



GOVERNMENT GAZETTE

OF THE

REPUBLIC OF NAMIBIA

N\$5.10

WINDHOEK - 23 September 1999

No. 2188

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Government Notice

MINISTRY OF MINES AND ENERGY

No. 190

1999

**PETROLEUM (EXPLORATION AND PRODUCTION) ACT, 1991:
REGULATIONS RELATING TO THE HEALTH, SAFETY AND WELFARE
OF PERSONS EMPLOYED, AND PROTECTION OF OTHER PERSONS,
PROPERTY, THE ENVIRONMENT AND NATURAL RESOURCES, IN,
AT OR IN THE VICINITY OF EXPLORATION AND PRODUCTION AREAS**

The Minister, in consultation with the Minister of Fisheries and Marine Resources and the Minister of Environment and Tourism, has, under section 76A of the Petroleum (Exploration and Production) Act, 1991 (Act No. 2 of 1991), made the regulations set out in the Schedule.

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PART I PRELIMINARY PROVISIONS

Definitions

1. In these regulations, any word to which a meaning has been assigned in the Petroleum (Exploration and Production) Act, 1991 (Act No.2 of 1991), shall have that meaning and, unless the context indicates otherwise -

“circuit” means an electrical circuit forming an electrical system or branch of an electrical system;

“competent person” means a person -

- (a) who is qualified by virtue of his or her knowledge of, and training, skills and experience in, any matter in respect of which he or she is required to be a competent person;
- (b) who is familiar with these regulations or any other law which applies to the work to be performed; and
- (c) who is trained to recognise any potential or actual danger to the health and safety in the performance of the work to be performed;

“conductor” means an electrical conductor arranged to be electrically connected to an electrical system;

“danger” means anything which may cause injury, illness, sickness or damage to persons, property, the environment or natural resources;

“earthed” means connected to the general mass of the earth in such manner as will ensure at all times an immediate discharge of electrical energy without danger;

“electrical apparatus” includes electric cables and any part of any machine, apparatus or appliance being a part designed for the generation, conversion, storage, transmission or utilisation of electricity;

“electrical system” means an electrical system in which all the conductors and apparatus are electrically connected to a common source of electromotive force;

“emergency preparedness plan” means a plan prepared by the operator under regulation 66(1);

“emergency situation” means an accident or dangerous occurrence arising out of petroleum activities which results in -

- (a) the death or a serious injury, illness or sickness of any person; decompression sickness;
- (b) significant pollution of the land, sea, seashore or any aquifer, estuary, harbour, lake, reservoir, river, spring, stream, borehole or other area of water by the spilling of petroleum, drilling fluid, chemical additive, any gas or any waste product or effluent;
- (c) significant damage to property, the environment or natural resources;
- (d) without prejudice to the generality of paragraphs (a), (b) and (c) -
 - (i) the ignition or explosion of gas;
 - (ii) the accidental ignition or detonation of explosives;
 - (iii) the outbreak of any fire;
 - (iv) the presence of any noxious or flammable gas;
 - (v) the inrush of water;
 - (vi) the extensive caving or subsidence of ground;
 - (vii) any unplanned ground movement or a premature collapse of any part of an installation; or
 - (viii) the bursting of a system containing any substance under pressure; or
- (e) such other accident or dangerous occurrence as may from time to time be determined by the Commissioner by notice in writing to the operator;

“environment” means the components of the earth, including-

- (a) land, water and air;
- (b) all organic and inorganic matter and living organisms as well as biological diversity;
- (c) the interacting natural systems that include components referred to in paragraphs (a) and (b); and
- (d) the human environment, insofar as it represents archaeological, aesthetic, cultural, historic, economic, palaeontological or social values;

“flexible cable” means a cable having flexible insulated conductors and earthing conductors within a protective sheath, but does not include signalling cable, telephone cable or flexible electric cord used with electrical apparatus at a voltage not exceeding 250 volts AC on a single-phase electrical system;

“guidelines” means any guidelines or directions issued under regulation 92;

“hazard” means a source of or exposure to danger, and “hazardous” shall have a corresponding meaning;

“hazardous substance” means any substance or mixture of substances which, in the course of customary or reasonable handling or use, including ingestion, might, by reason of its toxic, corrosive, irritant, strongly sensitising or flammable nature or because it generates pressure through decomposition, heat or other means, cause injury, illness or death to human beings, animals or plants or imperil an installation, aircraft, vehicle, ship, vessel, boat, train, aircraft or other transport facility;

“installation”, in relation to an operator, means any movable or immovable structure, including a vessel, standing or stationed within Namibia on land or in, under or on any waters of the territorial sea, exclusive economic zone, or continental shelf, constructed for and used in connection with petroleum activities carried out by the operator, and includes, except in relation to these regulations in so far as they relate to safety zones, any pipeline;

“insulated” means covered with insulating material of such thickness and properties as will prevent the flow of electrical energy between the object so covered and its surroundings or any external object in contact with it;

“isolated” means disconnected from the normal source of energy;

“Labour Act” means the Labour Act, 1992 (Act No. 6 of 1992);

“licensee company” means the holder of a reconnaissance licence, an exploration licence or a production licence, including any person to whom any interest in any such licence has been granted, ceded or assigned as contemplated in section 9(1)(b) of the Petroleum Act;

“live” means electrically energised;

“living quarters” means any dining-room, sleeping quarters, kitchen, recreation room, sick-bay, laundry, linen-room and any store-room or office which forms an integral part of, and is used in connection with, any structure used to accommodate persons employed by operators or employed in respect of petroleum activities and includes any corridor giving access to any of these rooms;

“locked out” means the isolation of machinery or electrical apparatus by means of a device which can be physically locked so as to prevent the unintentional movement or energising of the equipment;

“machinery”, in relation to an operator, means -

- (a) any article or combination of articles assembled, arranged or connected and which is used or intended to be used in connection with petroleum activities carried out by the operator -
 - (i) for converting any form of energy into performing work; or
 - (ii) whether incidental to the conversion of any form of energy into performing work or not, for developing, receiving, storing, containing, transforming, transmitting, transferring or controlling any form of energy; or

- (b) any appliance or combination of appliances used or intended to be used in connection with petroleum activities carried out by the operator and which is declared by the Minister by notice in the *Gazette* to be machinery for the purposes of these regulations;

“Merchant Shipping Act” means the Merchant Shipping Act, 1951 (Act No. 57 of 1951);

“offshore installation” means an installation fixed or supported on the sea-bed or a vessel used at sea in connection with the exploration and exploitation of hydrocarbons resources and on which persons are normally present;

“onshore installation” means an installation situated on land;

“operator” means a licensee company carrying out petroleum activities, and includes a licensee company of a group of companies carrying out such activities;

“organisation of the operator” means all -

- (a) persons employed by the operator;
- (b) persons, whether as contractors or subcontractors, performing work for the operator; and
- (c) persons employed by the persons referred to in paragraph (b), engaged in petroleum activities under the licence concerned;

“pipeline” means a tube system, usually made of steel pipe that is welded together and includes any pipeline between a fixed point onshore and an offshore installation, and a pipeline between an installation and another installation which is intended to be used to convey petroleum and which forms an integral part of the installation;

“Petroleum Act” means the Petroleum (Exploration and Production) Act, 1991 (Act No. 2 of 1991);

“petroleum activities” means any reconnaissance, exploration or production operations;

“reasonably practicable”, in relation to a hazard or risk, means practicable having regard to -

- (a) the severity and scope of the hazard concerned;
- (b) the state of knowledge reasonably available concerning that hazard or risk and of any means of removing or mitigating that hazard or risk;
- (c) the availability and suitability of means to remove or mitigate that hazard or risk; and
- (d) the cost of removing or mitigating that hazard or risk in relation to the benefits deriving from it;

“risk” means the probability that injury, illness, sickness or damage will occur;

“safe” means free from any hazard, and “safely” and “safety” shall have corresponding meanings;

“safety zone” means any safety zone established under regulation 81 and includes any extension of such safety zone effected under regulation 82(1);

“serious injury” means -

- (a) the injury of any person -

- (i) which is likely to be fatal;
 - (ii) in consequence of which such person loses a limb or part of a limb or suffers a permanent disability; or
 - (iii) which incapacitates such person for a period not less than 14 days from performing the duties for which he or she was employed or is usually employed;
- (b) the unconsciousness or incapacitation of any person from heat-stroke, heat exhaustion, electric shock or inhalation of fumes or poisonous gas;

“subsea operations” means petroleum activities carried out under the sea;

“subsea pipeline” means a pipeline or associated apparatus or works used for the conveying of petroleum under the sea;

“substance” means any solid, liquid, vapour, gas or aerosol, or combination thereof;

“trailing cable” means any flexible cable used to supply power to any mobile machine and which is dragged across the ground;

“voltage” means the difference of electrical potential between any two conductors, or between a conductor and earth;

“warning signal” means -

- (a) by day, flag A as defined in the International Code of Signals; and
- (b) by night, the lights as defined in the International Regulations for Preventing Collision at Sea, 1993;

Application of regulations

2. These regulations shall apply in or at any area in Namibia, including the territorial sea, the exclusive economic zone and the continental shelf of Namibia, in or at which petroleum activities are carried out.

PART II GENERAL DUTIES AND RESPONSIBILITIES OF OPERATORS

Main responsibility for health, safety and welfare of persons employed or performing work, and for protection of other persons, property, the environment and natural resources, in, at or in respect of any area where petroleum activities are carried out.

3. (1) An operator shall, with due regard to good oilfield practices -
- (a) be responsible for the control, management and supervision, and the direction, of persons employed, whether or not employed by the operator, or performing work in, at or in respect of any area where petroleum activities are carried out;
 - (b) provide such funds and take any such measures as may be necessary so as to ensure -
 - (i) compliance by -
 - (A) any person employed by the operator;
 - (B) any person, whether as contractor or subcontractor, performing work in such area for the operator; and

- (C) any person employed by a person referred to in subparagraph (B),

with, or enforcement of, the obligations in respect of petroleum activities vested in the operator in terms of the requirements of these regulations or any other law;

- (ii) the health, safety and welfare of persons referred to in paragraph (a), and the protection of other persons, property, the environment and natural resources in, at or in the vicinity of such area from hazards arising from petroleum activities carried out in such area, including hazards arising from such activities during labour conflicts and abnormal operational conditions; and
- (iii) the carrying out of any environmental impact assessment studies provided for in the petroleum agreement entered into between the Minister and the operator in terms of section 13 of the Petroleum Act, and the compliance with the other terms and conditions of that agreement;
- (c) do such research and conduct such investigations as may be necessary for the exercise or performance of its powers, functions or duties conferred or imposed by or under any provision of these regulations; and
- (d) investigate or cause to be investigated any representation or complaint made or lodged in connection with any matter relating to the safety, health or welfare of any person or persons employed or performing work in connection with the petroleum activities under the relevant licence.
- (2) Subregulation (1) shall not be construed as limiting the liability which rests on any operator in terms of these regulations or any other law.
- (3) An operator may -
- (a) assign any duty imposed upon it in terms of these regulations to any person under its control to perform that duty subject to its control, supervision and directions; and
- (b) direct any person employed or performing work in connection with the petroleum activities under the relevant licence to perform any function in relation to a duty so imposed upon him or her,

but shall not be divested of any such duty.

(4) Subregulation (3) shall not be construed as detracting from an operator's responsibility of control, management and supervision, and the direction, of persons employed or performing work in connection with the petroleum activities concerned.

Health factors

4. An operator shall -
- (a) identify the hazards and evaluate the risks associated with any work performed in the course of the petroleum activities carried out under the licence concerned constituting a hazard to the health of persons employed for purposes of that work, and the steps that need to be taken to comply with the provisions of the Petroleum Act and these regulations; and
- (b) as far as is reasonably practicable, prevent the exposure of the persons referred to in paragraph (a) to the hazards concerned or, where prevention is not reasonably practicable, minimise such exposure.

Safety precautions

5. An operator -
- (a) shall take all such precautions as may be necessary to-
 - (i) ensure the safety of any person employed or otherwise present with his or her consent at or in the vicinity of any installation; and
 - (ii) to protect the environment and natural resources, including precautions to prevent pollution; and
 - (b) shall ensure that any such person is duly informed of such precautions.

Powers of Minister in relation to non-compliance with these regulations

6. If an operator contravenes or fails to comply with these regulations, the Minister shall -
- (a) in the case of a contravention of these regulations, direct that operator, by notice in writing, to take such steps within such period as may be specified in the notice as may be necessary to remedy the effects of the contravention; or
 - (b) in the case of a failure to comply with these regulations, direct that operator, by notice in writing, to comply with the regulations within such period and on such conditions, if any as may be specified in the notice.

General safety

7. A person shall not negligently or wilfully do anything likely to endanger life or limb on, in or at an installation, or negligently or wilfully omit to do anything necessary for the safety of persons engaged in petroleum activities.

**PART III
INTERNAL CONTROL SYSTEM**

Establishment of internal control system

8. An operator shall, with a view to complying with the obligations relating to petroleum activities, establish an internal control system to ensure that petroleum activities are carried out in a proper and safe manner.

General requirement relating to persons at work in connection with petroleum activities

9. A person shall not perform work in connection with petroleum activities unless he or she has received the necessary instruction and training so as to be able to perform the work safely and competently, or he or she performs such work under the supervision and guidance of a person who has received such instruction and training.

Duty to provide information

10. The operator shall ensure that-
- (a) copies of these regulations are readily available for perusal by persons employed by the operator or persons performing work within the organisation of the operator; and
 - (b) all persons referred to in paragraph (a) are as far as is reasonably practicable -

- (i) familiar with the provisions of these regulations, where relevant;
- (ii) aware of the hazards connected with any work to be performed; and
- (iii) conversant with the safety measures to be taken or observed to obviate such hazards.

Duty to assist State in in-service training

11. The operator shall, at the request of the Minister and on such terms and conditions as he and the Minister may determine by mutual agreement, undertake to assist the State in the in-service training of any person employed by the State or by the organisation of the employer for purposes of the administration of these regulations and on the development of technology in the field of the petroleum industry.

Duties of persons employed by operators or persons performing work within the organisation of operators

12. (1) A person employed or performing work within the organisation of the operator shall comply with instructions given by the operator for his or her own safety, health and welfare and that of others whether or not that person is employed by the operator;

(2) A person employed or performing work in connection with petroleum activities who observes any danger, whether to life or limb or to an installation, shall-

- (a) take immediate steps to remove the danger; or
- (b) if the removal of the danger is not possible, immediately warn persons in danger and notify the nearest superior responsible person.

(3) A person employed or performing work in connection with petroleum activities shall not obstruct or impede any other person employed, or performing work, in connection with those activities who is engaged in the performance of his or her duties.

Personnel on installations

13. (1) The operator shall at all times keep and maintain a record of any person on, or on the way to or from, any installation engaged in petroleum activities carried out, at or in connection with, that installation.

(2) A person other than a person employed on any installation engaged in petroleum activities carried out, at or in connection with that installation shall not be granted access to that installation, except with the permission of the operator.

- (3) The operator who grants permission under subregulation (2) shall -
 - (a) at the time of granting the permission to the person concerned, inform that person of all measures prescribed by or under these regulations in order to ensure the safety of any visitor to the installation; and
 - (b) take all such steps as may be necessary to ensure that the person concerned complies with the measures referred to in paragraph (a).

PART IV REGISTRATION AND LOCATION OF INSTALLATIONS

General requirements in relation to and registration of offshore installations

14. (1) An operator shall not use any offshore installation or allow any such installation to be used in connection with any petroleum activities under its licence unless-

- (a) the installation has, if required been registered in terms of the Merchant Shipping Act and complies with any regulations laid down in respect of

installations of that nature by these regulations or any other law;

- (b) it has in place a self-certification or verification regime with independent internal competent personnel appointed by the operator and including the petroleum inspectors in its verification activities; and
- (c) a certificate of fitness has been issued by any competent person, committee, society or other body of persons approved by the Commissioner to the operator in relation to the installation.

(2) In ensuring that any offshore installation complies with the requirements specified in subregulation (1), the operator shall -

- (a) if such installation is not registered or deviates from those requirements, immediately report, in writing, the reasons therefor and, if it deviates from those requirements, the nature and extent of the deviation and the reasons for such deviation, to the Commissioner; and
- (b) immediately take such steps as may be necessary to register the installation and to remedy the deviation and indicate the steps taken in the report referred to in paragraph (a) or, if circumstances require otherwise, in a further report in writing as soon as is reasonably practicable.

(3) The operator shall, at such times as may be determined by the Commissioner, provide the Commissioner with information on the progress of the petroleum activities under the relevant licence.

(4) Subregulation (1) shall, in the case of an operator who at the commencement of these regulations is using any offshore installation or is allowing the use of the installation, come into operation after the expiration of a period of six months from the date of commencement of these regulations or such further period as may, on good grounds shown, be allowed by the Commissioner.

Location of installations

15. (1) The operator shall-

- (a) ensure that an installation is located within a distance which in the opinion of the Commissioner constitutes, with due regard to the nature of, and the functions performed by or at such installation, a safe distance, specified by the Commissioner by notice in writing to the operator-
 - (i) in the case of an offshore installation, from any other offshore installation and any lighthouse, navigation mark, cable, pipeline or such other structure or place as may be specified by the Commissioner; and
 - (ii) in the case of an onshore installation, from any other onshore installation, navigation mark or such other structure or place as may be specified by the Commissioner
- (b) as soon as is reasonably practicable after the certificate of fitness has been issued in terms of regulation 14(1)(c), report in writing the location of the offshore installation as well as the distance of any anchor relating to that installation from the installation, to the Commissioner who shall then notify all relevant parties and cause such offshore location to be published in the "Notice to Mariners" published by the Hydrographic Office at Cape Town in the Republic of South Africa.

(2) If an installation is no longer used for petroleum activities or is abandoned, the operator shall immediately report that fact, in writing, to the Commissioner

- (3) If an installation is relocated, no longer used for petroleum activities or is abandoned the operator shall, subject to the Petroleum Act, ensure-
- (a) that structures and equipment used in connection with the petroleum activities concerned carried out by the operator and debris are removed;
 - (b) that appropriate publicity is given to the depth, position and dimensions of any such structures not entirely removed;
 - (c) that any well drilled in connection with the petroleum activities concerned is plugged or closed off;
 - (d) in the case of an onshore installation, that the environment is restored to its normal condition to the extent possible; and
 - (e) for the purposes of paragraph (d), that correct measures to restore the environment are taken.

PART V

MARKING, TESTING, INSPECTION AND CONTROL OF INSTALLATIONS

Marking of installations

16. The operator shall mark an installation in such manner as shall, with due regard to international standards, render it identifiable, whether in day-time or at night, by, and safe to, aircraft, ships, vessels or boats or other transport facilities.

Testing, inspection and control of installations during operation

17. The operator shall -
- (a) on every occasion on which an installation is used and during its operation at regular intervals or such other period as may, on good grounds shown by the operator, be determined by the Commissioner in writing, subject it to such tests, inspections and control as may be necessary in order to determine whether such installation is in proper condition and complies with these regulations, the Petroleum Act or any other law;
 - (b) keep and maintain a record containing particulars of the times at which and the manner in which such tests, inspections and control have been carried out; and
 - (c) in the planning of new installations and equipment and the modification of existing equipment, maintain a safety level concurrent with technological development.

Arrangements relating to inspections of offshore installations

18. (1) Subject to section 4(6) of the Petroleum Act, the operator shall be responsible to arrange the transport and accommodation of the Commissioner, the Chief Inspector or any other person for purposes of performing his or her functions on an offshore installation.

(2) The operator shall not be liable, except in the case of any intentional act or omission on its part, in respect of any person who makes use of any means of transport or accommodation arranged by the operator in terms of subregulation (1), for any loss or damage resulting from the death, injury, illness or sickness of that person or loss of or damage to any property caused by or arising out of or in any manner connected with the use of that transport or accommodation.

- (3) The Commissioner may, if he or she has reasonable grounds to believe that

an offshore installation does not comply with the requirements laid down in respect of such installation by these regulations, the Merchant Shipping Act or any other relevant law, require the operator, by notice in writing, to cause an inspection to be undertaken by a reputable company approved by the Commissioner which renders services concerning regulatory compliance internationally to government agencies.

(4) The costs incurred in connection with the inspection referred to in subregulation (3) shall be borne, in the event of the company referred to in subregulation (3) finding that the installation concerned-

- (a) does not comply with the requirements referred to in subregulation (3), by the operator; or
- (b) complies with the requirements referred to in subregulation (3), by the State.

PART VI GENERAL REQUIREMENTS RELATING TO INSTALLATIONS, EQUIPMENT AND FACILITIES

General requirements relating to design, construction, installation, location, maintenance and operation of installations and equipment

19. The operator shall ensure that an installation, any component connected to such installation and any equipment, apparatus, device, electrical installation and machine used in connection with petroleum activities carried out by the operator, including -

- (a) drilling, production, auxiliary and subsea systems;
- (b) the mooring arrangement, anchor system and dynamic positioning systems of an offshore installation; and
- (c) equipment for the loading of petroleum,

are designed, constructed, equipped, installed, located and maintained so as to operate safely, without risk to the environment and withstand anticipated loads in accordance with these regulations, the Petroleum Act and any other relevant law.

General duties of designers, manufacturers, importers or suppliers of articles and substances for use in connection with petroleum activities

20. (1) Any person who designs, manufactures, imports or supplies any article or substance for use in connection with petroleum activities shall -

- (a) ensure, as far as is reasonably practicable, that the article or substance is safe and without hazards to health, the environment or natural resources when properly used;
- (b) carry out or arrange for the carrying out of such tests and examination as may be necessary for the effective implementation of the provisions of paragraph (a); and
- (c) take such steps as may be necessary to ensure that adequate information will be available to the customer at the time of supply and subsequently on request by the customer or others who may use it at work -
 - (i) in connection with the transport, storage and use of the article or substance;
 - (ii) about the results of the tests referred to in paragraph (b); and
 - (iii) about any conditions necessary to ensure that the article or substance

when put to use, will be safe, and without hazards to health, the environment or natural resources when properly used,

and the operator itself shall ensure that any such article or substance complies with these requirements.

(2) For the purposes of this section "properly used" means used with reasonable care, and with due regard to any information, instruction or advice supplied by the person who has designed, manufactured, imported or supplied the article or substance.

Telecommunication devices

21. The operator shall ensure that an installation is equipped with such telecommunication devices as may be necessary for the safety of persons on it.

Cranes, lifts and other lifting devices

22. The operator shall, in addition to the duties imposed upon such operator in terms of these regulations, ensure that a crane, lift or other lifting device used in connection with petroleum activities carried out by the operator is -

- (a) of adequate strength for the purpose for which it is used and free from patent defect;
- (b) clearly and conspicuously marked with its certified safe working load;
- (c) not loaded in excess of its certified safe working load, except for the purpose of carrying out a test referred to in paragraph (d);
- (d) tested by a competent person -
 - (i) before being put in operation and after installation; and
 - (ii) after any repairs to or modification of the lifting device which is likely to alter the safe working load or affect the stability of the crane, lift or other lifting device, but at least once every twelve months; and
- (e) supplied with a certificate stating that the lifting device was tested, examined and declared safe in terms of paragraph (d).

Instruments for registration of environmental data

23. The operator shall ensure that an installation is equipped with instruments for registration of such environmental data as may be necessary to exercise control over any petroleum activities.

Living quarters

24. The operator shall ensure -
- (a) that the living quarters of an installation -
 - (i) are separated from areas with drilling, production and auxiliary systems and any hazardous area; and
 - (ii) are sufficient in area in accordance with the accepted ergonomic standards and adequately equipped to meet the needs of the maximum number of persons which may be on the installation at any time; and
 - (b) that records containing particulars of the number of persons accommodated in the living quarters of an installation are kept and maintained.

Drinking water and sanitary facilities

25. The operator shall provide persons employed or persons performing work under the licence concerned with -

- (a) a sufficient supply of water for drinking and washing purposes; and
- (b) sufficient sanitary facilities of a high hygienic standard and cause such facilities to be adequately ventilated, illuminated and disinfected and to be kept in a clean condition.

Protective equipment, clothing and devices

26. (1) The operator shall provide persons employed by it or persons performing work under the licence concerned with suitable protective equipment and clothing.

- (2) Any person referred to in subregulation (1) shall -
 - (a) use protective equipment, clothing or devices in accordance with these regulations and any such instructions as may be given to him or her; and
 - (b) not use any protective equipment, clothing or device other than such equipment, clothing or device as approved by the operator.

Noise

27. (1) The operator shall ensure that no person employed or person performing work under the licence concerned shall while at work be exposed to a daily noise dose or peak noise level in excess of internationally accepted standards or such standards as may be laid down under these regulations by means of guidelines.

(2) Where it is not practicable to comply with the standard specified under subregulation (1), the operator shall supply and cause to be constantly used hearing protective equipment to the person exposed to the noise dose or level.

Ventilation

28. The operator shall ensure that the living quarters of an installation and all other enclosed areas manned are provided with ventilation, heating and cooling systems capable of maintaining a moderate non-injurious atmosphere.

Lighting

29. The operator shall ensure that an installation is provided with lighting throughout sufficient to ensure the safety of the persons on it and so arranged that the operational control areas and access and evacuation routes remain illuminated in both normal and emergency conditions.

Transit areas

30. The operator shall ensure that all surfaces used for transit and all passageways and stairs on or at an installation are properly maintained, tested and examined and, as far as is reasonably practicable, are kept free from all materials or substances likely to cause a person to slip or fall.

Openings and hazardous areas

31. The operator shall ensure that any opening or open hatchway or any area identified as hazardous where entry is prohibited -

- (a) is provided with a secure and efficient fence or barrier so designed and constructed as to effectively prevent any person from falling or entering it; and
- (b) is properly signposted in which persons employed or performing work in such area or field are warned of the possible hazards.

Ladders

32. The operator shall ensure that all ladders in use on or at an installation-
- (a) are of good construction, free from any defects and of adequate strength for the purpose for which they are used;
 - (b) have a level and firm footing;
 - (c) are properly maintained, tested and examined; and
 - (d) are safe and without hazards to health.

Control of drift of offshore installations or vessels

33. The operator shall ensure that procedures are in place to control the drift of offshore installations or vessels used in connection with petroleum activities and to regain control, in areas where such drift may represent a danger to other installations, vessels or the environment.

PART VII MACHINERY

Use, operation, supervision and control of machinery

34. (1) The operator shall ensure -
- (a) that no person uses, operates, supervises or controls any machinery unless he or she has received adequate instruction and training for the duties he or she has to perform and has been duly authorized by the operator to do so; and
 - (b) that reasonable precaution is taken in connection with the use of machinery so as to ensure the safety of persons employed on or about such machinery.
- (2) A person authorized to use, operate, supervise or control any machinery shall not absent himself or herself from, or cease to have effective supervision or control of such machinery while it is required to be used, unless he or she has been relieved by another duly authorised person.

Scheme for examination and testing of machinery

35. The operator shall formulate a scheme for the systematic examination and, where required, testing of machinery so as to ensure the safe operation of the machine.

Starting and stopping of machinery

36. (1) A person shall not set any machinery in motion unless he or she has taken all reasonable precautions to ensure that no person can be endangered by reason of such machinery being in motion.
- (2) The operator shall ensure that any machinery is provided with a conveniently located starting and stopping appliance.

Safety measures during repairs, maintenance, cleaning, testing or examination of machinery

37. (1) The operator shall take such steps as may be necessary to ensure-
- (a) that when any machinery is stopped for repair, maintenance, cleaning, testing or examination purposes the power supply to such machinery is isolated;
 - (b) that suitable warning signs or notices are posted at the switch and signed by the persons who are undertaking such repairs, maintenance, cleaning, testing or examination; and
 - (c) that the signs or notices referred to in paragraph (b) are removed only by the person who posted them.
- (2) The operator shall ensure -
- (a) that automatic devices for lubricating machinery whilst in motion are provided wherever practicable; and
 - (b) that, where it is impracticable to stop any machinery and there is a risk of personal injury, the repair, maintenance, cleaning, testing or examination of any machinery in motion is undertaken only by a competent person duly authorised by the operator.

Fencing and guards

38. (1) The operator shall ensure -
- (a) that any exposed machinery which, when in motion, may be dangerous to any person is securely fenced off; and
 - (b) that efficient guards are provided to such parts of any machinery as may be dangerous to any person.
- (2) A person shall not wilfully or negligently damage or, without proper authority, remove or render useless any fence, guard or any other structure provided or any other safety measure established to ensure the safe operation of machinery.

General duties of operators

39. Any person authorised to use, operate, supervise or control any machinery shall-
- (a) before commencing work ensure that such machinery is in safe working condition;
 - (b) if such machinery during use appears in any way to be or to have become dangerous, immediately stop it; and
 - (c) until such time as the defect which renders it dangerous in terms of paragraph (b) is rectified, not use such machinery.

**PART VIII
ELECTRICITY****Selection and installation of electrical apparatus**

40. The operator shall take such steps as may be necessary to ensure -
- (a) that any electrical apparatus on or at an installation is of suitable design, sound construction, suitable material, free from any defects, properly

maintained and protected in such a manner that no person can be injured by inadvertent contact with any live portion; and

- (b) that any place where such electrical apparatus is installed and which may constitute danger to persons is adequately fenced off or enclosed effectively.

Electrical control gear

41. (1) The operator shall ensure that-

- (a) any electrical installation and power line on or at an installation is provided with protective devices which shall, as far as is reasonably practicable, automatically isolate the power supply in the event of a fault developing on the electrical installation or power line;
- (b) any switchgear on or at an installation is designed that it cannot be closed accidentally by gravity, impact or any other cause and is provided with a cover to prevent accidental contact with live parts;
- (c) any controlling apparatus on or at an installation is marked or labelled prominently so as to identify the electrical system or part of the electrical system or the electrical machinery which it controls; and
- (d) whenever work is to be carried out on electrical apparatus on or at an installation which has been isolated and locked out, effective precaution is taken to discharge electrically that apparatus to prevent any conductor or apparatus from being made live accidentally or inadvertently while any person is working on it.

(2) A person shall not interfere with or render ineffective any protective device referred to in subregulation (1)(a).

Diagram of electrical equipment

42. The operator shall cause a schematic diagram showing the up-to-date position of all permanent electrical equipment on or at an installation to be kept on the installation.

Posting of notices

43. (1) The operator shall, at places on or at an installation where electrical apparatus is installed which may constitute a danger to persons, cause notices to be prominently displayed-

- (a) prohibiting any unauthorised person from entering, handling or interfering with such apparatus;
- (b) containing directions as to the procedure to be followed in case of fire; and
- (c) containing directions on the rescue and first aid treatment of persons suffering from electric shock or burns.

(2) Any person working with electrical equipment shall acquaint himself or herself with the notices posted under subregulation (1) and shall act in accordance with the directions contained in those notices.

Switch and transformer premises

44. The operator shall ensure -

- (a) that any enclosed premises on or at an installation housing switchgear and transformers are -

- (i) of adequate size so as to provide safe working space for operating and maintenance staff;
 - (ii) constructed in such a manner that persons cannot reach in and touch bare conductors or exposed live parts of the electrical machinery;
 - (iii) sufficiently ventilated to maintain the equipment at a safe working temperature;
 - (iv) where necessary, provided with lighting that will enable all equipment, thoroughfares and working areas to be clearly distinguished and all instruments, labels and notices to be easily read;
 - (v) provided with unobstructed doors or gates which open outwards; and
 - (vi) as far as is reasonably practicable, constructed so as to be proof against rodents, leakage, seepage and flooding; and
- (b) that no person, other than a person duly authorised by the operator, enters the enclosed premises referred to in paragraph (a).

Scheme for installation, re-installation and use of electrical apparatus

45. (1) The operator shall ensure the formulation of a plan with respect to the installation, re-installation and use of electrical apparatus on or at an installation.

(2) The scheme referred to in subregulation (1) shall include provisions concerning-

- (a) the examination and testing of all electrical equipment before it is energised after installation or re-installation;
- (b) the systematic examination and testing of all electrical apparatus to ensure proper maintenance thereof;
- (c) the nature of the examination and testing to be carried out;
- (d) the procedure to be followed and precautions to be taken to ensure the safety of persons working on electrical apparatus; and
- (e) the identification of electrical installations and the recording of the results of examinations and tests.

Earthing

46. The operator shall ensure -

- (a) that any accessible metallic portion of electric plant or apparatus on or at an installation which, though not normally forming part of a circuit, may accidentally become live, is either protected by insulating material or is connected to earth by a conductor of adequate cross-sectional area so as to prevent danger to persons; and
- (b) that the cross-sectional area of any earthing conductor is calculated to be capable of withstanding the maximum possible earth fault current condition.

Earth leakage protection

47. The operator shall ensure -

- (a) that a suitable method of earth leakage protection is, as far as is reasonably

practicable, provided on or at an installation for all alternating current circuits operating at a voltage normally exceeding 48 volts AC or such other voltage as may be determined under these regulations by means of guidelines; and

- (b) that earth leakage protection equipment is provided on or at an installation with means by which tests of its operation may be made.

Protection from atmospheric electricity

48. The operator shall ensure that suitable equipment is provided to protect an electrical installation on or at an installation from abnormal voltage due to atmospheric electricity.

Electric cable installation

49. The operator shall ensure -
- (a) that any electric cable on or at an installation is properly placed, attached, connected and supported; and
 - (b) that the electric cables are protected.

Flexible cable or trailing cable

50. The operator shall ensure -
- (a) that only a flexible cable or trailing cable is used in connection with the operation of -
 - (i) any self-propelled mobile machine;
 - (ii) movable electrical apparatus; or
 - (iii) portable electrical apparatus,on or at an installation;
 - (b) that any flexible cable or trailing cable on or at an installation is screened, where necessary, and such screen is earthed; and
 - (c) that at any point where any flexible cable on or at an installation is joined to a main electric cable, a switch is provided to cut off the current from such flexible cable.

Signal and telephone cables

51. The operator shall ensure that signal and telephone cables on or at an installation are not allowed to come into electrical contact with each other or with any other electrical conductor.

Operation of electrical apparatus

52. (1) The operator shall ensure that no person operates any apparatus on or at an installation, unless he or she has been instructed in its use and has been duly authorised by the operator to do so.

(2) Any person employed on or at an installation shall immediately report overheating, electrical shock or damage relating to any electrical installation or apparatus which may come to his or her knowledge.

**PART IX
FIRES AND EXPLOSIONS**

General duties of operators

53. The operator shall -
- (a) ensure that -
 - (i) an installation and any component connected to an installation, is designed, constructed, equipped and maintained so as to prevent fires and explosions and, where any such event has occurred, minimise the harmful effects of fires and explosions; and
 - (ii) an effective organisation for the conduct of fire-fighting work on or at an installation is established; and
 - (b) take all such steps as may be necessary to ensure that the personnel on or at an installation exercise caution regarding anything which might cause fires and explosions and comply with the provisions of these regulations regarding fires and explosions.

Classification of installations in terms of fire and explosion risk

54. The operator shall ensure that -
- (a) all installations are classified in terms of fire and explosion risk; and
 - (b) every installation is divided into zones according to the degree of fire and explosion risk.

Precautions against fires and explosions

55. (1) The operator shall -
- (a) where any explosive or flammable atmosphere is likely to be encountered on or at an installation, adopt such precautions, methods of installation of electrical apparatus and use of such apparatus as may be appropriate to prevent the occurrence of such explosive or flammable atmosphere from occurring; and
 - (b) cause any place at an installation where any flammable or combustible substance is stored or used to be suitably signposted.
- (2) No person shall on or at any installation place, throw or leave or cause or permit to be placed, thrown or left any naked light or flame or any burning material on or near any combustible material or flammable substance where it may cause danger from fire or explosion.

Fire-fighting equipment

56. The operator shall ensure that suitable and adequate means for extinguishing fire are available on or at an installation.

Procedure in case of fire

57. (1) A person who notices a fire on or at an installation shall, if possible, extinguish such fire or otherwise raise an alarm without delay and cause such steps to be taken as would bring the occurrence of the fire to the attention of the person in control of that installation without delay.

(2) Every person, except a person duly authorised by the operator to stay on or at an installation for the purpose of dealing with an emergency in consequence of a fire on or at that installation, shall be withdrawn without delay from all places affected or likely to be affected by the fire or smoke arising from the fire and only persons duly authorised by the operator shall enter those places.

(3) The operator shall cause suitable precautions to be taken to prevent danger to persons from any noxious or asphyxiating gases or smoke emanating from any fire and ensure that procedures in case of fire are prepared and implemented.

Fire-fighting plan

58. The operator shall ensure that the following is in place:
- (a) A fire-fighting plan showing all locations and type of fire-fighting equipment provided;
 - (b) a fire alarm system at an installation to give prompt and adequate warning to persons who may be endangered by fire; and
 - (c) a team of trained persons to deal with the situation in the case of fire at an installation.

PART X TRANSPORT

General requirements relating to transport of persons, articles and substances

59. The operator shall ensure that the transport of persons, articles and substances for the purposes of petroleum activities in terms of the licence concerned is carried out in a proper and safe manner.

Transport facilities

60. The operator shall ensure that -
- (a) any reasonable precaution is taken in connection with the use of an aircraft, ship, vessel, boat, train or other transport facility for the purposes of petroleum activities in terms of the licence concerned so as to ensure the safety of persons engaged in those activities or persons in that facility and the protection of the environment and natural resources;
 - (b) the transport facility referred to in paragraph (a) is used in compliance with the provisions of these regulations and any other relevant law;
 - (c) the transport facility referred to in paragraph (a) is sufficiently and efficiently manned and properly equipped;
 - (d) no person drives, is in charge of or operates the transport facility referred to in paragraph (a) unless he or she is duly authorised to do so and has received adequate instruction and training for the duties he or she is to perform and the hazards which may arise from its use of that transport facility;
 - (e) all operating controls, devices, systems and other parts and equipment of the transport facility referred to in paragraph (a) are in good working order and fit and safe for the purpose for which the transport facility is used;
 - (f) articles and substances transported for the purposes of petroleum activities in terms of the licence concerned are properly and carefully loaded, handled, carried, kept, cared for and discharged; and

- (g) the contractor or any other person, formulates a plan for the systematic examination and maintenance of the transport facilities referred to in paragraph (a) and cause the results of the examinations and the tests performed for the purposes of such maintenance to be recorded.

Transport, storage and use of hazardous substances

61. The operator shall ensure that the transport, storage and use of a hazardous substance for the purposes of petroleum activities in terms of the licence concerned is carried out -

- (a) in a proper and safe manner;
- (b) in compliance with these regulations and any other law; and
- (c) with due regard to -
 - (i) any information, instruction or advice supplied by the person who has designed, manufactured, imported or supplied the substance; and
 - (ii) internationally accepted standards or such other standards as may be laid down under these regulations by means of guidelines.

Marking of cargo and equipment

62. The operator shall ensure that cargo and equipment transported for the purposes of petroleum activities in terms of the licence concerned as well as anchoring and marking buoys is clearly marked on the outside.

PART XI SUBSEA OPERATIONS

General duties of operators

63. (1) The operator shall ensure that all subsea operations under the licence concerned are carried out in a proper and safe manner.

(2) The operator shall, prior to the carrying out of subsea operations under the licence concerned, ensure the formulation of a plan and submit a copy of the plan to the Commissioner, containing particulars relating to the operations, including particulars of subsea pipelines to be installed and equipment and safety measures to be used and implemented in respect of the operations.

Subsea pipelines

64. The operator shall-
- (a) prior to the installation of a subsea pipeline under the licence concerned inform the Commissioner of the intended installation;
 - (b) with due regard to good oilfield practices, ensure that any subsea pipeline installed-
 - (i) is adequately maintained and protected from damage by any activity at or in the vicinity of that pipeline, including fishing and shipping activities and activities in connection with the reconnaissance, exploration, production and recovery of subsea natural resources;
 - (ii) is designed, equipped and installed in such a way that -
 - (A) it will not cause damage to fishing equipment;

- (B) it will not, except to the extent necessary to carry out the subsea operations concerned, constitute an obstacle to fishing activities; and
 - (C) it is equipped with a surface emergency shut-down system and monitoring system for the registration of leaks; and
- (c) ensure that-
- (i) the routing of pipelines is decided with due consideration of the factors which may influence safety during installation, operation and abandonment; or
 - (ii) if a pipeline is planned to intersect other pipelines or cables of any kind, routing and installation procedure is agreed upon with the owners and represented to the Commissioner.

Prohibition in certain areas

65. The Minister may, in consultation with the Minister of Fisheries and Marine Resources, by notice in the *Gazette* prohibit -

- (a) the anchoring of any ship, vessel or boat or other transport facility used in navigation on or under the sea; or
- (b) fishing or subsea operations,

specified in such notice at any cable on or in the seabed or subsea pipeline or within such distance from such cable or pipeline as may be so specified.

PART XII EMERGENCY PREPAREDNESS

Emergency preparedness plan

66. (1) The operator shall prepare an emergency preparedness plan, containing hazards defined by it with due regard to these regulations, aimed at ensuring that effective emergency preparedness is exercised in an emergency situation arising out of the petroleum activities carried out under the licence concerned.

(2) The operator shall submit to the Commissioner for his consent, at least one month prior to the commencement of the petroleum activities concerned, such number of copies of the emergency preparedness plan as the Commissioner may require.

- (3) The operator shall ensure that -
 - (a) the emergency preparedness plan concerned is updated if necessary and shall for that purpose continuously evaluate experience, technological development and new knowledge relating to petroleum activities; and
 - (b) such number of copies of any amendments to the emergency preparedness plan as the Commissioner may require is immediately submitted to the Commissioner.

Qualifications to deal effectively with emergency situation

67. The operator shall ensure that persons employed by it or persons performing work for it have adequate qualifications, knowledge and training, including practical training, to deal effectively with an emergency situation.

Registration, evaluation, follow-up and reporting of emergency situation

68. (1) The operator shall -
- (a) subject to section 4(1) of the Petroleum Act and these regulations and in consultation with the Commissioner and the Chief Inspector, establish a system for the registration, evaluation and investigation of any emergency situation arising out of the petroleum activities carried out under the licence concerned; and
 - (b) record -
 - (i) the emergency preparedness measures that are implemented for a specific emergency situation; and
 - (ii) any deviation from the emergency preparedness plan and the reason for such deviation.

(2) The operator shall immediately report any emergency situation arising out of the petroleum activities carried out under the licence concerned to the Commissioner and the Chief Inspector and confirm the emergency situation without delay in the manner provided for in the guidelines that the Commissioner may issue under regulation 92.

(3) During an emergency situation the operator shall ensure that the Commissioner and the Chief Inspector are constantly informed of the development of that situation and of the emergency preparedness measures to be implemented.

- (4) When -
- (a) a serious injury, illness or sickness of any person results in the death of that person after the injury, illness or sickness has been reported in terms of subregulation (2); or
 - (b) any injury, illness or sickness of any person arising out of petroleum activities, other than an injury, illness or sickness referred to in paragraph (a), develops into the death or a serious injury, illness or sickness of that person,

the operator concerned shall immediately report the death, serious injury, illness or sickness that has so resulted or developed to the Commissioner and the Chief Inspector and confirm such situation without delay.

(5) For the purpose of this regulation, "emergency preparedness measures" means measures stipulated under the emergency preparedness plan, which shall be carried out for any type of emergency situation arising out of the petroleum activities carried out under the licence concerned.

Disturbance of places of accidents or dangerous occurrences

69. (1) Where an accident or dangerous occurrence arising out of petroleum activities results in the death or serious injury, illness or sickness of any person the place of the accident or occurrence shall not be disturbed or altered without the consent of the Chief Inspector, unless -

- (a) the disturbance or alteration is necessary to prevent any further accident or dangerous occurrence or to rescue any person from danger; or
- (b) discontinuance of work at the place of the accident would seriously impede such petroleum activities.

(2) The operator shall, before the place of an accident or occurrence referred to

in subregulation (1) is disturbed or altered or, if the place is disturbed or altered to prevent any further accident or dangerous occurrence or to rescue persons from danger, immediately after the place has been so disturbed or altered, cause a sketch of that place, illustrating the accident or dangerous occurrence together with a key to the sketch showing all relevant details and photographs, to be prepared.

Inquiries into accidents or dangerous occurrences by operators

70. Where an emergency situation or accident has occurred, the operator concerned shall immediately submit a copy of the report of the inquiry, together with the sketch and photographs, referred to in regulation 69(2), to the Chief Inspector.

Inquiries into accidents or occurrences by Chief Inspector

71. The Chief Inspector may, in addition to an inquiry in terms section 4(1)(i) of the Petroleum Act-

- (a) hold an inquiry into any emergency situation; and
- (b) if he or she has reason to believe that any person has contravened these regulations or failed to comply with them, hold an inquiry into such contravention or failure.

Records of incidents

72. The operator shall cause a register to be kept and maintained of any near miss, injury, accident and emergency situation arising out of the petroleum activities under the licence concerned;

Standby aircraft, ships, vessels and other transport facilities

73. The operator shall, in order to provide for an emergency situation, and in accordance with the emergency preparedness plan, ensure that -

- (a) aircraft, ships, vessels or such other transport facilities, as may be necessary, in proper condition; and
- (b) rescue teams, medical practitioners or such other persons as may be necessary

are on standby when an installation is used in connection with the petroleum activities carried out under the licence concerned, to render assistance in such situation, and may enter into an agreement with any other operator so as to deal with an emergency situation in co-operation with such other operator.

Pollution by the spilling of petroleum

74. The operator shall in the event of any pollution by the spilling of petroleum arising from the petroleum activities carried out under the licence concerned, hereinafter referred to as the petroleum spill, ensure compliance with their oil spill contingency plan and ensure that the pollution of the environment and the coastline are prevented or limited, if not possible to prevent such pollution.

First-aid and medical assistance in emergency situation

75. The operator shall, in the event of an emergency situation arising out of the petroleum activities carried out under the licence concerned, ensure that-

- (a) personnel receive such first-aid and medical assistance as may be necessary; and
- (b) a medically competent person is available in such a situation.

First-aid stations

76. (1) The operator shall ensure that-
- (a) an installation is provided with such number of first-aid stations as may, in its opinion, be necessary or such number as may be determined under these regulations by means of guidelines; and
 - (b) an ambulance or other transport facility for the transport of injured or ill persons to hospital is readily available.

Training of first aid workers and issuance of Certificates of Fitness in respect of medical personnel

77. (1) The operator shall cause -
- (a) a sufficient number of persons within the organisation of the operator to undergo a course of training in first-aid;
 - (b) first-aid certificates or equivalent qualifications to be issued by a competent authority to every person who completes a course of training in first aid; and
 - (c) a list of persons qualified in first-aid to be displayed at first-aid stations.
- (2) The operator shall ensure that each medical personnel is issued with a Certificate of Fitness.

Communication

78. (1) The operator shall take any such measures in regard to communication within the emergency preparedness organisation concerned as may be necessary so as to ensure -
- (a) effective administration and control of all emergency preparedness resources; and
 - (b) unambiguous and effective transmission of information by means of light, sound, writing, signs or symbols,

in the event of an emergency situation.

(2) For the purpose of this regulation, "emergency preparedness organisation" means an organisation set up by the operator consisting of some of its employees or people performing work relating to a petroleum activity carried out under the licence concerned, which shall implement the emergency preparedness plan.

Alarm system

79. (1) The operator shall ensure that an alarm system is activated in an emergency situation arising out of the petroleum activities carried out under the licence concerned to give prompt and adequate warning of that situation and enable all emergency preparedness resources to be mobilised.

Access and evacuation facilities

80. (1) The operator shall ensure that an installation is provided with-
- (a) such access and evacuation facilities as are safe and without hazards to health, available for use at all times, unobstructed and sufficient to allow for free passage of persons; and

(b) clearly marked and visible access and evacuation routes.

(2) No person shall enter or leave the installation concerned except by means of the evacuation routes referred to in subregulation (1)(b).

PART XIII SAFETY ZONES

Establishment of safety zones in relation to offshore installations

81. (1) Subject to subsection (2), the operator -

(a) shall establish around and over an offshore installation a safety zone with its outer boundary connected at a point 500 metres from the end of each anchor or the outer edges of the installation and determined with due regard to -

(i) mining, fishing, tourism and other activities and interests that will be affected; and

(ii) the nature of, and the functions performed by or at that installation; and

(b) shall give notice of the establishment of a safety zone and of its location, extent, duration, marking and such other information as may from time to time be determined by the Minister, to -

(i) the Commissioner, who shall notify all relevant parties, and cause such notice to be published in the "*Notice to Mariners*" published by the Hydrographic Office at Cape Town in the Republic of South Africa; and

(ii) such other persons or bodies as may be determined by the Minister;

(2) The Minister may, upon an application made to him or her by the operator, with due regard to practices generally accepted in other countries of the world in relation to safety zones determined in respect of offshore installations used in petroleum activities -

(a) exempt the operator, by notice in writing, from the provisions of subregulation (1) to the extent specified in that notice; or

(b) determine, in writing, that such safety zone shall consist of such other shape, form or dimensions as may be specified in the notice.

(3) If the operator fails to establish a safety zone as provided in subregulation (1), the Minister -

(a) may cause such a safety zone to be established in accordance with that subregulation; and

(b) shall give notice of the establishment in accordance with that subregulation,

and may recover the costs incurred in connection with that establishment and the notice from the operator.

Extension of safety zones by Minister

82. (1) The Minister may, if an emergency situation has occurred in a safety zone which, in the opinion of the Minister, may result in -

(a) the death of or a serious injury to any person;

- (b) significant pollution of the sea or other area of water or the seashore by the spilling of petroleum, drilling fluid, chemical additive, any gas or any waste product or effluent; or
- (c) significant damage to property, the environment or natural resources,

outside that safety zone, extend that safety zone, by notice in the *Gazette* or by notice in writing to the holder of the licence concerned and such other persons or bodies which in the opinion of the Minister are interested in the extension, for such period as may be determined by the Minister and specified in the notice.

(2) The notice referred to in subregulation (1) shall also state the extent and the marking of the safety zone.

Prohibition in safety zones

83. (1) Subject to subregulation (2), no aircraft, ship, vessel or boat or such other transport facility as is used in navigation, on or under the sea or on the seabed as may be determined by the Minister by notice in the *Gazette*, other than such transport facility as is used in connection with petroleum activities carried out at the installation concerned, shall enter any safety zone.

(2) The operator concerned or the Minister, with the consent of the company, may with due regard to generally accepted international standards regarding navigation in or in the vicinity of installations and safety zones, grant permission generally or in every particular case and on such conditions as may be determined, to any aircraft, ship, vessel or boat or other transport facility referred to in subregulation (1) to enter any safety zone.

Monitoring and notification

84. The operator shall, where practical -
- (a) monitor activities which may threaten the safety of the petroleum activities inside and outside the safety zone in force in relation to the offshore installation concerned;
 - (b) notify any aircraft, ship, vessel or boat or other transport facility referred to in regulation 83 which is about to enter that safety zone and any such transport facility outside the safety zone which may threaten the safety of petroleum activities referred to in paragraph(a); and
 - (c) notify the Commissioner of any activities referred to in paragraph (a) or (b).

Violation of safety zone

85. The operator shall immediately report any violation of the safety zone in force in relation to the offshore installation concerned to the Commissioner and to any such authority as may be specified by the Commissioner with due regard to the nature of the violation.

PART XIV GENERAL PROVISIONS

Implementation of operators' schemes or plans

86. (1) Any scheme or plan formulated or planned by an operator in terms of these regulations shall be-

- (a) explained to any person required to implement that scheme or plan;

- (b) distributed among persons employed or performing work in connection with petroleum activities; and
- (c) displayed at a conspicuous place or places in or at the area where petroleum activities are carried out and where it can readily be observed by the persons who may be affected by the scheme or plan.

(2) The operator shall-

- (a) comply with the provisions of its scheme or plan; and
- (b) submit a copy of every scheme or plan to the Commissioner prior to the implementation of that scheme or plan.

(3) The Commissioner may, from time to time, after consultation with the operator, require such amendments to be made to the operator's scheme or plan as may be determined by him or her by notice in writing to the operator.

Maintenance of registers and records

87. All records and registers required to be kept under these regulations unless otherwise provided for, shall -

- (a) be kept at the office of the installation or at such other place as the Commissioner may permit;
- (b) be legibly entered in ink in English; and
- (c) be preserved in original for a period of not less than 12 months after the date of last entry or report.

Exemptions

88. The Minister may, for such period and on such conditions as he or she may determine, exempt any operator or any category of persons by notice in the *Gazette* or, in the case of a particular operator or other person, by notice in writing to such operator or other person, from any one or more of the provisions of these regulations.

Offences and penalties

89. (1) An operator who -

- (a) contravenes or fails to comply with these regulations;
- (b) contravenes or fails to comply with any direction, notice, order, summons, exemption or condition given, made, issued or laid down under these regulations;
- (c) contravenes or fails to comply with any requirement of any scheme or plan formulated by it in terms of any provision of these regulations; or
- (d) in any notice or other document referred to in these regulations wilfully furnishes information or makes a statement which is false in any material respect,

shall be guilty of an offence and on conviction be liable to a fine not exceeding N\$20 000.

(2) Whenever an operator is convicted of an offence consisting of a failure to comply with any provision of these regulations or of any direction or notice made under these regulations, the court convicting that operator may, in addition to any punishment imposed on him or her in respect of that offence, issue an order requiring him or her to

comply with that provision, direction or notice within a period determined by the court.

(3) Whenever in any legal proceedings in terms of these regulations it is proved that an operator was present on, in or at any installation, that fact shall be *prima facie* evidence that the operator was employed on, in or at that installation.

(4) In any legal proceedings in terms of these regulations, any statement or entry contained in any book, register or document kept by any operator or found on or in any premises or installation occupied or used by that operator, and any copy or reproduction of any such statement or entry, shall be admissible in evidence against that operator as an admission of the facts contained in that statement or entry, unless it is proved that statement or entry was not made by that operator.

General right of appeal

90. (1) Any person who feels aggrieved by any action or decision taken or made by the Commissioner or Chief Inspector under these regulations, may, within 30 days as from the date on which such action or decision was made known to such person, lodge an appeal in writing to the Minister against any such action or decision, setting out the grounds on which it is made, and the Minister may confirm, set aside or amend any such action or decision.

(2) The decision of the Minister shall be final.

(3) Pending the final determination of an appeal referred to in subsection (1), that appeal shall not affect the operation of the action or decision in question.

Application of any other law to petroleum activities

91. The Minister may, in order to ensure -

- (a) the health, safety and welfare of persons employed or performing work in any area where petroleum activities are carried out; and
- (b) the protection of other persons, property, the environment and natural resources in, at or in the vicinity of such area, from hazards arising from petroleum activities carried out in such area,

by notification in the *Gazette* extend to petroleum activities such provisions of any other law for the time being in force as the Minister may notify in the *Gazette*.

Guidelines and directions to ensure proper administration of these regulations

92. (1) The Commissioner may from time to time -

- (a) issue guidelines in relation to the application of any provision of these regulations by operators and persons employed or otherwise present in or at reconnaissance, exploration and production areas, and directions, not inconsistent with these regulations, to such operators or persons in order to effect the proper administration of these regulations; and
- (b) cause the guidelines and directions referred to in paragraph (a) to be published by such persons and in such manner and in such languages as may be determined by the Minister.

(2) Any guideline or direction referred to in subregulation (1) -

- (a) may be issued generally in respect of all operators or in relation to any particular operator; and
- (b) may incorporate any standard, guideline or direction which is in operation

in any country of the world in relation to the petroleum industry in that country by a mere reference to the document in which such standard, guideline or direction is published in that country.

(3) The Commissioner shall keep available for free inspection at his or her office a copy of the full text of the document in which a standard, guideline or direction referred to in subregulation (2)(b) is published.

(4) Different guidelines or directions may be issued under subregulation (1) in respect of different operators.

(5) Any guidelines laid down under this regulation and any direction given by the Minister, Commissioner or the Chief Inspector under the Act or these regulations shall be-

- (a) explained to any person required to implement that direction or guideline;
 - (b) distributed among persons employed or performing work in connection with petroleum activities; and
 - (c) displayed at a conspicuous place or places in or at the area where petroleum activities are carried out and where it can readily be observed by the persons who may be affected by the direction or guideline.
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