has accepted:
 - (i) the Formal Safety Assessment in relation to the facility; and
 - (ii) the Facility Description in relation to the facility; and
 - (iii) those parts of the Safety Management System in relation to the facility that relate to the design, construction and installation of the facility; and
 - (b) the Managing Director is reasonably satisfied that the construction and installation of the facility is in accordance with all material requirements of:
 - (i) the Safety Case in force for the facility; and
 - (ii) any conditions specified, under paragraph 4b), in the consent to construct and install; and
 - (iii) these Regulations.
4. A consent to construct and install a facility:
- (a) must be given to the operator in writing; and
 - (b) may specify conditions for the construction and installation of the facility.
5. If the Managing Director decides not to grant a Consent to construct and install, he or she will promptly give to the operator a notice in writing setting out:
- (a) the terms of the decision; and
 - (b) the reasons for the decision.

Clause 392

Consent To Use Facilities

1. Before commencing to operate a facility, the operator of the facility must obtain, from the Managing Director a Consent to use the facility.
2. An application for a Consent to use must be lodged in writing with the Managing Director.
3. The Managing Director may grant a Consent to use a facility if he or she is reasonably satisfied that:

- (a) there is a Safety Case in force for the facility; and
 - (b) the operation of the facility in accordance with the Safety Case and any conditions specified under paragraph 4(b) will be in accordance with all material requirements of these Regulations.
4. A Consent to use a facility;
 - (a) must be given to the operator in writing; and
 - (b) may specify conditions for the use of the facility.
 5. If the Managing Director decides not to grant a Consent to use, he or she will promptly give to the operator a notice in writing setting out:
 - (a) the terms of the decision; and
 - (b) the reasons for the decision.
 6. If the Safety Case in force for a facility is revised under Clause 393, the Consent to use the facility is taken, for the purposes of these Regulations, to be revised accordingly.

Clause 393

Administration Of Safety Cases

A. Submission of Safety Case

1. To apply for acceptance of a Safety Case in respect of a facility, the operator of the facility must submit to the Managing Director a Safety Case that complies with the applicable provisions of these Regulations.
2. A Safety Case must:
 - (a) be in writing; and
 - (b) relate to a specific facility or proposed facility in:
 - (i) a specified location; or
 - (ii) 2 or more specified locations; and
 - (c) subject to item 1(3) of this Clause, relate to any ancillary unit that is or will be attached to, or operated in conjunction with, the facility or proposed facility.
3. If an ancillary unit is to be operated in conjunction with 2 or more facilities, the operator of those facilities may propose that the Safety Case in respect of 1 of those facilities should apply in respect of the ancillary unit.
4. If the Managing Director gives notice in writing to the operator of acceptance of their proposal under item 1(3) of this Clause, the Safety Case in respect of the relevant facility applies to the ancillary unit, for the purposes of these Regulations, as if the ancillary unit were part of that facility.
5. A Safety Case may be submitted in stages.

B. Decision of the Managing Director on proposed Safety Case

1. If the Managing Director is reasonably satisfied:

- (a) that the Safety Case in respect of a facility:
 - (i) is appropriate to the facility; and
 - (ii) complies with these Regulations; and
 - (b) where the Managing Director has, under item 7(2) of this Clause, required a validation relating to the facility; that:
 - (i) the person, or each of the persons, undertaking the validation meets the criterion specified in item 7(3) of this Clause; and
 - (ii) the validation complies with item 7(4) of this Clause;the Managing Director will accept the Safety Case.
2. Subject to item 2 and item 3 of this Clause, the Managing Director will in any other case, refuse to accept the Safety Case.
 3. If the Managing Director does not initially accept the Safety Case, he or she will give the operator a reasonable opportunity to modify and re-submit the Safety Case.
 4. If, after complying with item 2(3) of this Clause, the Managing Director decides:
 - (a) not to accept the Safety Case under this regulation; and
 - (b) not to accept it provisionally under item 3 of this Clause;the Managing Director will give the operator notice in writing setting out:
 - (c) the terms of the decision; and
 - (d) the reasons for the decision.
 5. If, at any stage, the Managing Director decides:
 - (a) to accept the Safety Case under this regulation; or
 - (b) to accept it provisionally under item 3 of this Clause;the Managing Director will give the operator notice in writing of the decision.

C. Provisional acceptance of Safety Case

1. Subject to item 3(2) of this Clause, if the Managing Director:
 - (a) accepts a particular stage of the Safety Case in respect of a facility; and
 - (b) considers that the Safety Case at that stage meets the criteria specified in item 2. (1) of this Clause;the Managing Director may provisionally accept the Safety Case.
2. A Managing Director will not provisionally accept a Safety Case until he, or she is reasonably satisfied that all elements of the Safety Case that are necessary for any activities to be carried out under the provisional acceptance have been provided.
3. A provisional acceptance of the Safety Case in respect of a facility will:
 - (a) be given in writing to the operator of the facility; and
 - (b) specify the following matters, as far as applicable:
 - (i) the period during which the provisional acceptance is to be in force;

- (ii) the extent to which the Safety Case has been accepted;
- (iii) if any limitations apply in respect of the use or operation of the facility; those limitations.

D. Revision of Safety Case

(Revision required because of certain technical developments, increase in risk levels, or intended action by operator)

1. The operator of a facility must submit a proposal in writing to the Managing Director for the revision of the Safety Case in force for the facility:
 - (a) when developments in technical knowledge, or in the assessments of hazards, relevant to the facility (b) make it appropriate to do so; or
 - (b) when, through a series of modifications, the operator can reasonably be expected to assess that there is (b) a significant cumulative increase in the overall risk levels in relation to the facility; or
 - (c) when the operator proposes to undertake or permit a modification of the facility that has the (b) potential to significantly influence the level of specific risks or the ranking of risk contributors; or
 - (d) when the operator proposes to make or permit a significant change to the Safety Management (b) System in relation to the facility; or
 - (e) subject to item 4(2) of this Clause, when the operator proposes to dismantle, decommission or (b) remove the facility.
2. Paragraph (1) (e) does not apply where the Managing Director has stated in writing that the proposed dismantling, decommissioning or removal is satisfactorily addressed in the Safety Case in relation to the facility.

(Revision required by the Managing Director or at end of 5 year period)

3. The operator of a facility must submit an application in writing to the Managing Director for the revision of the Safety Case in force for the facility in each of the following cases:
 - (a) if the Managing Director requests the operator to do so by notice in writing that sets out:
 - (i) the matters to be addressed by the required revision; and
 - (ii) the proposed date of effect of the revision; andthe grounds for the request;
 - (b) at the end of each period of 5 years commencing on the later of:
 - (i) the date when the Safety Case is first accepted by the Managing Director, or
 - (ii) the date of the most recent acceptance by the Managing Director, under this paragraph, of a revision of the Safety Case.
4. An operator to which the Managing Director gives a request under paragraph (3) (a) may make a submission in writing to the Managing Director, within 21 days of receiving the request or any longer period that the Managing Director in writing allows, stating the operator's reasons in respect of all or any of the following matters:
 - (a) why the revision should not occur;

- (b) why the revision should be in different terms from the proposed terms;
 - (c) irrespective of whether the operator gives other reasons, as to why the notice should take effect on a later date than the proposed date of effect.
5. If an operator makes a submission in accordance with item 4(4) of this Clause in respect of a request, the Managing Director will:
- (a) decide whether he, or she accepts all or any of the reasons stated in the submission; and
 - (b) give the operator notice in writing of the decision; and
 - (c) to the extent (if any) that the Managing Director decides to accept the reasons, give the operator notice in writing that varies or withdraws the request, in conformity with the decision; and
 - (d) to the extent (if any) that the Managing Director decides not to accept the reasons, give the operator notice in writing of the grounds for not accepting them.
6. If the Managing Director notifies the operator in writing of any concerns of the Managing Director with the proposed revision, the operator must submit a draft timetable, linked to the stages of the development or operations to which the proposed revision relates, for the proposed revision, and the timetable is to be negotiated and agreed between the operator and Managing Director.

E. Decision of the Managing Director on proposed revision

1. If the Managing Director is reasonably satisfied:
- (a) that the Safety Case in respect of a facility, when revised in accordance with the proposed revision:
 - (i) will be appropriate to the facility; and
 - (ii) will comply with these Regulations; and
 - (b) that any additional risk to the safety of the facility or of persons on the facility, caused by reason of the revision, is reduced as much as a reasonably practicable; and
 - (c) where the Managing Director has, under item 7(2) of this Clause, required material that establishes a validation relating to the facility; that:
 - (i) the person, or each of the persons, who undertook the validation meets the criteria stated in item 7(3) of this Clause; and
 - (ii) the validation complies with item 7(4) of this Clause
- the Managing Director will accept the proposed revision.
2. Subject to paragraph (3), the Managing Director will, in any other case, refuse to accept the proposed revision.
3. If the Managing Director does not initially accept the proposed revision, he or she will give the operator a reasonable opportunity to modify and re-submit the proposed revision.
4. If, after complying with paragraph (3), the Managing Director decides:
- (a) not to accept the proposed revision under this regulation; and
 - (b) not to accept it provisionally under item 6 of this Clause;
- the Managing Director will give the operator notice in writing setting out:

- (c) the decision; and
- (d) the reasons for the decision.

5. If, at any stage the Managing Director decides:

- (a) to accept the proposed revision under this regulation; or
- (b) to accept it provisionally under item 6 or this clause;

the Managing Director will give the operator notice in writing of the decision that specifies:

- (c) the date on which the revision is to commence; or
- (d) the respective dates on which the various parts of the revision are to commence.

F. Provisional acceptance of proposed revision of Safety Case

1. The Managing Director may, by notice in writing to the operator of a facility, grant for the period specified in the notice a provisional acceptance of a proposed revision of the Safety Case in force for the facility.
2. The Managing Director may, by notice in writing to the operator:
 - (a) extend a provisional acceptance for the period specified in the notice; or
 - (b) cancel a provisional acceptance, with effect from the date of effect specified in the notice, being a date not earlier than the date on which the notice is given.
3. The Managing Director will not grant or extend a provisional acceptance of a proposed revision unless he, or she is satisfied that the operation or the facility in accordance with the proposed revision:
 - (a) will be appropriate to the facility; and
 - (b) will comply with these Regulations; and
 - (c) will reduce to as low as is reasonably practicable any risk to the safety of the facility or of persons on the facility.
4. For the purposes of these Regulations, a provisional acceptance in force under this regulation has effect, in accordance with its terms, as an acceptance of the revised Safety Case.

G. Validation of design, construction and installation, or of significant change

1. The scope of validation in respect of a facility is to be agreed between the Managing Director and the operator of the facility.
2. The Managing Director may, by notice in writing, require the operator of a facility to provide material in writing that establishes, to the reasonable satisfaction of the Managing Director, a validation:
 - (a) in the case of a proposed facility; in respect of the design, construction and installation (including instrumentation, process layout and process control systems) of the facility, insofar as those matters are covered by the scope of validation; or
 - (b) in the case of an existing facility; in respect of a proposed significant change to the facility.

3. The operator to which paragraph (2) applies must establish, to the reasonable satisfaction of the Managing Director that each person undertaking the validation had the necessary competence and ability, and access to data, in respect of each matter being validated, to arrive at an independent opinion on the matter.
4. The validation must establish, to the level of assurance reasonably required by the Managing Director:
 - (a) in the case of an existing facility---that, after any proposed change or changes, the facility will be fit for purpose; and
 - (b) in the case of a proposed facility---that the design, construction and installation (including instrumentation, process layout and process control systems) of the facility are fit for purpose and consistent with the Formal Safety Assessment relating to the facility.
5. A validation may be submitted to the Managing Director in stages.
6. In this regulation:

“existing facility” means a facility at a location if the facility is or has been in use, or is available for use, in that location.

Clause 394 **Contents of Safety Case - General**

A. Core matters affecting safety of a facility

1. The Safety Case in respect of a facility must demonstrate:
 - (a) a Facility Description; and
 - (b) a Formal Safety Assessment; and
 - (c) a Safety Management System;each of which:
 - (d) is in place, or is to be put in place, for the facility; and
 - (e) complies with the relevant provisions of this regulation.
2. The facility Description in relation to a facility must:
 - (a) contain a description of the facility (including layout and design features that are complementary to the control measures identified as a result of a Formal Safety Assessment); and
 - (b) provide for active and passive fire and explosion barriers to be used on the facility; and
 - (c) be consistent with the Formal Safety Assessment in relation to the facility.
3. The Formal Safety Assessment in relation to a facility must contain:
 - (a) an identification of all hazards having the potential to cause a major accident event; and
 - (b) a detailed and systematic assessment of risk, including the likelihood and consequences of a major accident event; and

- (c) a description of technical and other measures undertaken, or to be undertaken, to reduce that risk as far as a reasonably practicable or implemented, or to be implemented, to assess and minimise the likelihood or consequences of a major accident event; and
 - (d) a description of the design and layout of equipment, including the use of protective devices, so as to ensure that the risks to persons involved with the facility are reduced as far as is reasonably practicable.
4. The Safety Management System in relation to a facility must make provision for:
- (a) activities that will, or are likely to, take place on or in connection with the facility; and
 - (b) the continual and systematic identification of hazards related to the facility; and
 - (c) the continual and systematic assessment of:
 - (i) the likelihood of the occurrence, during normal or emergency situations, of injury or damage associated with those hazards; and
 - (ii) the likely nature of such injury or damage; and
 - (d) as far as reasonably practicable---the elimination or reduction of risks to persons involved with the facility and, in particular:
 - (i) risks arising during evacuation, escape and rescue in case of emergency; and
 - (ii) risks to persons involved with the facility arising from the equipment and hardware; and
 - (e) where the Safety Case identifies inspection and maintenance of, and testing programs for, the equipment and hardware as integral to the control of those risks---the requisite inspection, maintenance and testing programs; and
 - (f) criteria and information demonstrating that other risks to the safety of the facility and to persons on it have been reduced as far as reasonably practicable; and
 - (g) adequate communications between the facility and:
 - (i) appropriate on-shore installations; and
 - (ii) appropriate vessels and aircraft; and
 - (iii) other appropriate facilities; and
 - (h) any other information that is reasonably necessary to demonstrate that the Safety Management System meets the requirements and objectives of these Regulations; and
 - (i) the performance standards that apply to the Safety Management System specified in the Safety Case.

B. Additional matters affecting safety of a facility

1. A Safety Case must specify the systems of monitoring, auditing and reviewing the implementation of the safety policies, objectives, procedures and performance standards specified in the Safety Case, so as to demonstrate the methods of:
- (a) implementing the Safety Management System specified in the Safety Case; and
 - (b) ensuring the ongoing effectiveness of those systems by:
 - continual and systematic identification of deficiencies in those systems; and
 - continual and systematic improvement of those systems.

2. The Safety Case in respect of a facility must adequately specify all standards, Australian, Timor-Leste and international, to be applied in the design, construction, installation and operation of the facility or plant used on or in connection with the facility.
3. The Safety Case in respect of a facility must specify an office or position on the facility, the occupant of which, while on duty:
 - (a) is in command of the facility; and
 - (b) is responsible for the safe operation of the facility.
4. The Safety Case in respect of a facility must describe the means of ensuring, as far as reasonably practicable, that:
 - (a) the office or position referred to in paragraph (3) is continuously occupied while the facility is in operation; and
 - (b) the person for the time being in occupation of that office or position is competent, by reason of having the necessary skills, training and ability, to perform the functions of a person in command of the facility; and
 - (c) the identity (by reference to office or position) of the person in command of the facility can at all times readily be ascertained, by means of a notice displayed in accordance with paragraph (6), by any person actually on the facility.
5. The Safety Case in respect of a facility must describe the means of ensuring that, at all times:
 - (a) there is in place a command structure in relation to the facility that applies in the event of an emergency; and
 - (b) the command structure is clearly set out in a notice displayed in accordance with paragraph (6).
6. For the purposes of paragraphs (4) (c) and (5) (b), a notice must be:
 - (a) prominently displayed on the facility; and
 - (b) easily legible.
7. The Safety Case in respect of a facility must provide for the operator of the facility to ensure, as far as reasonably practicable, that each employee working on, or in connection with, the facility is competent, by reason of having the necessary skills, training and ability:
 - (a) to undertake:
 - (i) in normal operating conditions; and
 - (ii) in abnormal or emergency conditions; and
 - (iii) during any changes to or modifications of the facility;the tasks, both routine and non-routine, that may reasonably be allocated to them; and
 - (b) to respond and react appropriately, and at the level reasonably required of them, during an emergency.

C. “Permit to work” system for safe performance of various activities

1. The Safety Case in respect of a facility must provide for the operator of the facility to establish and maintain, in accordance with paragraph (2), a documented system of coordinating and controlling the safe performance of all work activities of persons on the facility, including in particular:

- (a) welding and other hot work; and
- (b) cold work (including physical isolation); and
- (c) electrical work (including electrical isolation); and
- (d) entry into, and working in a confined space; and
- (e) procedures for working over water; and
- (f) diving operations.

“confined space” means an enclosed, or partially enclosed, space that:

- (a) is not used or intended for use as a regular workplace; and
- (b) has restricted means of entry and exit; and
- (c) has, or may have, inadequate ventilation, contaminated atmosphere or oxygen deficiency; and
- (d) is at atmospheric pressure when occupied;

2. The system must:

- (a) form part of the Safety Management System specified in the Safety Case in force for the facility; and
- (b) identify the persons having responsibility to authorise and supervise work; and
- (c) ensure that persons involved with the facility are competent in the application of the permit to work system

D. Involvement of employees

1. The operator of a facility must demonstrate to the Managing Director, to the reasonable satisfaction of the Managing Director, that:

- (a) in the development or revision of the Safety Case in relation to the facility, there has been effective consultation with, and participation of, the classes of persons (including, in particular, relevant employees) involved with the facility; and
- (b) the Safety Case provides adequately for effective consultation with, and the effective participation of, those classes of persons, so that they are able to arrive at informed opinions about the risks and hazards to which they may be exposed on the facility.

2. A demonstration for the purposes of paragraph (1) must be supported by adequate documentation.

3. In this regulation, a reference to relevant employees is a reference to employees who are:

- (a) identifiable before the Safety Case is developed; and
- (b) working, or likely to be working, on the relevant facility.

E. Design, construction, installation, maintenance and modification

1. The Safety Case in respect of a facility must specify an effective means of ensuring the adequacy of design, construction, installation and modification of the facility, including its structural integrity.

2. In particular, the design, construction, installation, maintenance and modification of the facility must provide for:

- (a) adequate means of inventory isolation and pressure relief in the event of an emergency; and

- (b) adequate means of gaining access for servicing and maintenance of the facility and machinery and other equipment on board the facility; and
- (c) adequate means of maintaining the structural integrity of a facility; and
- (d) taking into account the results of the Formal Safety Assessment relating to the facility.

F. Medical and pharmaceutical supplies and services

The Safety Case in respect of a facility must specify the medical and pharmaceutical supplies and services, sufficient for an emergency situation, that must be maintained on, or in respect of, the facility.

G. Machinery and equipment

1. The Safety Case in respect of a facility must specify the equipment required on the facility (including process equipment, machinery and electrical and instrumentation systems) that relates to, or may affect, the safety of the facility.
2. The equipment must be fit for its function or use:
 - (a) in normal operating conditions; and
 - (b) to the extent that it is intended to function, or be used, in an emergency---in case of emergency.

H. Drugs and intoxicants

The Safety Case in respect of a facility must specify adequate means of:

- (a) securing, supplying, and monitoring the use of, therapeutic drugs on the facility; and
- (b) preventing the use of:
 - (i) controlled substances (other than therapeutic drugs); and
 - (ii) intoxicants;on the facility.

Clause 395

Contents of Safety Case - Emergencies

A. Evacuation, escape and rescue

1. The Safety Case in respect of a facility must contain, or refer to, an evacuation, escape and rescue analysis in relation to the facility that specifies adequate routes for evacuation and escape in the event of an emergency.
2. For the purposes of paragraph (1), the Safety Case must specify:
 - (a) appropriate evacuation, escape and rescue analyses, and strategies for the control of evacuation, escape and rescue procedures; and
 - (b) adequate life saving equipment in accordance with the escape and rescue analysis, including:
 - (i) sufficient life rafts to accommodate safely the maximum number of persons likely to be on the facility at any one time; and

- (ii) suitable equipment to enable that number of persons to obtain access to the life rafts after launching and deployment; and
 - (c) in the case of a mobile facility---suitable equipment to provide float-free capability and means of launching; and
 - (d) the position or office of the person responsible for implementing and supervising procedures in the event of an emergency.
3. The Safety Case must provide, in its evacuation, escape and rescue analysis, for the facility to have or contain amenities of the following kinds for the evacuation and escape of persons on the facility in the event of an emergency:
- (a) suitable evacuation and escape routes that are, as far as reasonably practicable, to be kept freely passable at all times;
 - (b) in respect of any route that is not freely passable--suitable alternative arrangements;
 - (c) suitable equipment for evacuation and escape;
 - (d) suitable temporary refuge amenities that are equipped with appropriate means of emergency communication;
 - (e) suitable means of escape and rescue for use in the event of an emergency.

B. Measures concerning fire and explosion hazards

1. A Safety Case in respect of a facility must contain a fire risk analysis specifying:
- (a) likely fire or explosion hazards to the facility; and
 - (b) measures for detecting those hazards; and
 - (c) measures for eliminating or reducing those hazards
2. In particular, the analysis must consider:
- (a) the incorporation into the facility of both automatic and manual systems for the detection, control and extinguishment of:
 - (i) outbreaks of fire; and
 - (ii) leaks or escapes of gas; and
 - (b) the means of isolating and safely storing hazardous substances, such as fuel, explosives and chemicals, that are used or stored on the facility; and
 - (c) an analysis of evacuation, escape and rescue measures for use in the event of fire or explosion on the facility.
3. The design of the facility must take into account the results of the analysis.
4. The Safety Case must provide for each person who is on a facility when an escape drill or a fire drill is held in relation to the facility to take part in the drill.

C. Emergency communications systems

1. The Safety Case in respect of a facility must specify communications systems:
- (a) within the facility; and
 - (b) between the facility and:

- (i) appropriate on-shore installations; and
- (ii) appropriate vessels and aircraft; and
- (iii) other appropriate facilities;

that, in the event of an emergency in connection with the facility, is adequate for those kinds of communication.

2. In particular, the Safety Case must provide for the communications systems of the facility to be:
 - (a) adequate to handle:
 - (i) a likely emergency on or relating to the facility; and
 - (ii) the operation requirements of the facility; and
 - (b) protected so as to be capable of operation in an emergency to the extent specified by the Formal Safety Assessment relating to the facility.

D. Control systems

The Safety Case in respect of a facility must specify adequate provision for the facility, in the event of an emergency, in respect of:

- (a) back-up power supply; and
- (b) lighting; and
- (c) alarm systems; and
- (d) ballast control; and
- (e) emergency shut-down systems.

E. Emergency preparedness

1. The Safety Case in respect of a facility must specify a response plan designed to address possible emergencies, the risk of which has been identified through the Formal Safety Assessment in relation to the facility.
2. The plan must:
 - (a) ensure the safety of persons likely to be on the facility at the time of the emergency; and
 - (b) specify the performance standards that it applies.
3. The Safety Case must specify adequate provision for escape drill exercises and fire drill exercises by persons on the facility.
4. In particular, those exercises must ensure that those persons will be trained to function in the event of emergency with an adequate degree of knowledge, preparedness and confidence concerning the relevant emergency procedures.
5. The Safety Case must provide for the operator of the facility to ensure, as far as reasonably practicable, that escape drill exercises and fire drill exercises are held in accordance with the Safety Case relating to the facility.
6. The Safety Case in respect of a mobile facility must also specify systems that are adequate to:
 - (a) shut down or disconnect, in the event of emergency, all operations on the facility that could adversely affect the safety of the facility; and

- (b) give appropriate audible and visible warnings of the shutting down or disconnecting of those operations.

F. Pipelines

1. The Safety Case in respect of a facility must specify adequate procedures for shutting down or isolating, in the event of emergency, each pipeline connected to the facility, so as to stop the flow of hazardous substances through the pipeline.
2. In particular, the procedures must include:
 - (a) effective means of controlling and operating all relevant emergency shut-down valves for a pipeline; and
 - (b) a fail-safe system of isolating a pipeline in the event of failure of other safety devices for the pipeline.
3. The Safety Case in respect of a facility must also specify:
 - (a) adequate means of mitigating, in the event of emergency, the risks associated with each pipeline connected to the facility; and
 - (b) the frequency of periodic inspection and testing of pipeline emergency shut-down valves that can reasonably be expected to ensure that they will operate correctly in an emergency.

G. Vessel and aircraft control

1. Subject to paragraph (2), the Safety Case in respect of a facility must specify a system for the operation of the facility that ensures, as far as reasonably practicable, the safe performance of the operations in relation to the facility that involve vessels or aircraft.
2. The system must be able to meet the emergency response requirements identified in the Formal Safety Assessment in relation to the facility and be described in the facility's Safety Management System.
3. The equipment and procedures for ensuring safe vessel and aircraft operations must be fit for purpose.

Clause 396 Penalty Provisions

A. Compliance with: Consent to construct and install; Consent to use; Safety Case

1. Except with the consent in writing of the Managing Director, the operator of a facility must not construct or install the facility in a way that is contrary to:
 - (a) the Consent to construct and install the facility; or
 - (b) the Safety Case in force for the facility.
2. Except with the consent in writing of the Managing Director, the operator of a facility must not operate, remove, dismantle or decommission the facility in a way that is contrary to:
 - (a) the Consent to use the facility; or
 - (b) the Safety Case in force for the facility.

3. The operator of a facility must not:
 - (a) undertake or permit a modification of the facility that has the potential to significantly influence the level of specific risks or the ranking or risk contributors; or
 - (b) make or permit a significant change to the Safety Management System in relation to the facility; or
 - (c) subject to paragraph (4), dismantle, decommission or remove the facility;before acceptance by the Managing Director of a revision, submitted under paragraph 4 (1) of Clause 393, in respect of the relevant activity.
4. In the case of an activity mentioned in paragraph (3) (c), paragraph (3) does not apply in any case where the Managing Director has issued a statement under paragraph 4 (2) of Clause 393 in respect of the activity.
5. A person must not, in the JPDA, make a significant change to the structure of a facility except in accordance with the provisions in the Safety Case in force for the facility.

B. Records

1. The operator of a facility must establish and maintain, in accordance with paragraph (2), a system of storing records required under paragraph (3) to be stored in relation to the facility.
2. The operator must store the records (for example, on paper or microfiche or by means of a computer):
 - (a) at the nominated address in respect of the facility; and
 - (b) in a manner that makes their retrieval reasonably practicable; and
 - (c) in a secure manner acceptable to the Managing Director; and
 - (d) for the period of 5 years from the creation of the record.
3. The records required to be stored are:
 - (a) the Safety Case in force for the facility; and
 - (b) any revisions of the Safety Case; and
 - (c) any written audit reports of the Safety Case; and
 - (d) a copy of each report given by the operator in accordance with paragraph 3 (2) of this Clause 396.
4. The operator of a facility must keep, in the manner and for the period specified in the Safety Case in force for the facility, documents required by the Safety Case to be kept, but this paragraph does not affect any duty under paragraph (3).
5. The operator must make available, in accordance with paragraph (6), copies of records that are stored or kept by the operator in accordance with paragraph (3) or (4) (including, in the case of a record on computer, a print-out of the record), to any of the following persons on written or oral request by the person:
 - (a) the Managing Director; or
 - (a) an Inspector authorized by the Managing Director.

6. The operator must make the copies of records available to the Managing Director or an Inspector authorised by the Managing Director:
 - (a) during the following times:
 - (i) in the case of emergency on or in relation to the facility, at any time (including night-time) on any day; or
 - (ii) in any other case, during normal business hours on any day, other than a Saturday, a Sunday, or a public holiday at the place where the records are kept; and
 - (b) either:
 - (i) at the nominated address; or
 - (ii) by agreement with the Managing Director or Inspector authorised by the Managing Director, at any other place or by means of electronic transmission.
7. For the purpose of enabling documents to be made available in accordance with paragraph (5), the operator of a facility must:
 - (a) notify in writing to the Managing Director, from time to time, a telephone number within Australia or Timor-Leste at which a request may be made under that paragraph; and
 - (b) ensure that arrangements are in place for calls made for the purpose of that paragraph to be received at that number, at any time (including night-time) on any day, and acted on in accordance with that paragraph.
8. A document that constitutes, or forms part of, a written audit report stored in accordance with paragraph (3) (c) is not admissible in evidence against a defendant in any proceedings for an offence under these Regulations.
9. Within 28 days of commencing to operate a facility, the operator of the facility must notify, or cause to be notified, in writing to the Managing Director, the nominated address of the operator in respect of the facility.
10. In this regulation:

“nominated address” means an address, within Australia or Timor-Leste notified in writing from time to time to the Managing Director, by or on behalf of the operator, as the address of the operator, for the purposes of these Regulations, in respect of the facility specified in the notification.

C. Reporting of significant accidents and incidents

1. The operator of a facility must give, at the earliest practicable opportunity, initial notice (whether oral or written) to an inspector of:
 - (a) a significant accident or incident on, or in connection with, the facility; or
 - (b) a significant accident sustained by a person on the facility;being a notice that contains all material details concerning the accident or incident that are at that time reasonably available to the operator.
2. Within a reasonable time specified by the inspector or, if no such time is specified, as soon as practicable after the occurrence of an accident or incident of a kind mentioned in paragraph (1), the operator must give a report in writing to the inspector setting out fully all material facts and circumstances concerning the accident or incident that the operator:

- (a) is aware of; or
 - (b) is able, by reasonable search and enquiry, to find out.
3. The operator of a facility must compile and maintain a record of reports of each significant accident or incident occurring on or in connection with the facility, and details in each case of any corrective action taken.
4. As soon as practicable after the end of each calendar month, the operator of a facility must submit to the inspector a summary in writing of:
- (a) all deaths of persons on the facility; and
 - (b) all injuries to persons on the facility, other than minor injuries not requiring treatment or requiring only treatment in the nature of first aid.
5. For the purposes of this regulation, an accident or incident is significant if it:
- (a) resulted in the death of a person; or
 - (b) resulted in serious injury to a person or significant damage to the facility; or
 - (c) was likely to have had a result of a kind mentioned in paragraph (a) or (b); or
 - (d) was of a kind that a reasonable operator would consider to require an immediate investigation.

D. Possession, etc of drugs and intoxicants

1. Subject to this regulation, a person on a facility must not have, in their possession or under their control:
- (a) a controlled substance; or
 - (b) an intoxicant.
2. In proceedings for an offence under paragraph (1) (a), it is a defence:
- (a) that the controlled substance was a therapeutic drug; and
 - (b) that the person had the therapeutic drug in their possession or under their control:
 - (i) in accordance with the Safety Case in force for the facility; or
 - (ii) in the course of the person's employment or duties; or
 - (iii) in the course of the person's duties or practice as a qualified medical practitioner, a qualified nurse or a qualified pharmacist; or
 - (iv) in accordance with any Australian or Timor-Leste Law in force; or
 - (v) where the person had lawfully acquired the therapeutic drug---for the person's bona fide personal use.
3. In proceedings for an offence under paragraph (1) (b), it is a defence that the person had the intoxicant in their possession or under their control in accordance with the Safety Case in force for the facility.

E Duty to leave facility on instruction

1. A person on a facility must leave a facility when instructed to do so by the person in command of the facility.

2. An instruction may be given orally or in writing.

F. Duty to cooperate with operator or person in command

1. A person on a facility must cooperate with:

- (a) the operator of the facility; and
- (b) the person in command of the facility;

to the extent reasonably necessary for compliance by the operator or person in command with the Safety Case in force for the facility.

2. A person on a facility must comply with the safety requirements of the Safety Case in force for the facility.

G. Interference with accident sites

1. In the case of an accident on or to a facility that involves:

- (a) the death of, or serious injury to, a person; or
- (b) damage that endangers, or interferes with the safe operation of, the facility; or
- (c) damage likely to have a consequence or effect mentioned in paragraph (a) or (b);

a person must not, before completion by an inspector of the investigation of the site of the accident, interfere with the site.

2. In proceedings for an offence under paragraph (1), it is a defence that the defendant:

- (a) was acting with the authority (whether written or oral) of an inspector; or
- (b) was acting with lawful authority under these Regulations.
- (c) was acting, in a reasonable manner, for any of the following purposes:
 - (i) helping or rescuing a sick, injured or endangered person;
 - (ii) maintaining the safety of the facilities or of persons on the facility;
 - (iii) reducing danger to the facility or to persons on the facility.

H. Endangering or interfering with safety of a person, etc.

1. A person must not do any act that directly or indirectly endangers, or interferes with, the safety of another person on a facility.

2. In this regulation, “act”, in relation to a person, includes omission to do any act that the person is under a duty to perform:

- (a) under these Regulations; or
- (b) under any contract to which the person is a party.

I. Endangering or interfering with safe operation of a facility

1. A person must not do any act that directly or indirectly endangers, or interferes with, the safe operation of a facility.

2. In this regulation, “act”, in relation to a person, includes omission to do any act that the person is under a duty to perform:
 - (a) under these Regulations; or
 - (b) under any contract to which the person is a party.

K. Application of the Criminal Code

1. Offences under these Regulations, other than offences under items 8 and 9 of this Clause 396, are offences of strict liability.
2. For the purposes of these Regulations, the Criminal Codes (as far as material) of the Contracting States are taken to apply in relation to these Regulations as provided under Article 14 of the Treaty.

Clause 397 Miscellaneous

A. Applications and submissions---details to be given

1. An application or submission (however described) that an operator is required or permitted to make or lodge with the Managing Director under these Regulations must include the name and address, and telephone and facsimile numbers of the relevant operator.
2. Any other application or submission (however described) that is required or permitted to be made to or lodged with the Managing Director under these Regulations must include the name and address, and telephone and facsimile numbers of the person making or lodging it.
3. An address required by paragraph (1) or (2) must be in Australia or Timor-Leste.
4. In spite of any other provision of these Regulations, the Managing Director may, in the event of non-compliance in any respect with this regulation, decline to proceed with the relevant application or submission until compliance occurs.

B. Notification of appointment of operator

1. The Contract Operator of a facility must ensure that, at all times, there is an operator in relation to the facility.
2. The operator of a facility is the person responsible for the overall management and operation of the facility.
3. The Contract Operator of a facility must, on or before lodging an application under these Regulations in relation to the facility, notify the Managing Director in writing of the name, and address within Australia or Timor-Leste and telephone and fax numbers of the operator of the facility.
4. The Contract Operator of a facility must promptly notify in writing to the Managing Director any change of operator of the facility.

5. A person notified to the Managing Director as the operator of a facility remains, for the purposes of these Regulations, the operator in relation to the facility until the end of the period of 28 days beginning on the day when the Managing Director receives, in accordance with paragraph (4), notice of change of operator.
6. An operator must promptly notify in writing to the Managing Director of:
 - (a) any change of name of the operator (where the identity of operator remains the same); or
 - (b) any change of the address, telephone or fax numbers of the operator.
7. The Managing Director must maintain a register or other record of matters notified under this regulation.

C. Proof of appointment as operator

1. In proceedings under these Regulations, a document that appears to the court to be a certificate by the Managing Director, in accordance with paragraph (2), certifying a statement to the effect mentioned in paragraph (3);
 - (a) is evidence of the truth of the statement; and
 - (b) may be received in evidence without being proved.
2. The certificate must be signed by the Managing Director and be expressed to be in accordance with the register or other record maintained by the Managing Director under item 2(7).
3. The statement must be to the effect that, on a specified date, or during a specified period, a specified person was the operator in relation to a specified facility.

D. Service, delivery and lodgement of documents

1. For the purposes of these Regulations, unless the contrary intention appears, a notice or other document required or permitted to be given to a person is taken to be given:
 - (a) in the case of service otherwise than by post on an individual---on the day on which the notice or other document is:
 - (i) delivered to the individual in person; or
 - (ii) delivered to their address for service or last known address; or
 - (b) in the case of service otherwise than by post on a body corporate---on the day on which the notice or other document is delivered to the registered office, or the address for service, of the body corporate; or
 - (c) in the case of service by post on a person---on the day on which the notice or other document would ordinarily be delivered in the due course of post or, if the person establishes that it was delivered on a later day, on that later day.
2. In proceedings under these Regulations, proof that, according to the records of the Managing Director, a particular document, or a document of a particular kind:
 - (a) was not received by the Managing Director; or
 - (b) was received by the Managing Director on a particular day, or at a particular time on a particular day, or within a particular period;is evidence of that matter or circumstance.

E. Time limit for applications, etc.

Where an application or submission (however described) is required or permitted to be made under these Regulations, then unless the contrary intention appears, the time within which the application must be made, or may be made, is 28 days after the occurrence of the matter or circumstance giving rise to the requirement or permission.

PART IV - GEOLOGICAL AND GEOPHYSICAL ACTIVITIES

Division 1 - General Requirements

Clause 401

Geological and Geophysical Surveys Approval

1. A geological or geophysical survey shall not be carried out or any modification, which constitutes a significant change to the area or duration of a survey previously approved, be made without prior approval.
2. An application for approval to carry out a geological or geophysical survey shall be made not less than one month or such other period as is approved before the proposed commencement of the survey and shall include:
 - (a) the proposed date of commencement, the estimated duration and cost of the survey;
 - (b) a plan to an appropriate scale showing the area to be the subject of the survey;
 - (c) in the case of a seismic, gravity or magnetic survey:
 - (i) details of the equipment to be used
 - (ii) a plan showing the proposed survey stations and/or traverses
 - (iii) a brief description of operations, procedures, the navigation and acquisition systems, and indicating in the case of airborne surveys, the proposed flying altitude;
 - (iv) a brief discussion paper on the positioning systems selected for each type of survey; and
 - (d) such other relevant information as the Managing Director requires and in addition shall be accompanied by:
 - (e) a safety manual as required under clause 201;
 - (f) where applicable, a copy of current vessel classification; and
 - (g) evidence that the vessel complies with the requirements of the Navigation Act 1912 and Regulations and Marine Orders issued thereunder and ISO/1936.
3. A survey shall not commence unless at least 48 hours notice of the date and time of commencement, the survey duration, and the survey area coordinates have been given to the Managing Director or an inspector nominated by the Managing Director.
4. During the survey the operator shall, as appropriate, inform;
 - (a) the Managing Directorate General of Fisheries, Timor-Leste Department of Agriculture; and
 - (b) the Federal Sea Safety and Surveillance Centre in Canberra? of movements of the survey vessel.

Clause 402 Seismic Energy Sources

1. Explosives shall not be used for a seismic survey without approval.
2. An energy source used in a seismic survey shall be operated in accordance with good safety practices, the manufacturer's recommendations, and the requirements of sub-clauses (4) to (7) as the case may be.
3. While diving operations from a platform are in progress, a charge shall not be detonated underwater within-
 - (a) 2 km of the platform; and
 - (b) 8 km of the platform unless adequate notification to the person in charge of the diving operations has been given of:
 - (i) the type of energy source to be used, its frequency and intensity;
 - (ii) the times at which the energy source is to be used;
 - (iii) in the case of explosive charges any misfires; and
 - (iv) any other pertinent information.
4. When airguns are used in a seismic survey:
 - (a) 8 km of the platform unless adequate notification to the person in charge of the diving operations has been given of:
 - (i) airgun system components shall be maintained free of dirt, oil or grease;
 - (ii) air lines and electrical lines shall be regularly inspected for signs of abrasion and wear; and
 - (iii) only those fittings, valves, hoses, pipes and other components that comply with the manufacturers' specifications shall be used;
 - (b) air pressure shall be reduced to 3500 kPa for each airgun before an array is brought on board, and shall be bled off completely once on board;
 - (c) maintenance of airguns shall be carried out only after the relevant air lines and electrical lines have been disconnected;
 - (d) procedures shall be followed which ensure that air lines, as numbered at the manifold, are connected to the correct sequence of guns in the array;
 - (e) any test-firing of an airgun or airgun array on deck or in the air shall be carried out only with approval; and
 - (f) all pipes or hoses subject to high pressure air shall be secured or equipped with safety chains to prevent whipping when air pressure is applied.
5. When gas exploders are used in a seismic survey-
 - (a) welding, brazing, or smoking shall not be allowed near gas cylinders or tanks nor in reel and cable work areas;
 - (b) gas storage areas shall be properly ventilated;
 - (c) gas cylinders and tanks shall be located in specially assigned locations and warning signs of the potential hazards shall be posted conspicuously;

- (d) propane and butane cylinders shall be stored as far away as possible from oxygen cylinders or tanks; and
 - (e) gas storage cylinders shall be protected from overheating.
6. When steam sources are used in a seismic survey:
- (a) high pressure and high temperature lines and vessels shall be adequately protected against damage or puncture from falling objects;
 - (b) steam safety valves shall be clearly marked with warning signs to describe possible intermittent operation; and
 - (c) testing of the source shall be done with the gun fully immersed in water.
7. When sparker and boomer electrical systems are used in a seismic survey:
- (a) charging and discharging circuits in the sparker or boomer electrical system shall be equipped with circuit breakers;
 - (b) sparker and boomer electrical cables shall be protected from damage, adequately insulated and grounded to prevent current leakage and electrical shock; and
 - (c) the operation of the sparker or boomer shall be tested with the gun fully immersed in water.

Clause 403
Person in Command

1. Each person on a vessel carrying out a survey shall be informed of who is in command and the name of the person in command shall be prominently displayed on the vessel.
2. The person in command shall be that person authorized by the contract operator for supervising the conduct of good oilfield practice on the vessel.

Division 2 - Reporting and Data Submission

Clause 450
Basic Data Retention

Where a geological or geophysical survey has been carried out all basic data relevant to the survey, including seismic field tapes and observer's logs, shall be stored and maintained in an approved manner so as to prevent undue deterioration, and shall be retained in Australia or Timor-Leste except as otherwise approved.

Clause 451
Clear Labelling of Data

All data stored by a contract operator or lodged with the Managing Director, shall be clearly labelled (using metric units) with all information necessary for identification. Following are the minimum requirements:

1. All labels for samples and data should include:
 - (a) The JPDA identification
 - (b) Contract Operator's name

- (c) Location and Date
- 2. Seismic Data should additionally include Survey Name, Line No, Shotpoints, Recording Parameters (Type/Format and Recording Scales).
- 3. In addition:
 - (a) Well Samples should include Well Name, Elevation and Coordinates, Depth Interval, Sample Purpose (eg. Dry Set, Palaeontology, Geochemistry).
 - (b) Well Cores should include on each core tray (or box):
 - (i) Total cored interval,
 - (ii) Segment interval in the tray (or box),
 - (iii) Identification of Top/Bottom of each segment,
 - (iv) Meter and 1/2 meter marked on core,
 - (v) Tags indicating sample removals and purpose of removal,
 - (vi) Tag indicating which (if any) cored interval was not recovered.
 - (c) Well Test Fluids or Gas Recoveries should include:
 - (i) Interval Tested,
 - (ii) Sample Origin (eg. during flow or from containers or test string),
 - (iii) Testing and Recovery Parameters (eg. pressure, temperature, flow period),
 - (iv) Any other factor which may have influenced the recovered material.

Clause 452 Periodic Reports

1. Weekly Reports

When a geological or geophysical field survey is in progress, two copies of a weekly report on survey operations shall be submitted to the Managing Director as soon as practicable.

2. Semester Reports

There shall be made available and distributed as directed by the Managing Director not later than one month after the expiration of the period to which they relate two copies of a semester progress report for the six month period on a calendar basis. If no operations have been carried out during the reporting period, a statement to that effect shall be made.

3. A semester progress report referred to in sub-clause (2) shall include:

- (a) a review of operations for exploration for petroleum carried out in the JPDA during the period from 1 January to 30 June each year;
- (b) a brief outline of geological and geophysical interpretations made as a result of the exploration operations, including any reprocessing or reinterpretation of basic data;
- (c) estimated expenditure for the period;
- (d) survey statistics; and
- (e) such other relevant information as the Managing Director requires.

4. Annual Reports

There shall be made available and distributed as directed by the Managing Director not later than one month after the expiration of the relevant period, two copies of a report covering the previous calendar year.

5. An annual report referred to in sub-clause (4) shall:

- (a) be of a more comprehensive nature than that of the semester report;
- (b) include a general discussion of operations carried out;
- (c) give conclusions derived from the operations;
- (d) mention reports submitted during the year;
- (e) give an outline of work plans for the next year;
- (f) include, where appropriate, updated interpretation maps of seismic and potential field data at an appropriate scale; and
- (g) include a summary of annual expenditure.

Clause 453 Survey Data Submission

1. When a geological or geophysical field survey has been carried out, the following information shall, unless otherwise approved, be made available as soon as practicable, but in any event within one month of completion of processing of data, and distributed as directed by the Managing Director:

- (a) where a gravity or magnetic survey has been carried out, and where applicable,:
 - (i) two copies of processed magnetic tapes of both located and gridded data in the ASEG-GDF format;
 - (ii) two stable base transparent copies of Bouguer gravity, free air gravity, total magnetic intensity and, if prepared, vertical gradient and residual contour maps;
 - (iii) two stable based transparent copies of computer generated profile data; and
 - (iv) two copies of analog monitor records, diurnal records, and altimeter records and any maps or profiles made available pursuant to this clause shall annotate line position, line number, registration marks and processing parameters;
- (b) where a seismic survey has been carried out, and where applicable,:
 - (i) two stable base transparent copies of shotpoint location and bathymetric maps together with two copies of magnetic tapes of shotpoints coordinates (geographic and Australian Map Grid) in United Kingdom Offshore Operator Association format if possible and related to the Australian National Spheroid and other formats requested by the Designated Authority;
 - (ii) two stable base transparent copies and two paper print of final processed sections having a vertical scale of not less than 10 cm/sec, and, if prepared, migrated sections;
 - (iii) for 3D, or simulated 3D surveys, two stable base transparent copies of time slice data over zones and intervals as requested by the Managing Director; and
 - (iv) two copies of velocity analysis data on microform or in a format acceptable to the Managing Director;
- (c) where a wireline survey has been carried out, and where appropriate,:

- (i) two stable base transparent copies and two paper prints of each log of each scale run in the survey; and
 - (ii) two stable base transparent copies and two paper prints of computer processed interpretation logs; and
 - (d) where a survey, other than a gravity, magnetic, seismic or wireline survey, has been carried out, such information or material as requested by the Managing Director.
2. Where a geological or geophysical field survey has been carried out, the following basic survey data and supporting material shall be lodged in accordance with the instructions of the Managing Director, but no later than six month after the survey was essentially completed as provided under paragraph (3) of Article 36 of the Interim Petroleum Mining Code, or at such time as directed or agreed by the Managing Director:
 - (a) where a seismic survey has been carried out;
 - (i) two copies of field tapes accompanied by observer's logs in an acceptable format; and
 - (ii) two copies of post common depth point stack tapes or equivalent, in a specified, ASEG standard format, and upon request of the Managing Director, two copies of other processed tapes.
 - (b) where a wireline survey has been carried out, two copies of all available digital form log data on magnetic tapes in an appropriate edited format (LIS or its equivalent) and on floppy disk if available.
3. All magnetic tapes submitted shall be of at least manufacturers certified "error free" quality.
4. At the request of the contract operator, the Managing Director may extend the time of lodgement specified in sub-clause (2) by periods not exceeding three years each provided:
 - (a) the contract operator provides and continues to provide access to the data to the Managing Director and their nominees on request; and
 - (b) the data is stored in conditions approved by the Managing Director.
5. All data referred to in sub-clauses (1), (2) and (3) which has not already been lodged with the Managing Director, must be lodged with the Managing Director prior to the surrender, expiry or cancellation of the whole or relevant part of the contract or prospecting approval.

Clause 454

Final Reports on Wells and Surveys

1. Unless otherwise determined by the Managing Director, where a geological or geophysical study or survey or the drilling of a well has been completed, two copies of a report and maps in an appropriate format shall be made available as soon as practicable within 6 months or such other period as is approved after such completion and distributed as directed by the Managing Director.
2. A report referred to in sub-clause (1) relating to the drilling of a well shall where appropriate include the following particulars:
 - (a) the name and location of the well;
 - (b) the depth of sea water in which the well was drilled;
 - (c) the true vertical depth and measured depth of the well;
 - (d) the dates of the start and finish of the drilling of the well;

- (e) the name of the drilling unit used;
 - (f) a statement whether the well has been:
 - (i) completed as a producing well;
 - (ii) suspended as a potential producing well; or
 - (iii) abandoned;
 - (g) the results of formation fluid sampling tests, production tests and analyses carried out;
 - (h) the equipment installed in or on the well;
 - (i) the cementing operations carried out in or on the well;
 - (j) the depths and descriptions of geological samples such as cuttings, sidewall and conventional cores;
 - (k) all surveys and measurements made in the well, including any detailed interpretations if made;
 - (l) The geological interpretation of the observations made;
 - (m) where available interpretations of all wireline log data;
 - (n) where available all fluid sample analyses;
 - (o) reports on cores and cuttings required by clause 456; and
 - (p) total aggregate cost of drilling the well, subsequent tests and sampling.
3. A report referred to in sub-clause (1) relating to a geological or geophysical study or survey shall include the following particulars:
- (a) name and location of the survey;
 - (b) dates of start and finish of the survey;
 - (c) names of the contractors used to carry out the survey;
 - (d) data acquisition report detailing the operations carried out;
 - (e) system and equipment used for positioning and/or navigation;
 - (f) geological/geophysical techniques and equipment used;
 - (g) data processing report;
 - (h) summary of the costs of the study or survey;
 - (i) list of magnetic tapes with index of contents and format; and
 - (j) interpretations, including maps, made as a result of the survey.

Clause 455

Cores, Cuttings and Fluid Samples

1. Where cuttings are recovered in connection with the drilling of a well two sets of samples of cuttings, each a minimum of 100g dry weight, shall be washed, dried in an approved manner and placed in suitable plastic bags that are properly labelled for identification and distributed in accordance with sub-clause (7).

2. Where cores, other than side-wall cores, are recovered in connection with the drilling of a well the cores shall where practicable be slabbed vertically and two samples, each of which is at least one-quarter of the core, shall be placed in suitable containers that are properly labelled for identification and distributed in accordance with sub-clause (7).
3. Full diameter core samples may, where approved, be retained for special studies.
4. Where core samples are retained in accordance with sub-clause (3):
 - (a) the samples shall be retained in Australia or Timor-Leste unless otherwise approved;
 - (b) in the course of such studies care shall be taken that the core is subjected to no more damage than is necessary for the purpose of the studies; and
 - (c) all residues remaining shall be lodged with the Managing Director on completion of the studies.
5. Side-wall cores which are recovered shall be retained in Australia or Timor-Leste unless otherwise approved, and all residues remaining after any studies have been made on the cores shall be preserved and lodged with the Managing Director on completion of such studies.
6. Where approval has been given for the export of cuttings, core plugs or whole cores, any skeletal material from whole cores shall be returned to Australia or Timor-Leste within 12 months of the approval being given, and residues from exported core plugs or cuttings shall be returned at the conclusion of the analyses and all such residue retained in Australia or Timor-Leste. In relation to any core plugs or cuttings retained overseas for further analysis, a quarterly report on the progress of these studies shall be sent to the Managing Director.
7. Two sets of samples of cuttings and cores prepared in accordance with this clause shall be made available and distributed as directed by the Managing Director.
8. Fluid samples recovered in the course of wireline or other testing shall upon request be made available and distributed as directed by the Managing Director.

Clause 456 **Reports on Cores and Cuttings**

1. Where an investigation, analysis or study is conducted on cuttings or cores, two copies of the report of the investigation, analysis or study shall be made available as soon as practicable after the completion of the investigation, analysis or study, and distributed as directed by the Managing Director.
2. Where approval has been given to the export of cuttings or cores, two copies of the report on the investigation, analysis or study of the cuttings or cores shall be made available upon completion and distributed as directed by the Managing Director.
3. Palynological and palaeontological and petrological slides prepared from cuttings or cores shall be stored and maintained in an appropriate manner and shall be lodged with the Managing Director when requested or in any event prior to the surrender, expiry or cancellation of the contract.

Clause 457
Exploration Data Exchange

The Designated Authority encourages exchange of exploration data between contract operators for the purpose of enhancing their geological knowledge of the contract area, and will only require notification in writing thereof.

Clause 458
Exploration Data from Adjacent Blocks

1. Notwithstanding paragraph (2) of Article 36 of the Interim Petroleum Mining Code, and in accordance with paragraph (4) of the same Article, a contract operator shall have the right to have access to and use all information held by the Designated Authority relating to the blocks in the JPDA adjacent to its contract area.
2. The blocks in the JPDA adjacent to a contract operator's contract area, are all those blocks which are located within its neighbouring contract areas. As the term “adjacent” has the meaning of “close to, next to, lying near, adjoining” collectively, there is no limiting criterion requiring the blocks to share a common boundary.

PART V - DRILLING

Division 1 - General Requirements

Clause 501 Approval to Drill

1. An application for approval to drill a new exploration or development well, or to re-enter an existing exploration or development well shall be made in duplicate not less than one month or such other period as is approved prior to the commencement of the operation, and such an operation shall not be commenced without prior approval.
2. An application under this clause shall include:
 - (a) proposed well name and number;
 - (b) location and water depth;
 - (c) programmed depth;
 - (d) estimated spud-in date;
 - (e) estimated drilling time;
 - (f) number and type of attendant craft, including aircraft, to be used in servicing the mobile drilling unit;
 - (g) name and address of drilling contractor;
 - (h) type of rig and blow-out prevention equipment, including description of equipment, and method of operation;
 - (i) names and addresses of other contractors involved in the operations and the nature of the services they will perform;
 - (j) detail of the drilling program, including particulars of coring, casing (including design parameters, assumptions and rationale consistent with clause 504), drilling fluid and logging;
 - (k) name of person employed by the Contract Operator responsible for communications with the Managing Director;
 - (l) deviation and directional survey programs and proposed well path;
 - (m) drilling procedures manual;
 - (n) geological prognosis of the area and the objectives of the well;
 - (o) pollution control measures; and
 - (p) statement of any significant impact on the environment
 - (q) such other information as the Managing Director requests.
3. An approved programme shall not be varied without approval.

Clause 502 Equipment and Facilities

1. Unless otherwise approved, materials and equipment used in drilling operations shall conform to such standards as are listed below, or to the API Standards which supersede those listed below, so as to safely withstand the conditions likely to be encountered during such operations for:
 - (a) derricks and masts API Std 4A, Specification for Steel Derricks (including Standard Rigs), API Std 4D, Specification of Portable Masts, or API Std 4E, Specification for Drilling and Well Servicing Structures;
 - (b) rotary drilling equipment API Spec 7, Specification for Rotary Drilling Equipment;
 - (c) well casing, tubing and drill pipe, API Spec 5CT, Specification for Casing, Tubing and Drill Pipe;
 - (d) wellhead equipment API Spec 6A, Specification for Wellhead Equipment;
 - (e) hoisting equipment API Spec 8A, Specification for Drilling and Production Hoisting Equipment;
 - (f) wire rope API Spec 9A, Specification for Wire Rope; and
 - (g) cement API Spec 10, Specification for Materials and Testing of Wells Cements.
2. The requirements under Clause 311 and Clause 312 shall also apply to drilling rigs.
3. When it is expected that poisonous gas bearing strata may be penetrated in drilling a well, a contract operator shall report to the Managing Director prior to commencement of drilling, the list of special equipment to cope with such a situation including safety devices for the drilling personnel.

Clause 503 Drilling Rig Inspection

A drilling rig will be inspected by an inspector designated by the Managing Director before its first entry into the JPDA unless it has been inspected in either Australia or Timor-Leste within the preceding nine (9) months.

Clause 504 Well Casing

1. The design and placement of casing strings shall be such as to prevent the release of well fluids into the surrounding environment, and shall take into account pressures that could be exerted on the casing whilst drilling to total depth or the next casing depth, or whilst performing any operation such as testing or production in that casing. The maximum performance properties used in the design of casing strings shall be those indicated as minimum performance properties in API Bulletin 5C2 on Performance Properties of Casing, Tubing, and Drill Pipe.
2. Casing strings shall be run and cemented at the approximate setting depths specified in the drilling program and any significant variations to the prescribed setting depths must be notified to the Managing Director prior to running casing. The setting depth of the surface and intermediate strings shall take into account known or predicted formation strength, known or predicted pore fluid type and pressure, and estimated influx volume in the case that the well kicks, so as to:
 - (a) avoid the pressure in the well bore whilst killing the well, or performing any other operations, exceeding the leak off pressure of the formation to be exposed below the casing shoe; and

- (b) avoid the pressure of the mud required to control the well, including circulation pressure losses, exceeding the minimum fracture propagation pressure of the formation to be exposed below the casing shoe.
3. All casing strings and liner strings shall be capable of withstanding all anticipated collapse and burst pressures, tensile loadings, temperatures, and environments likely to be encountered. In particular:
 - (a) design burst pressure of surface and intermediate casing shall be calculated assuming a column of gas to surface in equilibrium with the anticipated leak off pressure of the formation to be exposed beneath the casing shoe, or in equilibrium with the maximum anticipated pore pressure to be encountered beneath the casing shoe, whichever gives the lesser surface pressure; and
 - (b) design burst pressure of production casing shall be calculated assuming a pressure to be exerted at surface on the column of casing fluid or packer fluid to be that of the closed in tubing pressure of the well during the production life, or the maximum anticipated pressure to be exerted on the casing during the life of the well, whichever is the greatest.
4. All casing strings, other than liner strings shall extend to the wellhead.
5. Casing recovered from a well shall not be re-used in another well unless it has first been inspected in accordance with API RP5C1, Recommended Practice for Care and Use of Casing and Tubing and the physical characteristics established by such inspection enable compliance with subclause (3).
6. The normal sequence of installation of casing strings shall be as follows:
 - (a) structural or drive casing string;
 - (b) conductor casing string;
 - (c) surface casing string;
 - (d) one or more intermediate casing strings, which may include liner strings;
 - (e) production casing string, which may include liner strings.
7. Where the nature of the surface formation is unknown:
 - (a) a structural or drive casing string shall be installed; and
 - (b) where requested by the Managing Director, evidence that the proposed structural or drive casing string is adequate for the proposed well site shall be submitted.
8. Where the surface formation is known to be stable, the structural casing string may, upon approval, be combined with the conductor casing string.
9. For drilling operations carried out from a mobile drilling unit (other than a jack-up platform) the conductor casing string:
 - (a) shall include the means to install a marine riser to return drilling fluids from the seabed to the mobile drilling unit;
 - (b) shall be designed to take account of lateral loading on the casing string due to riser reaction as a result of the motion of the mobile drilling unit and wave and water current forces; and
 - (c) may have a wellhead installed of adequate strength to support the full blow-out preventer stack.

10. For drilling operations carried out from a mobile drilling unit (other than a jack-up platform) the surface casing string shall provide for the installation of a wellhead of adequate strength to support the full blow-out preventer stack, unless such wellhead element has previously been installed on the conductor casing string as provided for in paragraph 9(c).
11. The design of the conductor or surface casing string shall take into account the support of other casing strings.
12. Where drilling operations are carried out from a fixed platform or a jack-up platform, the design of the casing strings shall take into account support for blow-out prevention equipment and other casing strings.
13. When a liner string is installed in a well there shall be an overlap of at least 30 metres between the top of the liner string and the shoe of the next larger casing string previously run, unless otherwise approved.
14. Pressure testing requirements include:
 - (a) after cementing and before drilling out of the casing shoe, all surface and intermediate casing strings shall be pressure tested to the design burst pressure as in sub-clause (3)(a) but not exceeding 70% of the minimum internal yield pressure, and not less than 5550 kPa;
 - (b) after cementing the production casing and before any completion or production testing operations are performed, the production casing shall be pressure tested to design burst pressure (see sub-clause (3)(b)) not exceeding 70% of the minimum internal yield pressure; and
 - (c) pressure tests shall be held for as long as necessary (but not less than 10 minutes) to ascertain that there is no continuous pressure drop, and the result recorded in the drillers log.
15. Drilling operations or operations to complete or test the well shall not commence until a satisfactory result in a pressure test pursuant to sub-clause (14) has been obtained.

Clause 505 Cementing of Casing Strings

1. Structural casing strings and conductor casing strings (other than those placed by jetting or driving) shall be cemented with sufficient cement to fill the annular space between the casing string and the wall of the hole or next outer casing string from the casing shoe of the structural or conductor casing string to the seabed if possible.
2. Surface casing strings shall be cemented with a volume of cement sufficient to fill the annular space between the casing string and the hole to a height of at least 450 metres above the shoe of the casing string or to the seabed if such casing string is less than 450 metres in length.
3. Intermediate and production casing strings and liner strings shall be cemented with sufficient cement to fill the annular space between the casing string and the wall of the hole or next outer casing string as follows:
 - (a) from the point where the cement column enters the annular space (including the casing shoe) to a height of at least 150 m above the cementing point;
 - (b) to a height of at least 100 metres above the top of any formation not previously cased containing hydrocarbons;

- (c) additionally, in case of a liner string which is used as an intermediate or production casing string, the overlap between the liner string and the next larger casing string previously set shall be cemented with sufficient cement to fill at least 30 metres measured length of the annular space between the liner string and the next larger casing string, unless provision is made for the overlap to be sealed in some other effective manner or unless otherwise approved.
4. All casing string cementations shall be carried out in accordance with good oilfield practice and the details of the cementing operations shall be recorded in the driller's log. If there is any reason to suspect a faulty cementing operation, the Managing Director shall be notified.
5. After the cementing of casing strings, drilling shall not be commenced for a time lapse of:
 - (a) 24 hours; or
 - (b) 8 hours under pressure for the surface casing string and 10 hours under pressure for all other casing strings.
6. For the purpose of sub-clause (5)(b) the cement is considered to be under pressure if during the time lapse referred to in that sub-clause the cement after placing is restrained from movement by the use of float valves or other approved equipment.
7. If the cementing requirements of this clause have not been achieved by primary cementing operations, endeavours shall be made to meet those requirements by recementing or by remedial cementing, unless otherwise approved.

Clause 506

Blow-out Prevention Control

1. Blow-out preventers and related well control equipment shall be installed, operated, maintained and tested in accordance with the manufacturer's recommendations or with API RP 53, Recommended Practice for Blow-out Prevention Equipment Systems for Drilling Wells, and shall be rated with a working pressure greater than the design burst pressure of the casing, calculated as in clause 504(3).
2. Unless otherwise approved, prior to drilling below the conductor casing string in exploration wells, or in development wells in those areas having known shallow gas accumulations, a pipe of adequate diameter with control valves or diverter system shall be installed so as to safely divert hydrocarbons and other fluids in the event of pressures occurring below the shoe of conductor string which may fracture the formation.
3. Prior to drilling below the surface casing string the blow-out prevention equipment shall include a minimum of:
 - (a) three remotely controlled, hydraulically operated blow-out preventers with a working pressure that exceeds the maximum anticipated surface pressure, including one equipped with pipe rams, one with blind rams and one of the annular type;
 - (b) a drilling spool with side outlets for the attachment of choke and kill lines, if side outlets are not provided in the blow-out preventer body. These side outlets, at least two in number, shall be connected to pipelines of sufficient strength to withstand a pressure equal to the pressure rating of the blow-out preventer assembly to which they are connected. One of the said pipelines shall be available for the purpose of killing the well and shall have a minimum internal diameter of 50 mm. The remaining pipelines shall be available for the purpose of bleeding well fluid to the choke manifold and shall have a minimum internal diameter of 75 mm;

- (c) a choke manifold containing not less than two adjustable chokes connected to one of the pipelines referred to in paragraph (b);
 - (d) a kill pump facility connected to the kill line referred to in paragraph (b); and
 - (e) a fill-up line.
4. Prior to drilling below an intermediate casing string, the blow-out prevention equipment shall include a minimum of:
 - (a) four remotely controlled, hydraulically operated blow-out preventers with a rated working pressure which exceeds the maximum anticipated surface pressure, including at least one equipped with pipe rams, one with blind rams and one of the annular type; and
 - (b) equipment as referred to in paragraphs (b), (c), (d) and (e) of sub-clause (3).
5. When drilling operations are being carried out from a mobile drilling unit (other than a jack-up platform), after drilling out of the conductor string, provision shall be made so that:
 - (a) equipment being run in the well may be secured in such a manner that it may remain stationary and independent of the motion of the mobile drilling unit; and
 - (b) every blow-out preventer assembly in use shall have included in it at least one set of pipe and shear-blind rams and conform to the requirements of sub-clauses (3) or (4), as appropriate.
6. It shall be ensured that:
 - (a) an inside blow-out preventer assembly (back pressure valve) and a full opening drill string safety valve in the open position are kept on the rig floor at all times whilst operations are in progress, with suitable crossover substitutes to enable installation on all drill pipe, drill collars and tubing in use; and
 - (b) a kelly cock is installed immediately below the swivel and another at the bottom of the kelly, of such design that it can be run through the blow-out preventers.
7. It shall be ensured that:
 - (a) the blow-out prevention equipment is not removed until the well has been adequately sealed; and
 - (b) the Managing Director is notified when blow-out prevention equipment has been removed for repairs, of the nature of the repairs and of the measures taken to seal the well.
8. During operations there shall be a control panel, located on the drill floor for operating blow-out preventers, and another located at such a distance from the drill floor as to ensure safe and ready access in times of emergency.
9. Each choke manifold shall have the following equipment clearly visible to the choke operator when standing in their normal operating position for either the remotely or hand adjustable chokes:
 - (a) a pressure gauge which indicates the drill pipe pressure at the drill floor; and
 - (b) a pressure gauge which indicates the casing string/drill string annulus pressure at a known point upstream of the choke.
10. Blow-out preventers which are installed on the ocean floor shall be provided with duplicate sets of control lines from the master control panel on the drill floor to the various components of the blow-out preventer stack and each control line shall contain a connector-control pod located at the top of the blow-out preventer stack to enable disconnection from the blow-out preventer stack for essential maintenance or in times of emergency.

11. Unless otherwise approved, the following mud system monitoring equipment, with drill floor indicators shall be installed, and used during all drilling operations after setting and cementing the conductor casing string-
 - (a) a recording mud pit level indicator to determine mud pit volume gains and losses. This indicator shall include a visual and audio warning device;
 - (b) a mud volume measuring device for accurately determining the mud volumes required to fill the hole on trips;
 - (c) a mud return or full hole indicator to determine when returns have been obtained or when they occur unintentionally, as well as to determine that returns essentially equal the pump discharge rate; and
 - (d) a mud gas monitoring device to determine the concentrations of gas in the drilling mud.
12. Drilling operations shall not be commenced or continued unless the drilling rig is equipped with a penetration rate recorder that will give a clear indication of a change in formation that can be used as a guide to warn against approaching areas of abnormal pressure, and which shall be maintained in good working order and be in continuous operation while drilling.

Clause 507 Pressure Testing Blow-out Prevention Equipment

1. The blow-out preventer equipment shall be tested in the manner and at the times outlined hereunder or as approved. In the event that a test prevention indicates that the equipment is not operating equipment correctly, operations shall not be continued until the deficiencies have been corrected and the equipment subjected to another test:
 - (a) after installing the blow-out preventer stack, the pipe rams, blind/shear rams, annular preventer, wellhead connection, choke and kill lines shall be tested first at a minimum pressure of 1400 kPa then to the casing design burst pressure (clause 504(3)) with the proviso that the annular preventer test pressure should not exceed 70% of its working pressure, and may be as low as 50% of its working pressure for pressure tests after the initial successful test on any well. The above tests shall be performed at the following times;
 - (i) when installed;
 - (ii) before drilling out of each casing string;
 - (iii) before undertaking a perforating and/or production testing program, unless a valid pressure test has occurred in the past 48 hours; and
 - (iv) following repairs that require disconnecting a pressure seal in the assembly;
 - (b) the shear or blind rams shall be function-tested at the times stipulated in paragraph (a) provided that after installing each casing string the shear or blind rams.

Clause 508 Accumulators

1. Accumulators, without accumulator pump assistance, shall have sufficient capacity at all times during the drilling operation to:
 - (a) open or close all the hydraulically operated choke line valves;
 - (b) close or open all annular type blow-out preventers;

- (c) close or open all blow-out preventer pipe rams; and
 - (d) open the riser connector in the case of a well drilled from a mobile drilling unit (other than a jack up platform).
2. Accumulator pumps shall have two independent sources of power and shall be capable of rebuilding fluid pressure in the accumulators within a period of three minutes to a sufficiently high level to:
- (a) open the hydraulically operated choke line valve; and
 - (b) close the annular type blow-out preventer.

Clause 509 **Blow-out Prevention Drills**

1. Blow-out prevention drills shall be conducted weekly for each drilling crew to ensure that all equipment is operating and that crews are properly trained to carry out emergency duties.
2. All blow-out prevention drills and response times shall be recorded in the driller's log.
3. There shall be displayed on the rig floor a notice providing details of the well control procedures proposed to be followed in the event that indications of a well kick are observed and all drilling crews shall be trained in those procedures.
4. All on-site personnel holding the position of derrick man or more senior, shall attend, at least once every 24 months, an accredited well-control school or refresher course in well-control and obtain a certificate of proficiency from such school or course.

Clause 510 **Formation Integrity Testing**

1. Unless otherwise approved, a formation integrity test shall be conducted after drilling out the casing shoe of surface and intermediate casing strings to establish that the casing shoe cementation and the formation strength at the casing shoe are adequate to sustain the maximum anticipated pressures which may be imposed at the casing shoe during the subsequent drilling operations. The results of the test shall be recorded in the driller's log.
2. Where the result of a test referred to in sub-clause (1) requires that the approved drilling and casing programmes need to be amended, any such amendments shall be submitted to the Managing Director for approval.
3. Where formations are encountered below a casing shoe which require the use of drilling fluid densities not anticipated in the approved drilling programme and which could result in pressures being imposed at that casing shoe in excess of those determined by the test referred to in sub-clause (1) an additional formation integrity test shall be performed, and if the result of that additional test differs from that performed at the casing shoe, the Managing Director shall be notified forthwith and the casing programme shall be amended if necessary.

Clause 511 Formation Pressure Monitoring

Adequate procedures shall be implemented for ensuring that indications of a change in formation pressure can be detected when drilling below the conductor casing shoe.

Clause 512 Drilling Fluid

1. The characteristics and use of the drilling fluid shall provide adequate control of any sub-surface pressures likely to be encountered in the well.
2. The well shall be maintained full of such drilling fluid.
3. Sufficient reserves of drilling fluid and supplies of drilling fluid materials shall be available at the well site for immediate use to comply with sub-clauses (1) and (2).
4. Tests consistent with API RP 13B, Recommended Practice for Standard Procedure for Testing Drilling Fluids, shall be performed on a regular basis while drilling and the results of such tests recorded in the driller's log.

Clause 513 Approval for Production or Drill Stem Tests

1. A production or drill stem test on a well, not being a producing well, shall not be conducted without prior approval. Open hole drill stem testing shall not be permitted.
2. An application for approval pursuant to sub-clause (1) shall include the particulars of-
 - (a) the equipment to be used;
 - (b) the testing programme;
 - (c) the intervals in the well to be tested;
 - (d) the expected duration of the test; and
 - (e) the method of disposal of the produced fluids.
3. The production test for which approval has been given for the purpose of this clause shall not be conducted unless the Managing Director has been given not less than 24 hours notice of the date and time of that test.
4. A production or drill stem test on a well shall not commence during the hours of darkness except with prior approval, or unless the zone being tested or another zone in the same reservoir has previously been tested and the reservoir pressure and formation fluids in the zone of the reservoir have been determined by such earlier testing.
5. All formation fluids which are produced into the test string shall be reverse circulated from the test string or displaced back into the formation before pulling the test string.

Clause 514
Approval to Abandon or Suspend a Well

1. A well shall not be abandoned or suspended without prior approval, except as provided for in sub-clause (4).
2. Subject to sub-clause (4), while drilling operations are being undertaken on a platform, a well shall not be left in a condition which in the opinion of the person in command of the platform or the Managing Director, is unsafe. Prior to the cessation of drilling operations, even temporarily, the well shall be made safe in accordance with good oilfield practice.
3. Subject to sub-clause (4), where casing is being installed, if a well encounters or has encountered:
 - (a) hydrocarbons;
 - (b) abnormally pressured water;
 - (c) unstable coals or shales; or
 - (d) lost returns;the drilling operations shall be continued to the next scheduled casing point at which point the hole will be logged, cased and secured at the surface.
4. In the event of an emergency or adverse weather conditions requiring, in the opinion of the person in command of the platform or the Managing Director, cessation of drilling operations, the well shall be made safe in accordance with good oilfield practice.
5. An application for approval to abandon or suspend a well shall give particulars of:
 - (a) the name of the well;
 - (b) the reason for abandonment or suspension;
 - (c) the proposed abandonment or suspension program including the method by which the well shall be made safe; and
 - (d) such further information as the Managing Director may require.
6. The abandonment or suspension program referred to in sub-clause (5)(c) shall conform with the relevant requirements of clauses 515 and 516, unless otherwise approved.

Clause 515
Abandonment of a Well

For abandonment of a well the following applies:

1. In the uncased portions of a well, cement plugs shall be placed such as to provide a minimum of 30 metres of cement above and a minimum of 30 metres of cement below any significant oil, gas or fresh water zones.
2. Where there is open hole immediately below the casing string, there shall be placed in that casing string:
 - (a) a cement plug placed by displacement method so as to extend at least 30 metres above and at least 30 metres below the casing shoe; or

- (b) a cement retainer with effective back pressure control set at least 10 m, but not more than 30 m, above the casing shoe with a cement plug calculated to extend at least 30 metres below the casing shoe and at least 15 metres above the retainer; or
 - (c) where lost circulation conditions exist or are anticipated, a permanent type bridge plug set within 45 metres above the casing shoe with at least 15 metres of cement on top of the bridge plug.
3. If the casing string is cut and recovered, a cement plug shall be placed to extend at least 30 metres above and at least 30 metres below the cut end of the casing string, and a retainer may be used in setting the required plug.
4. Where the casing string has been perforated:
 - (a) a cement plug shall be placed opposite the perforations and shall extend from at least 30 metres below to 30 metres above the perforated interval; or
 - (b) the perforated interval may be plugged by means of a cement retainer set in the casing string no more than 45 metres above the top of the perforated interval with a cement plug extending at least 15 metres above the retainer, provided the perforated interval is isolated from open hole below; or
 - (c) subject to sub-clause (b) where a succession of retainers is used to isolate a series of perforated test intervals, only the topmost retainer need have a minimum of 15 metres of cement plug placed above it.
5. In a cased hole containing a liner string or strings, a cement plug shall be placed immediately above each liner string hanger to extend at least 30 metres above the liner string hanger.
6. A surface cement plug extending at least 45 metres in height shall be placed in the innermost casing string which extends to the seabed with the top of the plug at a depth no greater than 45 metres below the seabed.
7. No annular space which extends to the seabed shall be left open to drilled hole below the annular space.
8. The location and integrity of cement plugs shall be verified in an approved manner.
9. Any intervals of cased hole in a well between cement plugs shall be filled with mud fluid of appropriate density suitably inhibited to prevent the corrosion of casing string.
10. All casing string and piling shall be severed and removed at least 2 metres below the seabed and the well location shall be cleared of any debris and obstructions.
11. An approved method shall be used to ensure that, wherever practicable, an area as determined by the Managing Director surrounding the well location is free of debris and obstructions likely to become a hazard to other operations within the JPDA.

Clause 516 **Suspension of a Well**

1. Subject to sub-clauses (2) and (3), for suspension of a well the relevant requirements of clause 515 shall apply unless otherwise approved.
2. Approved equipment and protection devices shall be installed on the well head to facilitate future re-entry of the well.

3. Approved means shall be provided to minimize hazards to other marine operations.

Clause 517
Disposal of Drilling Fluids

The concentration of petroleum in any drilling, at the point where it is discharged from the platform into the sea, shall be controlled within approved limits and by approved methods.

Clause 518
Deviation and Directional Surveys

1. Unless otherwise approved a deviation survey giving information on depth and inclination of the well shall be made at intervals of not more than 300 metres, or at the nearest bit change.
2. The application under Clause 501(1) shall include a deviation and/or directional survey program designed to ensure that the location of the well trajectory is recorded during drilling with sufficient accuracy to allow for relief well drilling.

Clause 519
Diving From Platforms

Where diving operations are being carried out from a platform, a person shall not:

- (a) where the dive being carried out involves decompression of the diver, dive from a platform on which drilling operations are in progress or from another platform within 500 metres of that platform if:
 - (i) the depth of the well is within 30 metres of the predicted hydrocarbon bearing zone; or
 - (ii) after penetration of that zone the well has been found unstable following one complete circulation from bottom to surface; or
 - (iii) the well is being perforated.

Clause 520
Person in command of a Drilling Rig

1. There shall be one person in command of a drilling rig and of the operations and activities carried out on or from it, who shall be the authorized representative of the owner of that rig.
2. There shall be a person to represent the contract operator on a drilling rig at all times during drilling of a well, responsible for overseeing that the implementation is closely following the contract operator's drilling prognosis.

Clause 521
Daily drilling log

1. The operator of a drilling rig shall have its drillers in charge at the well-site, maintain a daily drilling log-book to accurately record not less than hourly, all the events taking place and encountered during the process of drilling a well in a professional manner.
2. A daily drilling log-book shall be accessible for inspection by an inspector.

Division 2 - Reporting and Data Submissions

Clause 550

Discovery of Petroleum and Estimate of Petroleum In-place

1. In addition to fulfilling the requirements of the Interim Petroleum Mining Code with respect to reporting of a discovery of petroleum, the results of the appraisal of the discovery including preliminary estimates of petroleum in-place shall be conveyed in writing to the Managing Director within 3 months of the date of discovery or such further period as the Managing Director allows.
2. In the month of November or such other month as the Managing Director nominates in each year two copies of a current estimate of the amount of in-place petroleum in a petroleum pool in a contract area shall be made available and supplied to the Managing Director.
3. An estimate referred to in sub-clause (2) shall be in an approved form and shall specify:
 - (a) the location of the petroleum pool;
 - (b) the amount of in-place petroleum in the pool; and
 - (c) the data upon which the estimate is based; and shall be accompanied by any specific reports produced during the period.
4. When a field study resulting in a revised estimate of the amount of in-place petroleum in the pool has been carried out, two copies of a report of the study and the revised estimate shall be made available and distributed as directed by the Managing Director.

Clause 551

Daily Report on Drilling Operations

1. Each day before midday a daily report of the drilling operations for the previous 24 hours shall be sent to the Managing Director.
2. The daily report shall contain:
 - (a) the name of the well;
 - (b) the drilled depth;
 - (c) the work carried out;
 - (d) the lithology of formations penetrated;
 - (e) any indications of petroleum;
 - (f) results of surveys made in the wellbore; and
 - (g) estimated daily and cumulative well costs.

Clause 552

Weekly Report of Drilling Operations

Each week two copies of a report on the drilling operations carried out during the previous week, including a summary of the daily drilling reports referred to in clause 551, together with one copy of the daily driller's logs and weekly rig inspection report, shall be made available and distributed as directed by the Managing Director.

Clause 553
Report on Modification, Abandonment or Suspension of a Well

A report providing details of any repair modification, recompletion, production test, abandonment or suspension of a well shall as soon as practicable be sent to the Managing Director.

PART VI - PETROLEUM PRODUCTION

Division 1 - General Requirements

Clause 601

Consent for Production Equipment and Recovery of Petroleum

1. The recovery of petroleum, other than recovery of petroleum during a production test of a well, shall not be carried out unless approved production equipment, safety systems, personnel emergency facilities and accommodation have been constructed, and:
 - (a) the production equipment, personnel emergency facilities and accommodation have been verified in such manner (if any) as the Managing Director determines and have been approved by the Managing Director as suitable for use in operations for the recovery of petroleum;
 - (b) such safety systems as the Managing Director defines as production safety systems have been certified by a verifying body as suitable for use in operations for the recovery of petroleum;
 - (c) the Managing Director has given consent for the operation of a pipeline or a secondary line, or there are in the contract area approved storage tanks, or approved facilities for the conveyance of petroleum from the contract area otherwise than by means of a pipeline; and
 - (d) the Managing Director has given consent in writing to the recovery of petroleum from the field in the contract area using a specific offshore facility.
2. The construction, alteration or reconstruction of production equipment, safety systems, personnel emergency facilities and accommodation shall not be undertaken without approval and, where applicable, verification by the verifying body. Equipment, systems, facilities and accommodation so constructed, altered or reconstructed shall not be used unless the construction, alteration or reconstruction has been completed to the satisfaction of the Managing Director.
3. An application for approval to construct, alter or reconstruct production equipment, safety systems, personnel emergency facilities and accommodation shall be accompanied by descriptions, plans and drawings containing such details as the Managing Director requires.

Clause 602

Other Operations

Operations for:

- (a) the enhanced recovery or recycling of petroleum;
- (b) the processing, storage or disposal of petroleum;
- (c) the disposal of produced formation water; or
- (d) the injection of petroleum or water into an underground formation:

shall not be carried out unless the method and the equipment for carrying out those operations have been approved.

Clause 603

Equipment To Comply With Standards

Unless otherwise approved:

1. wellhead equipment shall comply with API Spec 6A, Specification for Well-head Equipment;
2. pressure piping on a platform shall be designed, constructed, operated and maintained in accordance with American National Standard Code for Pressure Piping, Chemical Plant and Petroleum Refinery Piping, ANSI/ASME B31.3;
3. valves used in production equipment shall comply with:
 - (a) API Spec 6D, Specification for Pipeline Valves, End Closures, Connecters and Swivels; or
 - (b) API Std 600, Steel Gate Valves, Flanged or Buttwelding Ends; and
4. pipe flanges and flanged fittings used in production equipment shall comply with:
 - (a) American National Standard, Steel Pipe Flanges and Flanged Fittings, ANSI/ ASME B16.5; or
 - (b) API Std 605, Large Diameter Carbon Steel Flanges.

Clause 604
Pressure Relief Vessel

1. Unless otherwise approved, all unfired pressure vessels shall be designed, constructed, tested, installed, operated and maintained in accordance with SAA AS 1210, Unfired Pressure Vessels.
2. Before a pressure vessel, in respect of which a person is empowered by a law of Timor-Leste, the Commonwealth of Australia or of a State or Territory of Australia to issue a certificate of inspection, is used, a copy of the certificate of inspection shall be supplied to the Managing Director.

Clause 605
Pressure Relief Valves

1. Unless otherwise approved, all pressure relief valves shall be designed, constructed, tested and installed in accordance with SAA AS 1271, valves, water gauges and other fittings for boilers and unfired pressure vessels.
2. A pressure relief valve used to protect pressure vessels or piping shall be inspected and tested:
 - (a) at approved intervals; and
 - (b) immediately after any indication that the valve may not operate correctly;by a person trained in such inspection and testing.

Clause 606
Monitors and Control Mechanisms

Approved monitors and control mechanisms shall be used to:

- (a) control the rate of recovery of petroleum or water from a well;
- (b) control the pressure in pressure vessels and associated piping so that the safe working pressure of the vessels and piping is not exceeded;
- (c) prevent the escape of petroleum;

- (d) shut down the artificial lift device (if any) and close in a well in the event of:
 - (i) a break in a pressure vessel or associated piping receiving or conveying petroleum or water flowing from the well;
 - (ii) any failure of any control mechanism associated with the well which might result in an unsafe condition being caused by the escape of petroleum or water; or
 - (iii) any fire or explosion in the vicinity of the well; and
- (e) active fire control mechanisms in the event of the outbreak of fire or an explosion.

Clause 607 Safety Devices

A well that is capable of producing petroleum by natural flow shall be equipped with an approved subsurface safety device, which shall be:

- (a) designed so that it closes off automatically the flow of petroleum or water from the well if the wellhead or production equipment is damaged in such a way that would allow the escape of petroleum or water from the well;
- (b) located in an approved position;
- (c) operated and tested at approved regular intervals; and
- (d) where a test indicates that it may not operate correctly, repaired or replaced forthwith.

Clause 608 Completion of Wells

1. A well shall not be completed without prior approval. The requirement for such approval applies to all wells which are to be made operational, including oil and gas production wells, gas or water injection wells and observation wells.
2. An application for a completion under this clause shall include:
 - (a) particulars of the current status of the well;
 - (b) a discussion on completion objectives;
 - (c) particulars of intervals which are to be opened for production, injection or observation; and
 - (d) particulars of equipment which is to be installed in the well.

Clause 609 Workover of Wells

1. The contract operator must notify the Managing Director of an intention to workover a well. The Managing Director may require an application for each approval to workover a well as provided below in this Clause. If within 48 hours of the notification by the contract operator, the Managing Director has not requested an application for approval to workover a well, the contract operator may proceed without approval.
2. Workover under this Regulation includes workovers on wells for the purposes of:
 - (a) water and gas shut-off from events such as coning/fingering in a petroleum pool, watered out or gassed out petroleum pool(s) of a reservoir unit, or communication behind casing;

- (b) recompletion to another petroleum pool or reservoir unit;
 - (c) accommodating artificial lift;
 - (d) accommodating enhanced oil recovery including conversion into injectors;
 - (e) accommodating stimulation of well inflow performance such as acidizing, hydraulic fracturing, bottom-hole heating, steam-soak process;
 - (f) well repair to remove/replace down-hole equipment.
3. An application for approval to work over a well shall include particulars of:
- (a) the purpose of the workover;
 - (b) the process of how the workover is going to be undertaken including the economic justification; and
 - (c) the sequential steps of activities programmed to be undertaken on the well.

Clause 610 **Rate of Recovery of Petroleum**

1. Commingling or sequentially producing one or more petroleum pools or reservoir units may be desired to optimise a petroleum field development plan (A group of several pools produced simultaneously will be known collectively as the “reservoir unit”). An application for approval of commingling or sequentially producing one or more petroleum pools or reservoir units should include, where applicable:
- (a) the best available delineation of pools to be included in the plan;
 - (b) maps showing:
 - (i) the boundaries of the pools, and
 - (ii) the structure, thickness, extent and fluid interfaces of the pools; and
 - (c) discussions of:
 - (i) geological and reservoir characteristics, hydrocarbon reserves, production and injection history, production capacity and pool pressures,
 - (ii) the economics involved if it is claimed that either sequential or separate production from a pool is sub-optimal, and
 - (iii) the reduction in recovery which may result from the pools being in communication through the wellbore.
2. For a fully developed petroleum pool or reservoir unit, whichever is the case, the annual rate of recovery of petroleum from that petroleum pool or reservoir unit shall be subject to approval unless the rate of recovery of petroleum from that petroleum pool or reservoir unit is the subject of a direction given to the Contract Operator by the Managing Director.
3. The Contract Operator's application under sub-clause (2) for approval of the rate of recovery of petroleum from a fully developed petroleum pool or reservoir unit, whichever is the case, shall include a proposed rate of recovery, past performance of wells and the petroleum pool or reservoir unit, prediction of future performance and estimate of ultimate recovery from the petroleum pool or reservoir unit.

4. For a petroleum pool or reservoir unit whichever is the case, under development, a periodic review of the petroleum Pool or reservoir unit description, production policy and current petroleum pool or reservoir unit performance shall be submitted at the request of the Managing Director to demonstrate that it is being developed in a manner consistent with sound petroleum pool or reservoir unit management practices and compatible with optimum long-term recovery.
5. For a petroleum pool or reservoir unit whichever is the case, which is to be developed, a description of the proposed petroleum pool or reservoir unit development and management program, particularly the sequence of exploitation of reservoir units and the production profile for the expected life of the project shall be included in the Development Plan to be prepared and submitted by the contract operator in accordance with Section 4.9 of the Model Production Sharing Contract.

Clause 611
Production Tests on Producing Wells

1. A production test to estimate the rate of recovery of petroleum from the well, shall be carried out on each producing well at least once each month unless:
 - (a) the rate of recovery of petroleum from the well is monitored continuously; or
 - (b) the testing of the well at intervals greater than one month has been approved.
2. An application for approval of the testing of a well at intervals greater than one month shall be accompanied by a statement of the reasons for the application.

Clause 612
**Production From More Than One Petroleum Pool
From One Well**

Unless otherwise approved as provided under Clause 610 (1), petroleum shall not be recovered simultaneously from more than one petroleum pool in a well unless provision is made to maintain in a well, separation of petroleum and water recovered from each petroleum pool until the petroleum and water pass a point where the quantity and composition of petroleum and water from each petroleum pool is determined in accordance with clause 614.

Clause 613
**Production From More Than One Petroleum Pool or Reservoir Unit
From More Than One Well**

Unless otherwise approved, petroleum recovered from different petroleum pools or reservoir units, whichever is the case, and from more than one well, shall not be commingled until the petroleum and water pass a point where the quantity and composition of petroleum and water from each well and from each petroleum pool or reservoir unit in which these wells are completed, is determined in accordance with clause 614.

Clause 614
Measurement of Petroleum and Water

1. Petroleum shall not be recovered from any petroleum pool or reservoir unit, which-ever is the case, unless equipment and procedures approved in accordance with sub-clause (4), are used enabling the quantity and composition of all petroleum to be determined.

2. Petroleum shall not be flared, vented, disposed of, or used in recovery operations unless equipment and procedures approved in accordance with sub-clause (4), are used enabling both the quantity and composition of such petroleum to be determined.
3. Water shall not be recovered from a petroleum pool or reservoir unit and disposed of unless equipment and procedures approved in accordance with sub-clause (4) are used enabling both the quantity and composition of the water to be determined.
4. Equipment and procedures used to determine the quantity and composition of petroleum and water require approval by the Managing Director.

Clause 615 Approval to Flare or Vent

Except in an emergency, the flaring or venting of petroleum shall not be carried out without approval.

Clause 616 Pollution

1. Every reasonable precaution shall be taken to avoid pollution of the environment.
2. Waste gas from vents and pressure vessels shall be disposed of using safe methods.
3. Subject to sub-clause (6) the flow into the sea of crude oil, oil sludge or an emulsion of petroleum and water, shall be prevented.
4. Produced formation water shall not be discharged into the sea unless:
 - (a) there is approved equipment which ensures that the concentration of petroleum in the discharged formation water specified in sub-clause (6) is not exceeded;
 - (b) there is approved equipment which monitors and records the concentration of petroleum in the discharged formation water;
 - (c) an approved test is conducted at regular intervals not less frequently than weekly to check the performance of the equipment referred to in paragraph (b) and the test results are recorded; and
 - (d) the records referred to in paragraphs (b) and (c) are available to an inspector for a period of at least 6 months from the date on which the record is made.
5. An application for the purposes of clause 602 for approval of the method and the equipment for carrying out the disposal of produced formation water shall include the following particulars:
 - (a) the distance offshore of the proposed point of discharge and the water depth at that point;
 - (b) the characteristics of any petroleum in the formation water;
 - (c) the average rate of discharge of the treated formation water;
 - (d) the description of pollution-sensitive zones and species near the point of discharge; and
 - (e) any other matter which the Managing Director or Contract Operator considers relevant.
6. The concentration of petroleum in any formation water discharged into the sea shall not be greater than 50 milligrams per litre at any one time and the average content over each 24 hours shall be less than 30 milligrams per litre.

Clause 617
Wireline Operations in Wells

1. Except in an emergency, notice acceptable to the Managing Director shall be given of an intention to conduct a wireline survey in a well or to move an item of subsurface equipment in a well.
2. Wireline operations shall be conducted in such a way as to minimise leakage.
3. Each time wireline blow-out preventers and/or a lubricator are installed, they shall be tested to the maximum anticipated shut-in surface pressure. After that, each time a pressure connection is broken and remade, it shall be re-tested unless in the event of a leak, it can be isolated using the wireline blow-out preventor or another approved method other than the Christmas Tree valves.

Clause 618
Sampling and Measurement of Petroleum Streams

1. The Contract Operator will provide an authorised inspector with all reasonable facilities and assistance that the inspector requests to witness the measurement of tanker loadings and that appropriate procedures are carried out to determine the quality of the petroleum loaded, including bottom sediments, water content and adjustment to standard temperature and pressure.
2. The Managing Director or authorised inspector may direct the procedures to be adopted by the Contract Operator to sample a petroleum stream at the time of tanker loading for the purpose of determining the quality of the petroleum loaded for sale.

Clause 619
Meter Calibration and Proving

1. Not later than 30 days prior to the use or expiration of an approval for the use of commercial petroleum metering systems, the Contract Operator shall lodge with the Managing Director an application for approval to operate the metering system. The Managing Director's approval, valid for a period of not less than one year, will be compatible with metrological requirements under Timor-Leste and Australian regulations for petroleum metering systems.
2. The Managing Director or the authorised inspector may direct the Contractor Operator to ensure that at prescribed regular intervals, for the purpose of determining the volume of the petroleum loaded for sale:
 - (a) the petroleum metering system has been calibrated; and
 - (b) the meter proving procedure has been satisfactorily carried out.

Clause 620
Pressure Vessel Inspection

Notice acceptable to the Managing Director shall be given of an intention to conduct a pressure vessel inspection.

Clause 621

Wireline and Diving Operations

Where diving operations being carried out from a platform, involves decompression of the diver, no wireline operations shall be carried out on that platform.

Clause 622

Tanker Loading and Shipment of Petroleum

1. For the operations at the point of tanker loading, covering the entry of a tanker to the point of tanker loading, the process of loading petroleum onto the tanker, and the shipment thereof out of the JPDA; the contract operator is responsible for:
 - (a) The preparation of:
 - (i) a petroleum loading, measurement and sampling procedure for adherence at the point of tanker loading;
 - (ii) standard forms for petroleum loading and tanker shipping documents; including the International Safety Management (ISM) Certificate and Ballast Water Report, and
 - (iii) a "Port Information and Regulations" manual of its petroleum loading terminal, for tanker-masters;which are subject to the Managing Director's approval.
 - (b) Securing the Managing Director's approval for entry of a tanker to the point of tanker loading in the contract area.
 - (c) The proper conduct of petroleum measurement and loading operations.
 - (d) Providing an inspector with reasonable facilities and assistance for the effective exercise of their powers in inspecting proper conduct of petroleum measurements and loading operations at the point of tanker loading.
 - (e) The engagement, if so wished by the contract operator, of an independent specialist surveyor, subject to the Managing Director's approval, to inspect and audit that the measurement of the quantities of petroleum loaded onto a tanker, and preparation and completion of the loading and shipping documents are all carried out properly, correctly, and in accordance with Regulations and Directions issued and procedures approved by the Designated Authority;
 - (f) Assuring that at the time of completion of loading and disconnection of the tanker for leaving from the point of tanker loading, that :
 - (i) all loading and shipping documents are completed and duly authorized by all the parties including the Managing Director; and
 - (ii) the Managing Director's approval for the tanker including its petroleum cargo to leave the JPDA, has been secured.
 - (g) Keeping the end of the petroleum loading-arm or loading-hose blind-flanged and sealed at all times in between two tanker loadings; and breaking such seal only when authorized by the Managing Director.
 - (h) Ensuring that the requirements of customs, migration and quarantine authorities of both Contracting States applied in accordance with Article 15 of the Treaty are met; and in particular with paragraph (d) thereof.

2. In the event that a disagreement arises between the inspector and the contract operator on the quantum of petroleum measured at the point of tanker loading, and an independent specialist surveyor has been engaged, the quantum of petroleum measured by the independent specialist surveyor will apply. Otherwise, the disagreement will be determined by the Managing Director.

Division 2 - Reporting and Data Submission

Clause 650 Programme of Work

A Contract Operator shall before 30th November, or such other date as the Managing Director nominates, in each year submit to the Managing Director a programme of work proposed to be carried out in a discovery area by the Contract Operator during the period of 12 months commencing on 1st January or 3 months after that nominated date.

Clause 651 Estimate of Recoverable and In-place Petroleum

1. In the month of November or such other month as the Managing Director nominates in each year a Contract Operator shall make available and distribute as directed by the Managing Director two copies of a report in accordance with this clause in respect of the amount of recoverable and in-place petroleum in a petroleum pool in the contract area of the Contract Operator.
2. A report referred to in sub-clause (1) shall be in an approved form and shall specify:
 - (a) the location of the petroleum pool;
 - (b) the estimated amount of recoverable petroleum in a commercial pool or in-place petroleum in a currently non-commercial pool; and
 - (c) the data upon which the estimates used in the report are based:and shall be accompanied by any specific reports made during the last preceding year in connection with reservoir performance and production optimisation.
3. When a field study resulting in a revised estimate of the amount of recoverable or in-place petroleum in a pool has been carried out, two copies of a report of that study and the revised estimate shall be made available and distributed as directed by the Managing Director.

Clause 652 Monthly Production Report

Not later than the 15th day of each month two copies of a monthly production report in respect of each field in a contract area, in an approved form, relating to the last preceding calendar month and containing the following information shall be made available and distributed as directed by the Managing Director:

- (a) the total quantities of:
 - (i) liquid and gaseous petroleum, and water produced;
 - (ii) liquid and gaseous petroleum used;
 - (iii) gaseous petroleum flared or vented;
 - (iv) liquid and gaseous petroleum, and water injected;

- (v) liquid petroleum stored; and
 - (vi) liquid and gaseous petroleum delivered from the area;
and the cumulative quantities of liquid and gaseous petroleum, and water, produced or injected as at the end of the month; and
- (b) for each well:
- (i) its identification name and number;
 - (ii) a summary of all work performed on each well in the contract area during the previous month unless those details of work performed have been described in a report submitted under clause 553;
 - (iii) the result of the production test required by clause 610, including the choke size used and the tubing and separation pressures observed during the test;
 - (iv) its status at the end of the month;
 - (v) the number of days of production;
 - (vi) the total estimated quantities of liquid and gaseous petroleum, and water, produced or injected during the month and the cumulative quantities of liquid and gaseous petroleum, and water produced or injected as at the end of the month; and
 - (vii) information about any shut-in of wells during the month, including reasons for such shut-ins.

Clause 653

Reports on Wireline Surveys and Subsurface Safety Valves

1. Where a survey using wireline techniques is conducted in a well during any month, one copy of a report of the survey, together with any records made for the purpose of the survey, shall, unless otherwise approved, be submitted to the Managing Director not later than the 15th day of the next succeeding month.
2. Where operations involving subsurface safety valves are carried out during any month, a report of these operations shall, unless otherwise approved, be submitted to the Managing Director not later than the 15th day of the next succeeding month.
3. A report referred to in sub-clause (2) shall include the name of the platform, the well number, the date, the time taken and description of work performed, and the condition of equipment removed, and any other matter the Managing Director may require.

Clause 654

Reports on Pressure Vessels

1. Unless otherwise approved, there shall be submitted to the Managing Director not later than the last day of each month the reports of all pressure vessel inspections carried out during the preceding month which include evaluation of the inspections and set out any intended further actions considered necessary as a result of the evaluation.
2. Notwithstanding the requirements of sub-clause (1) in the case of the discovery of serious damage or deterioration requiring immediate corrective action, a report shall be made forthwith to an inspector, and a written report as soon as practicable made to the Managing Director.

Clause 655
Records of Petroleum in Discharged Formation Water

A summary of the records referred to in sub-clause 616(4) shall be submitted at 3 monthly intervals in a form acceptable to the Managing Director.

Clause 656
Reporting on Shipments of Petroleum

Not later than the 10th day of each month the contract operator shall report to the Designated Authority on shipments of petroleum made during the period of the preceding month, which will include:

- (a) the quantities of petroleum sold and lifted at each shipment;
- (b) for each shipment, the price pursuant to Section 8, the sales proceeds received copies of the relevant invoice and evidence of settlement thereof;
- (c) attachments comprising shipping documents relevant to each such shipment, e.g. bill of lading, certificates of quantity and quality, cargo manifest, certificate of origin, dry certificate/ullage report, notice of readiness, tanker time sheet, and master's receipt;
- (d) opening and ending stock for the month of contract operator's petroleum storage facility, and the discharge of bottom sediments & water and sludge therefrom;
- (e) storage and transfer losses of petroleum for the month at contract operator's storage facility, which must be elucidated.

PART VII - CRANES, WINCHES AND LIFTS

Division 1 - General Requirements

Clause 700 Crane Code

In this Part, a reference to the “Code” is a reference to the SAA AS 1418, SAA Crane Code.

Clause 701 Crane

1. Unless otherwise approved, a crane shall be constructed, installed, tested, operated and maintained in accordance with the Code or such other code as is approved.
2. Except with prior approval, a crane shall not be used unless a certificate verifying its design suitability for intended use in the marine environment has been issued by a verifying body.

Clause 702 Crane Construction, Installation, Relocation and Alteration

1. A crane shall not be constructed on a fixed platform unless prior to the commencement of construction notice in or to the effect of Appendix 1 has been lodged with the Managing Director and the intended construction has been approved.
2. A crane shall not be installed or relocated on a platform unless prior to the commencement of installation or relocation notice in or to the effect of Appendix 2 has been lodged with the Managing Director and the installation or relocation has been approved.
3. A crane on a platform shall not, without approval, undergo alterations to components or parts which affect or determine the structural integrity or load bearing capacity of the crane.
4. Safety devices which affect the integrity of a crane on a platform shall not be altered without approval.

Clause 703 Certificate of Inspection of Manufacture

Before a crane is installed in the JPDA, a certificate of inspection of manufacture issued by a person or body empowered to issue such a certificate by a law of Timor-Leste, the Commonwealth of Australia or of a State or Territory of Australia, or some other approved person or body, shall be lodged with the Managing Director.

Clause 704 Crane Repairs

1. Except in an emergency, where a crane on a platform has suffered serious damage that crane shall not be repaired without approval.

2. In this clause “serious damage” shall have the meaning given to that expression by clause 282.

Clause 705 Commissioning Tests

A crane:

- (a) that has been installed on a platform or relocated on a platform; or
 - (b) that has been repaired or altered and is on a platform;
- shall undergo approved commissioning tests before being used or re-used (as the case may be).

Clause 706 Special Conditions

1. For the purposes of this clause the load factor (dynamic factor) means the factor by which the capacity of a crane is determined for offshore applications.
2. Subject to sub-clause (4), a fixed crane on a platform shall not be used for loading or unloading vessels, for on-platform lifts, or for raising or lowering persons unless:
 - (a) the design of the crane complies with the Code or such other code as is approved;
 - (b) the crane cannot be lowered in free fall;
 - (c) legible load charts, which have been calculated in accordance with the following factors, have been fitted in the crane driver's cabin:
 - (i) vessel list factor where applicable;
 - (ii) load factor (Dynamic factor) of at least 2.4 for routine loading and unloading vessels; and
 - (iii) load factor (Dynamic factor) of 1.35 or such other load factor as is approved for routine on platform lifts;
 - (d) for lifts, other than routine lifts, which fall outside the constraints of the load charts referred to in paragraph (c), approval has been given;
 - (e) for a fixed crane to be used for loading or unloading vessels, the wind conditions are not more than 40 knots and the mean wave height is not more than 3.5 metres;
 - (f) for a fixed crane to be used for raising or lowering persons, the crane has:
 - (i) a capability of a powered rope speed in single fall of not less than 50 metres per minute;
 - (ii) self-sustaining features of a worm gear reduction or any other design of equivalent safety; and
 - (iii) a “deadman” type fail-safe brake which operates directly on the winding drum or on a drum of approved design geared in an approved manner directly to the winding drum and is applied by approved means; and
 - (g) for a fixed crane to be used for on-platform lifts, the wind speed and direction are such that they will not create a hazard.
3. Where there is on a platform a fixed crane that does not comply with paragraphs (a), (b), (c) and (f) of sub-clause (2), that crane shall, as soon as is reasonably practicable, be modified or altered so that it does so comply.

4. Where there is on a platform a fixed crane that cannot comply with paragraphs (a), (b), (c) and (f) of sub-clause (2), that crane may, subject to approval, be used with such constraints as are determined by the Managing Director.
5. A crane on a platform shall not be used to lower loads in free fall without approval.

Clause 707
Personnel Transfer

1. A crane on a platform shall not be used to transfer persons between a platform and a vessel unless those persons are wearing approved buoyancy vests and are transferred on approved personnel transfer nets, and the crane complies with paragraph 706(2)(f).
2. No more than 4 persons shall be transferred simultaneously on a personnel transfer net.

Clause 708

Load and Boom Angle Indicators

A crane on a platform shall be equipped with:

- (a) one (and not more than one) automatic load indicator:
 - (i) which is so constructed and marked as to enable a person operating the crane readily to determine the safe working load for any working position;
 - (ii) which gives an alarm warning when the load has reached 95% of the safe working load for the corresponding radius and an audible warning when the load has exceeded 110% of the safe working load for the corresponding radius;
 - (iii) which may also be fitted with a means to stop the hoisting and luffing-out motions automatically when the load has reached 110% of the safe working load for the corresponding radius;
 - (iv) which is maintained in good order;
 - (v) which is checked monthly to ensure its accuracy; and
 - (vi) in respect of which a log is maintained of the monthly checks.
- (b) a positive boom angle indicator and, where applicable, a boom extension indicator clearly visible to the crane driver.

Clause 709

Maintenance and Operating Manuals

1. A maintenance and operating manual shall be submitted to the Managing Director for approval in respect of each crane installed on a platform.
2. A copy of the approval maintenance and operating manual shall be kept on the platform and be available to the crane driver at all times.
3. A crane on a platform shall be maintained and operated in accordance with the procedures set out in the approved maintenance and operating manual.
4. An approved maintenance and operating manual shall not be altered without approval and, where the Managing Director so requires, shall be altered in the manner required.
5. The Managing Director may require that any crane on a platform shall not be used if a maintenance and operating manual has not been submitted for approval in accordance with this clause, or if the manual submitted has not been approved.

Clause 710

Crane Communication

1. When a crane is being operated, communication between dogman or crane chaser and crane driver shall be in accordance with the Code, except that voice communication by telephone or radio between those persons is permitted.
2. Where voice communication by telephone or radio between dogman or crane chaser and crane driver is installed it shall, where practicable, be used instead of other types of communication.

Clause 711
Crane Driver Competence

1. A crane shall not be driven except by a person holding a certificate of competence issued by an approved authority.
2. The Managing Director may require further and continuing evidence of competence of a crane driver for offshore crane operation.

Clause 712
Dogman or Crane Chase Competence

1. A person shall not act as a dogman or crane chaser unless he holds a certificate of competence issued by an approved authority.
2. The Managing Director may require further and continuing evidence of the competence of a dogman or crane chaser for offshore crane operation.

Clause 713
Sheave Blocks

1. Sheave blocks shall comply with SAA AS 2089, Sheave Blocks or such other code as is approved.
2. All sheaves and pins in sheave blocks shall be designed to withstand both the static and the dynamic loads likely to be encountered in operation.
3. All diverting sheaves located in working areas and subjected to dynamic loads shall be protected in such a fashion that in the event of a failure of the sheave the wire rope shall not be capable of displacement by a distance greater than 1.5 times the diameter of the sheave.

Clause 714
Illumination of Areas of Operation

When operations involving the use of cranes or winches are carried out between the hours of sunset and sunrise, the load, the area under the load, and any likely obstructions shall be adequately illuminated.

Clause 715
Winches

1. Winches including air driven winches shall, unless otherwise approved, comply with the Code.
2. Unless otherwise approved, winches used for raising or lowering persons shall be so designed as to have a safety factor of 10 and shall comply with sub-paragraphs 706(2)(f)(ii) & (iii).
3. Where there is a risk to personnel, winches shall be used with rope spooling devices.

Clause 716 **Lifting Tackle and Gear**

Unless otherwise approved, lifting tackle and gear complying with the Code shall be used on a crane on a platform.

Clause 717 **Ropes and Slings**

Unless otherwise approved:

- (a) steel wire ropes shall comply with SAA AS 1656 and Steel Ropes (other than for Mining Purposes);
- (b) lifting slings made of wire rope shall comply with SAA AS 1666 and Wire Rope Slings;
- (c) lifting slings made of natural or synthetic fibre shall comply with SAA AS 1380 and Fibre Rope Slings;
- (d) all wire rope slings shall be marked with identification and safe working load information as detailed in Section 9 of SAA AS 1666 and Wire Rope Slings;
- (e) all steel wire ropes and slings shall be regularly inspected and maintained in accordance with SAA AS MB1, Steel Wire Rope Manual and an approved maintenance and inspection programme, and shall be used in accordance with SAA AS 1666, Wire Rope Slings and SAA AS MB1, Steel Wire Rope Manual; and
- (f) slings and wire ropes under dynamic loading shall have approved end fittings complying with SAA AS MB1, Steel Wire Rope Manual. Bull dog and fist grips are not to be used as a sole means of fastening in this application.

Clause 718 **Cargo Gear Testing and Handling**

1. Cargo gear that includes a sheave block, chain, ring, hook, shackle, or swivel or cargo tray, personnel transfer net, work basket or other cargo container, shall not be used in lifting, loading or unloading operations unless:
 - (a) that cargo gear has been tested using a proof load at least equal to that applicable to it and shown in a table in Appendix 3 and found after the test to be undamaged and free from cracks, flaws or other defects;
 - (b) where that cargo gear is a sheave block, chain, ring, hook, shackle or swivel, the safe working load for which it has been tested pursuant to paragraph (a):
 - (i) is clearly marked on it or on a tablet or ring of durable material attached to it; or
 - (ii) is set out in a notice of a kind and in a position that may be read easily by a person using it;
 - (c) where that cargo gear is a cargo tray, personnel transfer net, work basket or other cargo container, it has the weight of the contents for which it has been tested pursuant to paragraph (a) clearly marked on it;
 - (d) that cargo gear has a certificate recording the results of the test pursuant to paragraph (a) and issued by the person who carried out the test; and

- (e) that cargo gear is regularly inspected and maintained in accordance with an approved inspection and maintenance programme.
- 2. Cargo gear which is a sheave block, chain, ring, hook, shackle or swivel and which shows damage, permanent deformation, cracks, flaws or other defects after testing in accordance with paragraph (1)(a) shall be discarded.
- 3. Cargo gear which is a cargo tray, personnel transfer net, work basket or other cargo container and which shows damage, permanent deformation, cracks, flaws or other defects after testing in accordance with paragraph (1)(a) shall not be used until repairs have been carried out and has been successfully retested.
- 4. A package or an article of one ton or more in weight shall not be lifted unless a statement of its gross weight has been prominently marked in legible and durable characters not less than 5cm in height on it or on a label securely attached to it.

Clause 719 Chain Blocks

Manual and power chain blocks shall comply with the Code or such other code as is approved.

Clause 720 Safety Requirements for all Cranes

- 1. Unless otherwise approved, a crane on a platform shall have:
 - (a) a hoisting limit device which when actuated stops the hoisting motion and applies the brake on the hoisting winch automatically;
 - (b) luffing limit devices which when actuated stop the luffing motion and apply the brake on the luffing winch automatically, and which are so arranged as to prevent the by-passing of these devices in the normal operation of the crane;
 - (c) engine stop systems which operate in a manner such that the engine comes to rest with minimum delay;
 - (d) (notwithstanding sub-clause 326(8)) a readily accessible shutdown device in the air intake of the internal combustion engine;
 - (e) a facility for emergency lowering of loads;
 - (f) temperature sensing devices (which may be of the audio-visual type) or equivalent safeguards to give adequate protection to prime mover and associated equipment;
 - (g) an emergency stop with manual re-set capability;
 - (h) subject to sub-clause (2), motion control levers which return with a minimum delay to neutral upon release;
 - (i) fire extinguishers of an approved type at the machinery deck;
 - (j) a wind speed indicator of an approved type;
 - (k) where the crane is used in conjunction with diving operations, an audio-visual device indicating that there is minimum of three turns of wire rope left on hoisting drums;
 - (l) the hoisting rope of the winch used for boat lifts attached to the drum in such a manner that the attachment withstands 100%, and not more, of the safe working load of the rope;

- (m) pneumatic, hydraulic and electric connections clearly marked corresponding to the markings on the crane circuit drawings; and
 - (n) an emergency escape route for personnel.
2. Paragraph (1)(h) does not apply to an engine throttle lever.
 3. Unless otherwise approved, where there is a rope luffing crane on a platform:
 - (a) the luffing hoist wire rope shall be so arranged as to ensure that if the crane boom should pass through its maximum operating radius, the boom shall not suffer damage;
 - (b) the luffing rope which drum shall have fitted a rope attachment device, which shall withstand at least twice the safe working load of the wire rope with no rope turns left on the drum and a holding brake acting directly on the drum; and
 - (c) the rope end entry on the winch drum shall be so arranged as to prevent damage to the wire rope under any condition.
 4. Unless otherwise approved, the settings of a hoist brake on a crane on a platform shall be so secured that unauthorised adjustment is prevented.
 5. Safety latches which automatically close shall be fitted on integral crane hooks.

Clause 721 **Safety Requirements and Hydraulic Cranes**

Unless otherwise approved, a hydraulic powered crane on a platform shall be fitted with:

- (a) a luffing speed limiting device which actuates prior to approaching the upper luffing limit;
- (b) an upper ultimate type limit device which shuts down the motive power to hoisting and luffing;
- (c) an automatic sensing device which prevents operation of the crane upon loss of pressure in the hydraulic power system;
- (d) primary filters in the hydraulic circuits which incorporate an electrical device which initiates a warning in the crane driver's cabin when a filter becomes blocked and the flow of oil drops below a minimum rate as determined by the manufacturer of the crane;
- (e) secondary filters in the hydraulic circuits which incorporate an electrical device which shuts down the motive power when the filter becomes blocked and the flow of oil drops below a minimum rate as determined by the manufacturer of the crane;
- (f) a means to show the crane driver which hoist speed has been selected;
- (g) a warning device to ensure that the crane is not in motion when changing hoist speeds; and
- (h) dual anti-cavitation devices installed in series in the hoisting and luffing hydraulic circuits.

Clause 722 **Electrical Requirements**

Unless otherwise approved, electrical wiring and fittings of cranes shall comply with AS 3000, SAA Wiring Rules or other approved code.

Clause 723 Riding Booms

Unless otherwise approved, a person, other than a qualified rigger engaged in the erection or dismantling of a crane, shall not climb or ride a boom or ancillary equipment of a crane.

Clause 724 Crane Inspection

1. A lattice type crane boom shall be fitted with a walkway and safety line internal to the boom, or other approved facilities, to ensure safety of personnel during boom inspections.
2. Crane boom sections and slew ring bolts shall be regularly inspected and tested in accordance with an approved inspection and testing programme.
3. A person when inspecting crane booms shall wear an approved harness connected to the boom.

Clause 725 Pawls, Washers and Limits

1. Where pawls are fitted to crane drums there shall be an approved form of indication that the pawls are engaged when the engine is shut down.
2. Hardened washers shall be used with high tensile bolts and nuts in conformity with SAA AS 1511, SAA High-strength Structural Bolting Code or such other code as is approved.
3. Crane limit devices and associated equipment shall be such that unauthorised interference is prevented.

Clause 726 Multiple Lifts

Cranes on platforms shall not be used for multiple or common lift operations without approval.

Clause 727 Log Book

A crane shall have a log book in which the crane driver records the daily checks and comments relating to the crane's operation.

Clause 728 Lifts

Unless otherwise approved, lifts shall comply with the rules of the classification society under which the facility is classified.

Clause 729 Taglines

Taglines for controlling loads shall be used at all times.

Clause 730 Mobile Cranes

A mobile crane as defined in the Code shall not be required to comply with the provisions of any clause in this Part provided that:

1. a mobile self-propelled crane of the crawler track type as defined in the Code shall comply with the following:
 - (a) for all on-platform lifts on a fixed platform, the normal operating conditions as given in the Code; and
 - (b) for all lifts from a fixed platform, and on or from a mobile platform, a stability factor of 67% as required by the Code provided that:
 - (i) an automatic load weighing indicator is fitted; and
 - (ii) the mean wave height does not exceed 2 metres while loading and unloading vessels.
2. a mobile crane other than a mobile crane referred to in sub-clause (1) shall not be used without approval.

Clause 731 Riding Loads

No person shall be supported by a crane except in an approved work basket or personnel transfer net.

Clause 732 Bridge Crane

Unless otherwise approved, a bridge crane shall be designed, constructed, installed, tested, operated and maintained in accordance with the Code or such other code as is approved.

Clause 733 Diving and Crane Operations

Where diving operations are being carried out from a platform, the crane or other equipment not associated with the diving operations shall not be operated or any activity carried out if diving personnel or diving equipment engaged in or being used for the diving operations could be struck by any material moving or falling as a result of the use of the crane or other equipment or the carrying out of the activity.

Division 2 - Reporting and Data Submission

Clause 750 Periodic Inspection

Not later than one month after each periodic inspection of a crane on a platform, there shall be submitted to the Managing Director a report which includes a description of work carried out, items inspected, findings as a result of the inspection, and any intended further action considered necessary as a result of the inspection.

APPENDIX 1

Clause 702

Notice of Intention to Construct a Crane

I hereby give notice that it is intended to construct a crane as described hereunder, and your approval for the intended construction is requested.

1. Address at which work is to be done.
2. Type of crane (eg overhead travelling crane, derrick crane, mobile crane, mono-rail, conveyor, hoist, etc).
3. Intended use of crane.
4. Classification of crane under the Code.
5. Power to be used to drive crane.
6. Safe working load/s.
7. If jib crane, state jib length.
8. If travelling crane, state span.
9. Name and address of maker.
10. Date when construction is to commence.
11. Name and address of verifying body.

I forward herewith general arrangements drawings and specifications describing the crane, together with a certificate referred to in clause 701 including a statement of the highest dynamic factor expected to be applied when using a crane in the JPDA.

..... Signature of person notifying

..... Full postal address

..... Telephone number Date

Note:

In this notice a reference to a clause is a reference to a clause in that Part of the Regulations of which the form of this notice is an appendix.

APPENDIX 2

Clause 702

Notice of Intention to Install or Relocate a Crane

I hereby give notice that it is intended to install/relocate on the platform indicated a crane as described hereunder and your approval for the intended installation/ relocation is requested.

1. Platform at which crane is to be installed or relocated.
2. Exact location of crane on that platform.
3. Type of crane.
4. Intended use of crane.
5. Power to be used to drive crane.
6. Safe working load/s.
7. If jib crane, state jib length.
8. If travelling crane, state span.
9. Name and address of maker.
10. Date when installation is required to commence.
11. Name and address of verifying body.
12. The certificate referred to in clause 701 is attached/has previously been forwarded and, where applicable, the certificate referred to in clause 703 will be forwarded on completion of installation/relocation.

..... Signature of person notifying

..... Full postal address

..... Telephone number Date

Note: In this notice a reference to a clause is a reference to a clause in that Part of the Regulations of which the form of this notice is an appendix.

APPENDIX 3

Clause 718
PROOF LOADS FOR CARGO GEAR

A. SHEAVE BLOCK, CHAIN, RING, HOOK, SHACKLE OR SWIVEL

Article	Proof Load
Chain, ring, hook, shackle or swivel	Twice the safe working load
Single sheave block*	Four times the safe working load
Multiple sheave block with safe working load not exceeding 20 tonnes	Twice the safe working load
Multiple sheave block with safe working load exceeding 20 tonnes but not exceeding 40 tonnes	20 tonnes in excess of the safe working load
Multiple sheave block with safe working load exceeding 40 tonnes	One and a half times the safe working load

* The proof load for a single sheave block is the load imposed on the pin or eye of the block and the safe working load is the maximum load which may be applied to a chain or rope passing around the sheave of the block.

B. CARGO TRAYS, PERSONNEL TRANSFER NETS, WORK BASKETS AND OTHER CARGO CONTAINERS

Weight of Contents	Proof Load
Not exceeding 3 tonnes	Twice the net weight
Exceeding 3 tonnes but not exceeding 12 tonnes	3 tonnes in excess of the net weight
Exceeding 12 tonnes but not exceeding 20 tonnes	One and a quarter times the net weight
Exceeding 20 tonnes	5 tonnes in excess of the net weight
Personnel transfer net and work basket	800 kg

PART VIII - DIVING

Division 1 - General Requirements

General

Clause 801

Tests

1. Any test required under this Part shall be carried out in such a manner as will enable the results to be recorded and certified:
 - (a) in an endorsed test document within the meaning of the By-Laws of the National Association of Testing Authorities, Australia or
 - (b) where the test is not a test in respect of which an endorsed test document of the kind referred to in paragraph (a) can be given, to the satisfaction of the Managing Director; or
 - (c) where the test is a test in respect of which an endorsed test document of the kind referred to in paragraph (a) can be given but for practical reasons acceptable to the Managing Director the requirement of such endorsement has been waived, to the satisfaction of the Managing Director.

Clause 802

Exemption Certificates

1. Subject to sub-clause (2), the Managing Director may, by a certificate in writing, exempt any person or class of persons, any diving operation or class of diving operations and any plant and equipment or class of plant and equipment from any requirement or prohibition imposed by any provision of this Part and any such exemption may be granted subject to conditions and to a limit of time, and may be revoked at any time.
2. The Managing Director shall not grant any such exemption unless, having regard to the circumstances of the case, and in particular to:
 - (a) the conditions which the Managing Director proposes to attach to the exemption; and
 - (b) any other requirements imposed by or under any enactment which apply to the case;

it is established that the health and safety of persons who are likely to be affected by the exemption will not be prejudiced in consequence of it.

Qualifications and Experience

Clause 803

Diver and Diver's Attendant

1. A person shall not be a diver unless that person:
 - (a) has been accredited as having met the terminal objectives in the relevant parts of Australian Standard AS2815 as outlined in the Guideline for the Australian Diver Accreditation Scheme consistent with the work which that person is called upon to perform during a diving operation; and

- (b) has been certified as medically fit to dive in compliance with clause 816; and
 - (c) is at least 18 years of age.
2. A person shall not be a diver's attendant unless that person has sufficient knowledge of:
- (a) underwater work;
 - (b) the signals and communication devices used in diving operations;
 - (c) decompression procedures;
 - (d) first-aid; and
 - (e) equipment used in diving operations.

Clause 804
Systems Maintenance, Life Support and Diver Medical Technicians

1. Where required under the provisions of clause, 813, there shall be provided an experienced maintenance technician who shall personally, under the supervision of a diving supervisor, undertake and be responsible for the repair, maintenance and safe functioning of equipment used in diving operations.
2. A person shall not perform the functions referred to in sub-clause (1) unless that person has such knowledge and experience as approved necessary to perform those duties.
3. Where required under the provisions of clause 813, there shall be provided an experienced life support technician who shall, under the supervision of the diving supervisor, control and monitor all the systems functions which relate to the “life support”, safety and health of any person inside a surface compression chamber.
4. A person shall not perform the functions referred to in sub-clause (3) unless that person has such knowledge and experience as approved necessary to perform those duties.
5. Where required under the provisions of clause 813, there shall be provided a diver medical technician who shall, where required, render advanced first-aid treatment.
6. A person shall not perform the functions referred to in sub-clause (5) unless that person complies with the provisions of sub-clause 808(3).

Clause 805
Diving Supervisor

1. A person shall not be a diving supervisor unless that person:
 - (a) has been trained and experienced in diving, as outlined in clause 803(1)(a) and (c);
 - (i) is or has been a competent diver with adequate knowledge and experience of the diving techniques to be used; and
 - (ii) has been appointed in writing by that person's employer to supervise diving operations; and
 - (b) during that persons dive, another person satisfying the requirements of clause 805 has been appointed in writing by their employer to supervise in the Supervisor's absence.

Clause 806

Diving Superintendent

Where the nature or size of a diving operation requires a diving superintendent, a person shall not be a diving superintendent in a diving operation unless that person has been appointed in writing, is able to supervise diving operations competently and complies with the requirements of clause 805.

Clause 807

Medical Practitioner

A medical practitioner referred to in this Part is a medical practitioner who is qualified under the requirements of the United Kingdom Health and Safety Executive, the Timor-Leste Ministry of Health or an approved similar body, and whose experience in underwater medicine is acceptable to the Managing Director.

Clause 808

First Aid Qualifications

1. A person shall not commence employment as a diver, diver's attendant or life support technician unless that person can demonstrate competence in general and hyperbaric first-aid treatment as is acceptable to the Managing Director.
2. A person shall not be a diving supervisor unless:
 - (a) that person has an approved level of competence in general and hyperbaric medical first-aid treatment; and
 - (b) that person holds a current hyperbaric first aid, and St. John Ambulance Occupational First Aid Certificate or approved equivalent from an approved training establishment.
3. A person shall not carry out the duties of a diver medical technician unless that person:
 - (a) has an approved level of advanced training in underwater medicine and first-aid procedures;
 - (b) has gained an approved level of competence in the field of that person's expected duties and responsibilities;
 - (c) is able competently to assess and evaluate the medical condition of a diving casualty, and to attempt to stabilize that casualty's condition;
 - (d) has such knowledge or experience as will enable that person, under the supervision of a diving supervisor and in consultation with a medical practitioner referred to in clause 807 by remote radio-voice communication, to carry out specific medical tasks, including:
 - (i) the accurate reporting of the medical condition of a diving casualty, and the stabilising of that casualty's condition;
 - (ii) the maintaining of the airway of a casualty; and
 - (iii) venipuncture, pleurocentesis, catheterisation, sub-cutaneous and intra-muscular injections, simple suture techniques and the use of specific antivenenes for injuries caused by marine animals and the treatment of those injuries; and
 - (e) has been certified medically fit for exposure to pressures greater than atmospheric pressure.

Documentation Requirements

Clause 809

Diving Manual and Maintenance Schedule

1. Prior to the initial commencement of diving operations a manual of safety requirements and procedures (“diving manual”) and a schedule of preventative maintenance requirements for diving operations and equipment shall be submitted to the Managing Director for approval.
2. The diving manual shall include provisions for securing the health and safety of persons engaged in diving operations and in particular provisions covering matters specified in Appendix 7.

Clause 810

Diving Operations Record

1. A record of diving operations shall be maintained at the site of all diving operations. Such record shall be an accurate record of all matters relevant to the diving operations as specified in Appendix 8 and shall be signed daily by the diving supervisor.
2. The records of diving operations referred to in sub-clause (1) shall be retained for at least five years.

Clause 811

Diver's Log Book

1. Each diver shall have and maintain a personal log book to be known as the “diver's log book”.
2. The diver's log book shall have affixed in it a clear “head and shoulders” photograph of the diver with that diver's name and signature on it.
3. Each diver shall record and maintain in the diver's log book:
 - (a) a report containing, so far as practicable, the details specified in Appendix 9, signed by the diver and by the diving supervisor of the diving operation to which that report relates;
 - (b) the results of each medical examination of the diver; and
 - (c) any other matters relating to the diver's suitability to dive that are referred to in Appendix 9.

Clause 812

Emergency Drill Reports

A record shall be kept of each emergency drill carried out in compliance with clause 817, including the type of emergency simulated, the results and conclusions drawn and any changes to operation procedures made as a consequence of these results and conclusions.

Operating Requirements

Clause 813 Crewing Levels

1. At all times when any diving operation is or is about to be carried out there shall be present a sufficient number of divers and other competent persons ('the diving team') to ensure so far as is reasonably practicable that the operation can be undertaken safely, and to operate plant, equipment and other facilities necessary for the safe conduct of the operation.
2. Subject to this clause and unless otherwise approved, a surface-oriented diving operation shall not be carried out unless, during the period when a diver is in the water, there are present and engaged in that operation a minimum of five persons; one diving supervisor, one diver in the water, one diver's attendant, one standby diver, one standby diver's attendant, or, one diving supervisor with four divers. At all other times during that operation these persons shall be readily available to assist in that operation.
3. Subject to this clause and unless otherwise approved, a diving operation involving the use of a diving bell shall not be carried out unless, during the period when a diver is either in a diving bell or in the water, there are present and engaged in that operation, a minimum of six persons; one bell diving supervisor, one diver outside the bell, one standby diver/attendant in the bell, one diver on the surface, two divers attending on the surface, or, a diving supervisor with three bell divers and two diver's attendants. At all other times during that operation these persons shall be readily available to assist in that operation.
4. Subject to this clause and unless otherwise approved, a diving operation involving the use of saturation diving techniques shall not be carried out unless, during the period when a diver is either in a diving bell or in the water, there are present and engaged in that operation a minimum of the following: one bell diving supervisor, one life support technician, three bell divers, one system maintenance technician and a sufficient number of diver's attendants to ensure the safety of the operation.

At all other times during that operation these persons shall be readily available to assist in that operation; and

- (a) There shall be available on the diving platform or vessel a person other than the diving supervisor who shall have supplementary qualifications to enable that person to carry out the duties of a medical technician outlined in clause 808(3).
5. Subject to this clause:
 - (a) in every diving operation one member of the diving team who is a diver, other than the diving supervisor of that operation, shall be the stand-by diver;
 - (b) unless otherwise approved, the stand-by diver shall be at all times in the immediate vicinity of the dive control station and be ready to dive immediately as required but may perform duties which do not prejudice the safety of any diver in the water; and
 - (c) where a diving bell is being used, a stand-by diver shall remain in the bell to monitor the diver or divers who leave it and be in immediate readiness to assist them in an emergency.
 6. During surface orientated diving operations, where two divers are in the water at the same time, one may act as stand-by diver for the other provided that both divers have-
 - (a) visual contact with each other;

- (b) means to communicate with the surface; and
 - (c) independent breathing medium supplies.
7. Nothing in sub-clauses (5) and (6) shall prevent the stand-by diver or any diver, if instructed to do so by the diving supervisor, from going to the assistance of any other diver in an emergency.

Clause 814

Place from which diving is allowed

Diving operations shall be conducted only from:

- (a) a base established on land, a jetty, a platform or a vessel that is at anchor or aground or made fast to the seabed or a fixed structure:
 - (i) that is safe and suitable for the purpose;
 - (ii) on which the equipment necessary for the diving operations is kept; and
 - (iii) that has suitable and safe means of access to and egress from the water for both working divers and any rescue or stand-by diver in an emergency; or
- (b) a dynamically positioned vessel:
 - (i) that is safe and suitable for the purpose;
 - (ii) that is maintained in position with adequate precautions taken to secure the safety of the divers from any dangers associated with the dynamic positioning system and the flow of water created;
 - (iii) that is approved for use in diving operations; and
 - (iv) that complies with the guidelines which may be issued by the Designated Authority.

Clause 815

Equipment Inspection and Approval

Diving operations at any one location shall not commence unless:

- (a) The specifications of the diving plant and equipment have been submitted and approved;
- (b) The diving plant and equipment have been inspected by an inspector at that location and have been approved prior to their initial use; and
- (c) Pre-dive function tests have been carried out on the diving plant and equipment prior to diving.

Clause 816

Medical Examination of Divers

Diving operations shall not be carried out unless each diver who dives in those operations:

- (a) has, within the period of 12 months before the commencement of those operations, undergone a medical examination by a medical practitioner referred to in clause 807 in accordance with the Schedule of minimum examination requirements specified in Australian Standard AS 2299;
- (b) has, after that medical examination, been declared in a certificate by endorsement in the divers log book given by that medical practitioner to be medically fit to dive; and

- (c) has not, since that declaration was made, knowingly ceased to be medically fit to dive.

Clause 817 Emergency Drills

At least once during each calendar month emergency drills shall be carried out from each site of diving operations, and the results recorded on the diving operations record.

Clause 818 Decompression Schedules

1. With the exception of saturation diving operations, diving operations shall not be carried out unless there is used in those operations a decompression schedule that contains an inert gas exposure limiting line, is recognised and approved by the Managing Director, and used in accordance with sub-clause (2).
2. Where a diver is in a compression chamber and is subjected to pressure above normal atmospheric pressure:
 - (a) procedures for or in relation to decompression or the operation of a surface compression chamber shall be carried out by at least two of the following people; a diving superintendent, diving supervisor, life support technician or diver, one of whom shall be in charge of the operation and one of whom shall be in the immediate vicinity to assist.

For the purpose of this sub-clause, during saturation diving operations the person in charge shall comply with sub-clauses 804(3) and (4).
 - (b) unless the diving supervisor is one of the persons carrying out the decompression procedures, one of the two persons required by sub-clause (2)(a) shall report immediately to the supervisor the occurrence of any abnormal event during the procedures.
3. Where a diver has carried out a dive using air as breathing medium and is required to carry out a subsequent dive (or dives) within a period of 12 hours after the commencement of the first dive, the bottom time for each subsequent dive shall be determined by adding, to its bottom time, the bottom times of all previous dives, and the depth to be entered into the decompression schedule in conjunction with that bottom time shall be the maximum of any dive so far carried out within that 12 hour period.
4. Where a diver has carried out a dive in which the limiting line (as determined by the decompression schedule used for that dive) was reached or exceeded, that person shall not commence another dive for a period of at least 24 hours after completion on the first mentioned dive.
5. Where a diver has carried out a dive (other than a saturation dive) in which a mixed gas breathing medium was used, that person shall not commence another dive within a period of 24 hours after completion of the first mentioned dive.
6. Where a diver has undergone saturation diving that person may not commence either surface oriented or bell-bounce diving within a period of 48 hours after the completion of decompression from saturation diving. The initial 24 hour period following that decompression shall be used to monitor the diver for any symptoms of decompression sickness and during this period that person shall remain within the vicinity of the compression chamber and not be subjected to more than light levels of exertion.

7. No diver shall undergo saturation diving for a period exceeding 28 days from the commencement of compression to the completion of decompression.

Clause 819
Hours of Duty

1. Subject to sub-clause (2), a person engaged in diving operations who is the diving supervisor, diver, diver's attendant, life support technician or systems maintenance technician shall not be on duty for more than 12 hours, either consecutively or in total during any period of 24 hours, not taking into account "handover" briefing periods required for safety reasons.

Clause 820
Diving Depths

1. Except in an emergency, surface-oriented diving operations involving the use of either air or mixed gas as breathing medium shall not be carried out at a depth exceeding 50 metres.
2. Except in an emergency, diving operations shall not be carried out at a depth exceeding 50 metres unless those operations involve the use of a diving bell and a suitable mixed gas breathing medium.
3. Diving operations shall not be carried out at a depth exceeding 300 metres without approval.

Clause 821
Application Consent for Diving Beyond 300 Metres

An application made to the Managing Director for consent to the carrying out of diving operations at a depth exceeding 300 metres shall include details of:

- (a) the equipment proposed to be used;
- (b) the decompression schedules proposed to be used;
- (c) the therapeutic recompression treatment for decompression sickness proposed to be used; and
- (d) other procedures including emergency procedures proposed to be used.

Clause 822
Decompression General

A diver who has undergone decompression following a dive shall remain in the vicinity of the surface compression chamber for four hours after the completion of decompression.

Clause 823
Therapeutic Recompression Procedures

Where, in diving operations, therapeutic recompression procedures are followed, such procedures shall not be used unless they are procedures, recognised by the diving industry and approved by the Managing Director, or are authorised by a medical practitioner referred to in clause 807.

Clause 824 Decompression Sickness

1. Where a diver suffers decompression sickness as a result of carrying out a dive, that diver shall not commence another dive within 24 hours of completing the first-mentioned dive or therapeutic recompression, or such period as a medical practitioner referred to in clause 807 determines.
2. Where a person has serious symptoms of decompression sickness, or has suffered a recurrence or relapse of musculo-skeletal decompression sickness, that required further recompression, a medical practitioner referred to in clause 807 shall be consulted as soon as possible and treatment of the person shall be continued under the supervision of the diving supervisor in consultation with that medical practitioner.
3. The person referred to in sub clause (2) above shall not carry out any further diving until that person has been examined and passed as fit to dive by a medical practitioner qualified in underwater medicine as referred to in clause 807.

Clause 825 Flying After Diving

Precautions shall be taken as far as practicable to ensure that the restrictions on elapsed time between completion of dives and commencement of flying are as given in Australian Standard AS 2299.

Clause 826 Diving In Current

Diving operations shall not be carried out where the velocity of the water current or weather conditions are considered by the diving supervisor to be such that a diver is unable to carry out work safely.

Clause 827 Diving With Self-contained Breathing Equipment

1. Diving operations using self-contained breathing equipment shall not be carried out without approval.
2. Closed circuit self-contained pure oxygen rebreathing apparatus shall not be used in diving operations.

Clause 828 Diving With Closed or Semi-closed Circuit Rebreathing Equipment

Diving operations using self-contained, closed circuit or semi-closed circuit rebreathing equipment shall not be carried out without approval.

Clause 829 Crewed Submersible Craft

Crewed submersible craft shall not be used without approval and shall be used in accordance with the guidelines which may be issued by the Designated Authority.

Clause 830 Diving From Platforms

Where diving operations are being carried out from a platform, a person shall not:

1. where the dive being carried out involves decompression of the diver, dive from a platform on which drilling operations are in progress or from another platform within 500 metres of that platform if:
 - (a) the depth of the well is within 30 metres of the predicted top of a hydrocarbon bearing zone; or
 - (b) after penetration of that zone the well has been found unstable following one complete circulation from bottom to surface; or
 - (c) the well is being perforated; and
2. where the dive being carried out involves decompression of the diver, unless otherwise approved, weld within 5 metres of any processing equipment that contains hydrocarbons, except that such welding operations are permitted where they are carried out in a pressurised enclosure or where the welding site and nearest processing equipment containing hydrocarbons are clearly separated by a solid plate deck or a continuous firewall;
3. carry out any activity at a place from which sparks or slag could fall upon any item of diving equipment being used for diving operations;
4. operate a crane or other equipment not associated with diving operations or carry out any activity if diving personnel or diving equipment engaged in or being used for the diving operations could be struck by any material moving or falling as a result of the use of the crane or other equipment or the carrying out of the activity;
5. transfer methanol, diesel fuel or other flammable or combustible substances between supply vessels and the platform;
6. where the dive being carried out involves decompression of the diver, carry out any wireline operations on the platform;
7. carry out operations associated with depressurising vessels or pipelines as a result of which hydrocarbons could be released on or near the platform;
8. detonate a charge underwater within:
 - (a) 2 km of the platform; and
 - (b) 8 km of the platform unless adequate notification to the person in charge of the diving operations has been given of:
 - (i) the type of energy source to be used, its frequency and intensity;
 - (ii) the times at which the energy source is to be used;
 - (iii) in the case of explosive charges any misfires; and
 - (iv) any other pertinent information; or
9. cause a vessel to approach or depart from that platform, or cause its propellers or thrusters to be engaged, without notifying the person in charge of diving operations.

Clause 831 Cathodic Protection

Where diving operations are being carried out from a platform or within 20 metres of a platform, the person in charge of the platform is responsible for ensuring that the power supply to all impressed current cathodic protection equipment is supplied in accordance with the guidelines which may be issued by the Designated Authority.

Clause 832 Breathing Medium Quality

1. Diving operations shall not be carried out unless the breathing medium and unmixed pure components of breathing medium used in those operations are suitable for use at the depths and for the periods required in those operations and conform to the requirements of purity and composition as specified in Part A of Appendix-1.
2. Compressed air for breathing supplied by an air compressor shall not be used in diving operations unless, within the period of three months preceding the operations, the compressed air delivered by the compressor has undergone a test carried out in accordance with clause 801 that has shown that the compressed air satisfied the standard referred to in sub-clause (1).

Plant and Equipment Requirements

Clause 833 Suitability of Plant and Equipment

All diving plant and equipment shall:

- (a) be adequate for the safe conduct of diving operations;
- (b) be properly designed in accordance with recognised codes of construction, of adequate strength and of good construction in accordance with sound engineering practice and from sound and suitable material;
- (c) be suitable for the conditions in which it is intended to be used, be properly maintained and comply with the requirements of clauses 840-845; and
- (d) where its safe use depends on the depth or pressure at which it is used, be marked with its safe working pressure or the maximum depth at which it may be used.

Clause 834 Additional Requirements For Plant and Equipment

1. Without limiting the generality of the requirements of clause 833, the diving plant and equipment shall:
 - (a) include a means of supplying a breathing mixture (including a reserve supply for immediate use in the event of an emergency and for therapeutic recompression or decompression):
 - (i) which is suitable in composition and temperature and of adequate pressure; and
 - (ii) at an adequate rate to sustain a prolonged vigorous exertion;

- (b) include a lifeline for each diver except where the nature of the diving operations renders a lifeline unsuitable, in which case an approved alternative system for ensuring the diver's safety is to be used;
 - (c) subject to sub-clause (2), unless a diving bell is used in diving operations or the diver is lowered by a diver's stage or cage, include a shot-line of adequate strength and made of a suitable material of which, during ascent and descent, one end is attached to a fixed object at the surface and the other end to an object at the diver's work-site;
 - (d) include a system enabling oral communication to be carried out between each diver and diving supervisor;
 - (e) where it is lifting and handling equipment used in or in connection with diving operations, comply with the requirements of Appendix 2;
 - (f) where diving operations are carried out at a depth exceeding 20 metres or where decompression of the diver is required the equipment provided for that diving operation shall include a surface compression chamber with all necessary ancillary equipment, and the chamber and equipment shall comply with the requirements of Appendix 3 and Appendix 5, Paragraphs 1 and 3.
 - (g) where diving operations are carried out at a depth exceeding 50 metres, include a diving bell as required under sub-clause 820(2) which shall have all necessary ancillary equipment and shall comply with the requirements of Appendix 4;
 - (h) where environmental conditions dictate, include an adequate means by which a diver can be maintained at a safe temperature;
 - (i) include a dive control station which shall have all necessary ancillary equipment and shall comply with the requirements of Appendix 5, Paragraphs 1 and 2
 - (j) where a surface compression chamber is used, include a decompression control station which shall have all necessary ancillary equipment and shall comply with the requirements of Appendix 5, Paragraphs 1 and 3.
 - (k) where saturation diving operations are being carried out, include a life support control station which shall have all necessary ancillary equipment and shall comply with the requirements of Appendix 5, Paragraphs 1, 3 and 4.
 - (l) include minimum first-aid equipment as detailed in Appendix 6; and
 - (m) include for use by a diver during diving operations:
 - (i) a sharp knife to be carried in an accessible position at all times whilst diving;
 - (ii) a weight belt which shall not be of the quick-release type;
 - (iii) a bail-out cylinder to be worn by the diver wherever practicable, the capacity of which cylinder shall be such as to allow the diver to swim in an emergency the maximum possible excursion length to the nearest independent breathing medium source;
 - (iv) a lifting harness to be worn by the diver which operates on a pelvic rather than head-and-shoulders type lifting principle; and
 - (v) approved head protection so as to prevent any injury caused by falling objects or other serious impacts.
2. Where the nature of the diving operation renders a shot-line unsuitable an alternative system for ensuring that the diver can safely reach and return from the work site shall be used.

Clause 835

Emergency Plant and Equipment

Without limiting the generality of the requirements of clause 833, the diving plant and other available on site equipment shall include equipment to be available for use in an emergency and in particular shall include:

- (a) such equipment as is necessary to provide an alternative and safe back-up means of recovering a diving bell from the seabed or underwater work-site to a mating position with a surface compression chamber;
- (b) for saturation diving operations, such equipment and back-up support as is necessary to allow all divers under hyperbaric pressure at any time to be evacuated under hyperbaric pressure from the location of the diving operations to a safe place where life support can be maintained and all divers safely decompressed to atmospheric pressure;
- (c) for other than saturation diving operations, such approved equipment and back-up support as is necessary to allow all divers under hyperbaric pressure to be safely evacuated; and
- (d) such equipment in diving bells as is necessary as far as practicable to allow the lives of divers trapped in a stricken bell to be sustained for not less than 24 hours, and emergency procedures relating to the use of such emergency plant and equipment shall be included in the diving manual required under clause 809.

Clause 836

Breathing Medium Equipment - General

1. Compressed air for breathing supplied by an air compressor shall not be used in diving operations unless-
 - (a) there is connected to the system supplying air from the compressor to the diver a pressure volume tank, a water and oil filter and where practicable a carbon monoxide filter; and
 - (b) the air intake from the compressor is located in a position in which it will not be affected by exhaust gases, sources of hydrocarbon or acetylene and in which it will take in only uncontaminated fresh air.
2. A cylinder filled with breathing medium shall not be used in diving operations unless:
 - (a) it has been filled with and contains after filling only breathing medium satisfying the requirements of clause 832;
 - (b) approved procedures which comply with the requirements of Part B of Appendix 1 were used for the filling, gas testing and supply of the cylinder; and
 - (c) where the cylinder was filled on a platform, the filling was done under the supervision of a diving supervisor.
3. Pure oxygen shall not be used in diving operations unless:
 - (a) in all pure oxygen supply lines only rising-stem-type valves, which have either metal-to-metal seats or seats of another material suitable for pure oxygen service, are used;
 - (b) stored pure oxygen is located as far as practicable away from equipment in which people may be subjected to hyperbaric pressure, from hydraulic equipment and any other flammable substance;
 - (c) where practicable, fixed rigid piping is used for oxygen supply;

- (d) the oxygen supply pressure is reduced to a maximum of 4.1MPa (600 psi) gauge pressure at the supply cylinder; and
 - (e) care is taken to avoid sharp bends in all oxygen supply lines.
4. All breathing medium supply lines shall be arranged so as to ensure adequate protection against their accidental damage and to ensure adequate protection for personnel.
 5. Any enclosed compartment in which large quantities of oxygen, inert gas or gas mixtures other than air are stored, shall be fitted with a visual and audible low and high oxygen content alarm device to provide warning that the atmosphere in the compartment is unsafe.

Clause 837 Breathing Medium Hoses

1. A hose shall not be used in diving operations for the conveyance of breathing medium unless-
 - (a) it has been tested not more than 12 months prior to those operations at a pressure equal to 1.5 times its maximum expected operating pressure;
 - (b) it is kink resistant;
 - (c) it is capable of carrying the breathing medium at a flow rate required in the operations;
 - (d) the hose and its couplings are in alignment;
 - (e) the couplings are not scoured or substantially corroded;
 - (f) the couplings contain no damaged threads;
 - (g) the hose fittings are made of brass, stainless steel, monel metal or other non-corrosive material;
 - (h) the fittings connecting the hose with other hoses are incapable of accidental disengagement or loosening; and
 - (i) it is, where practicable, of such diameter and has such type of connection as will minimise the possibility of wrongly connecting hoses and fittings.

Clause 838 Breathing Medium Supply

1. Diving operations shall not be carried out unless there is provided:
 - (a) a pressure reducing regulator to control the pressure at which breathing medium is supplied to a diver from a cylinder; and
 - (b) a means to allow ready changeover to an alternative pressure reducing regulator or an alternative breathing medium supply in case of failure of the primary pressure reducing regulator or the primary breathing medium supply.
2. The oxygen content of mixed gas breathing medium supplied to a diver shall be continuously monitored using an oxygen content analyser in conjunction with an audible and visible high and low oxygen content alarm.
3. Discrete inert gases or oxygen shall not be connected to a dive control panel nor supplied to any diver in the water.

4. With the exception of breathing medium supplied to a diver by the use of a gas recirculating unit involving gas reclaim, carbon dioxide removal and oxygen enrichment, breathing medium produced on-site by either a gas mixing apparatus or by a gas reclaim unit shall not be delivered to a diver without first being stored for at least 24 hours and then re-analysed.

Clause 839 Pressure Measuring Equipment

1. Diving operations in which surface supply breathing equipment is used shall not be carried out unless there are used in those operations:
 - (a) equipment to enable a person on the surface to ascertain at all times during which a diver is submerged, the depth of the diver;
 - (b) a gauge to enable a person on the surface to ascertain the pressure at which the breathing medium is supplied from on-line compressors or cylinders;
 - (c) a gauge to enable a person on the surface to ascertain the pressure at which the breathing medium is supplied to the diver; and
 - (d) where a surface compression chamber is used, pressure measurement equipment and gauges as indicated in Appendix 3.
2. A gauge used in or in connection with diving operations shall:
 - (a) if used to measure the depth of the diver or the pressure in a diving bell or surface compression chamber, be calibrated uniformly throughout the diving plant in either metres head of sea-water or feet head of sea-water and in all other cases either in kPa, psi or bars;
 - (b) at least once in each period of three months, and whenever it appears to be incorrect, be checked by a dead-weight tester or suitable master test gauge;
 - (c) if it is a master gauge, be calibrated at least once in each period of 12 months by a test carried out in accordance with clause 801; and
 - (d) if it is a dead-weight tester, be verified under, and in accordance with, the Weights and Measures (National Standards) Act 1960 of the Commonwealth of Australia.
3. A dead-weight tester or master gauge used for checking a gauge in accordance with sub-clause (2) shall be available to an inspector on demand.
4. A pressure gauge used in diving operations to measure diver, diving bell or surface compression chamber depth of sea-water or equivalent depth of sea-water at a given internal pressure, shall have an accuracy within 0.25% of the maximum scale reading.

Plant and Equipment Maintenance, Examination and Testing Requirements

Clause 840 Maintenance Certification and Documentation

Plant and equipment shall not be used in any diving operation unless:

- (a) it is regularly maintained in a condition which ensures that it is safe while being used;
- (b) in the case of a surface compression chamber, diving bell, associated trunking and other pressure vessels which form part of a diving system, it is certified in writing by a classifying

- authority or other verifying body in accordance with the rules of that authority pertaining to that equipment;
- (c) in the case of lifting or handling equipment used to raise or lower persons in the course of diving operations, it is certified in writing by a classifying authority or other verifying body in accordance with the rules of that authority pertaining to that equipment;
 - (d) there is maintained a register containing:
 - (i) in the case of a surface compression chamber, other pressure vessels and lifting and handling equipment, the certificates referred to in paragraphs (b) and (c);
 - (ii) in the case of a surface compression chamber or a diving bell, sufficient information, including information relating to the materials used in its construction, to enable it to be safely used, repaired and altered;
 - (iii) in the case of all plant and equipment used in diving operations, a full schedule of all routine preventative maintenance to be carried out, which schedule has been signed or initialled as a mark of acceptance by the diving supervisor upon successful completion of any such maintenance; and
 - (iv) in the case of all plant and equipment used in diving operations, a record of non-routine equipment maintenance or equipment replacement, which record has been signed as a mark of acceptance by the diving supervisor upon successful completion of any such work;
 - (e) it has been examined and tested as necessary in accordance with a defined schedule of pre-dive checks within the six hours immediately prior to the commencement of operations.

Clause 841

Certificates of Examination and Testing

1. The certificates referred to in paragraph 840(d) shall state:
 - (a) the plant and equipment to which it relates;
 - (b) that the classifying authority or other verifying body or diving supervisor has examined it;
 - (c) that it has been tested by or under the close supervision of the authority, verifying body or supervisor issuing the certificate;
 - (d) the conditions under which it can be safely used; and
 - (e) the period during which it can be safely used.
2. The certificates referred to in paragraph 840(d) shall cease to be valid:
 - (a) when any repair or alteration has been made to the plant or equipment which affects its safe working; and
 - (b) on expiration of the period in accordance with sub-clause (1)(e).

Clause 842

Periodic Testing

1. Subject to sub-clause 841 (2), the following testing requirements for equipment used in diving operations, including test frequency and minimum test certificate signatory requirements, shall apply-

- (a) for complete lifting and handling equipment upon installation and thereafter at least every 5 years a static overload test of 1.25 times and a dynamic overload test of 1.1 times the full weight of the equipment to be lifted including the expected weight of personnel during launch and recovery. The test certificates shall carry an approved classifying authority or other verifying body's signatures;
- (b) for main lifting wires of diving bells, diving stages and wet bells upon initial installation and thereafter at least every 6 months a destructive overload test on a section of the wire to determine that the breaking strength is at least 8 times the full weight of the equipment to be lifted including the expected weight of personnel during launch and recovery. The test certificates shall carry an approved classifying authority or other verifying body's signatures;
- (c) for swivels used on main lifting wires, including diving bell, diving stage and wet bell swivels:
 - (i) a visual examination for abnormalities at least every month, the records of which to carry the signatures of the diving supervisor;
 - (ii) a non-destructive test to detect any cracks or other abnormalities at least every year, the records of which to carry signatures of the diving supervisor; and
 - (iii) a non-destructive test to detect any cracks or other abnormalities at least every 5 years, the certificates of which to carry NATA signatures;
- (d) for all sheaves and lead-blocks:
 - (i) a visual inspection and lubrication as required at least every month, the records of which to carry the signatures of the diving supervisor;
 - (ii) a non-destructive test to detect any cracks or other abnormalities at least every year, the records of which to carry signatures of the diving supervisor; and
 - (iii) for primary load bearing sheaves, a non-destructive test to detect any cracks or other abnormalities at least every 5 years, the certificates of which to carry NATA signatures;
- (e) for pressure vessels used as diving plant and equipment other than compressed air and hydraulically operated tools or fire extinguishers at least every 2 years a pneumatic pressure test at a pressure equal to 1.25 times or at least every 5 years a hydrostatic pressure test at a pressure equal to 1.5 times the working pressure, the certificates of which to carry the signatures of the classifying authority or other verifying body; pneumatic pressure testing shall not be carried out without approval;
- (f) for seamless gas cylinders an inspection and test in accordance with SAA AS 2030 Gas Cylinder Code, the certificates of which are to carry NATA signatures-
 - (i) taken underwater at least every 2 years; and
 - (ii) not taken underwater at least every 5 years;
- (g) for air compressors for the supply of low or high pressure air breathing medium, at least every 3 months an analysis of the air from the compressor to determine compliance with clause 832 as to purity requirements specified in Appendix 1, Part A. The test certificates shall carry NATA signatures;
- (h) for breathing medium hoses at least every year, the records of which to carry the signatures of the diving supervisor; a pressure test on the hose at a pressure equal 1.5 times the maximum expected operating pressure as required by sub-clause 837(1)(a);
- (i) for pressure measuring equipment:

- (i) for working depth/pressure gauge at least every 3 months a calibration using a master gauge or dead-weight tester as required by sub-clause 839 (2)(b), the records of which to carry the signatures of the diving supervisor; and
 - (ii) for master depth/pressure gauge at least every year a calibration by a NATA approved testing laboratory as required by sub-clause 839 (2)(c); and
 - (j) for complete diving bell ballast release systems a visual inspection at least every 3 months and a complete disassembly at least every year of all lifting links in the drop-weight attachment rigging including lifting slings, chains, shackles, pins, rings etc., the records of which to carry the signatures of the diving supervisor.
2. A reference in sub-clause (1) to a test is a reference to a test the procedures for which have been approved and which is carried out in accordance with those approved procedures.

Clause 843 Retaining Registers

The register referred to in paragraph 840(d) shall be retained:

- (a) in the case of a register containing certificates relating to any surface compression chamber, diving bell or seamless gas cylinder not taken under water, for at least 5 years from the date of the last such certificate it contains; or
- (b) in any other case, for at least 2 years from the date of the last certificate it contains.

Clause 844 Alterations to Equipment

A person shall not carry out any repairs, additions or alterations to diving plant or equipment other than of a routine nature which could affect its safe working without prior approval, and any repairs, additions or alterations are only to be carried out under the supervision of a classifying authority or other verifying body.

Clause 845 Unattended Equipment

1. A surface compression chamber or diving bell may be used for diving operations only if:
 - (a) during the whole of the preceding 14 days it has been under the surveillance of divers or other persons competent to maintain the equipment properly; or
 - (b) in the event that it has been unattended for any part of the preceding 14 days, it has passed an internal leak test and pre-dive function tests prior to the initial recommencement of diving operations.
2. In sub-clause (1) an internal leak test means an internal leak test held for at least 30 minutes in which the test pressure is not less than the maximum pressure (gauge) equivalent to the maximum depth of dive in which the chamber or bell is or is about to be used.

Division 2 - Reporting and Data Submission

Clause 847

Reporting of Death, Serious Injury and Decompression Sickness of Divers

1. In this clause and clause 848 a reference to a serious injury is a reference to an injury to a person as a result of which the person requires immediate attention by a medical practitioner.
2. Where a person dies or suffers a serious injury while engaged in diving operations in the JPDA:
 - (a) a report of the death or serious injury shall forthwith be made to an inspector;
 - (b) a report in writing giving full particulars of the death or serious injury shall be transmitted to the Managing Director as soon as practicable after the occurrence of the death or serious injury; and
 - (c) a person shall not interfere with the place of such death or serious injury without the approval of an inspector except only insofar as it is necessary for the purposes of providing for the immediate protection or saving of health or life.
3. Where a diver suffers from decompression sickness or any other adverse physiological condition as a result of exposure to higher than atmospheric pressure in the course of diving operations:
 - (a) a report of the sickness or condition shall forthwith be made to an inspector; and
 - (b) a report in writing giving full particulars of the sickness or condition shall be transmitted to the Managing Director as soon as practicable after the occurrence of the sickness or condition, or the completion of treatment.

Clause 848

Written records of Diver Death, Injury or Decompression Sickness

1. Where a diver during a diving operation dies or suffers any injury or decompression sickness, a written record of that death, injury or decompression sickness shall be kept and specify:
 - (a) particulars of death, injury or decompression sickness;
 - (b) the names of the supervisor, the divers and the divers' attendants and of any other person involved in activities directly relevant to the death, injury or decompression sickness;
 - (c) in respect of the dive, the times when the diver became exposed to pressure exceeding atmospheric pressure, when that diver commenced decompression, and when decompression was completed;
 - (d) the equipment used;
 - (e) the decompression schedule used;
 - (f) the breathing medium used by the divers;
 - (g) the work performed by the divers;
 - (h) details of unusual conditions (if any);
 - (i) the nature of the injury;
 - (j) the circumstances leading to the injury;
 - (k) the medical treatment given; and
 - (l) the names of medical practitioners consulted and who attended the injured diver.

2. Subject to the reporting requirements of clause 847, and not later than the 15th day of each calendar month, a copy of the records kept under sub-clause (1) of injuries which occurred during the preceding calendar month which have not been reported shall be transmitted to the Managing Director.
3. A report in writing required under sub-clause (2) shall as far as practicable be made in accordance with the form specified in SAA AS 1885 Code of Practice for Recording and Measuring Work Injury Experience.

Clause 849
Reporting of Potentially Hazardous Events

1. Where an event occurs during a diving operation which is not in the normal or ordinary course of such an operation and which is professionally considered to be likely to cause injury to a person or serious damage to property, but such event does not cause injury or serious damage:
 - (a) a report of the event shall forthwith be made by the contract operator to an inspector; and
 - (b) a report in writing of the event shall be sent to the Managing Director as soon as practicable specifying measures taken or to be taken to prevent such events.

APPENDIX 1 - PART A**A Clause 832 - Requirements as to purity and composition of breathing medium and unmixed pure components of breathing medium used in diving operations**

1. Compressed natural air supplied by a low pressure air compressor used by divers for breathing in diving operations shall not:
 - (a) contain more than 3 parts per million by volume of halogenated hydrocarbons;
 - (b) contain more than 5 parts per million by volume of:
 - (i) carbon monoxide; or
 - (ii) acetylene;
 - (c) contain more than 25 parts per million by volume of methane;
 - (d) contain more than 500 parts per million by volume of carbon dioxide;
 - (e) contain more than 20 milligrams of oil per cubic metre at 100 kPa; and
 - (f) have an objectionable or nauseous odour.
2. Compressed natural air supplied from a cylinder other than that supplied by a low pressure air compressor used by divers for breathing in diving operations shall not have contamination levels higher than those specified in Table 1.
3. Compressed natural air used by divers for breathing in diving operations shall not contain less than 19.5% or more than 22% by volume of oxygen.
4. Pure unmixed components to be used for breathing medium in diving operations shall not have contamination levels higher than those specified in Table 1, and where these pure components are mixed to form breathing medium, then the maximum allowable contamination level in the mixture, where different levels are specified for a given contaminant, shall be the larger of the two levels listed in either pure component specification.
5. Allowable percentage composition tolerances for the mixture minor components are as follows:-

For the minor component content, +/- 5% of nominal content of the minor component is allowed

eg. for 10% oxygen in helium +/- 0.5% oxygen is allowed.

TABLE 1**ALLOWABLE CONTAMINATION LEVELS IN DIVING BREATHING MEDIUM**

Maximum permissible contamination levels measured in parts per million by volume unless otherwise stated

Pure Component Type	Oxygen	Helium	Nitrogen	Air
Minimum Purity allowable (% by volume)	99.50	99.95	99.97	-
Nitrogen	1000	200	-	-
Argon		5000	25	200 -
Hydrogen	10	10	10	-
Hydro-carbons (other than) methane	3	1	1	-
Methane	50	5	5	25
Carbon Dioxide	10	10	10	500
Carbon Monoxide	5	5	5	5
Moisture (water vapour)	50	50	50	50
Oxygen	-	50	50	-
Oil Mist mg/m ³ at 100 kPa	-	-	-	5

NOTE:

All gas is to be free of particulate matter, odour, toxic and irritating contaminants.

APPENDIX 1 - PART B

B Clause 836(2) - Requirements as to the filling, gas testing and supply of cylinders for the supply of breathing medium used in diving operations

General

1. Under sub-clause 836(2)(a), a cylinder filled with breathing medium shall not be used in diving operations unless it is filled with and contains after filling breathing medium satisfying the requirements of clause 832 and as detailed in Appendix 1, Part A.

Testing of cylinders and gas in cylinders shall be carried out in accordance with the requirements of clause 801.

Design and Handling of Cylinders

2. All cylinders are to be manufactured in accordance with SAA AS 2030, Gas Cylinders Code and are to be subjected to periodic testing in accordance with sub-clause 842(1)(f).
3. All cylinders are to be colour coded and labelled in accordance with the requirements of SAA Rules for Gas Cylinders Identification and in particular Identification of Medical Gas Cylinders (AS1944). This applies to individual cylinders as well as to cylinders supplied as part of a multi-cylinder pack or unit whether individually or commonly manifolded.
4. In addition to the colour coding referred to above, and in accordance with SAA AS 2030, Gas Cylinders Code, Section 1.15 'Identification', each cylinder is to carry prominently a printed label, tag or other approved means of identification.
5. Each individually supplied cylinder or group of cylinders supplied as a unit is to be identifiable by a clearly visible and prominent mark or serial number.
6. Supplies of oxygen-medical and air-medical are to remain captive in diving and/or medical traffic only.

Supplies of all remaining gases not normally part of medical traffic are to be dedicated exclusively to diving traffic and are to be so marked in bold letters such as “DIVING ONLY”

Filling and Testing

7. All cylinders returned for filling (or re-filling) are to be vented to atmospheric pressure and evacuated to a pressure not exceeding 20 kPa absolute.
8. Analysis is to be carried out on the gas actually contained in a cylinder (or group of cylinders) and not on the gas upstream of the cylinder being filled, that is, before it reaches the cylinder.
9. Analysis is to be carried out as follows:
 - (i) Every cylinder (including every individual cylinder within a multicylinder pack) is to be tested for carbon monoxide and odour contamination.
These tests are 'on-site' tests and do not require certification;
 - (ii) Every cylinder of a gas or gas mixture containing oxygen (other than air) is to be analysed for oxygen content. These tests are 'on-site' tests and do not require certification;
 - (iii) In the case of 'G' size or equivalent cylinders supplied individually (and not commonly manifolded) one cylinder out of each batch of not more than sixteen is to be analysed comprehensively for impurities as required under clause 832 (and specified in Appendix 1, Part A) and the results are to be reported on a NATA endorsed test certificate (see point No 1) which specifies the serial numbers of the batch of cylinders concerned and the serial numbers of the cylinder from which the analysis was taken;
 - (iv) In the case of larger than 'G' size or equivalent cylinders supplied individually (and not commonly manifolded) and unless special dispensation to the contrary is applied for and given by the Managing Director, each cylinder is to be analysed comprehensively for impurities as required under clause 832, (and specified in Appendix 1, Part A) and the results are to be reported on a NATA endorsed test certificate (see point No 1) which specifies the serial number of the cylinder from which the analysis sample was taken; and
 - (v) In the case of commonly manifolded 'G' size or equivalent or larger cylinders supplied as a composite unit, a composite representative sample of no more than 16 commonly manifolded cylinders is to be taken and analysed comprehensively for all impurities as required under clause 832, (and specified in Appendix 1, Part A) and the results are to be reported on a NATA endorsed test certificate (see point No 1) which specifies the serial numbers of all cylinders tested by the composite sample or the serial number of the framed bottle pack as appropriate (provided all cylinders within the pack contributed to the composite sample).
10. Any NATA endorsed composition analysis certificate applicable to a cylinder (or group of cylinders) is to accompany that cylinder to its user destination and is to be available to the user and to an inspector on demand for verification of the acceptability of the gas for use as diving breathing medium.
11. Attached to every individually supplied cylinder or to every commonly manifolded group of cylinders is to be a tag contained within a waterproof envelope which gives details of the mixture (or the pure component) supplied.

APPENDIX 2

Clause 834 (e) - Requirements for Lifting and Handling Equipment Used In The Course of Diving Operations

Equipment used for raising and lowering persons in diving operations

1. Lifting and handling equipment shall not be used in diving operations for the raising and lowering of persons unless:
 - (a) if it is a winch:
 - (i) it is so constructed that the brake is automatically applied except when the controls are in the operating position; and
 - (ii) the winch, winch drum and wire on the winch drum are clearly visible to the winch operator when operating the winch;
 - (b) if it is a diving bell lifting winch, the lowering of the diving bell is controlled by its drive system and not by its brakes;
 - (c) if it is a diver's stage:
 - (i) it is sufficiently large to carry at least two divers and their associated tools in uncramped conditions and contains no equipment other than for diving;
 - (ii) it is suitably enclosed to prevent its occupants from falling out;
 - (iii) it is fitted with appropriate inboard handholds and is secured against tipping or spinning in a manner dangerous to its occupants;
 - (iv) it is fitted with an adequate reserve supply of breathing mixture to allow for the safe return of the diver; and
 - (v) where the distance between the diving platform and the water surface is greater than 3 metres, there is provided a diver's stage and stage handling system for the diver and the stand-by diver.
 - (d) if it is a lead-block or sheave:
 - (i) it has an internal diameter of at least 24 times that of the lifting wire passing through it; and
 - (ii) it is equipped with a sheave restraint which is designed such that in the event of failure of the sheave, its lifting wire cannot move by more than one and a half times the internal diameter of the sheave;
 - (e) if it is a shackle, it is properly wired in the closed position when closed;
 - (f) in the case of a diving bell, a swivel is installed between its hull lifting point and main lifting wire;
 - (g) in the case of terminal wire rope connections, bull-dog grips are not used on any such connections where the wire is subject to other than purely static loads;
 - (h) where split pins are used as retainers on clevis pin or other similar connections, they are used in conjunction with castellated nuts; and
 - (i) suitable safety restraining harnesses are provided for and worn by all persons engaged in potentially hazardous rigging activities associated with diving bell launch and recovery such as:
 - (i) fitting and removal of chain-stops; and

- (ii) attachment and removal of diving bell guide or cross haul wire end connections at the diving bell either before or after its deployment.

Equipment used for raising and lowering loads in diving operations.

- 2. Lifting and handling equipment shall not be used in diving operations for the raising and lowering of loads unless:
 - (a) there is a continuous means of communication between the winch or crane operator and the diving supervisor;
 - (b) if it is a winch, the winch drum and wire on the winch drum are clearly visible to the winch operator; and
 - (c) if it is a crane, there is provided an audible and visible alarm system to indicate to the crane operator when the wire on the winch drum is near to being fully unspooled.

APPENDIX 3

Clause 834(f) - Requirements for Surface Compression Chambers

A surface compression chamber shall:

1. comply with clause 833 and be certified by a classifying authority or other verifying body to be in accordance with the rules of that authority;
2. contain the first-aid equipment required under paragraph 834(l) (see Appendix 6);
3. have at least two compartments with doors each of which acts as a pressure seal and can be unlatched from either side (“a two-compartment chamber”);
4. be equipped with suitable view-ports to enable a person outside the chamber to observe all occupants of each chamber lock as well as all measurement devices; and all ports are to be suitably located so as to:
 - (a) avoid physical damage caused by falling objects; and
 - (b) prevent damage caused by heat from any external light source shining through a port;
5. have sufficient space to allow all occupants expected to occupy it at any one time to move about and lie down comfortably as required; and if the chamber is to be used in circumstances in which a person is intended to remain inside under pressure for a continuous period of 12 hours or more, excluding therapeutic decompression it shall have a minimum internal diameter of 2 metres; and in all other cases it shall have a minimum internal diameter of 1.75 metres unless a smaller diameter is approved by the Managing Director.
6. provide a suitable environment and suitable facilities for those who are to use it, having regard to the kind of operation in connection with which it is used and the period during which the pressure is raised; and in particular:
 - (a) overboard-dump mask breathing systems shall be provided for all occupants requiring oxygen-rich decompression or therapeutic treatment breathing mixtures;
 - (b) facilities shall be provided where necessary to minimise the noise inside the chamber during rapid pressurisation;
 - (c) adequate facilities shall be provided for heating, lighting and cooling; and
 - (d) adequate sanitary facilities shall be provided, with particular care being taken in the design of any toilet system so as to prevent the possibility of a pressure seal being formed between the chamber interior and toilet bowl interior areas by any person using the toilet;
7. be so designed as to minimise the risk of fire; and in particular:
 - (a) no chamber shall be fitted with electrical service connections that are physically capable of being wrongly connected;
 - (b) all motors installed inside a chamber shall be designed and operate so as to be safe and suitable for use in a hyperbaric environment;
 - (c) all electrical wiring and electric lighting installed inside a chamber shall be designed and operate so as to be safe and suitable for use in a hyperbaric environment;
 - (d) extreme care shall be exercised in the handling and piping of oxygen to and from a chamber; and particular care shall be taken to ensure:

- (i) that oxygen delivery pressures to a chamber are suitably low and compatible with the design of the piping system in which the oxygen is transmitted;
 - (ii) that the valving and fittings used on oxygen lines are suitable and safe for the purpose;
 - (iii) that oxygen lines and fittings are kept clean and free from oil, dirt or other particulate matter; and
 - (iv) that only lubricants compatible with oxygen are used in oxygen service; and
 - (e) a means which is acceptable to the Managing Director shall be provided in the chamber for extinguishing fires;
8. where through-hull penetrating connections are fitted:
- (a) have fitted manually operable override valves immediately on either side of fixed-rigid-piping hull penetrators;
 - (b) have electrical and communication wiring type hull penetrators of a design acceptable to the Managing Director; and
 - (c) have clear identification labelling on both internal and external hull sides of all hull penetrators;
9. be equipped in an inner lock with such suitable medical support facilities as:
- (a) a device from which an intravenous drip can be suspended; and
 - (b) a suitable plug connection allowing an electrocardiograph situated out-side the chamber lock to be used on a person in the chamber lock;
10. be fitted with such valves, gauges and other fittings as are necessary to control and indicate the internal pressures of each chamber lock or trunking from outside the chamber; and in particular:
- (a) pressure gauges shall be calibrated uniformly throughout in either metres head of sea-water or feet head of sea-water;
 - (b) there shall be an alternative means to measure the pressure in each chamber lock or trunking in the event of malfunctioning of a primary gauge; and
 - (c) a suitable caisson pressure gauge, which can be read by a person inside the chamber lock and a person outside the chamber lock, shall be fitted internally in each chamber lock;
11. be equipped with:
- (a) a facility to enable a gas sample to be taken outside the chamber from each internal chamber lock; and
 - (b) such instruments or equipment fitted either internally or externally as will allow the measurement by a person outside the chamber of the content of oxygen and carbon dioxide in the internal chamber atmosphere;
12. be fitted with adequate equipment, including reserve facilities, for supplying and maintaining the appropriate breathing mixture at an adequate rate of supply to persons inside it;
13. be equipped with an effective means which includes a helium voice unscrambler as required, to enable communication between persons inside and outside the chamber;
14. be equipped with a suitable lock of diameter not less than 300 millimetres through which food and medical supplies can be passed into the chamber while its occupants remain under hyperbaric pressure;

15. if it is equipped for saturation diving:
- (a) have adequate environmental monitoring and control facilities including a back-up system to maintain adequate and safe environmental conditions if the primary control system malfunctions; and in particular environmental monitoring shall include the following:
 - (i) the continuous monitoring by a person outside the chamber of the temperature, humidity and oxygen content of the internal chamber atmosphere. The equipment for monitoring the oxygen content shall be fitted with an audible and visible high and low oxygen content alarm system;
 - (ii) the provision inside the chamber of environmental monitoring equipment or instruments to enable occupants of the chamber to monitor continuously its internal temperature, humidity and oxygen content; and
 - (iii) the provision, either at the chamber, at the life support control station or decompression control station, of environmental monitoring equipment to allow a person outside the chamber to monitor continuously its internal temperature, humidity and oxygen content and to measure its carbon dioxide content as required; and
 - (b) have a suitable system for guarding against rapid depressurisation of a chamber should a rupture occur in a large diameter pipe connected to the chamber such as a pipe forming part of the reticulated environmental control piping.

APPENDIX 4

Clause 834(g) - Requirements for Diving Bells

A diving bell shall:

1. comply with clause 833 and be certified by a classifying authority or other verifying body to be in accordance with the rules of that authority;
2. contain the first-aid equipment required under paragraph 834(1) (see Appendix 6);
3. be equipped with doors which act as pressure seals and which may be un-latched from either side;
4. have view-ports sited so as to avoid as far as possible physical damage and prevent heat damage from any external light source;
5. provide a suitable and safe environment for those who are to use it; and in particular shall provide:
 - (a) mask systems for all occupants through which either surface-supplied or on-board gas can be breathed;
 - (b) facilities where necessary to minimise the noise inside the bell during rapid pressurisation; and
 - (c) adequate facilities for heating and lighting;
6. be so designed as to minimise the risk of fire; and in particular:
 - (a) no electrical connections shall be physically capable of being wrongly connected;
 - (b) all motors installed inside a bell shall be designed and operate so as to be safe and suitable for use in a hyperbaric environment; and
 - (c) all electrical wiring and electric lighting installed inside a bell shall be designed and operate so as to be safe and suitable for use in a hyperbaric environment;
7. where through-hull penetrating connections are fitted:
 - (a) have fitted manually operable override valves immediately on either side of fixed-rigid-piping hull penetrators;
 - (b) have electrical and communication wiring-type hull penetrators of a design acceptable to the Managing Director; and
 - (c) have clear identification labelling on both internal and external hull sides of all such connections;
8. be fitted with adequate equipment including reserve facilities for supplying the appropriate breathing mixture without interruption to persons occupying or working from the bell; and in particular:
 - (a) as required under sub-clause 838(1)(b) the breathing medium distribution panel in the diving bell shall be designed so as to allow a change-over to an alternative breathing medium supply source;
 - (b) as required under paragraph 833(b), all piping systems, pressure regulators and other fittings associated with the supply and delivery of breathing medium shall be properly designed in accordance with recognised codes of construction, of adequate strength and of good construction in accordance with sound engineering practice and from sound and suitable

materials and shall in addition be capable of delivery of breathing medium at adequate flow rates and pressures at all depths for which the diving bell is designed to be used;

- (c) shall be equipped with such breathing supply manifolds and piping as will enable:
 - (i) the diver (or divers) and stand-by diver to breathe either surface-supplied or on-board cylinder supplied breathing medium; and
 - (ii) the stand-by diver to breathe from an independent supply source other than surface supply when the diver (or divers) is breathing either surface-supplied or on-board cylinder-supplied breathing medium;
 - (d) it shall be equipped with a suitable means for removal of carbon dioxide from its atmosphere; and
 - (e) it shall be equipped with adequate portable carbon dioxide and oxygen analysers for analysis of its internal atmosphere; and the oxygen analyser shall be calibrated in atmospheres partial pressure with a maximum scale reading not exceeding two atmospheres partial pressure;
9. be provided with a suitable sonar beacon and stroboscopic light or other acceptable system by which in the event of an emergency it can be rapidly located by rescue personnel;
 10. be provided with a suitable means by which in the event of an emergency the lives of trapped persons can be sustained for at least 24 hours;
 11. be provided with a through-water communication facility or other acceptable emergency means of conversation between occupants of a stricken bell and surface personnel;
 12. be fitted with lap-type seat belts for all occupants;
 13. be so designed that:
 - (a) its main lifting wire is of adequate strength to withstand all static and dynamic loads likely to be encountered during diving operations and it shall have a maximum fully equipped weight including the expected weight of its occupants of not more than one eighth;
 - (b) if the main lifting wire parts causing the bell to come to rest on the sea floor or other obstruction, diver access to and from the bell through the bottom door is still reasonably available;
 14. where drop-weights are fitted, have incorporated in their design:
 - (a) a suitable means for prevention of their accidental disengagement; and
 - (b) adequate strength in the release mechanism and fittings for attachment of the drop-weight to the bell, such that the weight of the drop-weight shall be less than one tenth of the tensile breaking strength of the release mechanism and fittings for its attachment;
 15. be equipped with emergency tools as required to enable:
 - (a) deliberate severance of the main lifting wire; and
 - (b) emergency repairs inside the bell to be carried out;
 16. be used in association with lifting gear which in an approved manner enables the bell to be safely lowered to working depth, maintained at that depth and returned to the surface without excessive lateral, vertical or rotational movement;
 17. be provided with a means by which, in the event of failure of the main lifting gear, the diving bell can be returned to a mating position with a surface compression chamber;

18. have pipe systems, fittings or tubings carrying pure oxygen which are suitable for oxygen service and which have been thoroughly cleaned by an acceptable method to enable them to be safely used for oxygen service;
19. be fitted with lifting equipment sufficient to enable an unconscious or injured diver to be hoisted into the bell by a person inside it;
20. in the case of umbilicals and umbilical connections to the bell-
 - (a) subject to (e), not have diver umbilicals longer than 40 metres fitted without approval;
 - (b) have adequate, waterproof labelling or tagging fitted to divers' umbilicals which specifies their age and date of their last pneumatic pressure or other test;
 - (c) be equipped with a suitable means for preventing undue weight being placed on the umbilical connections at the bell hull;
 - (d) be equipped with suitable screwed or other acceptable external hull connection fittings, such that umbilical lines can be readily re-connected or disconnected underwater in an emergency; and
 - (e) have a stand-by bell diver's umbilical at least 2 metres longer than that of the working diver;
21. be equipped with such valves, gauges and other fittings (which are to be made of suitable materials) as are necessary to control and to indicate to the diving supervisor and bell occupants the pressure within the bell; and in addition, there shall be means provided for:
 - (a) a person on the surface to ascertain the pressure at which the breathing medium is being supplied to the bell and the external pressure acting on the bell; and
 - (b) a person inside the bell to ascertain the pressure at which breathing medium is supplied to the bell, the pressure at which on-board gas is supplied to the bell and the external pressure acting on the bell;
22. be equipped with:
 - (a) an internal valve of a type that will enable a person inside the bell to depressurise the bell in an emergency, that is, a valve fitted with a spring or other fail-safe device which requires it to be continuously held in the open position in order to prevent its otherwise automatic closure; and
 - (b) an external valve of a type that will enable a person outside the bell to pressurise or depressurise the bell in an emergency, and a corresponding valve on the inside of the bell hull fitted in such a way as to prevent its inadvertent or accidental closure;
23. be equipped for attachment between the bell and surface compression chamber a mating mechanism which is designed to ensure it cannot be mistakenly disengaged where this could cause rapid, uncontrolled depressurisation of the bell or any surface compression chamber forming part of the chamber complex to which the bell is attached;
24. be equipped with an effective means which includes a helium voice unscrambler as required, to enable as far as practicable clear and interference-free oral communication between the diving supervisor and divers engaged in bell diving operations; and
25. be clearly visible to the lifting winch operator during the above-water phases of bell launch and recovery.

APPENDIX 5

Clause 834(i), (j) and (k) - Requirements for Dive, Decompression and Life-support Control Stations in Diving Operations.

1. Where a dive, decompression or life support control station is situated in an enclosed area, the enclosure shall be equipped with:
 - (a) an audible and visible high and low oxygen content alarm system;
 - (b) a suitable and effective air conditioning or ventilation system; and
 - (c) a self-contained or other cylinder-supplied, full-face-mask breathing system to allow a person or persons in charge of a dive, decompression or life support control station to maintain their position in the event of smoke or toxic gases making the station otherwise not habitable.

Clause 834(i) - Requirements for a Dive Control Station

2. The Dive Control Station shall be set aside as a single, designated location which shall be as far as practicable adjacent to where a diver enters the water and from which the diving supervisor can continuously supervise, monitor and direct the control of all systems and functions which relate to the life support and safety of a diver in the water. In particular, the equipment forming part of a dive control station shall include instruments which readily allow the diving supervisor to monitor, direct and control on a continuous basis the following:-
 - (a) in relation to a diver's breathing medium:
 - (i) its supply to the Dive Control Station;
 - (ii) its oxygen content and wherever a reclaim recirculation unit is involved, its carbon dioxide content; and
 - (iii) its delivery to the diver;
 - (b) the pressurisation of:
 - (i) a diving bell;
 - (ii) umbilical hoses to a diver engaged in surface-oriented diving operations or to a diving bell; and
 - (iii) any transfer-under-pressure locks and trunkings;
 - (c) a diver's depth and the internal and external pressures acting on a diving bell and its occupants;
 - (d) any heating, cooling or other environmental control systems as required; and
 - (e) all radio, telephone or other verbal communications associated with the diving operation being supervised.

Clauses 834(j) - Requirements for Decompression Control Stations

3.
 - (a) A decompression control station shall be set aside as a single, designated location which shall be either attached or adjacent to a surface compression chamber and from which a diving supervisor, life support technician, or diver can supervise, monitor and control all systems and functions which relate to the life support of a person undergoing decompression.
 - (b) Equipment forming part of a decompression control station shall include instruments, controls and fittings which allow for the control and monitoring of:
 - (i) Gas used for pressurization and breathing medium for each lock or trunking;

- (ii) Pressure gauges fitted to each individual lock or trunking;
- (iii) Oxygen and carbon dioxide content of each lock;
- (iv) Temperature and humidity of each lock; and
- (v) Radio and telephone communication with each lock.

Clause 834(k) - Requirements for Life Support Control Stations

4. (a) A life support control station shall be set aside as a designated location either attached or adjacent to a surface compression chamber, and from which a diving supervisor or life support technician can supervise, monitor and control all systems and functions which relate to the life support and safety of persons maintained under pressure.
- (b) A life support control station shall be installed where saturation diving operations are being carried out and shall be combined with the decompression control station in the same location.

APPENDIX 6**Clause 834(l) - Minimum First Aid Equipment Required at Place at which Diving Operations are Carried Out.**

1. Within Diving Bell	Number Required:
Tourniquet	1
Mouth-to-Mouth Resuscitation Tubes	2
Scissors (16.5 cm)	2
Wound Dressing (shell or field large)	2
Hand-Operated Resuscitator	1
2. Outside Surface Compression Chamber	Number Required:
Aneroid Blood Pressure Sphygmomanometer	1
Stethoscope	1
Pen-light and batteries	1
Rubber hammer	1
Tuning fork	1
Otoscope - Aphphalho Scope	1
Dressing (shell or field large)	2
Tourniquet	2
Mouth-to-Mouth Resuscitation Tubes	2
Pharyngeal Airways large Adult Size	2
Suction apparatus non-electric hand/foot operated	1
Suction catheter with side arm relief	2
Mouth Gag	1
Scissors (13 cm)	1
Artery Forceps (13 cm)	4
Artery Forceps (20 cm)	2
'Haemaccel' 500 ml	4
500 ml 4% glucose in 1/5 normal	5

saline (plastic pack)	
Cannula (16 gauge x 5 cm adult size)	5
Large Intra-Cath (yellow label)	1
Giving Sets	5
Syringes 20 ml	4
Syringes 10 ml	4
Syringes 2 ml	4
Needles 0.50 mm x 25 mm	1 box
Needles 0.80 mm x 38 mm	1 box
Storets injection swabs non-alcoholic (Packet of 100)	1
Self-Retaining Catheter 16 gauge with 30-50 cm ³ ballon	5
Catheter bag (2L)	5
Dexamethasone, 8 mg	1 box
Valium injection 10 mg	6
'Elastoplast' 7.5 cm (Code 1003)	2 rolls
'Zylocaine' 2 ml ampoules of 2%	10
Scissors (16.5 cm (large size)	1
Tape Non-Allergenic 3 cm	10 rolls
Air splints adult size full arms	3
Half arms	2
Full legs	2
10 cm sterile gauze squares	6
20 cm x 10 cm sterile combine dressings	5
15cm sterile crepe bandages	5

APPENDIX 7

Clause 809 - Matters in Respect of which Provision is to be made in the Diving Manual

1. Planning which includes the following –
 - (a) foreseeable meteorological and oceanological conditions;
 - (b) sea-bed conditions;
 - (c) depth and type of operation;
 - (d) suitability of plant and equipment;
 - (e) availability, qualifications and experience of personnel;
 - (f) underwater hazards of the diving site; and
 - (g) proposed shipping movements.
2. Preparation which includes the following:
 - (a) consultation with persons having any control over or information related to the safety of any diving operations to be carried out, in particular the control of lifting operations and shipping movements;
 - (b) selection of breathing medium and equipment;
 - (c) check of plant and equipment (pre-dive function testing);
 - (d) allocation of personnel;
 - (e) fitness of divers for underwater operations;
 - (f) precautions against cold in and out of the water;
 - (g) communication procedures; and
 - (h) precautions against underwater hazards of the diving site.
3. Procedures during diving operations which include the following:
 - (a) responsibilities of each position in the diving team;
 - (b) use of all types of diving equipment;
 - (c) supply of gases and gas mixtures, including maximum and minimum partial pressures of gases;
 - (d) operation and use of equipment under water;
 - (e) limits on depth and time under water;
 - (f) descent, ascent and recovery of divers;
 - (g) descent, ascent and recovery of diving bell;
 - (h) diving tables for use in decompression procedures for both single and repetitive diving and in therapeutic decompression procedures;
 - (i) control in changing meteorological and oceanological conditions;
 - (j) time for which divers are to remain in the vicinity of the surface compression chamber; and
 - (k) maintenance of log books.

4. Emergency Procedures which include the following:
- (a) emergency communications;
 - (b) emergency assistance under water and on the surface;
 - (c) recompression and decompression;
 - (d) first aid;
 - (e) medical assistance;
 - (f) calling assistance from emergency services including advance liaison with those services where appropriate;
 - (g) precautions in the event of evacuation of the platform or vessel which include a comprehensive evacuation plan for any divers under hyperbaric pressure from initial alert stage through to completion of decompression;
 - (h) procedures for the emergency secondary recovery of a stricken diving bell from the sea-floor or other obstruction; and
 - (i) provision of emergency electrical supplies.

APPENDIX 8

Clause 810(1) - Matters to be Included in the Diving Operations Record

The following matters shall be included in the Diving Operations Record in respect of each diving operation:

- (a) the name of the diving contractor;
- (b) the dates on which and the period during which the diving operation is carried out;
- (c) the name or other designation of the platform or vessel in connection with which the diving operation is carried out and the location of that platform or vessel;
- (d) the name of the diving supervisor and the period for which that supervisor is acting in that capacity in respect of the diving operation;
- (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 including details of the decompression schedule used;
- (g) the date and time of authority being given to the diving supervisor to commence or recommence diving operations;
- (h) the maximum depth reached in the course of the operation for each diver;
- (i) for each diver in respect of each dive that diver makes, the time that diver leaves the surface, that diver's bottom time, and the time that diver reaches the surface;
- (j) the type of breathing apparatus and gas mixture used;
- (k) the nature of the diving operation;
- (l) any decompression sickness, other illness, discomfort or injury suffered by any of the divers;
- (m) particulars of any emergency which occurred during the diving operation and any action taken;
- (n) any defects that are discovered in any plant or equipment used in the diving operations;
- (o) particulars of any environmental factors affecting the diving operation;
- (p) the date and time when any machinery or electrical system is isolated and rendered unserviceable because of its malfunction or other unsuitability for the use in diving operations; and
- (q) any other factors relevant to the safety or health of the persons engaged in the operations.

APPENDIX 9

Clause 811 - Matters to be Entered in the Diver's Log Book

The following matters shall be entered in the diver's log book:

1. in respect to the diver's suitability to dive:
 - (a) a record and the results of any medical examination carried out in compliance with clause 816; and
 - (b) a record of any medical abnormalities restricting the diver's ability to dive.
2. in respect of each diving operation in which the diver takes part:
 - (a) the date;
 - (b) the name of vessel or platform, geographic location and client company;
 - (c) the current, visibility and water temperature;
 - (d) the maximum depth reached on each dive;
 - (e) the time the diver left the surface, left the bottom and the diver's bottom time;
 - (f) the diver's breathing medium (air or mixed gas);
 - (g) the mode of dive (surface supplied, bell, SCUBA, saturation or others);
 - (h) decompression procedure followed and the decompression table used;
 - (i) a description of the work carried out by the diver;
 - (j) remarks including any unusual aspects of dive, incidents of decompression sickness, area affected, and treatment table used; and
 - (k) the diver's signature, supervisor's signature and endorsement of the diving company.
3. in respect of saturation diving:
 - (a) the date and time of the start and finish of each saturation dive;
 - (b) the breathing medium, rate of compression and total exposure to date for this saturation;
 - (c) the storage depth, excursion depth and duration of excursion; and
 - (d) the compression and decompression Schedule or Table used.

PART IX - OCCUPATIONAL HEALTH AND SAFETY

Division 1 - GENERAL REQUIREMENTS

Clause 901

Objects

1. This regulation on occupational health and safety is to elaborate in particular Article 12 and paragraph (h) of Annex C of the Treaty and paragraph (1)(k) of Article 37 of the Interim Petroleum Mining Code, and therefore the word Regulation addresses the procedures referred to in Article 12 of the Treaty.
2. The objects of regulating Occupational Health and Safety are:
 - (a) to secure the health and safety of persons at work;
 - (b) to protect persons at work against risks to health or safety;
 - (c) to assist in securing safe and healthy work environments;
 - (d) to eliminate, at the source, risks to the health and safety of persons at work;
 - (e) to provide for the involvement of employees and contract operators in the formulation and implementation of health and safety standards.
3. For the purpose of this Regulation:
 - (a) “employee” includes a service contractor engaged by a contract operator and employees of the service contractor; and
 - (b) the duties and liabilities of a contract operator hereunder extend to such a service contractor and its employees, in relation to matters over which the contract operator:
 - (i) has control; or
 - (ii) would have had control but for any agreement between the contract operator and the service contractor to the contrary.

Clause 902

Obligations

1. A contract operator shall provide and maintain so far as is practicable:
 - (a) monitor the health of its employees;
 - (b) keep information and records relating to the health and safety of its employees.
 - (c) employ or engage persons who being suitably qualified in relation to occupational health and safety are able to provide advice to the contract operator in relation to the health and safety of its employees.
 - (d) monitor conditions at any structure under its control and operation; and
 - (e) provide information to its employees, in such languages as are appropriate, with respect to health and safety at the work place, including the names of persons to whom an employee may make an inquiry or complaint in relation to health and safety.

2. A contract operator shall ensure so far as is practicable that persons (other than its employees) are not exposed to risks to their health or safety arising from the conduct of the undertaking of the contract operator.
3. A superintendent of a workplace/structure shall take such measures as are practicable to ensure that the workplace/structure and the means of access to and egress from the workplace/ structure are safe and without risks to health.
4. An employee while at work shall take the care of which the employee is capable for the employees own health and safety and for the health and safety of any other person who may be affected by the employee's acts or omissions at the workplace/structure.
5. An employee shall not:
 - (a) wilfully or recklessly interfere with or misuse anything provided in the interests of health or safety in pursuance of any provision hereunder; or
 - (b) wilfully place at risk the health or safety of any person at the structure.
6. A supplier of any plant or substance that the supplier ought reasonably to expect will be used by employees at work must take all reasonably practical steps:
 - (a) to ensure that the plant or substance is manufactured and in such condition as to be safe for employees and without risk to their health; and
 - (b) to carry out, or caused to be carried out, the research, testing and examination necessary in order to discover, and to eliminate or minimise any risk to the health and safety of employees, that may arise from the use of the plant or substance; and
 - (c) to make available to the employer adequate information concerning
 - (i) its use
 - (ii) its design and construction details, or composition, and
 - (iii) any conditions necessary to ensure its use will be safe for employees and without risk to their health.

Clause 903
Health and Safety Issues

1. If any issue concerning health and safety arises at a workplace/structure;
 - (a) the contract operator or its representative; and
 - (b) the health and safety representative for the designated work group in relation to which the issue has arisen or if there is no such representative, the employees in that group;shall attempt to resolve the issue in accordance with the relevant prescribed procedure issued by the contract operator after having been approved by the Managing Director.
2. Where the issue concerns work which involves a threat to the health and safety of any person and;
 - (a) the threat is immediate; and
 - (b) given the nature of the threat and degree of risk, it is not appropriate to adopt the processes set out in paragraph 1 herein above;

the contract operator and the health and safety representative for the designated work group in relation to which the issue has arisen may after consultation jointly direct or, if the consultation does not lead to agreement between them, either of them may direct that the work shall cease.

3. During any period during which any work was ceased pursuant to paragraph 2 herein above, the contract operator may assign the employee or employees to suitable alternative work.
4. If the issue is not resolved within a reasonable time or if there has been a direction that work shall cease, any one of the parties to the attempt at resolution may require an inspector to attend at the structure.
5. The inspector shall attend as soon as possible and may take such action under this Regulation as the inspector considers necessary.
6. If the inspector:
 - (a) issues a prohibition notice; or
 - (b) otherwise determines that there was reasonable cause for employees to be concerned for their health and safety;

any employee who, as a result of the issue arising at the workplace/structure, does no work for any period pending the resolution of the issue shall be entitled to be paid for that period.

7. Any dispute in respect of an entitlement under paragraph 6 may be referred to the Managing Director for final resolution of the matter.

Division 2 - REPRESENTATIVE AND COMMITTEES

Clause 904 Designated Work Groups

1. A contract operator shall be obligated, in respect of a workplace/structure to determine the groups of employees which shall be the designated work groups at the workplace/structure.
2. If so requested by employees, a contract operator shall, in consultation with their relevant employee associations, in respect of a workplace/structure determine the groups of employees which shall be the designated work groups at the workplace/structure.
3. If the employees at a workplace/structure are not in agreement with the designated work groups determined under paragraph 1 or 2, any employee at a workplace/structure may at any time require an inspector to attend at the workplace/structure and to determine the groups of employees which shall be the designated work groups at the workplace/structure.
4. Contract operator disagrees with the inspector's determination under paragraph 3, the contract operator may apply to the Designated Authority for the appointment of a committee to determine the designated work groups.
5. A committee for the purposes of paragraph 4 shall consist of three persons of whom one, the appointee of the Designated Authority, shall be appointed to be chairperson, one shall be appointed to represent the contract operator and one shall be appointed to represent the employees.
6. In determining the designated work groups, the contract operator, the inspector or the committee (as the case requires) shall have regard to:

- (a) the number of employees at the workplace/structure;
 - (b) the nature of each type of work performed at the workplace/structure;
 - (c) the number and grouping of employees who perform the same or similar types of work;
 - (d) the areas at the workplace/structure where each type of work is performed;
 - (e) the nature of any hazard at the workplace/structure; and
 - (f) any overtime or shift working arrangements at the workplace/structure.
7. All the employees at the workplace/structure may be determined to be one designated work group.
 8. At any time the designated work groups at a workplace/structure may be varied through the appropriate procedure under this clause.
 9. The designated work groups at a workplace/structure shall be listed in a Schedule of Designated Work Groups, which shall be displayed in a prominent place at the workplace/structure.
 10. If at a workplace/structure no action has been taken under paragraph 1 or 4 by the contract operator, final determination of the work groups shall be made by the Managing Director.

Clause 905 Election

1. At an election of health and safety representatives:
 - (a) any employee in the designated work group may be a candidate; and
 - (b) all employees in the group shall be entitled to vote.
2. In a designated work group, an inspector shall upon request of an employee in the group conduct an election for a health and safety representative and at such an election:
 - (a) any employee in the group may be a candidate upon the nomination of any other employee in the group; and
 - (b) all employees in the group shall be entitled to vote.
3. If at any election there is only one candidate:
 - (a) it shall not be necessary to conduct a ballot; and
 - (b) that candidate shall be the health and safety representative for the designated work group.
4. There shall be only one health and safety representative for each designated work group.
5. A person shall cease to be a health and safety representative upon:
 - (a) ceasing to be an employee in the designated work group;
 - (b) resigning as a health and safety representative;
 - (c) upon the designated work group in respect of which the person was elected being varied under Clause 904;
 - (d) failing to re-elected;
 - (e) after having served a term of office of 24 months as a health and safety representative; or
 - (f) being disqualified under Clause 911.

6. A health and safety representative shall perform a function or duty under this regulation only in respect of the designated work group in respect of which the health and safety representative is elected.
7. An employer shall cause an elected health and safety representative to undertake a suitable course approved by the Managing Director on the subject of occupational health and safety at the cost of the employer.

Clause 906 Functions

1. A health and safety representative may for the purpose of health and safety at a workplace/structure:
 - (a) inspect the whole or any part of the workplace/structure:
 - (i) at any time after giving reasonable notice to the contract operator; and
 - (ii) immediately in the event of any accident, hazardous situation, dangerous occurrence or immediate risk to the health and safety of any person;
 - (b) accompany any inspector during an inspection of the workplace/structure;
 - (c) require the establishment of a health and safety committee in accordance with Clause 912; and
 - (d) with the consent of the employee, be present at any interview between an employee and an inspector concerning health and safety.
2. A contract operator shall:
 - (a) subject to paragraph 3 permit a health and safety representative to have access to such information as the contract operator possesses relating to:
 - (i) actual or potential hazards arising at any workplace/structure under the control and management of the contract operator or the plant or substances used for the purposes of that undertaking; and
 - (ii) the health and safety of the employees of the contract operator;
 - (b) subject to paragraph 5, permit a health and safety representative to be present at any interview concerning occupational health and safety between the contract operator or a representative of the contract operator and an employee;
 - (c) consult health and safety representatives on all proposed changes to the workplace/structure, the plant or substances used in that undertaking or the conduct of that undertaking being changes that may affect health and safety at the workplace/structure;
 - (d) permit health and safety representatives to take such time off work with pay as is necessary or prescribed for the purposes of performing their functions or duties or taking part in any course of training relating to occupational health and safety which is approved by the Managing Director; and
 - (e) provide such other facilities and assistance to health and safety representatives as are necessary or prescribed to enable them to perform their functions and duties.
3. An employer shall not pursuant to paragraph 2(a)(ii) supply to a health and safety representative any medical information in respect of an employee unless:

- (a) the employee has consented to the supply of the information to the health and safety representative; or
 - (b) the information is in a form which does not identify the employee.
4. A contract operator shall not prevent or obstruct the attendance of a health and safety representative at a course of training of the type referred to in paragraph 2(d).
5. A health and safety representative shall not be present at any interview of a kind referred to in paragraph 2(b) without the consent of the employee.
6. No provision of this Regulation shall be construed as imposing any duty upon a health and safety representative in the capacity of health and safety representative.

Clause 907 **Assistants**

1. A health and safety representative may for the purposes of performing a function or duty under this Regulation seek whenever necessary the assistance of any person.
2. A contract operator shall allow a person assisting a health and safety representative access to the workplace/structure unless the contract operator considers that the person by reason of a lack of knowledge of occupational health and safety is not a suitable person to assist a health and safety representative.
3. Where a contract operator does not allow a person assisting a health and safety representative access to the workplace/structure, the health and safety representative may apply to the Managing Director for an order directing the contract operator to allow that access and specifying the terms and conditions of that access.
4. An application under paragraph 3 shall be referred to the Managing Director who shall determine the matter as soon as practical.

Clause 908 **Provisional Improvement Notices**

1. Where a health and safety representative is of the opinion that any person:
 - (a) is contravening any provision of this Regulation, or
 - (b) has contravened such a provision in circumstances that make it likely that the contravention will continue or be repeated;

the health and safety representative may issue to the person a provisional improvement notice requiring the person to remedy the contravention or likely contravention or the matters or activities occasioning the contravention or the likely contravention.

2. A provisional improvement notice shall:
 - (a) state that the health and safety representative is of the opinion that the person:
 - (i) is contravening a provision of this Regulation; or
 - (ii) has contravened such a provision in circumstances that make it likely that the contravention will continue or be repeated;

- (b) state the reasons for that opinion;
 - (c) specify the provision in this Regulation in respect of which that opinion is held; and
 - (d) specify the day (being a day more than seven days after the day on which the notice is issued) before which the person is required to remedy the contravention or likely contravention or the matters or activities occasioning the contravention or likely contravention.
3. A person:
- (a) to whom a provisional improvement notice is issued in relation to which an inspector has not been required under Clause 910 to attend at the workplace/structure; and
 - (b) who does not comply with the provisional improvement notice;
- shall be guilty of an offence against this Regulation.

Clause 909 Directions

1. A health and safety representative may include in a provisional improvement notice directions as to the measures to be taken to remedy the contravention, likely contravention, matters or activities to which the notice relates.
2. Any direction under paragraph 1 may:
 - (a) refer to any approved code of practice, and
 - (b) offer the person to whom it is issued a choice of ways in which to remedy the contravention, likely contravention, matters or activities.

Clause 910 Inspector attendance at workplace

1. A person to whom a provisional improvement notice is issued or, where that person is an employee, that person's employer may within seven days after the notice is issued require an inspector to attend at the workplace/structure.
2. After receiving a requirement to attend at a workplace/structure, an inspector shall so attend as soon as possible but before the day specified in the notice as being the day before which the notice shall be complied with.
3. An inspector shall inquire into the circumstances relating to the notice and may:
 - (a) affirm the notice;
 - (b) affirm the notice with such modifications as the inspector thinks fit; or
 - (c) cancel the notice.
4. Where an inspector has affirmed a notice with or without modifications, the notice as so affirmed shall be deemed to be a notice issued by the inspector under Clause 918.

Clause 911 Disqualification

1. A contract operator may apply to the Managing Director to have a health and safety representative disqualified on any one or more of the following grounds:
 - (a) That the health and safety representative has performed any function or duty under this Division 2 with the intention only of causing harm to the contract operator or its undertaking.
 - (b) That the health and safety representative has issued a provisional improvement notice to the contract operator or an employee of it in circumstances where the representative intended to cause harm to the contract operator or its undertaking;
 - (c) That the health and safety representative has used any information, acquired from the contract operator by the representative, for a purpose which is not connected with the performance of any function or duty under this Division 2 and the health and safety representative intended to cause harm to the contract operator or its undertaking.
2. Where the Managing Director is satisfied that a health and safety representative has acted in the manner referred to in paragraph 1(a),(b) or (c) it may disqualify the health and safety representative for a specific period or permanently.
3. For the purpose of determining what (if any) action it should take under paragraph 2, the Managing Director shall take into account:
 - (a) what (if any) harm was caused to the contract operator or its undertaking by or as a result of the action of the health and safety representative;
 - (b) the past record of the health and safety representative in performing any functions and duties under this Division 2; and
 - (c) whether the action of the health and safety representative was contrary to the public interest;and may take into account any other matters it considers relevant.

Clause 912 Committees

1. Upon being requested to do so by a health and safety representative, a contract operator shall within three months after the date of the request establish a health and safety committee in accordance with this Clause.
2. Where a contract operator has been requested by a health and safety representative to establish a health and safety committee, the contract operator shall consult with the health and safety representative as to the composition and functions of the committee.
3. At least half of the members for the time being of a health and safety committee shall be employees.
4. The functions of a health and safety committee are:
 - (a) to facilitate cooperation between a contract operator and the employees of the contract operator in instigating, developing and carrying out measures designed to ensure the health and safety at work of the employees; and
 - (b) to formulate, review and disseminate (in such languages as are appropriate) to the employees the standards, rules and procedures relating to health and safety which are to be carried out or complied with at the workplace/structure;

and include such other functions as are prescribed or agreed upon by the contract operator and the health and safety committee.

5. Subject to this section, health and safety committee, shall meet at intervals not exceeding four months.
6. Half of the members of a health and safety committee may require a meeting of the committee to be held at any time.
7. Subject to this Regulation a health and safety committee may regulate its own procedures.

Division 3 - INSPECTIONS

Clause 913 Appointment of Inspectors

1. The Designated Authority shall appoint such inspectors as are necessary for the purpose of this Regulation.
2. The Designated Authority shall furnish every inspector with a certificate of appointment which an inspector shall produce on demand to the occupier, employer or other person in charge of any workplace/structure which the inspector intends to enter or enters pursuant to this Regulation.

Clause 914 Powers of Inspectors

1. An inspector may for the purpose of the execution of this Regulation:
 - (a) enter, inspect and examine at all reasonable times by day or night any workplace/structure which the inspector considers it necessary to enter, inspect and examine for that purpose;
 - (b) enter any workplace/structure at any time when the inspector is under this Regulation requested or required to attend at the workplace/structure;
 - (c) take such equipment or materials as may be required;
 - (d) make such examination and inquiry as may be necessary to ascertain whether or not this Regulation has been complied with;
 - (e) examine any substance or other thing whatsoever at the workplace/structure;
 - (f) take or remove without payment such samples of any such substance or thing as may be required for analysis;
 - (g) take possession of any such substance or thing for further examination or testing or for use as evidence;
 - (h) take photographs or measurements or make sketches or recordings;
 - (i) require the production of, examine and take copies of any document or any part of any document;
 - (j) direct that the workplace/structure or any part of the workplace/structure be left undisturbed for as long as the inspector considers necessary; and
 - (k) exercise such other power as may be necessary or as are conferred upon the inspector by this Regulation.
2. An inspector may for the purposes of paragraph 1 seek whenever necessary the assistance of any person, and the occupier of, or employer at a workplace/structure shall permit any such person access to the workplace/ structure.

Clause 915 Further Provisions

1. Upon entering any workplace/structure an inspector shall take all reasonable steps to notify the employer and any health and safety representative of the entry.

2. Upon concluding an inspection an inspector shall give to the employer and any health and safety representative or, if there is no such representative, the health and safety committee, information with respect to the inspector's observations and any inspection the inspector proposes to take in relation to the workplace/ structure.
3. Where an inspector proposes to take and remove a sample from any workplace/structure for the purposes of analysis the inspector shall so notify the employer and any health and safety representative or, if there is no such representative, the health and safety committee and after having taken the sample the inspector shall:
 - (a) divide the sample taken into as many parts as are necessary and mark and seal or mark and fasten up each part in such a manner as its nature will permit;
 - (b) if required by the employer, representative or committee;
 - (c) retain one part for future comparison;and if it is determined that an analysis of the sample is to be made, the inspector shall submit another part to an analyst for analysis.
4. Where under Clause 914-1(g) an inspector takes possession of any substance or thing, the occupier of, or employer at the workplace/structure may appeal against that seizure by notice in writing given to the inspector.
5. The Managing Director shall determine an appeal under paragraph 4 and may:
 - (a) affirm the seizure; or
 - (b) order that the substance or thing be returned to the occupier or employer (as the case requires) and give directions for that return.
6. Where under Clause 914-1(h) an inspector takes photographs or makes sketches or recordings the inspector shall forthwith notify the employer and any health and safety representative of that fact and the address of a place where the photographs, sketches or recordings are or will be available for inspection.
7. Where an inspector uses the assistance of an interpreter, any injury or requisition to any person made on behalf of such an inspector by the interpreter shall for all purposes be deemed to have been actually made by the inspector, and any answer thereto made to the interpreter shall be deemed to have been actually made to the inspector.
8. Where an inspector has conducted an investigation under this Regulation, the inspector must, as soon as is reasonably practicable, prepare a written report relating to the investigation and give the report to the Managing Director.

Clause 916 **Employers to assist**

The owner or occupier of, or employer at any workplace/structure and the agents and employees of the owner, occupier or employer shall provide such assistance as an inspector may require for any entry, inspection, examination or inquiry or for the exercise of the powers of the inspector under this Regulation.

Clause 917 Offences

1. Any person who:
 - (a) refuses access to a workplace/structure to an inspector or person assisting an inspector;
 - (b) obstructs an inspector in the exercise of the powers of the inspector under this Regulation or induces or attempts to induce any other person to do so;
 - (c) fails to produce any document required under this Regulation by an inspector;
 - (d) conceals the location or existence of any other person or any substance from any inspector;
 - (e) prevents or attempts to prevent any other person from assisting an inspector; or
 - (f) in any other way hinders, impedes or opposes an inspector in the exercise of the powers of the inspector under this Regulation;shall be guilty of an offence.
2. The occupier of and employer at any workplace/structure at which an offence under paragraph 1 occurs shall be guilty of the same offence unless the occupier or employer proves that the act or omission constituting the offence took place without the knowledge of the occupier or employer and that the occupier or employer did not know and could not reasonably have known thereof.
3. Any person who assaults or directly or indirectly intimidates or threatens or attempts to intimidate or threaten an inspector or a person assisting an inspector shall be guilty of an offence.
4. Any person who is guilty of an offence against this Clause shall be liable to prohibition of subsequent entry into the JPDA by the Designated Authority. Where that person is a contract operator the offence represents wilful misconduct on the part of the contract operator.

Clause 918 Improvement Notice

1. Where an inspector is of the opinion that any person:
 - (a) is contravening any provision of this Regulation; or
 - (b) has contravened such a provision in circumstances that make it likely that the contravention will continue or be repeated;the inspector may issue to the person an improvement notice requiring the person to remedy the contravention or likely contravention or the matters or activities occasioning the contravention or likely contravention.
2. An improvement notice shall:
 - (a) state that the inspector is of the opinion that the person:
 - (i) is contravening a provision of this Regulation, or
 - (ii) has contravened such a provision in circumstances that make it likely that the contravention will continue or be repeated;
 - (b) state the reasons for that opinion;
 - (c) specify the provision in this Regulation in respect of which that opinion is held; and

- (d) specify the day (being a day more than seven days after the day on which the notice is issued) before which a person is required to remedy the contravention, or likely contravention or the matters or activities occasioning the contravention or likely contravention.
3. A person:
- (a) to whom an improvement notice is issued in relation to which an appeal has not been made under Clause 921, and
 - (b) who does not comply with the improvement notice;
- shall be guilty of an offence against this Regulation.

Clause 919 Prohibition Notice

1. Where an inspector is of the opinion that at any workplace/structure there is occurring or may occur any activity which involves or will involve immediate risk to the health and safety of any person, the inspector may issue to the person who has or may be reasonably presumed to have control over the activity a prohibition notice prohibiting the carrying on the activity until an inspector certifies in writing that the matters which give or will give rise to the risk are remedied.
2. A prohibition notice shall:
- (a) state that the inspector is of the opinion that in the workplace/structure there is occurring or may occur an activity which involves or will involve an immediate risk to the health and safety of any person;
 - (b) state the reasons for that opinion;
 - (c) specify the activity which in the inspector's opinion involves or will involve the risk and the matters which give or will give rise to the risk; and
 - (d) where in the inspector's opinion the activity involves a contravention or likely contravention of any provision of this Regulation, specify that provision and state the reasons for that opinion.
3. A person:
- (a) to whom a prohibition notice is issued in relation to which an appeal has not been made under Clause 921; and
 - (b) who does not comply with the prohibition notice;
- shall be guilty of an offence against this Regulation and shall be liable to prohibition of subsequent entry into the JPDA by the Designated Authority. Where that person is a contract operator, the offence represents wilful misconduct on the part of the contract operator.
4. Where an appeal has been made under Clause 921, an inspector shall not give a certificate under paragraph 1 until after the appeal is withdrawn or decided.

Clause 920 Directions

1. An inspector may include in an improvement notice or a prohibition notice directions as to the measures to be taken to remedy any contravention, likely contravention, risk, matters or activities to which the notice relates.

2. Any direction under paragraph 1 may:
 - (a) refer to any approved code of practice; and
 - (b) offer the person to whom it is issued a choice of ways in which to remedy the contravention, likely contravention, risk, matter or activities.

Clause 921
Appeals against Notices

1. A person to whom an improvement notice or a prohibition notice is issued or, where that person is an employee, that person's employer may within seven days after the notice is issued appeal in writing against the notice to the Managing Director.
2. The Managing Director shall inquire into the circumstances relating to the notice and may:
 - (a) affirm the notice;
 - (b) affirm the notice with such modifications as it thinks fit, or;
 - (c) cancel the notice.
3. Pending the decision under paragraph 2 of the Managing Director, the operation of the notice shall:
 - (a) in the case of an improvement notice, be suspended; and
 - (b) in the case of a prohibition notice, continue, subject to any decision to the contrary made by an inspector assigned for that purpose by the Managing Director.
4. Where:
 - (a) the Managing Director affirms an improvement notice or a prohibition notice or affirms such a notice with modifications; and
 - (b) the person to whom the improvement notice or prohibition notice was issued does not comply with the notice as so affirmed;

that person shall be guilty of an offence against this Regulation and shall be liable to entry prohibition applying in the case of an offence against Clause 918 or 919.

Division 4 - CONSEQUENCES

Clause 922

General

1. Any person who contravenes or fails to comply with any provision of this Regulation shall be guilty of an offence against this Regulation.
2. Any person who is guilty of an offence against this Regulation shall be liable to consequences as provided under Clause 919(3).

Clause 923

Offences by Bodies

1. Where an offence against this Regulation committed by a body corporate is proved to have been committed with the consent or connivance of, or to have been attributable to any wilful neglect on the part of, an officer of the body corporate or person purporting to act as such an officer, that person or officer is also guilty of that offence and liable to the consequence for that offence.
2. When under this Regulation it is necessary to establish the intention of a body corporate is sufficient to show that a servant or agent of the body corporate had that intention.
3. In paragraph 1, “officer” in relation to a body corporate means:
 - (a) a Managing Director, secretary or executive officer of the body corporate;
 - (b) any person in accordance with whose directions or instructions the Managing Directors of the body corporate are accustomed to act; or
 - (c) a person concerned in the management of the body corporate.

Clause 924

Discrimination Against Employees

1. An employer shall not dismiss an employee or injure an employee in the employment of the employer or alter the position of an employee to the detriment of the employee by reason only that the employee:
 - (a) is or has been a health and safety representative or member of a health and safety committee;
 - (b) performs or has performed any function or duty as such a representative or member;
 - (c) assists or has assisted or gives or has given any information to an inspector, health and safety representative or health and safety committee; or
 - (d) makes or has made a complaint in relation to health and safety to the employer, a fellow employee, inspector, and health and safety representative or health and safety committee.
2. An employer or prospective employer shall not refuse or deliberately omit to offer employment to a prospective employee or treat a prospective employee less favourably than another prospective employee would be treated in relation to the terms on which employment is offered by reason only that the first-mentioned prospective employee:
 - (a) has been a health and safety representative or member of a health and safety committee;
 - (b) has performed any function or duty as such a representative or member;

- (c) has assisted or given information to an inspector, health and safety committee; or
 - (d) has made a complaint in relation to health and safety to a former employer, former fellow employee, inspector, health and safety representative or health and safety committee.
3. Any person who is guilty of an offence against this Regulation shall be liable to consequences as provided under Clause 919(3).
 4. Where a person is found guilty of an offence against this Clause, the Managing Director may in addition make one or both of the following orders:
 - (a) It may order the offender to pay within a specified period to the person against whom the offender discriminated such damages as it thinks fit to compensate that person;
 - (b) It may order that the employee be reinstated or re-employed in the employee's former position or, where that position is not available, in a similar position or that the prospective employee be employed in the position for which the prospective employee had applied or a similar position.

Division 5 - CODES OF PRACTICE

Clause 925 General

1. For the purpose of providing practical guidance to employers, self-employed persons and employees, the Managing Director may approve and adopt any suitable codes of practice.
2. A code of practice may consist of any code, standard, rule, specification or provision relating to occupational health or safety formulated or adopted by the relevant agency of Timor-Leste or Australia and may apply, incorporate or refer to any code of practice adhered to by a contractor in its operations elsewhere.
3. The Managing Director may introduce any revision of the whole or any part of a code of practice or revoke the approval of a code of practice.
4. During the time the Managing Director has not yet introduced a code of practice, a contractor is obligated to lodge with the Designated Authority prior to commencement of development operations, a comprehensive code of practice adhered to by the contractor in its operations elsewhere. Such comprehensive code of practice shall prevail until the time a decision on a code of practice has been made by the Managing Director.
5. The Managing Director shall notify contract operators of its:
 - (a) approval of a code of practice;
 - (b) approval of a revision of the whole or any part of a code of practice; and
 - (c) revocation of approval of a code of practice
6. A contract operator shall cause a copy:
 - (a) of every approved code of practice;
 - (b) where an approved code of practice has been revised and that revision has been approved, of every approved code of practice as so revised; and

- (c) where an approved code of practice applies, incorporates or refers to any other document, of every such document to be made available for inspection by their employees at the workplace/structures under its or its employees' management.
7. An approved code of practice shall come into effect:
- (a) on the day on which notice of approval of the code of practice is given; and
 - (b) where the code of practice has been revised in whole or in part, to the extent of that revision on the day on which notice of approval of that revision is given or, on such later day as may be specified in the notice.
8. An approved code of practice shall cease to be of effect at end of the day on which notice of the revocation of approval of the code of practice is given, or on such later day as may be specified in such notice.

Clause 926
Use of Codes of Practice in Proceedings

Where it is alleged that a person contravened or failed to comply with a provision of this Regulation in relation to which an approved code of practice was in effect at the time of the alleged contravention or failure:

- (a) the approved code of practice shall be admissible in evidence of the allegation; and
- (b) if the Managing Director is satisfied in relation to any matter which is necessary to prove in order to establish the alleged contravention or failure that:
 - (i) any provision of the approved code of practice is relevant to that matter; and
 - (ii) the person failed at any material time to observe the provision of the approved code of practice;

that matter shall be taken as proved unless the Managing Director is satisfied that in respect of that matter the person complied with that provision of this Regulation other wise than by way of observance of that provision of the approved code of practice.

PART X - COMBATING INCIDENTAL POLLUTION

Division 1 - GENERAL REQUIREMENTS

Clause 1001

Objects

1. Incidental pollution is to be controlled by:
 - (a) a contingency plan which provides effective and timely prescribed measures to be undertaken by a contract operator for controlling, containment and clean-up of incidental pollution of the environment by uncontrolled discharge of fluids from petroleum operations;
 - (b) clearly defined assignment of tasks and responsibilities to employees of a contract operator and a purposeful deployment system of equipment and materials, both to be well-comprehended by them, for the purpose of achieving well-coordinated course of actions in combating pollution caused by incidental spillage of fluids from petroleum operations hazardous to the living environment, including the effective containment and clean-up thereof.
2. For the purpose of this Regulation:
 - (a) “employee” includes a service contractor engaged by a contract operator employees of the service contractor; and
 - (b) the duties and liabilities of a contract operator hereunder extend to such a service contractor and its employees, in relation to matters over which the contract operator:
 - (i) has control; or
 - (ii) would have had control but for any agreement between the contract operator and the service contractor to the contrary.
 - (c) “pollution” shall mean any spillage of petroleum or other substances from a petroleum operation hazardous to the living environment.

Clause 1002

Obligations

1. In the event of incidental pollution of the environment by fluids from a petroleum operation, the contract operator in control of the operation shall:
 - (a) be liable for damage of resources and indemnification arising therefrom, in accordance with the production sharing contract provisions, and be subject to the law of the contracting state in which an indemnification for such damage is filed;
 - (b) take out appropriate insurance to cover expenses or liabilities provided under paragraph 1(a) of this clause;
 - (c) take prompt actions in deploying its resources to combat pollution, i.e. to regain control of the source causing pollution; to contain and clean-up the environment of spilt pollutants in an effective manner; and mobilize third party resources as and when needed.
2. A contract operator shall prepare and adopt a comprehensive contingency plan for combating incidental pollution from its petroleum operation which shall be subject to the approval and satisfaction of the Managing Director.

3. A contract operator shall:
 - (a) have in its employ persons who are knowledgeable and qualified in the field of combating incidental pollution from its petroleum operation;
 - (b) pre-position materials and equipment for combating pollution at strategic locations and program the use thereof to help assure effective and expeditious pollution containment and clean-up;
 - (c) make advance arrangements with suitable third party persons and/or shore-based agencies for their resources to take part in the contract operator's contingency plan where a growing incidence of pollution may be requiring assistance/mobilization of such third parties' resources;
 - (d) cooperate when requested to participate in a cooperative plan arranged for combating incidental pollution of regional extent.

Division 2 - THE APPROACH

Clause 1003

Classification of Incidental Pollution.

1. A contract operator shall forward to the Managing Director a comprehensive engineering report providing its analysis of the potential circumstances and the types of incidents arising out of its petroleum operations which may harm the living environment by uncontrolled spillage of pollutants, also describing the potential magnitude and the extent that such pollution could take in terms of quantities, intensities and areal extent.
2. Based on the analysis of paragraph 1 of this clause, the contract operator shall classify the potential for pollutants to spread, into several sequential classes of magnitude (at least 3 classes), and submit to the Managing Director for approval a comprehensive description of effective and workable operational responses required to combat each of such class of pollution, including the resources (i.e. men, materials/equipment and costs estimate) in sufficient detail that would be needed to be mobilized therefore.
3. The obligations under this clause have to be fulfilled by a contract operator to the satisfaction of the Managing Director prior to the time when drilling activities in a contract area may commence. The Managing Director may introduce any modification to an approved classification at a later date.
4. A contract operator shall annually review and update its report forwarded to the Managing Director as obligated under paragraph 1 of this clause, especially immediately prior to the time that petroleum production development activities are to commence.

Clause 1004

Reporting

1. Any incidental pollution occurring in a contract area shall be reported within 48 hours, after being detected by the contract operator to the Managing Director, Managing Director and the Federal Sea Safety and Surveillance in Canberra. The report will include a description of the pollutants including their estimated volume and distribution, their magnitude in terms of paragraph 2 of Clause 1003; the actions contemplated for combating it; and the cause of such pollution.

2. Subsequent actions taken to contain and clean-up pollution and to regain control on its cause, shall also be reported as provided in paragraph 1 of this clause, in time intervals of no longer than 10 days.
3. Failure to duly report as provided hereunder shall constitute a wilful misconduct.

Clause 1005 Organization

1. To combat incidental pollution, a contract operator shall forward to the Managing Director a formulation of its organization for combating each classification of pollution, i.e. to regain control on the source of pollution, its containment and clean-up; which should clearly define the following:
 - (a) The taskforce assigned and its specific responsibilities, its command-control system, the employees nominated, their respective functions, responsibilities, reporting-lines, and locations;
 - (b) The communications system within and into the task-force;
 - (c) The reporting system within the task-force and to the management of the contract operator;
 - (d) The deployment system of pre-positioned materials and equipment (including crew) for combating pollution, the reasons for having chosen the respective specifications and quantities of such materials and equipment, their specific locations, and the response time in using such materials and equipment.
 - (e) Arrangements for assistance from and cooperation with other operators, third-party persons and shore-based agencies for mobilizing resources for the contingency that pollution spreads out regionally.
2. Subject to approval of the Managing Director, a contract operator will have appropriately pre-positioned on each of its structures, for safety protection of its personnel when there is an uncontrolled spillage of well-fluids, sufficient safety devices and equipment such as emergency fluid-flow shut-off devices, personnel survival/escape equipment, fire-fighting equipment; and arrange for a personnel evacuation system to take out casualties from the JPDA for immediate medical help.
3. The organization established hereunder, shall be:
 - (a) subject to the approval of the Managing Director;
 - (b) reviewed and updated at least annually.
4. A contract operator shall appoint a claims officer and adopt a claims procedure for the investigation and handling of claims from any party claiming loss or injury as a result of pollution.

Clause 1006 Contingency Plan

1. A contract operator is obligated to lodge with the Managing Director a contingency plan to combat pollution from its petroleum operation, which is an action plan clearly elaborating coordinated courses of action to be taken by the task-force for each classification of pollution to regain control on the source of pollution, its containment and clean-up; arrangements for periodic surveillance of the extent of pollution when necessary, and also the reporting to be made as provided under this Regulation.

2. Upon request of the Managing Director, a contract operator shall provide comprehensive explanation of its contingency plan, and the Managing Director may introduce modifications thereto.
3. The employees of a contract operator comprising a task-force shall be fully familiarized with the contingency plan so as to achieve an effective and well coordinated task force when it goes into action.
4. A contingency plan shall also include actions to be taken by the task-force for mobilizing assistance from other contract operators and/or shore-based agencies having resources to combat pollution, should this become necessary.
5. A contingency plan shall be adopted before the start of drilling operations, and shall be reviewed and updated at least once every year, especially by the time that petroleum production development activities are to commence.

Division 3 - VIGILANCE

Clause 1007 Practice drills

1. A contract operator responsible for petroleum production operations shall conduct from time to time practice drills for the containment and clean-up of a simulated pollution, but not less frequent than once a year.
2. A practice drill may be witnessed by an inspector if it is so requested.

Clause 1008 Maintenance and inspection

1. A contract operator shall conduct proper and regular maintenance of its equipment and replace outdated materials required for combating pollution.
2. Equipment and materials pre-positioned for combating pollution shall be inspected on a regular basis.
3. An inspection on a contract operator's preparedness to combat pollution shall be conducted by an inspector not less frequent than once a year.

Clause 1009 Training

Employees assigned to a task-force shall be adequately trained by the contract operator to achieve an effective and well-coordinated task-force.