Oil Mines Regulations, 2011

MINISTRY OF LABOUR AND EMPLOYMENT

NOTIFICATION

New Delhi, the 9th December, 2011

G.S.R. 876(E).—The following draft of certain regulations which the Central Government proposes to make, on the recommendations of the Committee constituted under section 12 of the Mines Act, 1952 (35 of 1952), in exercise of the powers conferred by section 57 of the said Act, and in supersession of the Oil Mines Regulations, 1984, except as respects things done or omitted to be done before such supersession, are hereby published as required by sub-section (1) of section 59 of the said Act, for the information of all persons likely to be affected thereby and notice is hereby given that the said draft regulations will be taken into consideration after the expiry of a period of three months from the date on which copies of the Gazette in which this notification is published, are made available to the public;

1. The objections or suggestions, if any, may be addressed to Shri S.K.Singh, Under Secretary, Ministry of Labour and Employment, Shram Shakti Bhawan, Rafi Marg, New Delhi – 110 001.

2. Any objection or suggestion, which may be received from any person in respect of the said draft regulations within the period specified above, will be considered by the Central Government.

CHAPTER-I

PRELIMINARY

1. Short title, extent and application

(1) These regulations may be called the Oil Mines Regulations, 2011.

(2) They shall extend to the whole of India

(3) They shall apply to every oil mine.

(4) They shall come into force on the date of their publication in the Official Gazette.

2. Definitions – In these regulations, unless the context otherwise requires.-

(1) "Act" means the Mines Act 1952;

(2) "acidizing" means the treatment of oil-bearing formation by chemical reaction with acid in order to increase productivity or injectivity ;

(3) "annular space" means the space surrounding pipe suspended in the well. The outer wall of the annular space may be an open hole or it may be string of larger pipe.

(4) "appropriate baseline" means a reference line established on the basis of hydrographical chart on the outer edge of the land along the sea.

(5) "approved" means approved by the Chief Inspector by a general or special order in writing and subject to such conditions as he may specify therein;

(6) "approved standards" means such national or international standards which may be approved by the Chief Inspector by a general or special order in writing.

(7) "bleed" means to drain off liquid or gas generally through a valve; to bleed off means a controlled release of the pressure of a well or the pressurised equipment;

(8) "blowout" means uncontrolled sudden violent escape of fluids from a well;

(9) "blowout preventer" means a device attached above the well head to control pressure and to prevent uncontrolled escape of fluids from the annular space between tubing and casing or between drill pipe and casing or between wire line and tubing or to shut-off the well if no drill pipe or tubing is in the hole, should a kick or blowout occur.

(10) "casing" means a steel pipe lowered into a well during drilling to prevent caving of the wells and to hold back fluids from entering the well ;

(11) "casing line" means steel wire rope used for lowering and raising of pipes in the well through crown block and traveling block;

(12) "cat-head" means a device mounted on the draw-works for making or breaking pipe connections or for operation of cat-line with the help of power from draw-works ;

(13) "cat-line" means a rope used to lift a pipe, drilling tool and other equipment from ground or base, pipe rack, tool platform or cat-walk on the derrick floor ;

(14) "cat-walk" means a ramp giving access to rig floor for drill pipe, tubing, casing, drilling and other tools;

(15) "cellar" means an excavation under the derrick to provide space for items or equipment at the top of the well which also serves as a pit to collect drainage of water and other fluids under the floor for subsequent disposal ;

(16) "cementing" means operation by which cement and water mixture is pumped down through the casing in such a way that it fills the space between casing and walls of the well to a predetermined height above the bottom of the well ;

(17) "christmas tree" means the valves and fittings assembled at the top of a well head to control the flow of the fluids;

(18) "competent person" in relation to any work or any machinery, plant or equipment means a person who has been duly authorised as the person competent to perform that work or to supervise the operation and or maintenance of the machinery, plant or equipment and who is responsible for the duties assigned to him.

(19) "completed well" means a well in which the petroleum bearing formations or effluent disposal formation is open to the well, complete with equipment installed in the well and at the well-head so that it is physically able to perform as a petroleum producer, injector or disposal well.

(20) "crown block" means a multi-sheaved assembly mounted at the top of the derrick or mast and used in conjunction with a travelling block for raising and lowering of equipment in drilling and servicing a well ;

(21) "day light hours" means the period from sunrise to sunset.

(22) "deputy manager" means a person possessing qualifications as provided under these regulations and who is appointed in writing by the owner, agent or manager to assist the manager in the control, management, direction and supervision of the mine or part thereof, and who takes rank below the manager.

(23) "derrick" means a compound latticed structure used over the well for drilling or well servicing purposes, and includes a mast ;

(24) "District Magistrate" in relation to any mine means the District Magistrate or the Deputy Commissioner as the case may be, who is vested with the executive powers of maintaining law and order in the revenue district in which the mine is situated.

(25) "draw-works" means an assembly of shafts, sprockets, chains, pulleys, belts, clutches, catheads and or other mechanical devices, suitably mounted and provided with controls for hoisting, operating and handling the equipment used for drilling a well or servicing a well ;

(26) "drilling" means perforation of the earth's surface crust by mechanical or other means and includes all operations for preventing collapse of the sides of such hole or for preventing such hole from being filled with extraneous material including water ;

(27) "drilling rig" means the complete structure and machinery required for drilling purposes at the bore hole site :

(28) "elevator" means a steel mechanical device used in connection with the hoisting equipment suspended from the traveling block, for holding in suspension, pipe or rod being lowered into or pulled from a well ;

(29) " emergency-escape device" means an inclined wire line to carry a safety carriage or slide running from a point above the monkey board to a ground anchor and includes such carriage or slide ;

(30) "explosimeter " means an instrument to measure the concentration of flammable gas ;

(31) " explosive" shall have the same meaning as is assigned to that term in the Indian Explosives Act, 1884 ;

(32) "flame-proof equipment " means an equipment that can withstand without injury any explosion of the flammable gas that may occur within it and can prevent the transmission of flame such as will ignite the flammable gas which may be present in the surrounding atmosphere ;

(33) "flammable" means capable of being easily ignited, burning intensely or having a rapid rate of flame spread ;

(34) "flare" means an open flame used to dispose off gas as per process requirement;

(35) "flash point" means a volatile liquid in the lowest temperature at which it can vaporise to form an ignitable mixture in air;

(36) "floor block" means a single sheave pulley or snatch block fixed at or near floor level by means of which the direction of pull on a rope can be varied ;

(37) "form" means a form as set out in the First Schedule ;

(38) "fracturing" means the process of forcing a fluid in the subsurface strata with the purpose of enhancing flow passages ;

(39) "gas" means the vapour state of the hydrocarbons occurring in or derived from petroleum;

(40) "gas free" means an environment in which--

(i) the percentage of flammable gas does not exceed 20 percent of lower explosive limit of such gas,
(ii) the percentage of oxygen is not less than 19, and
(iii) noxious gases are within permissible limits ;

(41) "gas well" means a well which is on continuous production from a gas bearing zone or a well in which casing is run for continuous production of gas ;

(42) "group gathering station" means a production installation used for gathering, treating , or storing and transporting petroleum and includes central tank farm, oil collecting station, gas compressor station, and well-head installation ,

(43) "hazardous area" means an area where hazardous atmosphere exists or is likely to occur;

(44) "hazardous atmosphere" means an atmosphere containing any flammable gas in a concentration capable of ignition or containing noxious gases beyond permissible limits ;

(45) "installation" means any fixed installation or structure or vessel or part thereof which is maintained within the mine or is to be established therein in connection with exploration or with exploitation of petroleum with a view to such exploitation, production, storage or transport of petroleum ;

(46) "installation manager" means the person appointed in writing by the owner, agent or manager of the mine to be incharge of and responsible for all operations and activities on or in connection with the installation ;

(47) "ionising radiation" means emission due to self-disruptive fission of atomic nucleus of any radioactive substance which is hazardous to health ;

(48) "kelly cock" means a valve installed between swivel and kelly or kelly and drill pipe to control pressure , should a high pressure backflow of fluids occur , and to keep the pressure off the swivel and rotary hose ;

(49) "kick" means a sudden pressure-surge of short duration caused by influx of formation fluids entering well being drilled ;

(50) "lifting appliance" means a combined unit with or without horizontal movement used for hoisting or lowering cargo;

(51) "lifting gear" means every type of equipment placed on loading hook of a lifting appliance and includes container, steel basket, lifting yoke, multi slings or chain or wire;

(52) "living accomodation" means the part of the installation comprising of personnel living rooms , conference room , galley and offices attached thereto;

(53) "lubricator" means a device fitted on top of a Christmas tree and consists of a pressure sealing device at its upper end so as to afford an effective seal on the wireline or other connection attached to tools run into the well ;

(54) "machinery" means –

(a) any stationery or portable engine, air or gas compressor, boiler or steam apparatus, or
(b) any such apparatus, appliance or combination of appliances intended for developing, storing, transmitting, converting or utilising energy, or
(c) any such apparatus, appliance or combination of appliances if any power developed, stored, transmitted, converted or utilised thereby is, under or intended for use in connection with mining operations;

(55) "major accident" means an occurrence including in particular, a major emission of fire or explosion from uncontrolled developments in the course of drilling and for production, storage, handling or transportation of petroleum or machinery or owing to natural events leading to serious effects (both immediate and delayed as well as inside or outside the installation) causing or likely to cause substantial loss of life or property;

(56) "monkey board" means a movable or fixed platform installed above derrick floor on which work-persons stand to handle pipes or other equipment racked on the derrick ;

(57) "mud" means a liquid that is circulated through the well during drilling or work-over operations ;

(58) "mud-pump" means a pump used to circulate mud;

(59) "mud tank" means the reservoir or tank through which the ~~drilling and~~ mud is cycled to allow sand and fine sediments to settle out where additives are mixed with mud and where the fluid is temporarily stored before being pumped back into the well ;

(60) "official" means a person appointed in writing by the owner, agent or manager to perform duties of supervision in a mine or part thereof and includes deputy manager, engineer, installation manager, safety officer, fire officer and surveyor;

(61) "offshore installation" means a mobile or fixed installation including any pipeline attached thereto, which is or is to be, or has been used, while standing or stationed in relevant waters with a view to explore or exploit crude oil and natural gas ;

(62) "oil well" means a well which is producing or is capable of producing petroleum;

(63) "out-line" means a rope used to carry pipes, drilling tools or other equipment from a derrick to the derrick walk or other location outside the derrick;

(64) "petroleum" means naturally occurring hydrocarbons in a free state whether in the form of natural gas or in a liquid, viscous or solid form but does not include helium occurring in association with petroleum;

(65) "pipe-rack" means a structure located adjacent to but usually below the level of the rig floor, on which pipe or casing may be stored or racked;

(66) "pipeline system" means surface pipelines including sub-sea pipelines and risers transporting petroleum and other commodities, with associated safety systems, valves, tool launchers or receivers, corrosion protection systems or other accessory equipment;

(67) "platform" means a working space, elevated above the surrounding**s** for the operation of machinery and equipment;

(68) "process complex" means an offshore facility for gathering, treating, storing, or transporting petroleum and includes well platform, well-cum-process platform, central process platform, and gas compressor complex;

(69) "quarter" means a period of three months ending on the 31st March, 30th June, 30th September or 31st December;

(70) "racked" refers to tubular goods or rods standing in the derrick or mast or stored on a pipe rack;

(71) "racking platform" means a platform in the derrick or mast at an elevation where a derrick man is normally required to handle stands being racked;

(72) "radio system" includes life boat radio equipment, VHF-FM marine transceivers, VHF-F walkie talkie sets, VHF-AM aero transceivers, Non directional beacon (NDB), HF-SSB transceivers and radio teletype to provide both voice and teletype communication;

(73) "railway" means a railways as defined in the Indian Railways Act. 1890;

(74) "Regional Inspector" means the inspector of mines incharge of the region or local area or areas in which the mine is situated or the group or class or mines to which the mine belongs, over which he exercises his powers under the Act;

(75) "rigging-up" means an act of assembling a drilling or work-over rig and auxiliary equipment prior to commencement of drilling or work-over operation; and includes jacking up and positioning;

(76) "risers" means that part of the pipeline system which extends from the sub-sea pipelines upto and including launchers or receivers or tools for internal maintenance or inspection.

(77) "river" means any stream or current of water whether seasonal or perennial and includes its banks extending upto the highest known flood level;

(78) "rotary hose" means the hose that conducts the circulating fluid from the stand pipe to the swivel and kelly;

(79) "rotary table" means a power operated turn-table on the rig floor primarily used for rotating the drilling string;

(80) "safety case" means a written report prepared by an approved agency to demonstrate that the hazards in relation to an installation have been identified, risks assessed and the control measures in place are adequate for safe operation";

(81) "Safety Management System" means, collectively, those elements in the management system that are applied to identify or assess or control a hazard or recover therefrom;

(82) "Schedule" means a Schedule appended to these regulations;

(83) "shore base" means the point on the appropriate base line which is nearest to the installation;

(84) "stand(s)" means sections of pipe consisting of two or more made-up lengths which are racked in a derrick;

(86) "standard railing" means a vertical barrier erected along exposed edges of a floor opening, wall opening, ramps, platform or walk-way to prevent fall of persons;

(87) "sub-sea pipeline" means that part of the pipeline system which is buried in, rests on or is laid above the sea-bed;

(88) "sub-structure" means the foundation on which normally the derrick and engines are placed;

(89) "surface casing" means casing to cover unconsolidated formations, to provide protection against shallow gas flow, seal off water bearing formations, protect fresh water sands from contamination, case-off lost circulations zones and to provide structural support for the well head.

(90) "swabbing" means the operation of activation on a wireline to bring well fluids to the surface when the well does not flow naturally;

(91) "toe board" means a vertical barrier at floor level erected along exposed edges of a floor opening, wall opening, platform, walk-way or ramp to prevent falls of materials;

(92) "toxic dust or gas" means any dust or gas which can cause a reversible or irreversible disturbance of the normal physiological processes of one or more bodily systems;

(93) "traveling block" means a multi-sheaved pulley block used in conjunction with the fixed crown block for raising and lowering the drilling string, casing, tubing rods and other tools;

(94) "vessel" shall have the same meaning as defined under clause (55) of section 3 of the Merchant Shipping Act, 1958;

(95) "well" means a hole in the earth crust-

(a) made or being made by drilling, boring or in any other manner from which petroleum is obtained or obtainable or for the purpose of obtaining petroleum;

(b) used, drilled or being drilled for the purpose of water injection or for injecting natural gas, air, water or any other substance into underground formation;

(96) "wellhead" means an assembly on top of the well casing strings with outlets and valves for controlling flow of fluids;

(97) "well perforating" means perforating well casing or tubing or cement to provide flow passage for production or for testing or well activation purposes;

(98) " work-over" or "well-servicing" means one or more of a variety of remedial operations on a well with the intention of restoring or increasing production or abandonment;

(99) "zone 'O' hazardous area" means an area in which hazardous atmosphere is continuously present;

(100) "zone 1 hazardous area" means an area in which a hazardous atmosphere is likely to occur under normal operating conditions;

(101) "zone 2 hazardous area" means an area in which a hazardous atmosphere is likely to occur only under abnormal operating conditions;

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CHAPTER-II
RETURNS, NOTICES AND PLANS

3. Notice of opening.-

(1) The notice required under section 16 of the Act shall be submitted in Form I accompanied by a plan showing the geographical boundaries of the mine including location of the installations and permanent features to the Chief Inspector and a copy thereof to the Regional Inspector:

Provided that in case of offshore installations, the boundary shall be shown with reference to the appropriate base line:

Provided further that in respect of a mine which has already been opened, such a plan shall be submitted within sixty days of the coming into force of these regulations:

Provided also that if such boundary is changed, a plan showing the new boundary shall be submitted within seven days of such change.

(2) When a mine has been opened, the owner, agent or manager shall forthwith communicate the actual date of opening to the Chief Inspector and to the Regional Inspector.

4. Quarterly returns.-

On or before the 20th day of April, July, October and January in every year, the owner, agent or manager shall submit to the Chief Inspector and the Regional Inspector correct returns in respect of the preceding quarter in Form II.

5. Annual returns.-

On or before the 20th day of February every year, the owner, agent or manager shall submit to the District Magistrate and to the Chief Inspector annual returns in respect of preceding year in Form III.

6. Change in ownership and addresses.-

(1) When a change occurs in the name or address or both, of owner or the ownership (including any partner in case of firm or any member in the case of an association or any director in the case of a public company or any major shareholder in the case of a private company), the owner, agent or manager shall within seven days from date of such change, submit notice in Form-I of the First Schedule, to the Chief Inspector and the Regional Inspector.

2. When any appointment is made of an agent, manager, deputy manager, engineer, installation manager, safety officer, shot firing officer, fire officer and surveyor or when the employment of any such person is terminated or any such person leaves the said employment or when any change occurs in the address of any agent or manager, the owner, agent or manager shall within seven days from the date of such appointment, termination or change give to the Chief Inspector and the Regional Inspector, notice in Form I.

7. Appointment of agent.-

(1) The owner of a mine shall submit in writing to the Chief Inspector and the Regional Inspector, statement showing names and designation of every person authorised to act on behalf of the owner in respect of management, control, supervision and direction of the mine.

(2) The statement shall also show the responsibility of every person in respect of matters for which such person is authorised to act on behalf of the owner.

(3) Every such person shall be deemed to be agent for the mine or group of mines, as the case may be, in respect of the responsibility as specified in such statement.

(4) The statement specified in sub-regulation (1) shall be submitted within one month from the date of coming into force of these regulations:

Provided that in case of mines or group of mines as the case may be, and in other cases, within one month from the date of opening or reopening of the mine.

(5) Any change, addition or alteration in the names or other particulars of the statement referred to in sub-regulation (1), shall be reported in writing to the Chief Inspector and the Regional Inspector within seven days from the date of such change, addition or alteration.

8. Notice of abandonment or discontinuance.-

(1) When it is intended to abandon a mine or to discontinue working thereof for a period exceeding four months, the owner, agent or manager shall not less than thirty days before such abandonment or discontinuance, give to the Chief Inspector and Regional Inspector a notice stating the reason for the proposed abandonment or discontinuance and the number of persons likely to be affected thereby.

(2) The notice referred to in sub-regulation (1) shall be submitted in Form I of First Schedule:

Provided that in an unforeseen circumstance where the installation is abandoned before the notice is given, the same shall be submitted forthwith.

9. Notice of accident and dangerous occurrence.-

(1) Where there occurs a readily identifiable event such as a dangerous occurrence with potential to cause an injury or disease to persons at work or to the public around the workplace, or an accident in or about a mine such as -

(i) an accident causing loss of life or serious bodily injury in connection with mining operations;
(ii) an explosion or ignition;
(iii) a blowout;
(iv) an outbreak of fire;
(v) a bursting of any pipeline or equipment containing petroleum, steam, compressed air or other substance at a pressure greater than the atmospheric pressure;
(va) a major uncontrolled emission of petroleum or chemical spillage;
(vi) a breakage or fracture of any essential part of draw-works, casing line or failure of emergency brake whereby the safety of persons may be endangered;
(vii) a breakage, fracture or failure of any essential part of any derrick, machinery or apparatus whereby the safety of persons may be endangered;
(viii) an influx of noxious gases;
(ix) accident due to explosives,

the owner, agent or manager shall forthwith inform the Regional Inspector immediately by telephone, telefax, express telegram or by special messenger and shall also within 24 hours of every such occurrence, give notice thereof in Form IV-A

of First Schedule to the Chief Inspector, the Regional Inspector and the District Magistrate **.**

(2) When an accident causing loss of life or serious bodily injury occurs in or about a mine in connection with the generation, storage, transformation, transmission, supply or use of electrical energy, the owner, agent or manager shall also forthwith inform the Electrical Inspector of Mines immediately by telefax, telephone, express telegram or special messenger.

(3) If death results from any injury already reported as serious under sub-regulation (1) the owner, agent or manager shall within 24 hours of his being informed or the death, give notice thereof to the Chief Inspector, Regional Inspector and District Magistrate.

(4) In respect of every person killed or injured as above, the owner, agent or manager shall send to the Chief Inspector particulars in Form IV-B and IV-C of the First Schedule within seven days of such occurrence or within 15 days of the injured returning to duty, as the case may be.

10. Notice of disease.-

Where any person employed in a mine contracts any disease notified by the Central Government in the Official Gazette, the owner, agent or manger shall within three days of his being informed of the disease give notice thereof in Form V of the First Schedule to the District Magistrate**,** the Chief Inspector, the Regional Inspector and Inspector of Mines (Medical).

11. **Plans.-**

(1) The owner, agent or manager of every mine shall keep the following plans accurate and uptodate :-

(a) a key plan with reference to the national grid showing the area duly demarcated in which operations for winning of petroleum and ancillary operations are carried on;

(b) a surface plan showing the location of all installations including wells, group gathering stations and pipe lines with their access route, railways, power transmission lines, public roads, buildings or other permanent structures not belonging to the owner, rivers and water courses within the mine;

(c) in case of offshore, a plan showing the locations of all platforms with details of wells, risers, pipelines, loading or unloading, storage facilities and all other fixtures depicting the water depth of installation and also distance from the shore base:

Provided that the Chief Inspector may, by an order in writing, call for a plan extending to such distance from the mine boundary as he may specify.

(2) Every plan maintained in accordance with the provisions of these regulations shall,

(a) show the name of the mine and of the owner and the purpose for which the plan is prepared ;

(b) show the true north or magnetic meridian and the date of the later ;

(c) unless otherwise provided, be on a scale having a representative factor of –

(i) 50,000 : 1, in case of key plans;

(ii) 20,000 : 1, in case of plans showing location of oil, gas wells and other installations, etc., mentioned in clause (b) of sub regulation 1:

Provided that the Chief Inspector may by an order in writing and subject to such conditions as he may specify therein, permit or require the plans to be prepared on any other suitable scale;

(d) be properly inked in on durable paper or a polyester tracing film and be kept in good condition;

(e) be accurate and maintained up-to-date and not later than 12 months.

(3) The Regional Inspector may, by an order in writing, -

(a) require such additional details to be shown on the plans required to be maintained under these regulations or the preparation and maintenance of such other plans and sections on such scale and showing such details within such time as he may specify in the order;

(b) require the owner, agent or manager to submit to him within such time such plans and sections, or tracings thereof, as he may specify in the order.

(4) All plans and sections required to be maintained under these regulations or any order made thereunder as well as all field books and other notes used in preparation of such plans and sections shall be kept available for inspection in the office of the mine and a list thereof be maintained.

12. Preparation of plans, etc., by surveyor.-

(1) Every plan or section required to be maintained under these regulations or any orders made thereunder shall be prepared by or under the personal supervision of a surveyor and shall carry thereon a certificate by him to the effect that the plan or section or part thereof is correct and shall be signed and dated by the surveyor and counter-signed and dated by the manager on every occasion that the plan or section is brought up-to-date.

(2) Every tracing of a plan or section or of any part thereof shall bear a reference to the original plan or section from which it was copied and shall be certified thereon by the surveyor to be a true copy of the original plan or section.

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CHAPTER III

EXAMINATION AND CERTIFICATE OF COMPETENCY AND OF FITNESS

13. Board of Mining Examinations – (1) For the purposes of these regulations, there shall be constituted a Committee on Mining Examinations, (hereinafter referred to as 'the Board of Mining Examination ').

(2) The Board of Mining Examination shall consist of the Chief Inspector, who shall be its Chairman ex-officio, and three members possessing at least degree in mining engineering or petroleum engineering ; and

(a) first class manager's certificate granted under the Metalliferous Mines Regulations, 2010 or under the Coal Mines Regulations, 2010; or
(b) having practical experience in metalliferous mines or coal mines; or
(c) serving in an institution imparting education in mining engineering or petroleum engineering at the degree or equivalent level; or
(d) engaged in mining or petroleum research or planning, to be appointed by the Central Government:

Provided that the Board of Mining Examination shall be so constituted that it shall include at least one member possessing qualifications laid down in clause (a) or clause (b) and at least two members possessing qualifications laid down either in clause (c) or in clause (d).

(3) Every member (other than the Chairman) of the Board of Mining Examination shall hold office for a period of three years from the date of the notification appointing him as member of the said Committee or until his successor is appointed and takes charge, whichever is later:

Provided that a member may at any time resign his office:

Provided further that a member appointed under clause (c) of sub-regulation (2) shall cease to hold office upon his ceasing to serve in any such institution, as is referred to in that clause:

Provided also that a person appointed to fill a vacancy caused by reason of the death or resignation or otherwise, shall hold office for the remaining period for which such member would have, but for such reason, continued as member.

(4) A person who holds, or who has held, office as member of the Board of Mining Examination shall, subject to the other provisions of this regulation, be eligible for re-appointment to that office.

(5) A member of the Board of Mining Examination (other than the Chairman) shall receive such remunerations as the Central Government may fix.

(6) An Inspector nominated in this behalf by the Chief Inspector shall act as Secretary to the Board of Mining Examination (hereinafter referred to in these regulations as the Secretary).

(7) Notwithstanding anything contained in this regulation, the Central Government may, if satisfied that it is necessary so to do in the public interest, re-constitute the Board of Mining Examination even though the term of office of all or any of the members thereof has not come to an end.

(8) Meetings of the Board of Mining Examination shall be held as and when the Chairman considers them necessary, and unless otherwise decided by the Chairman, all meetings of the said Committee shall be held at Dhanbad.

(9)(a) For every meeting of the Board of Mining Examination , not less than ten clear days prior notice intimating the time and place of the proposed meeting and signed by the Chairman or the Secretary shall be given to each member who is not absent from India.

(b) Such notice shall be delivered at, or posted to the usual place of residence of the member, and each such notice shall be accompanied by a list of items of business to be disposed of at that meeting.

(c) Notwithstanding anything contained in clauses (a) and (b), in case of urgency, an emergent meeting may be called for by Chairman at any time, by intimating the members, only two days in advance, of the time and date of such meeting and the subject matter for discussion at such meeting.

(10)(a) The Chairman shall preside at every meeting of the Board of Mining Examination .

(b) If the Chairman is absent for any reason, the members present shall elect one from amongst themselves to preside over the meeting, and the members so elected shall, for the purposes of that meeting, have all powers of the Chairman.

(11) No business shall be transacted at a meeting of the Board of Mining Examination unless at least three members, including the Chairman, are present:

Provided that if at any meeting there is no quorum as aforesaid, the meeting shall automatically stand adjourned to a date which is seven days later or if that day is a public holiday to the next working day and the time, place and agenda for the adjourned meeting shall remain unchanged and shall thereupon be lawful to dispose of the business at such meeting irrespective of the number of members attending.

(12)(a) All matters which the Board of Mining Examination is required to consider shall be considered at its meeting, or, if the Chairman so decides, by circulation of the papers, to every member who is not absent from India.

(b) When any matter is referred to by circulation, any member can request that it should be considered at a meeting of the Board of Mining Examination and the Chairman may direct that it shall be so considered but when two or more members so request, the Chairman shall direct that it shall be so considered at a meeting to be held.

(13)(a) The Secretary shall place, before the Board of Mining Examination a list of business to be transacted at the meeting.

(b) No business which is not included in such list shall be considered unless the Chairman permits.

(14)(a) Every matter at a meeting shall be decided by the majority of votes of the members present at such meeting.

(b) Every matter referred to the members by circulation under sub-regulation (12) shall be decided by the majority opinion of the members to whom the papers were circulated, unless the Chairman reserves it for consideration at a regular meeting to be held later.

(c) In case of equal division of votes or opinions of the members, Chairman shall have a casting vote or opinion.

(15)(a) The Secretary shall record the minutes of each meeting in a bound-paged book kept for the purpose and copies of such minutes of the meeting shall be circulated to all members present in India.

(b) The minutes so recorded shall be confirmed at the next meeting of the Board of Mining Examination and signed by the Chairman in token thereof.

(16)(a) The Chairman in addition to any other powers and duties conferred upon him under these regulations, shall -

(i) present all important papers and matters to the Board of Mining Examination as early as possible;
(ii) issue orders for carrying out the decisions of the Board of Mining Examination ;
(iii) have power to refer, in his discretion, any matter to the Central Government for its orders; and
(iv) have powers generally to take such action or pass such orders necessary to implement the decisions of the Board of Mining Examination .

(b) The Chairman may, during his temporary absence by reason of leave or otherwise, authorise any member of the Board of Mining Examination to perform all or any of the duties of the Chairman during such absence.

(c) Unless the Chairman otherwise directs, all proceedings of the Board of Mining Examination shall be conducted in camera and be regarded as confidential.

14. Certificates to be granted by the Board of Mining Examination . – The shot firing certificates issued under these regulations shall be granted by the Board of Mining Examination .

(a) Shot firing certificate of competency to perform well perforation job in oil mine.

15. Examinations and examiners. – (1) Certificates shall be granted to candidates after such examination and in such form as the Board of Mining Examination may specify:

Provided that the Board of Mining Examination may, subject to the conditions specified in the bye-laws exempt any person from appearing at the examination or part thereof for the grant of a certificate referred to in regulation 14.

(2) The examinations shall be held at such times and at such centres as may be fixed by the Board of Mining Examination , and shall be conducted by examiners appointed by the Board of Mining Examination .

(3) The examiners so appointed shall be subject to the orders of the Board of Mining Examination in respect of all matters relating to the conduct of the examinations, and shall receive such remuneration as the said Committee, with the sanction of the Central Government, may fix.

(4) The Board of Mining Examination may specify the procedure for and the conduct of the examinations and to the granting of certificates of competency and of fitness as required under these regulations, and shall, so far as may be practicable, provide that the standard of knowledge required for the grant of certificates of any particular class and the standard of medical fitness shall be uniform throughout the territories to which these regulations extend.

16. Submission of applications. – (1) Applications for an examination conducted by the Board of Mining Examination shall be made to the said Committee not less than 60 days prior to the date fixed for the examination and on a form specified for the purpose.

(2) Notice regarding the date and place of the examinations for the Shot firing certificate shall be published under the order of the Board of Mining Examination , in such periodicals as the said Committee may direct, not less than 60 days prior to the date fixed for receiving applications.

17. Age and general qualifications of candidates. – (1) No person shall be admitted as a candidate at any examination held by the Board of Mining Examination unless he is twenty years of age.

(2) No persons shall be admitted as a candidate at any examination for a shot firing certificate unless the certificate of experience, etc., required for appearing in the examinations under these regulations shall be in the form specified by the Board of Mining Examination .

(3) Every application for an examination as aforesaid shall be accompanied by-

(i) a medical certificate obtained not more than one year prior to the date of his application, from a qualified medical practitioner not below the rank of a Civil Assistant Surgeon or from a Certifying Surgeon, certifying the candidate to be free from deafness, defective vision or any other infirmity, mental or physical, likely to interfere with the efficiency of his work; and

(ii) a certificate from person of good repute as to the general good conduct and sobriety of the candidate.

18. Practical experience of candidates for shot firing certificate of competency examinations.– (1) No person shall be admitted as a candidate for examination of shot firing officer's certificate of competency unless he holds a degree from an approved institution and having total experience of one year in perforation operation in oil mines.

(2) The Chief Inspector may, by an order in writing and subject to such conditions as he may specify therein, vary the conditions specified under sub-regulation (1).

19. Number of attempts at examination. – No person shall be admitted for examination for shot firing certificate beyond five attempts from the date of coming in to force of these regulations.

20. Fees for grant of certificates. - (1) Every application for grant of a shot firing certificate shall be as accompanied by a fee of five hundred rupees.

(2) The fee once paid shall not be refundable except where the candidate has died before the examination or where fee has been erroneously paid.

21. Duplicate certificates. – If any person proves to the satisfaction of the Board that he has, without any fault on his part, lost or been deprived of a certificate granted to him under these regulations, the Board of Mining Examination may, upon realisation of a fee of rupees one thousand and subject to such terms and conditions as it thinks fit, cause a copy of the certificate to be delivered to him after making payment thereof and the word "DUPLICATE" shall be stamped across every such copy.

22. Certificates to be delivered to the manager. – When the holder of a shot firing certificate is employed in oil mine in a capacity which requires the possession of the said certificate, he shall deliver such certificate to the manager of the mine in which he is for the time being employed and the manager shall deliver to such person a receipt for the same and retain the certificate in the office at the mine so long as the holder thereof is so employed, and shall return it to the holder on his ceasing to be so employed.

23. Suspension or cancellation of shot firing certificates. - (1) If the Regional Inspector is of the opinion that the holder of a shot firing certificate is incompetent or is guilty of negligence or misconduct in the performance of his duties under the Act or under these regulations, he shall bring the matter to the notice of the Board of Mining Examination who may authorise in writing an Inspector, not being and not below the rank of the Inspector whose report formed the basis of the said opinion, to hold an enquiry to determine whether or not such a person (hereinafter referred to as the delinquent) is fit to continue to hold such certificate:

> Provided that the Board of Mining Examination shall, before the beginning of the enquiry, furnish to the delinquent a statement of the case on which the enquiry is instituted.

(2) During such enquiry under sub-regulation (1), the Inspector authorised to conduct the enquiry, shall be provided with all relevant documents and he shall record-

(a) the evidence of any witness that formed the basis of the said opinion;
(b) any evidence that the delinquent may like to give;
(c) the evidence of any witness that the delinquent may like to produce;
(d) the evidence of Manager of the mine; and
(e) any other evidence that may be considered necessary or relevant by the Inspector conducting the enquiry:

Provided that unless the delinquent fails to be present in spite of sufficient notice, the evidence aforesaid shall be recorded in the presence of the delinquent and he shall be given a reasonable opportunity to cross-examine the witness other than those produced by him:

Provided further that the Inspector conducting the enquiry also may cross-examine the delinquent and the witnesses.

(3) The Inspector who conducted the enquiry shall, within fifteen days from the date of conclusion of his enquiry, send a report to the Board of Mining Examination together with his findings, the notes of evidence recorded during the enquiry and other relevant records.

(4) Copies of the notes of evidence and the findings of the Inspector who conducted the enquiry shall also be sent to the delinquent who may submit his written representation to the Board of Mining Examination within thirty days from the date of despatch of such copies.

(5) The Board of Mining Examination may, after considering the evidence and other records and the written representation, if any, submitted by the delinquent, either cause further enquiry to be made in the case and thereupon, or otherwise, either exonerate the delinquent of the charges against him or suspend or cancel the certificate, as it deems fit.

(6) Against any order of the Board of Mining Examination under this regulation, an appeal shall lie before Central Government within thirty days of the order.

(7) Where a certificate is suspended or cancelled under this regulation suitable endorsement may be made on such certificate or a duplicate thereof issued under regulation 21.

24. Validity of a shot firing certificate. -

(1)(a) No shot firing certificate shall remain valid for a period of more than five years unless the certificate bears an endorsement by the Regional Inspector to the effect that the holder has within the preceding five years, been examined and certified by a qualified medical practitioner appointed by the Chief Inspector to be free from deafness, defective vision or any other infirmity, mental or physical likely to interfere with the efficient discharge of his duties.

(b) An application in respect of an examination in pursuance of clause (a) shall be made to the Chief Inspector, accompanied by a fee of fifteen rupees.

(2) (a) A medical examination undergone in accordance with rule 29B of the Mines Rules 1955 shall also be deemed to be an examination for the purposes of sub-regulation (1).

(b) The application for endorsement on a certificate by the Regional inspector shall be accompanied by the certificate of fitness granted in terms of rule 29B of the Mines Rules 1955 and a fee of five rupees.

25. Retirement age for shot firing officer.- (1) No person shall act as a shot firing officer in oil mine after attaining the age of sixty years unless he has obtained, within the preceding one year, a medical certificate of fitness certifying him fit to carry out the duties prescribed for him in the Act and in these regulations and the orders made thereunder:

Provided that if the Chief Inspector or the Regional Inspector is of the opinion that a person as aforesaid, though less than sixty years of age, is medically unfit to carry on the duties prescribed for him in the Act and in these regulations and the orders made thereunder, the Chief Inspector or the Regional Inspector may, by an order in writing, require such persons to obtain a medical certificate of fitness within such period, not exceeding three months, as he may specify therein, and no such persons shall continue to act in any capacity as aforesaid after the period so specified unless he has obtained a medical certificate of fitness.

(2) The medical certificate of fitness as aforesaid shall be obtained from such authority and in such manner as the Board of Mining Examination may specify.

(3) Without prejudice to the provisions contained in sub-regulation (1), no person shall act as shot firing officer after attaining the age of sixty five years.

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CHAPTER-IV

INSPECTORS, MANAGEMENT AND DUTIES

26. Qualifications of Inspectors.-

(1) No person shall be appointed as Chief Inspector unless he holds a degree in mining engineering of an educational institution approved by the Central Government;

(2) No person shall be appointed as Inspector unless he holds a degree in mining or petroleum engineering of an educational institution approved by the Central Government:

Provided that -

(i) in relation to electrical machinery installed in mines, a person holding a degree in electrical engineering of an educational institution approved by the Central Government may be so appointed;
(ii) in relation to other machinery or mechanical appliances installed in mines, a person holding a degree in mechanical engineering of an educational institution approved by the Central Government may be so appointed;
(iii) in relation to the provisions of the Act and of the regulations and of orders made thereunder which relate to matters concerning the occupational safety and health, a person holding a degree in medicine or surgery or occupational health and hygiene of an educational institution approved by the Central Government may be so appointed; and
(iv) in relation to the provisions of the Act and of the regulations and of orders made thereunder which relate to matters concerning welfare of persons, a person holding a degree in social science or labour welfare of an educational institution approved by the Central Government may be so appointed.

27. Access to facilities and vessels.-

(1) The owner agent or manager of the mine shall afford access and provide facilities for such access to the Chief Inspector, inspector and every person authorised under section 8 of Act, at all times to any part of the mine or any vessel or installation of the mine, as well as to material and information necessary to carry out inspection, survey, measurement, examination or enquiry under the Act.

(2) The officials referred in sub-regulation (1) shall have the right to stay on vessels or installation as long as deemed necessary, and the owner, agent manager or installation manager shall arrange transport to any part of the mine or any vessel, or installation of the mine, and also arrange for their stay on board.

28. Mine.-

For the purposes of this Chapter, all borings, boreholes, petroleum wells, accessory petroleum conditioning plants, workshops and installations, including the pipe conveying petroleum within an area duly demarcated by the owner or agent shall be deemed to constitute one mine:

Provided that where special conditions exist, the Chief Inspector may, by an order in writing and subject to such conditions as he may specify therein, permit or require the division of any one such area into two or more separate mines.

29. Qualification and appointment of manager.-

(1) No mine shall be opened, worked or re-opened unless there is a manager of the mine, being a person duly appointed.

(2) The manager appointed under sub-regulation (1) shall hold degree in engineering from an approved institution and have an experience of not less than ten years in oil mines:

Provided that the owner or agent may, where it considers necessary so to do, appoint a person having lesser years of experience, with the prior approval of the Chief Inspector in writing.

(3) No person shall act or be appointed to act as manager of more than one mine except with previous permission in writing of the Chief Inspector and subject to such conditions as he may specify therein:

Provided that the Chief Inspector may at any time by an order in writing vary or revoke any such permission if the circumstances under which the permission was granted have altered or the Chief Inspector finds that the manger has not been able to exercise effective supervision in the mines under his charge.

(4) Where by reason of absence or for any other reason, the manager is unable to perform his duties under the Act, and the regulations or bye-laws and orders made thereunder, the owner or agent shall authorise in writing a person possessing the qualifications under sub-regulation (2)) to act as manager.

(5) Where the qualification of the person authorised to act as manager is in variance with sub-regulation (2), no such authorisation shall continue beyond a period in excess of 30 days except with previous consent in writing of the Regional Inspector.

(6) The owner or agent as the case may be, shall forthwith intimate to the Regional Inspector in writing that such an authorisation has been made, stating reasons for the authorisation and the date of commencement and ending of the same.

(7) The person so authorised to act as manager shall during the period of such authorisation have the same responsibility, discharge the same duties, and be subject to the same liabilities as the manager.

30. Qualifications and appointment of deputy managers.-

(1) At every mine, having more than two manned installations including unmanned installations attached to that or part thereof, the manager shall be assisted by deputy managers on the following scale :-

(a) in case of an offshore mine, one deputy manager for every four manned installations including unmanned installations attached to them, or part thereof;
(b) in other cases, one deputy manager for every eight installations or part thereof.

(2) The deputy manager appointed under sub-regulation (1) shall hold degree or diploma in engineering from an approved institution and have an experience of not less than seven years of working in oil mines.

(3) The Chief Inspector may, by an order in writing and subject to such conditions as he may specify therein, permit or require appointment of deputy mangers in variation with these provisions.

31. Qualification and appointment of engineer.-

(1) At every mine, one or more engineer shall be appointed to hold general charge of mechanical and electrical machinery and to be responsible for its installation, maintenance and safe working and a notice of every such appointment, giving the name and full particulars of the qualifications and experience of the person so appointed, shall be sent to the Regional Inspector within seven days of such appointment.

(2) The engineer so appointed under sub-regulation (1) shall hold degree or diploma in engineering from an approved institution and shall have experience of not less than five years of working in the oil mines.

(3) The Chief Inspector may by an order in writing and subject to such condition as he may specify therein, permit appointment of engineer in variation with these provisions.

32. Qualification and appointment of installation manager.-

(1) At every mine one or more installation manager shall be appointed to hold charge of the different installations of the mine.

(2) Installation manager so appointed under sub-regulation (1) shall hold degree or diploma in engineering from an approved institution and shall have an experience of not less than five years of working in oil mines.

(3) An installation manager may hold charge of more than one installation.

(4) The Chief Inspector may by an order in writing and subject to such conditions as he may specify therein, permit or require appointment of installation manager in variation with these provisions.

33. Qualification and appointment of safety officer.-

(1) The owner, agent or manager of every mine shall appoint one or more safety officers to assist the manager in promotion of safety and health at work.

(2) In case of off-shore installation, safety officer shall be appointed at each manned installation.

(3) The safety officer appointed under this regulation shall hold degree or diploma from an approved institution and shall have undergone occupational health and safety training in oil mines.

(4) The Chief Inspector may, by an order in writing and subject to such conditions as he may specify therein, permit or require appointment of additional safety officers in variation with these provisions.

34. Qualification and appointment of surveyors.-

(1) At every mine one or more persons holding degree or diploma in civil engineering or in mine surveying, from an approved institution or an approved certificate in surveying, shall be appointed as surveyor to assist the mines manager and for carrying out the surveys, levellings and for preparing plans and sections as required under the Act, the regulations and the orders made thereunder.

(2) The Chief Inspector may, by an order in writing and subject to such conditions as he may specify therein, permit or require appointment of Survey Officer in variation with these provisions.

35. Qualification and appointment of fire officer.-

(1) At every mine one or more persons shall be appointed to be the fire officer for fire fighting and to assist the manager on fire prevention measures.

(2) No person shall be appointed as fire officer unless he holds a degree or diploma in fire engineering from an approved institution.

(3) The Chief Inspector may, by an order in writing and subject to such conditions as he may specify therein, permit or require appointment of fire officer in variation with these provisions.

36. Qualification and appointment of shot firing officer.-

(1) At every mine adequate number of shot firing officers shall be appointed for well perforation operation.

(2) No person shall be appointed as shot firing officer unless he is holder of shot firing officer certificate of competency.

(3) No person shall be admitted as a candidate for examination of shot firing officer's certificate of competency unless he holds a degree from an approved institution and having total experience of one year in perforation operation in oil mines.

(4) The Chief Inspector may, by an order in writing and subject to such conditions as he may specify therein, permit or relax for appointment of shot firing officer in variation with these provisions.

37. Appointment of officials and competent persons.-

(1) The owner, agent or manager of every mine shall appoint such number of competent persons including officials and technicians, as is sufficient to secure, during each of the working shift -
   (a) adequate inspection of the installation and the equipment thereof ;
   (b) a thorough supervision of all operations at the installation;
   (c) the installation, running and maintenance, in safe working order, of all machinery in the mine; and
   (d) the enforcement of the requirements of the Act and these regulations.

(2) It shall be the responsibility of the manager, deputy manager, engineer and installation manager to see that the persons appointed under sub-regulation (1) are competent to perform duties assigned to them.

(3) Copies of all appointments made under sub-regulation (1) and duties assigned to the competent persons under sub-regulation (2) shall be entered in a bound paged book kept for the purpose.

38. General management.-

(1) The owner, agent and manager shall provide for the safety, health, welfare, environment and proper discipline of persons employed in the mine.

(2) Except in a case of emergency, no person who is not an official or a competent person shall give otherwise than through the manager, instructions to a person employed in a mine who is responsible to the manager.

39. Duties of persons employed in mines.-

(1) Every person shall strictly adhere to the provisions of the Act and of the regulations and orders made thereunder and to any order or direction issued by the manger or an official with a view to the safety or convenience of persons, not being inconsistent with the Act and these regulations nor shall he neglect or refuse to obey such orders or directions.

(2) Every person shall be responsible to follow safety directives and be conversant with the safety instruction issued by the manager from time to time.

(3) Before beginning work every person shall examine his place of work and the equipment that he is to use and shall forthwith report to his superior any dangerous defect that he may discover.

(4) Every person shall make use of all safeguards, safety devices and other appliances provided for his protection or the protection of others.

(5) Except in an emergency, no person unless duly authorised shall interfere with, remove, alter or displace any safety device or other appliance provided for his protection or the protection of others or interfere with any method or process adopted with a view to avoiding accidents and injuries to health.

(6) No person shall, while on duty, throw any stone or other missile with intent to cause injury or fight or behave in a violent manner nor shall impede or obstruct any other person in the discharge of duties, or offer or render any service or use any threat, to any other person with a view to prevent the other person from complying with the provisions of the Act or the regulations, or orders made thereunder or from performing duties faithfully.

(7) No person shall sleep or rest in a dangerous place such as scaffolds, **derrick floo**r or cranes or in the vicinity of dangerous or toxic substances, machinery, boilers, vehicles and heavy equipment's.

(8) Every person shall wear protective equipment and clothing suited to his duties and to the weather conditions.

(9) Every person receiving any injury in the course of his duty shall, as soon as possible, report the same to an official or to the competent person in charge of a first-aid station, who shall arrange for the necessary first-aid to the injured person.

(10) No person shall, except with the authority of an official, remove or pass through any fence, guard barrier or gate, or remove any danger signal.

40. Duties of manager.-

(1) The manager shall be responsible for the safe and proper working of the mine by exercising supervision, control and direction to ensure that all work is carried out in accordance with the provisions of the Act and of the regulations and orders made thereunder.

(2) The manager shall ensure that sufficient supply of materials and appliances for the purpose of carrying out the provisions of the Act, the regulations and orders made thereunder and for ensuring the safety of the mine and persons employed therein, is always provided at the mine; and if he is not the owner or agent of the mine, he shall report in writing to the owner or agent when anything which he is not competent to order, is required for the aforesaid purpose and a copy of every such report shall be recorded in a bound paged book kept for the purpose.

(3) The manager shall assign to every competent person and official his specific duties and on his appointment make over to him a copy of the regulations, rules and bye-laws and any orders made thereunder which affect him and he shall take all possible steps to ensure that every such person understands, carries out and enforces the provisions contained therein in a proper manner.

(4) The manager shall examine all reports, registers and other records required to be made or kept in pursuance of the Act, the regulations and orders made thereunder and shall countersign the same and date his signature.

Provided that the manager may, however by an order in writing delegate this duty to deputy manager or installation manger.

(5) The manager shall pay attention to and cause to be carefully investigated any specific representation or complaint that may be made to him in writing by a work person of the mine as to any matter affecting the environment or safety or health of persons in or about the mine.

(6) When an accident resulting in any serious bodily injury to any person or loss of life occurs in a mine, the manager shall inspect the site of accident immediately and shall also either himself or through safety officer have an enquiry made into the causes of and circumstances leading to the accident and the results of every such enquiry and a plan and section of the site of the accident showing the details shall be submitted to the Regional Inspector within seven days of the date of occurrence.

(7) The manager shall perform such other duties as specified in this behalf under the Act, the regulations and orders made thereunder.

(8) The manager may suspend or take such disciplinary action as he thinks fit against the work persons for contravention of any provision of the Act, or the regulations and orders made thereunder.

(9) The manager shall maintain in a bound paged book kept for the purpose, a diary, and shall record therein the findings of each of his inspections and also the action taken by him to rectify the defects mentioned, if any.

(10) The manager shall identify operation of hazardous nature and frame code of safe practice to be followed by persons engaged in the operation which shall be consistent with the Act and the regulations or orders made thereunder.

(11) The manager shall ensure that the adequate copies of code of safe practices are distributed to the concerned persons working in these operations.

41. Duties of deputy manager.-

(1) The deputy manager shall carry out the duties assigned to him by the manager, and shall see that in the part of the mine or installations assigned to him by the manager, all work is carried out in accordance with the provisions of the Act and of the regulations or orders made thereunder.

(2) The deputy manager shall –

(a) subject to the orders of the manager, visit and examine the part of the mine and the installations under his charge or part thereof;

(b) maintain a detailed report of the result of each of his inspection and also action taken by him to rectify the defects noticed, if any;

(c) ensure that when any drilling rig, workover rig and associated equipment, production equipment or pipeline is shifted or newly installed, it is given a trial run before being put into use;

(d) in the absence of manager, deputy manager shall have the same responsibility and discharge the same duties and shall be subjected to same liabilities as the manager, but not so as to exempt the manager there from.

42. Duties of engineer.-

The engineer shall -

(a) subject to the orders of the manager and other superior official, hold general charge of the machinery at the mine, and shall be responsible for the proper installation, maintenance and safe working of such machinery;
(b) ensure that when any machinery is shifted or newly installed, see that it is given a trial run before it is put into use;
(c) ensure that the provisions of the Act and of the regulations or orders made thereunder relating to installation, operation, maintenance or examination of machinery are properly carried out by subordinate officials, competent persons and employees as the case may be, appointed for the purpose; and
(d) examine all reports, registers and other records relating to the installation, maintenance, operation or examination of machinery required to be made or kept in pursuance of the Act and the regulations or orders made thereunder, and shall countersign the same and date his signature.

43. Duties of installation manager.-

The installation manager shall -

(a) have responsible charge and control of such installations and shall carry out such duties, as may be assigned to him by the manager;

(b) ensure that a notice of his appointment is posted at a place in the installation in such a position that it can be easily and conveniently read;

(c) ensure that in the installation assigned to him, all work is carried out in accordance with the provisions of the Act and the regulations or the orders made thereunder;

(d) visit and examine the installations under his charge on every working day to see that safety in every respect is ensured;

(e) maintain a detailed record of the results of each of his inspections and also of the action taken by him to rectify the defects noticed, if any;

(f) ensure that when any drilling rig, work-over rig and associated equipment or production equipment or pipeline is shifted or newly installed, a trial-run is given before it is put into use and be present during every such trial run;

(g) ensure that all persons employed at the installation are thoroughly instructed and familiar with the provisions of the standing orders, safe operating procedures and emergency plan made under these regulations relating to prevention of blowout and fire;

(h) ensure that the provisions of the Act and the regulations or orders made thereunder relating to the installation, maintenance, operation or examination of machinery and equipment are properly carried out by himself or by competent persons or work persons, as the case may be, appointed for the purpose;

(i) during the construction of an installation or any operation thereat, when there is an emergency or apprehended emergency endangering the life or safety of any person or the stability and safety of the installation, himself take or cause to be taken such measures as are necessary or expedient to avoid the emergency.

44. Duties of safety officer.-

(1) The safety officer shall -

(a) inspect, as often as may be necessary, the installations of the mine with a view to identify the dangers which may cause bodily injury or impair health of any person or environment;

(b) advise the manager on measures necessary to prevent dangerous situations;

(c) enquire into the circumstances and causes of all accidents whether involving persons or not and advise the manager on measures necessary to prevent recurrence of such accidents;

(d) collect, compile and analyse information in respect of accidents and dangerous occurrences with a view to promote safe practices and improvement of working environment;

(e) organise regular safety education programmes and safety campaigns to promote safety awareness amongst persons employed in the mine.

(f) ensure that all new workers and workers transferred to new jobs receive adequate safety fire fighting and first aid training:

Provided that in case of offshore installations, safety training shall also include instructions and guidance relating to survival at sea;

(g) maintain a detailed record of work performed by him every day.

(2) The safety officer shall be assisted by adequate number of assistants for the discharge of his duties.

(3) No duties other than those specified in sub-regulation (1) shall be assigned to the safety officer without the written approval of the Regional Inspector.

45. Duties of fire officer.-

The fire officer shall --

(a) ensure the observance of the provisions of the Act and the regulations or orders made thereunder concerning fire detection, fire-fighting systems and emergency plan and advise the manager on measures necessary to ensure adequate protection against fire;

(b) ensure proper layout, installation and maintenance of fire-fighting equipment;

(c) ensure that emergency plan for likely fire situations are prepared;

(d) organise regular training of persons incharge of fire-fighting duties with particular reference to contingency or emergency plan for fire, correct assessment and handling of fire problem;

(e) ensure that persons incharge of fire fighting duties undertake simulated fire drills atleast once in every month to study promptness of response and effective tactics;

(f) examine at least once in every quarter all devices and equipment of fire detection and fire-fighting systems in the mine and report any defects in the same to the manger;

(g) exercise a general supervision and co-ordination during control and extinguishment of any fire in the mine;

(h) assist the manager or other officials so authorised, to conduct enquiry into the causes and circumstances of all fires with a view to prevent reoccurrence in the mine;

(i) maintain detailed record of work performed by him every day;

(2) No duties other than those specified in sub-regulation (1) shall be assigned to the fire officer without the written approval of the Regional Inspector.

46. Duties of shot firing officer.-

The shot firing officer shall -

(a) carry out his duties in accordance with the provisions of the regulations and of any orders made thereunder with respect to the transport and use of explosives;

(b) be responsible for the observance by his assistants, if any, of such provisions and of any direction with a view to safety, which may be given to them by a superior official;

(c) not hand over any explosive to any unauthorised person;

(d) be present when shots are being charged and shall himself fire the shots; and
(e) be responsible when a shot has misfired to see that the gun is safely disarmed.

47. Duties of competent persons.-

(1) Every competent person shall be subject to orders of superior official and shall perform his duties assigned to him in accordance with the provisions of the Act and of the regulations or the orders made thereunder.

(2) The competent person shall not -
- (a) depute another person to perform his work without the sanction of his superior officials;
- (b) absent himself without having previously obtained permission from such official for the period of his absence or without having been relieved by a duly competent person; and
- (c) without permission from such official, perform during his shift, any duties other than those for which he has been appointed.

(3) The competent person shall, on the occurrence at his place of work any hazardous condition, take prompt corrective measures to eliminate the hazard.

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CHAPTER-V
DRILLING AND WORKOVER

48. Derricks.-

(1) Every part of a derrick shall be of sound construction and adequate strength and shall be maintained in safety working order.

(2) The derrick shall be adequately secured to prevent it from overturning.

49. Derrick platforms and floors.-

(1) On every derrick or portable mast, a platform atleast 0.60 metres wide shall be provided on atleast one side of the crown block equipped on its outer edges with a two-rail railing atleast one meter high and toe-board 0.15 meter high.

(2) On every derrick, platforms shall be provided for persons to stand on while they handle pipe or other equipment racked in or on the derrick which shall cover the space from the working edge of the platform to the legs and girts of the derrick and be firmly secured.

(3) The working edge of monkey board platforms shall be so placed that there is adequate clearance for safe passage of traveling block.

(4) Platforms, floors and walkways shall be kept free of dangerous projections or obstructions and shall be so maintained that adequate protection against slipping is provided.

50. Ladders.-

(1) Every derrick shall be equipped with a ladder arrangement ensuring safe access to all elevated walking and working platforms.

(2) Access from ladder to working platforms shall be properly secured with railings and toe-boards.

(3) Every ladder shall have rungs equally spaced and the top end of each ladder section shall extend not less than one metres above the platform.

(4) Landing platforms or cages shall be provided on ladders of more than 6 metres to a maximum unbroken length of 9 metres.

(5) All landing platforms shall be equipped with railings and toe-boards so arranged as to give safe access to the ladder :

Provided that the Chief Inspector may permit in any mine or part thereof any alternative precautionary measures to be taken in lieu of landing platforms.

(6) All ladders leading from derrick platform to monkey board shall be provided with fall preventor of approved type or other such device to prevent persons from falling:

Provided that where special conditions exist which make the compliance with provisions of this sub-regulation not reasonably practicable, the Chief Inspector may by an order in writing and subject to such conditions as he may specify therein, exempt or relax from these provisions.

51. Safety belts and life lines.-

(1) Every person who works above the first girt of a derrick shall be provided with approved type of safety belt with full body harness and lifeline and shall use the same unless he is otherwise protected against the danger of falling from height.

(2) No person shall work or travel from where he is likely to fall for more than 1.8m unless he is protected by approved type of safety belt with full body harness and lifeline and shall use the same whilst at work.

52. Emergency escape device.-

(1) On every derrick there shall be installed and maintained an escape line, with the approved escape device with a slide of adequate strength in such a manner that persons can come down safely from the monkey board to ground level or main deck level (in case of off shore) in an emergency.

(2) Escape line shall be securely fastened to the girt immediately above the monkey board and it shall be securely anchored to ground at a distance not less than the height of the monkey board from the ground.

(3) Landing place shall be provided with adequate quantity of sand or other suitable material for cushioning to prevent hard landing.

(4) A competent person shall inspect every part of the emergency escape device once in every round trip or once in a week whichever is earlier and a record of every such inspection shall be maintained in a bound-paged book kept for the purpose and signed by the person who made the inspection.

53. Weight indicator.-

(1) On every rig a weight indicator shall be provided and used to register a close indication of the load suspended from the casing line.
(2) The weight indicator shall be well maintained and in working order.

54. Escape exits.-

The rig floor area, and each draw works engine floor area and each living accommodation shall have not less that two escape exits placed on opposite sides to give unobstructed escape.

55. Guardrails, handrails and covers.-

(1) Floor openings and floor holes shall be guarded by a standard railing and toe-board or cover.
(2) Every open-sided floor or platform 1.8 metres or more above adjacent floor or ground level where any person is allowed to work or pass shall be guarded by a standard railing.
(3) On the inside of all mud tank runways standard railing shall be provided unless other means are available to prevent a person from falling into the mud tanks.
(4) Open sided floors, walkways, platforms or runways above or adjacent to dangerous equipment and similar hazards shall be guarded with a standard railing and toe-board.

56. Draw-works.-

(1) The draw-works shall be fitted with a suitable device with its control near the driller's stand to stop the draw-works in case of an emergency.
(2) No draw-works shall be operated unless all guards are in position and maintained.
(3) If lubrication fittings are not accessible with guards in place, machinery shall be stopped for oiling and greasing.

(4) The brakes, linkage and brake flanges of draw works shall be examined by a competent person once at least in every 24 hours and if any defect is found during such examination, the draw-works shall not be used until such defect is remedied.
(5) The results of every such examination specified under sub-regulation (4) shall be recorded by the competent person making the inspection.
(6) The draw-works shall be provided with an automatic device which shall effectively prevent the traveling block from coming closer than two metres of the crown block on the one end and crashing on the rotary table at the other end:

Provided that where special conditions exist which make the compliance with provisions of this sub-regulation not reasonably practicable, the Chief Inspector may by an order in writing and subject to such conditions as he may specify therein, exempt or relax from these provisions.

57. Cathead and catline.-

(1) Catheads operated manually shall be equipped with a guide divider to ensure separation of the first wrap of line or rope.
(2) The key seat and projecting key on a cathead shall be covered with a smooth thimble or plate.
(3) When a cathead is in use, a competent person shall be at the controls and in the event of any emergency, he shall immediately stop the rotation of the cathead.
(4) The operator of the cathead shall keep his operating area clear and shall keep the portion of the catline not being used coiled or spooled.

58. Tongs.-

(1) Uncontrolled rotation of pipes shall be effectively prevented while making or breaking pipe connections and a back-up tong shall be used for this purpose whenever required.
(2) Tong counter balance weights and lines shall be provided with guards to prevent accidental contact.
(3) The ends of tong safety lines shall be secured with not less than three wire-line clamps, or crimped.

59. Safety chains or wirelines.-

Tongs, ends of rotary hose and suspension sheaves shall be fitted with safety chains or wirelines.

60. Casing lines.-

(1) All casing lines shall be visually examined by a competent person once at least in seven days and the condition of the wire as to wear, corrosion, brittleness and fracture shall be noted and a report of every such examination shall be recorded in a bound-paged book kept for the purpose and shall be signed and dated by the person who made the examination.
(2) If during any examination as aforesaid any defect or weakness is found by which the safety of persons may be endangered, such weakness or defect shall be promptly reported in writing to the installation manager or manager and until such weakness or defect is remedied, the casing line shall not be used.
(3) The wearing points of every casing line shall be moved by cutting off at least thirty metres of the casing line after every 3000 tonne-kilometres or at shorter intervals, where necessary so as to prevent excessive wear of the casing line which shall be carried out under the supervision of the driller or other competent person who shall record the date and other particulars thereof and shall sign and date the same:

Provided that where special conditions exist which makes compliance with the provisions of this sub-regulation not reasonably practicable, the Chief Inspector may by an order in writing and subject to such conditions as he may specify therein, exempt or relax from these provisions.

61. Rigging equipments for material handling.-

(1) Rigging equipment including cranes for material handling shall be checked prior to and during its use to ensure that it is safe.
(2) Rigging equipment shall not be loaded in excess of its recommended safe working load.
(3) While operating cranes in the vicinity of overhead electric transmission line, adequate precaution shall be taken against accidental contact with the electric transmission line unless the same is kept de-energised during movement of the crane.
(4) All rigging equipment and crane shall be examined by a competent person at such interval and in accordance with the procedure as laid down by the manager or installation manager and he shall record the results of his inspection.

62. Storage of materials.-

(1) All materials stored in tiers shall be stacked, racked or otherwise secured to prevent sliding, falling or collapse.
(2) Passage ways shall be kept clear to provide for the free and safe movement of material handling equipment or persons.

63. Construction and loading of pipe-racks.-

(1) Construction of pipe racks shall be designed to support any load placed thereon.
(2) Adequate provision shall be made to prevent pipe-tubular material or other round material from rolling off pipe-racks.
(3) No person shall go or be allowed to go between pipe-rack and a load of pipe during loading, un-loading and transferring operations of pipes unless effective protection device or system is provided to protect such person from being hit by any load of pipe in motion.

64. Rigging-up and rig dismantling.-

(1) The raising and installation of heavy loads shall be done during daylight hours unless adequate general lighting arrangements are provided at the place of work.
(2) All loose parts and tools shall be securely fastened.
(3) Guylines, cat lines, sub lines and such other lines shall not be installed within six metres of any electric overhead transmission lines.
(4) The exhausts of internal combustion engines shall be provided with water quenched or other effective spark arrestors.
(5) High pressure circulating fluid lines and steam line shall be securely bolted down.
(6) While dismantling the rig the wellhead shall be protected against damage from sliding or falling object.
(7) Components from aloft including nuts, bolts and cleats shall be lowered safely to the ground either singly, bundled or in containers.
(8) Safe work practices shall be framed and implemented by the manager or deputy manager or installation manager for rigging-up and dismantling.

65. Jacking up and jacking down of offshore rig.-

(1) The jacking up, jacking down and the rig movement shall be done under the direct supervision and control of an installation manager, or other official specially appointed by the manager for this purpose.

(2) The stability of the rig shall be ensured throughout the operations specified under sub-regulation (1).

(3) Code of safe practices specifying the operations, safety guidelines, maintenance, examination, duties of various persons and the checklists, for the operations shall be framed by the owner, agent or manager and a copy of the code shall be made available to the concerned officials before start of the operations.

(4) No jacking up, jacking down or rig movement shall be undertaken without considering prevailing wind, sea-current, sea bed data, water depth, penetration anticipated and other information likely to affect the stability and safety of the vessels.

(5) The rig shall remain securely anchored to the offshore supply vessels till such time it is properly pinned to the sea bed.

(6) The towing vessel used shall be subjected to the provisions of the test certificate issued by an approved agency which shall be dated within the previous twelve months and shall state continuous static bollard pull of the vessel.

(7) The water tight integrity of the rig shall be provided and maintained at all times.

(8) Effective communication shall be provided and constantly maintained between the rig and shore base.

(9) No critical operation of jacking up and jacking down shall be carried out beyond daylight hours except emergency.

(10) Only minimum number of persons required for jacking up or jacking down operations shall be permitted to remain on the installation.

67. Anchoring, mooring and positioning.-

(1) Floating facilities shall have systems to enable them to maintain their position at all times and, if necessary, be able to move away from the position in the event of a situation of hazard and accident.

(2) Dynamic positioning systems shall be designed in such a manner that the position can be maintained in the event of defined failure, damage to the system and in case of accident.

(3) During conduct of marine operations, the necessary actions shall be taken in such a manner that the probability of situations of hazard and accident is reduced and those who take part in the operations are not injured.

(4) Requirements shall be set to maintaining position in respect of vessels and facilities during implementation of such operations, and criteria shall be set for start up and suspension of activities.

68. Mud tanks and mud pumps.-

(1) Sufficient capacity of mud tanks and mud pumps shall be provided and maintained for effective control of the well.
(2) Mud tank shall be located at such a distance from internal combustion engine so as to guard against fire due to accumulation of flammable gases.
(3) Mud tanks shall be so designed and installed as to provide positive suction to mud pumps:
Provided that the Chief Inspector may, by an order in writing exempt any part of the mine from observance of this precaution if he considers such observance not necessary.

(4) All mud pumps connected to a drilling rig shall be equipped with a safety pressure relief valve and an operating gauge in the system.
(5) The valve shall be set to discharge at a pressure not in excess of the established working pressure of the pump, pipes and fittings.
(6) The discharge from a safety pressure relief valve shall be piped to a place where it will not endanger persons.
(7) There shall be no valve between a pump and its safety pressure relief valve.

69. Blowout preventor assembly – drilling.-

(1) After the surface casing is set in a well, no drilling shall be carried out unless blowout preventer assembly is securely installed and maintained.

(2) Blowout preventer assembly shall consist of -

(a) one blind or blind shear ram preventer for closing against an open hole and one pipe ram preventer, for closing against tubular in use in the hole for rated working pressure upto 136 kg/cm^2 (2000 psi);

(b) one annular preventer shall be provided in addition to provisions made in sub-regulation 2(a) for rated working pressure more than 136 kg/cm^2 (2000 psi) and upto 340 kg/cm^2 (5000 psi); and

(c) one annular preventer and one pipe ram preventer shall be provided in addition to provisions made in sub-regulation 2(a) for rated working pressure more than 340 kg/cm^2 (5000 psi) according to the maximum anticipated surface pressure.

(3) In blowout preventer assembly, there shall be provided two seamless steel pipes or flexible armored high pressure steel hose at least 50 millimeter in diameter connected below each set of blowout preventer, one for bleeding off pressure and the other for killing the well which shall be straight without any sharp bends and lead directly to the opposite sides of the drilling platform.

(4) Each pipeline shall consist of components having a working pressure not less than that of the blowout preventers.

(5) The bleed-off line shall be securely tied and connected to a suitable manifold which shall permit the flow to be diverted through a full opening line or through either the bleed-off line or kill line, each containing an adjustable choke and connected to a degassing system.

(6) Kelly cocks shall be provided between swivel and kelly and also between kelly and drill pipe.

(7) Well shall always be kept under control in all situations.

(8) Blow out preventer shall be installed and maintained to enable the shut off of any flow from the well regardless of the type or diameter of the tools or equipment in the well.

(9) Blow out preventer shall have a pressure rating equal to or greater than pressure rating of the well head, or the anticipated surface pressure, whichever is more.

70. Blowout preventor assembly for well servicing and coal bed methane operations.-

(1) Blowout preventer assembly shall consist of -

(a) one blind or blind shear ram preventer for closing against an open hole; and
(b) one pipe ram preventer, for closing against tubular in use in the hole.

(2) Well shall always be kept under control in all situations.

(3) Blow out preventer shall be installed and maintained to enable the shut off of any flow from the well regardless of the type or diameter of the tools or equipment in the well.

(4) Blow out preventer shall have a pressure rating equal to or greater than pressure rating of the well head, or the formation pressure, whichever is more.

71. Control system for blowout preventers.-

(1) All ram preventors shall have locking mechanism and instructions for operating the controls shall be posted prominently near the control unit.

(2) All controls of power operated blowout preventers shall be located within easy reach of the driller on the derrick floor :

Provided that where special conditions exist which make the compliance with this sub-regulation unnecessary or not reasonably practicable, the Chief Inspector may by an order in writing and subject to such conditions as he may specify therein, grant relaxation from the provisions of this sub-regulation.

(3) A remote control panel for the blowout preventer shall also be installed at ground floor level at a safe distance from the derrick floor and in case of off shore installation, at tool pusher's office.

(4) Blow out preventers shall be connected to an accumulator system which shall be capable of providing fluid of sufficient volume to close all the blowout preventers and open hydraulically operated valve.

(5) Minimum accumulator pressure shall not be less than 15 kg/cm^2 above pre-charge. It shall be capable of closing any ram type blow out preventer within 30 seconds and annular preventer within 60 seconds.

(6) All controls for blowout preventers shall be clearly identified with suitable markers.

72. Testing of blowout preventer assembly.-

(1) All the components of blowout preventors assembly shall be pressure tested upon installation and at every repair or re-installation but the frequency of pressure test shall not to exceed 21 days.

(2) Pressure test shall be conducted initially at low pressure of 15 to 20 kg/cm^2 (200 to 300 psi) and then at high pressure which shall be greater than the maximum anticipated surface pressure.

(3) The low and high pressure test shall be maintained for at least five minutes.

(4) Notwithstanding anything stated above, the annular ~~bag~~ type blowout preventer shall not be subjected to more than 70 percent of its rated pressure.

(5) All operational components of the blowout preventer assembly shall be function tested atleast once in a week.

(6) Full particulars of all tests mentioned above shall be recorded in the daily report and in the case of pressure test, the pressure applied and duration of test shall also be recorded by the persons making the test.

(7) If during any test, a blowout preventer assembly or any part thereof is found to be defective, such defects shall be rectified before resumption of normal operation of drilling or workover.

(8) Necessary pressure testing device shall be provided with each rig.

(9) All blow out preventers shall be serviced and tested at the workshop once in three years to their rated pressure and the test results shall be recorded, and shall also be made available at the installation.

73. Precautions against blowout.-

(1) The following control equipment for the drilling mud system shall be installed and kept in use during drilling operations :-

(a) a pit level indicator registering increase or reduction in the drilling mud volume and shall include a visual and audio warning device near the driller's stand;

(b) a gas detector or explosimeter at the primary shale shaker and connected to audible or visual alarm near the driller's stand;

(c) a device to ensure filling of well with mud when the string is being pulled out;

(d) a control device near the driller's stand to stop the mud pump when the well kicks, and in case of offshore rig an additional control device shall also be provided at a safe distance:

Provided that where special conditions exist which make the compliance with the provision of this sub-regulation not reasonably practicable, the Chief Inspector may, by a general or special order in writing and subject to such conditions as he may specify in such order, grant relaxation from the aforesaid provision.

(2) If the control equipment mentioned in sub-regulation (1) indicate that formation fluids are entering the well, immediate steps shall be taken to control the well.

(3) (a) Instructions shall be issued before the blow out preventer assembly is installed regarding action to be taken when a well kicks and specifying the duties of each person employed on the rig and of such other persons as may be necessary and a copy of the such instructions shall be posted prominently near the rig.

(4) Each person employed on a rig shall have an adequate understanding of the warning signs of a kick, the instructions referred to in sub-regulation (3), the blowout preventer assembly and be able to operate the controls for blowout preventers.

(5) Blowout prevention drill shall be conducted for this purpose once in seven days.

(6) Suitable control valves shall be kept available near the well which can be used in case of emergency to control the well.

(7) When running in or pulling out tubings, a suitable mechanism shall be kept readily available at the derrick floor to prevent uncontrolled flow from tubing .

74. Precautions after a blowout has occurred.-

(1) On the appearance of signs indicating that a well is blowing out, all persons other than those whose presence is deemed necessary for controlling blowout shall be immediately withdrawn from the installation and suitable action shall be taken in accordance with the procedures formulated in the emergency plan prepared under regulation 111.

(2) During the whole time that any work of controlling a blowout is in progress, the following precaution shall be taken: -

(a) competent person shall be present on the spot throughout;
(b) an area within 500 metres of the well on the down wind direction shall be demarcated as danger zone;
(c) all electrical installations within the danger zone shall be de-energised;
(d) approved safety lamps or torches shall only be used within the danger zone;
(e) no naked lights or vehicular traffic shall be permitted within the danger zone.

(f) a competent person shall ascertain the condition of ventilation and presence of gases with an approved instrument so far as safety of person is concerned;
(g) there shall be available at or near the place, adequate number of approved type of self-contained breathing apparatus or any other apparatus of approved type for use in emergency;
(h) adequate fire-fighting equipment shall be kept readily available for immediate use.
(i) any other equipments as required by Regional Inspector shall also be kept readily available.

75. Drilling operations.-

(1) At the beginning of every shift the instruments and controls at the driller's stand, draw-works, mud pumps, sensing and monitoring instruments, mud logging, casing line, catline and blowout preventer assembly shall be examined by the driller and he shall satisfy himself that these are in good working order.

(2) The manager of every mine shall ensure that a detail plan of operations relating to safety and geo-technical matters is formulated before commencing drilling for the individual well and the same shall be made available to installation manager, other concerned officials and competent persons before commencement of these operations.

(3) Before commencement of well drilling operation, a pre-spudding audit shall be carried out to examine and ensure safe operation of drilling and other related activities, and the audit finding shall be recorded and signed by the members.

(4) The driller shall ensure that no person remains in a position of danger at or near the rotary table before the rotary table is set in motion.

(5) Tools or other materials shall not be carried up or down a ladder unless properly secured to the body leaving both hands free for climbing.

(6) The casing line shall not be in direct contact with any derrick member or foul with any material in the derrick excepting the crown block and any travelling block sheaves, a line spooler, a line stabilizer or weight indicator.

(7) When cementing, no person shall be allowed on the rig floor near the wellhead or near the cementing line and equipment except those actually engaged on the operation.

(8) All high pressure pipes fitted with flexible points shall be suitably anchored and pressure tested before cementing operations commence.

(9) After cementing operation and prior to perforation, casing shall be hermetically tested at a pressure atleast 70% of the casing burst pressure.

(10) No well shall be drilled within 45m of any railways, public road or of any public works or of other permanent structure not belonging to the owner:

Provided that where special conditions exist which make the compliance with provisions of this sub-regulation not reasonably practicable, the Chief Inspector may, by an order in writing and subject to such conditions as he may specify therein, exempt or relax from these provisions.

76. Offshore drilling operations.-

(1) Integrity of installation:

(a) The owner, agent or manager shall take appropriate measures with a view to prevent damage to the drilling installations or any other installation or structure or pipelines in the vicinity.

(b) The measures to prevent damage referred to in clause (a) include-

(i) ensuring that the oceanographic, meteorological, environmental and sea bed conditions are suitable for the installation;
(ii) ascertaining the suitability of drilling location with respect to any structure or pipeline in the vicinity; or
(iii) establishing the procedure for the movement of the installation to the drilling location, its positioning threat and on completion of drilling moving away therefrom.

(2) Well control-

(a) The owner, agent or manager shall -
(i) take appropriate measures with a view to keep the well under control during drilling and well activity operations;
(ii) prevent uncontrolled release of well fluids;
(iii) ensure as far as is reasonably practicable, any arrangements made and equipment provided pursuant to this regulation are capable of remaining effective in emergency.

(b) The measures referred to in clause (a) shall include -
(i) installing well control equipment in accordance with approved standards;
(ii) monitoring of drilling parameters including mud properties;
(iii) establishing well control procedures; and
(iv) ensuring that personnel required to implement the procedures are competent.

77. Drill stem test.-

(1) Prior to the commencement of drill stem test, -

(a) the pressure and function of the blowout preventer assembly shall be pressure and function tested;
(b) fire-fighting equipment shall be kept readily available for immediate use;
(c) no person other than those required for the test shall be admitted on the drilling floor;
(d) the test line shall be securely anchored at each end and at each 9.0 metres interval;
(e) the kelly hose shall not be used as part of the test line;
(f) the test line and valves shall be examined by a competent persons and no test shall be taken if any defect is discovered until such defect is rectified.

(2) Initial opening of drill stem test tools shall be restricted to daylight hours only.

(3) When petroleum has been recovered during a drill stem test, the drill pipe shall not be pulled out unless the well is properly killed and steps are taken to ensure that there is no possibility of petroleum being present in the drill pipe.
(4) Gas produced to the atmosphere during a drill stem test shall be burnt through a flare-line or burners.

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CHAPTER-VI
PRODUCTION

78. Perforation.-

(1) Explosives shall be stored only in a magazine duly approved by the licensing authority under Indian Explosives Act, 1884 and shall be transported as per the provisions of the said Act.

(2) No person shall be appointed as shot firing officer unless he holds a valid shot firing certificate, provided under these regulations.

(3) Preparation of the charges and the charging of explosives shall be carried out by or under the personnel supervision of the shot firing officer and shots shall be fired by himself.

(4) Before commencement of perforation operation, the shot firing officer shall ensure that -

(a) the well is adequately filled with mud or brine so as to keep the bottom hole pressure under control, except in cases of under balanced perforation;
(b) the blowout preventer assembly is pressure and function tested and the results of the test are recorded by the competent person performing the test;
(c) the perforation gun be safely lowered down the well;
(d) a lubricator and wire-line blowout preventer are used at the wellhead while perforating through tubing;
(e) all equipment including drilling rig, and cable used for perforation are efficiently earthed;
(f) electrical bonding is established between equipment and well-head before connecting up explosive charges;
(g) all precautions be taken to safeguard against dangers from fire and stray electric currents, wireless equipment and mobile phone be kept switched off;
(h) perforating gun be primed just before lowering it in to the well. At the time of connecting detonator, the logging cable shall be placed in safe position in the logging unit;
(i) no synthetic clothes be worn by perforation crew; and
(j) all persons other than those engaged in perforation operation remain at a safe distance.

(5) Well-perforation shall not be carried out during night hours or under conditions of lightning, thunder, high winds and heavy rain.

(6) Normal work at the well shall not be resumed until firing of the charge has been completed and official has removed the perforation equipment from the site.

(6) Adequate fire fighting equipment shall be kept readily available at site for the whole period while well perforation operations are in progress.

(7) A written record of all issues, use, and return of explosives shall be maintained in a bound paged book kept for the purpose duly signed and dated by the competent person.

79. Well testing and activation.-

(1) Before commencement of testing or activation of well, the Christmas tree and flow-lines including the associated fittings shall be subjected to the maximum pressure that is likely to be encountered and the results of such tests shall be recorded by the person making the test.

(2) Well testing shall be done under the direct personal supervision of the installation manager or an official authorised in writing for the purpose who shall ensure that-

(a) no operation to activise the well is done during night hours ;
(b) flow-lines are firmly anchored to the ground;
(c) the separator safety valve is in good working order and properly adjusted;
(d) adequate fire-fighting equipment is readily available for immediate use; and
(e) adequate facilities are provided to safely collect the well products in tanks or pits.

(3) During well testing, in the event of any oil or gas show, immediate steps shall be taken to bring the well under control.

80. Group gathering stations.-

(1) When it is intended to construct any new group gathering station or carry-out material alterations at any group gathering station the owner, agent or manager shall, give notice of not less than ninety days before such construction or alteration commences, of such intention in Form VI of the First Schedule to the Chief Inspector, Regional Inspector and District Magistrate, and every such notice shall be accompanied by two copies of an upto date plan of the proposed site of the group gathering station showing the name and location of the installation, the name and location of any other group gathering station and all hydrocarbon pipe lines lying within a radius of 500 metres therefrom, the name of each well connected to the station, the extent of the land over which right of use has been established and any railway, public road, public works, building or any other surface feature lying within 60 metres of such installation :

Provided that where it is essential to carryout immediate alterations at any group gathering station in the interest of safety of the mine or of the persons employed therein, the provisions of this regulation shall be deemed to have been complied with if the said notice is given to the Regional Inspector as soon as the work for such alteration is commenced:

Provided further that in respect of a group gathering station where the quantity of petroleum gases or liquid stored or handled exceeds 300 tonnes and 1,00,000 tonnes respectively, the notice under this sub-regulation shall also be accompanied by a safety report in Form VII of the First Schedule and once atleast every three years thereafter, or earlier if any material alternations are proposed, the safety report shall be reviewed in due regard to new technical knowledge or the likely consequences of proposed alterations which might have affected or might affect the particulars in the previous report relating to safety and hazard assessment and a copy thereof submitted to the Chief Inspector, Regional Inspector and District Magistrate:

Provided also that in case of an existing group gathering station, -

the aforementioned copies of the plan and the details required to be furnished in the notice and wherever applicable, in the safety report shall be submitted within six months and five years respectively, of the coming into force of these regulations to the Chief Inspector, Regional Inspector and District Magistrate.

(2) If the Regional Inspector, by an order in writing so requires, such additions or alterations shall be made to the installations, as he may specify in the order.

(3) When the group gathering station has been commissioned, the owner, agent or manager shall forthwith communicate the actual date or commissioning to the Chief Inspector, Regional Inspector and District Magistrate.

(4) The group gathering station or process complex or well-cum-satellite platform along with processing platform, shall be designed, manufactured, operated and maintained in accordance with approved standards such that they are of sound construction, adequate strength and maintained in safe working order.

81. Piping and instrumentation diagram.-

Detailed piping and instrumentation diagram of each process complex shall be maintained and updated and a copy of the same shall be kept available at the process complex.

82. Markings on off shore platforms.-

(1) Marking of the installations shall be done as per the International Association of Light House Authorities.
(2) Markings of helicopter deck and other markings to ensure prudent helicopter operations shall be carried out and maintained in accordance with the International Civil Aviation Organisation.

83. Precautions during acidizing operations.-

(1) Acidizing operations at a well shall be carried out under the direct personal supervision of an official authorised for the purpose.
(2) Prior to acidizing operations all pressure lines and associated equipment shall be tested to a pressure one and a half times the expected working pressure.
(3) A non-return valve shall be installed in the treating line as close to the wellhead as practicable.
(4) The official shall see that -
  (a) no person other than those required for acidizing operation remains in the vicinity of the well;
  (b) every person handling acid is provided with and uses protective outer clothing, goggles, gloves and footwear; and
  (c) an adequate quantity of lime or other suitable chemical is readily available and used to neutralize any acid spilled.

84. Precautions during fracturing operations.-

(1) Fracturing operations at a well shall be carried out under the direct personal supervision of an official authorised for the purpose.
(2) Prior to fracturing operations, discharge pipeline upto the last valve on the wellhead shall be tested to a pressure one and half times the expected fracturing pressure.
(3) A non-return valve shall be installed in each discharge line as close to the wellhead as practicable.
(4) All discharge and bleed-off lines shall be securely anchored. Bleed off lines shall discharge into open tanks or to a pit.
(5) During fracturing operation, the official shall see that within 30 metres of well -
  (a) no person other than those required for fracturing operation remains;
  (b) no naked light or other source of ignition is permitted;
  (c) all electrical equipment is de-energised; and
  (d) adequate fire fighting equipment is available for immediate use.

(6) Pumping units shall be located cross wind atleast 15 metres from the wellhead, and pumping shall be done during daylight hours:

  Provided that where difficulties exist, the Chief Inspector may by an order in writing relax the provisions of these regulations subject to such condition as he may specify therein.

85. Precautions during loading and unloading of petroleum tankers.-

(1) Every tanker while it is being loaded or unloaded and until its valves have been shut and filling pipe and discharge faucets closed, shall be attended by a competent person authorised for the purpose.
(2) Loading and unloading of tankers carrying petroleum shall be performed during day light hours.

(3) In the loading and unloading area all pipe-lines, fittings and delivery hoses or metal pipes, metallic loading arms, swivel joints, tanks, chassis of tankers shall be electrically continuous and be efficiently earthed.

(4) On land, no mechanically propelled tankers shall be loaded or unloaded until its engine has been stopped and battery isolated from electrical circuit and the engine shall not be restarted and the battery shall not be connected to the electrical circuit until all tanks, and valves have been securely closed :

Provided that where special conditions exist which make compliance with any provisions of this sub-regulation not reasonably practicable, the Chief Inspector may by an order in writing and subject to such conditions as he may specify therein, grant relaxation from the said provisions.

(5) Adequate fire-fighting equipment shall be kept readily available during loading and unloading of tankers for immediate use.

86. Storage tank.-

(1) Every tank for the storage of petroleum in bulk shall be constructed of iron and steel in accordance with the specification approved by the Chief Inspector through a general or special order in writing;

(2) The tanks shall be erected on firm foundations or supports of non-combustible material in accordance with sound engineering practice.

(3) The height of a storage tank shall not exceed one and a half times its diameter or twenty meters whichever is less.

Explanation. - For the purposes of this sub-regulation, the height of a tank shall be the height from its bottom to top curb angles.

(4) An air space of not less than 5 percent of the total capacity of the tank or the space provided in the specification referred to sub-regulation (1), whichever is less, shall be kept in each tank.

(5) Every tank after being installed or reinstalled and before being put in use, shall be pressure tested by a competent person so as to ensure that it is free from any leakage and is suitable for storage of petroleum and a report of such test shall be maintained by the person making the test.

(6) Every tank installed above ground having capacity in excess of 1000 cubic metres shall be separately enclosed with a dyke or bund constructed above the ground level with an enclosure volume not less than the capacity of such tank.

(7) All enclosures mentioned in sub-regulation (6), shall be provided with proper discharge system to prevent accumulation of oil or water in the enclosures.

(8) Every storage tank including its roof and all metal connections shall be electrically connected with the earth in an efficient manner by not less than two separate and distinct connections placed at the opposite extremities of such tanks.

(9) The effectiveness of earthing shall be tested once in twelve months and the results of every such test shall be recorded in a bound-paged book kept for the purpose duly signed and dated by the person carrying out the test.

(10) Every storage tank shall be protected against lightning by suitable lightning conductors.

(11) No person shall enter or be permitted to enter a tank for cleaning or maintenance unless the tank has been examined by a competent person and found to be gas-free.

(12) When it is necessary to enter into a tank which is not gas-free, persons who are required to enter the tank shall be provided with approved type of self contained breathing apparatus or a full face piece mask with a pressure supply of respirable air.

(13) During the whole time that any work of cleaning or maintenance inside a tank in progress,

(i) a competent persons who is qualified to administer artificial respiration and first-aid shall be present on the spot throughout;
(ii) approved portable hand lamps shall be exclusively used in such work; and
(iii) adequate number of approved type self-contained breathing apparatus or full face mask shall be provided and maintained for use in emergency.

87. Emergency shut system and safety valves on off shore wells.-

1. A surface controlled sub-surface safety valves and a well head surface safety valve shall be provided and maintained at every well in accordance with approved standards which shall be in addition to other well head valves.

2. Every process complex shall be provided with an emergency shut down system and fire shut down system.

3. Emergency shut down system specified in sub-regulation (2), shall be capable of-

i) shutting down all wells and all activities on process complex, except those which may be required for dealing with the emergencies;
ii) bleeding off petroleum from the flow lines.

4. The fire shut down system specified in sub-regulation (2), shall be capable of activating the automatic fire fighting system at the affected areas in addition to the activities specified in sub-regulation (3).

5. The switches of the system specified in sub-regulation (2) shall be conveniently located at strategic points and shall be well marked.

88. Well servicing operations.-

(1) Every derrick shall be carefully examined by a competent person before it is used for well servicing operations and be adequately secured to prevent it from overturning.

(2) Prior to perforation and, or before lowering completion assembly, casing shall be hermetically tested at a pressure atleast 10% higher than the formation pressure.

(3) The crown block, traveling block, wire-lines, hooks and elevators shall be carefully examined by a competent person before it is used.

(4) When operations are carried out with a hoist and stationery derrick, the floor block shall be fastened to a substantial anchorage.

(5) Every person shall keep clear of the wireline between the drum and floor block.

(6) All persons shall remain at a safe distance from the bailing line during swabbing and scraping operations.

(7) When running in or pulling out tubings, a suitable mechanism shall be kept readily available at the derrick floor to prevent uncontrolled flow from tubing .

(8) No well servicing operation shall be carried out at any live well unless proper blowout preventer assembly is securely installed and maintained.

(9) Before commencement of well servicing operation, the blowout preventer assembly shall pressure and function tested.

(10) No tubing shall be pulled out of any well unless the well is properly killed.

(11) Before commencement of well servicing operation, pre-workover conference shall be held to examine and ensure safe operations and other related activities.

89. Artificial lifting of oil.-

(1) Unless a submersible pump is used for the purpose a properly constructed working platform shall be provided at the well where artificial lift equipment is to be used.

(2) No repairs, lubrication or pressing shall be done unless the pumping unit is stopped.

(3) All surface control valves for gas lift, intermittent gas lift or free plunger lift systems shall be clearly marked for ready identification.

(4) Risk assessment shall be conducted before carrying out artificial, secondary or enhanced oil recovery operation and suitable technical and other control measures thereof shall be formulated.

(5) Safe work practices shall be framed by the manager and circulated to all persons engaged therein.

90. Temporary closure of producing well.-

(1) When it is intended to temporarily close any producing well for a period exceeding 30 days, it shall be filled with mud or water or oil or salt solution or any special chemical so that the hydrostatic pressure of the fluid column over-balances the formation pressure to prevent leakage of petroleum at the wellhead:

Provided that in case of off shore wells, all the well valves including surface and sub-surface safety valves shall be closed and the same shall be inspected at such intervals as may be specified by the manager in writing.

(2) The control valves of the christmas tree shall be completely closed and effective measures shall be taken to prevent unauthorised operation.

(3) The christmas tree shall be examined for leakage at least once in 30 days by a competent person authorised for the purpose and in case any leakage is detected during such examination, the competent person shall take immediate steps to stop it.

(4) A report of every such examination shall be recorded in a bound paged book kept for the purpose duly signed and dated by person making the examination.

91. Plugging requirements of abandoned wells.-

(1) When it is intended to abandon a well, -

(a) all permeable formations shall be isolated with cement;
(b) a cement plug of minimum length of 50 metres shall be placed at the bottom of the well;
(c) a cement plug of a minimum length of 50 metres shall be placed across the shoes of the surface casing:

Provided that incase of off shore wells such plug shall be placed beneath the bottom of the outmost casing and sea bed cleared of all obstruction;

(d) the celler or pit around the well shall be filled up and the land shall be restored to the original level; and

(e) cased wells may be abandoned by placing a bridge-plug above the top of perforations capped with a three meter cement plug:

Provided that in case of offshore installation, it shall be ensured that the well is so designed and constructed that, it can be abandoned in a safe manner and after its abandonment, there can be no unplanned escape of fluid from it or from the reservoir, and it shall not pose any hazard to navigation of ships, vessels, etc. in the area.

(2) Every abandoned well shall be clearly identified at site and on the plan.

92. Production and process facilities.-

(1) The owner, agent or manager shall take appropriate measures -

(a) to prevent undesirable event that may lead to a release of petroleum;
(b) to shut in the process or affected part in the process, to stop the flow of petroleum or a leak or overflow, if it occurs; and
(c) to prevent ignition of released petroleum.

(2) The appropriate measures referred to in sub-regulation (1) shall include -

(a) designing and constructing the process and auxiliary facilities in accordance with approved standards;
(b) ensuring that the process facilities are designed on the basis of the findings of the assessment ;
(c) establishing procedures for the operation, maintenance, modification and testing;
(d) establishing procedures for testing and completion of wells in accordance with approved industry practices; and
(e) ensuring that the personnel required to implement procedures are competent.

(3) The treatment system for water produced from wells shall be designed that oil content in each discharge stream meets the stipulation as fixed by Ministry of Environment and Forest.

(4) The discharge point for water produced from the wells shall be placed in such a manner that such discharges shall not cause harm to the marine environment.

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CHAPTER-VII
TRANSPORT BY PIPELINES

93. Application.-

This chapter shall apply only to the transport of petroleum by means of pipelines within any mine as referred to in regulation 28.

94. Approval of the route and design of pipeline.-

(1) Permission in writing of the Regional Inspector shall be obtained for laying pipelines in accordance with such conditions as he may specify therein in respect of the following pipelines:-

(a) all gas pipelines;

(b) all trunk pipelines and all feeder lines having pressure more than 60 kg/cm^2

(2) Every application for permission under sub-regulation (1) shall be submitted in Form VIII of the First Schedule to the Regional Inspector and a copy thereof be sent to the Chief Inspector and the District Magistrate.

(3) The application for permission under sub-regulation (1) shall be accompanied by two copies of an upto date plan of the area where the pipeline is proposed to be laid showing the extent of land over which right of use has been established and route of the pipeline clearly indicating the districts and states through which the pipeline would pass:

Provided that in case of an existing pipeline or system of pipelines the aforementioned copies of plan and the particulars required to be furnished in the application shall be submitted to the Chief Inspector, Regional Inspector and District Magistrate within six months of the coming into force of these regulations:

Provided further that in case where special conditions exist, the Regional Inspector may by an order in writing and subject to such condition as he may specify therein, permit the laying of pipelines in variation with these provisions.

(4) Where it is proposed to lay pipeline within 45 metres of any railway or of any public work in respect of which this regulation is applicable by reason of any general or special order of the Central Government or of any public road or building or of other permanent structure not belonging to the owner of the mine, every application for permission under sub-regulation (1) and the accompanying plan shall also specify the position of pipeline in relation to the railway, public road or work building and a copy of the application shall also be sent in the case of railway to the railway administration concerned; and in the case of any public works as aforesaid, to such authority as the Central Government may by general or special order direct.

(5) When any pipeline has been commissioned, the owner, agent or manager shall forthwith communicate the actual date of commissioning to the Chief Inspector, Regional Inspector and District Magistrate.

95. Design of pipeline and fittings.-

(1) All pipes, valves, flanges and other fittings shall conform to Indian standards specification or such other specification as the Chief Inspector may recognise.

(2) Pipeline systems including risers shall be designed in such manner as will ensure its structural integrity under functional and environmental loads.

(3) Risers shall be located in areas away from landing station, crane operations and vessels operation.

(4) Pipeline systems shall be designed so that internal maintenance can be carried out.
(5) Launchers and receivers for cleaning and inspection tools (pigs) shall be designed so that they cannot be opened under pressure.

(6) With regard to flexible pipeline systems and pipeline systems made of material other than steel, usage factors and, if applicable, load and material factors shall be determined so as to ensure that the safety level for such systems is not lower than that of pipelines and risers made of steel.

(7) Pipeline shall have isolation valve which will operate during leakage or during disaster to meet the intended safety functions:

Provided that where special conditions exist, the Chief Inspector may by an order in writing relax the provisions of these regulations subject to such conditions as he may specify therein.

96. Laying of pipeline.-

(1) Pipelines shall be laid at least one meter below the ground level except where laying thereof above the ground level is necessary for any special conditions.

(2) The route of underground sections of a pipeline shall be indicated by markers and not less than two such markers shall be visible from any point along the route.

(3) Where the Chief Inspector is of the opinion that it is in the interest of public safety so to do, he may by an order in writing, require the owner, agent or manager to relay, renew or repair such pipeline in accordance with requirements as may be specified in such order.

(4) Permission from competent authority shall be obtained while crossing public structures such as roads, railway, river, etc.

(5) Pipeline shall not be laid unless the land is under the sole control of the owner or right of use has been obtained.

(6) Before the pipeline is put into commission, entire length of the pipe line shall be subjected to hydraulic test at a pressure of atleast one and half times the maximum permissible working pressure and the result of every such test shall be recorded by the competent person carrying out the test and countersigned and dated by the manager or deputy manager .

(7) Adequate arrangement shall be made to protect the gas pipeline from -

(a) hydrate formation; and

(b) high and low pressure valves in case of pressure above 60 kg/cm^2 .

(8) Pipelines shall be monitored including testing for corrosion at regular interval to observe the condition of the pipeline.

(9) Pipelines shall be inspected with greater frequency at the places where the pipeline crosses public structures, road, rail, river etc.

(10) Maintenance schedule shall be formulated and implemented regarding detecting, isolating and repairing a leak in the pipe line in a safe and efficient manner uin accordance with safe work practices.

97. Laying and maintenance of sub-sea pipeline and risers.-

(1) All sub-sea pipelines and risers shall be laid, protected and maintained in accordance with the approved standard.

(2) All pipeline and riser shall be protected against accidental load and mechanical damage.

(3) The layout of pipelines shall be such as to facilitate inspection, maintenance and repair.

(4) The route of sub-sea pipelines shall be demarcated in such manner that the vessels operating nearby do not damage the pipelines.

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CHAPTER VIII
OFF SHORE SAFETY ZONES

98. Establishment of safety zones.-

(1) The Chief Inspector may declare any geographical area around and above the facilities with the exception of sub-sea facilities, pipelines and cables as safety zone, if it is considered necessary in the interest of safety .

(2) Unless otherwise specified by the Chief Inspector, the safety zone shall extend from the sea bed to maximum 500 meters above the highest point of a facility in the vertical plane and horizontally extends 500 meters out from the extremities of the facility, where it may be located at any time.

(3) No unauthorised vessel (including aircraft) shall enter, pass, stay or operate in the safety zone, unless permitted.

99. Establishment and revocation of specified safety zones in emergency.-

In case of emergency, Chief Inspector may extend the existing safety zone or establish new safety zone to the extent as may be considered necessary in the interest of safety of persons employed therein, prevention of loss of property or damage to environment and the same may be revoked when the situation no longer warrants.

100. Monitoring of safety zones.-

1) The owner, agent or manager, shall -

(a) monitor all activities inside the safety zones;

(b) alert any intruding vessels or object which are about to enter the safety zone and intimate other vessels outside the safety zone if the vessels may constitute danger to the safety of the petroleum activities; and

(c) if the situation so warrants, refuse or prevent the entry of such vessels and also intimate the coast guard and other competent authority.

101. Notification of establishment and revocation of safety zones.-

The owner, agent, manager or installation manager, shall notify the establishment and the movement of off shore installations to the concerned agencies and the competent authorities.

102. Control in the safety zone.-

(1) The master of the attendant vessel or off take tanker or helicopter shall comply with instructions of the installation manager when in a safety zone.

(2) The master of the vessel or tanker or helicopter shall take adequate precautions for its safe operation and be responsible for safety of their crew, the safe operation of vessel or tanker or helicopter and for avoiding collision with the installation or associated facilities.

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CHAPTER - IX

PROTECTION AGAINST GASES, FIRES AND SAFETY MANAGEMENT SYSTEM

103. Storage and use of flammable material.-

(1) Except for fuel in the tanks of the operation equipment, no flammable material shall be stored within 30 metres of any well.
(2) Safety cans shall be used for handling and use of flammable liquids.
(3) Drainage from any fuel storage shall be in a direction away form the well and equipment.
(4) Any flammable liquid having a flash point of less than 65 degree Celsius shall not be used for cleaning purposes without prior permission in writing of the manager, deputy manager or an installation manager.

104. Precaution against noxious and flammable gases.-

(1) No person shall enter or be permitted to enter any cellar, sump, pit or any confined space or Zone '0' hazardous area or the area where a flare has become accidentally extinguished unless a test therein by a competent person indicates that the confined space is gas free.

(2) Where any test mentioned in sub-regulation (1) shows the concentration of flammable gas to exceed 20 percent of its lowest explosive limit, the supply of electric energy shall be cut off immediately from all cables and apparatus lying within 30 metres of the installation and all sources of ignition shall also be removed from the said area and normal work shall not be resumed unless the area is made gas-free.

(3) An automatic monitoring system shall be installed and maintained with sensors located at strategic points so as to activate warning system.

(4) On detection of hydrogen sulphide, all person on and near the well head, drill floor, shale shaker area, mud pump and tank shall put on suitable escape breathing apparatus.

(5) All persons other than those required for control measures shall be withdrawn to a safe area.

(6) Thorough checks with hydrogen sulphide gas detectors shall be made and normal operations shall resume only after the area has been declared gas free by the installation manager.

(7) Particulars of every occurrence as to where and when the flammable gas was found when it was removed, and the percentage thereof shall be recorded in a bound paged book kept for the purpose and every such entry shall be signed and dated by the competent person making the report and counter signed by the installation manager.

105. Safe distances.-

(1) No person shall smoke or be permitted to smoke within 30 metres of any well, separator, petroleum storage tank or other source of flammable gases.
(2) In every mine 'no smoking' areas shall be clearly demarcated.
(3) No naked light or open flame or spark shall be permitted within 30 metres of any well or any place where petroleum is stored.
(4) No flame type treater, crude oil treater or other flame-type equipment shall be placed or located within 30 metres of any well, separator, petroleum storage tank, except where such flame type equipment is fitted with a flame arrestor.
(5) Flare stack shall be sited not less than 90 metres from any part of a production installation or petroleum storage tanks:

Provided that where any of the above provision is not reasonably practicable, the Chief Inspector may relax the provision of these regulations subject to such condition as he may specify in writing.

106. Precautions against fire.-

(1) Dead leaves or dry vegetation shall not be allowed to accumulate or remain, and combustible materials other than materials required for use within a period of 24 hours shall not be stored, within a distance 15 meters from any oil or gas well or fuel tank storage area.

(2) Where an internal combustion engine is located within 30 metres of any well, separator or storage tank, -

(a) its exhaust pipe shall be insulated or sufficiently cooled and the end of the exhaust pipe shall be directed away from the well head; and

(b) its exhaust manifold shall be shielded to prevent its contact with liquids or gases which might otherwise fall on it.

(3) Where a diesel engine is located within 30 metres of a well, it shall be provided with an air intake shut-off valve with readily accessible remote control arrangement.

(4) Water bath treator, heater treator and flare line shall be provided with suitable device for remote ignition.

(5) All plant, machinery and derricks shall be effectively earthed for dissipation of any static electric charge.

107. Precautions during welding.-

(1) No person other than a competent welder duly authorised in writing by the manager, deputy manager, installation manager or engineer shall carry out welding or cutting work requiring use of flame or electric welding apparatus.

(2) No welding or cutting work shall be undertaken by any welder in any classified hazardous area unless a written permit, called “Hot work permit” in the form specified in the Second Schedule is issued to the welder by the manager, deputy manager or installation manager or authorised official and copies of such hot work permits shall be entered in a bound paged book kept for the purpose.

(3) No welding or cutting work shall be undertaken in hazardous area unless the area is duly examined and found gas free by a competent person authorised for the purpose and a report of every such examination shall be recorded in a bound paged book kept for the purpose duly signed and dated by the person making the examination.

(4) During the welding and cutting operations, the welder shall ensue that-

(a) all flammable material, oil grease, oil-soaked earth are removed from the area;

(b) no matches, lighters, or smoking apparatus or any other source capable of igniting flammable gas is present at or around his place of work :
Provided that nothing in this clause shall be deemed to prohibit the use of any suitable apparatus for the purpose of lighting or re-lighting the welding torch;

(c) adequate precautions are taken to prevent fires being started by sparks, slag or hot metal;

(d) adequate number of fire extinguishers and other fire fighting arrangements are made and kept readily available for immediate use;

(e) when operations are carried out in confined space, adequate ventilation by mechanical means is constantly provided to prevent accumulation of flammable gas; and

(f) when operations are carried out on pipeline which contain flammable fluid, the pipe be disconnected or blinded, the line be isolated, drained or purged with inert gas or water before hot work is undertaken and adequate precaution taken against build-up of pressure in the line while hot work is in progress:

Provided that nothing in this clause shall be deemed to prohibit the use of hot-tapping machine on a running pipeline with prior written permission of the manager or an installation manager.

(5) The installation manager or engineer shall ensure that where hot work permits are issued, welding and cutting operations are carried out in accordance with the said permits.

108. Cold work permit.-

(1) Cold work permit shall be issued by the manager, installation manager or authorised official where the risk arising from the work demands co-ordination between different activities, stringent system of control and non-routine jobs, to ensure safety of persons.

(2) The cold work permit shall be in the form specified in the Third Schedule specifying the place, time, date and duration of such work, the precaution to be taken, use of essential personnel protective equipment and other relevant details.

(3) The cold work permit shall incorporate a mechanical isolation procedure which involves the physical locking off and isolation of essential sections or valves.

(4) Copies of cold work permit issued shall be displayed at a notified location such that operating person can readily see and check which part of system or equipment is under maintenance and not available for operation.

(5) Relevant instructions shall be issued to all concerned persons for implementation of cold work permit.

109. Fire fighting equipment.-

(1) At every drilling rig, following fire fighting arrangement and equipment shall be provided :-

(a) adequate water storage, pumping facilities, hoses and nozzles;

(b) adequate number of appropriate portable fire extinguishers at the derrick floor, main engine area, electrical machinery, mud tank area, diesel storage area and other vulnerable places; and

(c) adequate number of appropriate portable fire extinguishers at the derrick floor, main engine area, electrical machinery, mud tank area, diesel storage area and other vulnerable places.

(2) At every group gathering station and petroleum storage tank, following fire fighting arrangement and equipment shall be provided:-

(a) a water ring main with adequate storage of water at site, pump feeding hydrants and water monitors shall be provided and maintained; and

(b) fixed-roof storage tanks shall be provided with fixed foam connections.

(3) In addition to the provisions of sub-regulations (1) and (2), the Regional Inspector may, by an order in writing, require maintenance of mobile fire fighting equipment of such type or specification as he may specify in the order.

(4) All installations including well head area with christmas tree shall be easily accessible so as to allow for external fire fighting assistance without any hindrance.

(5) Adequate number of fire tenders or equipment shall be kept readily available at convenient location for use in emergency at all time.

(6) A competent person shall once at least in every three months examine every fire extinguisher and shall discharge and refill it as often as may be necessary to ensure that is in proper working order.

(7) A report of every such examination or refilling under this regulation shall be recorded in a bound paged book kept for the purpose duly signed and dated by the person making the examination or refilling:

Provided that the Regional Inspector may by an order in writing require such additional fire fighting arrangements, of such type and at such locations as he may specify in the order.

110. Use of fire fighting equipment.-

Every person employed at any drilling - rig, work-over rig, well head installation, group gathering station, storage tank or on such work where fire fighting equipment may be required to be used, shall be trained in the use of such equipment by holding regular fire drills for this purpose.

111. Emergency plan.-

(1) The manager shall frame an emergency plan and submit a copy thereof to the Regional Inspector who may approve it either in the form submitted or with such additions or alterations as he may deem fit.

(2) Emergency plan shall be prepared after carrying out risk assessment of the activities in the mines in respect to following emergencies :

(a) fire;
(b) blowout, explosion, ignition, influx of inflammable or noxious gases;
(c) bursting of equipment, pipeline or uncontrolled escape of petroleum;
(d) failure of structures;
(e) accident involving boat, helicopter etc.
(f) chemical spillage;
(g) natural calamities;
(h) medical evacuation, man over board; and
(i) any other emergencies.

(3) The emergency plan shall contain -

(a) the action to be taken in the event of any major accident including when and how the said action is to be taken;
(b) organisation plan clearly stating the line of command and the responsibilities of each person involved in case of emergency situations;
(c) equipment plan viz., make, type, capacity, location, field of operation, and operating procedure in respect of every equipment; and
(d) strategy plan specifying the number of steps to be taken in any particular case of emergency.

(4) Action plan shall clearly stipulate –

(i) alarm and communication system,

(ii) system of notifying the authorities,
(iii) the duties and responsibilities of each key personnel including measures to be adopted to avert or minimise the consequences of the emergency,
(iv) when and how the equipment shall be used and when and how the action shall be carried out,
(v) help or information that would be available from associated and external agencies including government agencies,
(vi) guidelines for terminating the action; and
(vii) plan for training of personnel and for mock-drills.

(5) (1) It shall be the duty of the manager to ensure that -

(a) all equipment on the installation provided for compliance with the emergency plan is maintained in a reliable state under efficient working order and in good repair;

(b) there is a proper and suitable written scheme for the systematic examination of all emergency equipments by an independent competent person;

(6) The manager shall specify the nature and frequency of examination that may be carried out, before first use of the equipment on the installation and also after any modification or repairs.

(7) The manager shall review and modify the plan periodically and in particular before any alteration is carried out and submit a copy thereof to the Regional Inspector for approval.

112. Safety management plan.-

(1) The owner , agent or manager shall prepare safety management plan in respect of all the operations of the mine in such a manner that -

(a) the requirements of the Act and of these regulations, bye-laws and orders made thereunder are complied with in relation to any activity or in connection therewith ;
(b) an organisational structure is in place with the aim of ensuring safety and health performance;
(c) the risks to safety and health are evaluated and measures are taken to reduce the risk to persons and damage to machinery or equipments likely to be affected;
(d) appropriate controls are in place to ensure that the decisions for ensuring and promoting safety and health are implemented;
(e) it is comprehensive and integrated;
(f) it provide for the identification of hazards and assessment of risks;
(g) it provide for measures to eliminate the hazards or control the risks;
(h) it provides for inspection, testing and maintenance of the equipment and machinery;
(i) it provides for adequate communication;
(j) it provides for any other matter that is necessary to ensure safety;
(k) it provides for monitoring, audit, review, training and continual sustainable improvement; and
(l) it provide for any other activity or operation which the Chief Inspector may specify in writing.

(2) The owner, agent or manager shall prepare a manual for safety management plan and a copy of the manual shall be made available at the office of the mine.

(3) A copy of the manual referred to in sub-regulation (2) shall be submitted to Chief Inspector and Regional Inspector within 180 days from the date of coming into force of these regulations.

(4) The Chief Inspector may either approve the manual submitted to him under sub-regulation (3) or with such modifications as he may deem fit.

(5) The Safety management plan shall be periodically reviewed and in particular before any alteration or system change is carried out and a copy thereof shall be submitted to both Chief Inspector and Regional inspector forthwith.

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CHAPTER- X

MANAGEMENT OF SAFETY IN OFFSHORE INSTALLATIONS

113. Preparation of safety case.-

(1) The owner, agent or manager shall prepare a safety case in respect of every installation including combined operations if any, in such a manner that -

(a) the safety management system is adequate in respect of the design and the operation of the installation;
(b) the potential major hazards of the installation and the risks to personnel thereon have been identified and appropriate controls provided; and
(c) in the event of a major emergency affecting the installation, adequate provision is made for ensuring temporary safe refuge for persons and also for their safe evacuation, escape and rescue.

(2) A copy of the safety case specified under sub-regulation (1) and duly signed by the manager shall be submitted to the Chief Inspector and Regional Inspector atleast ninety days before commencement of operations on the installation:

Provided that in respect of installations where operations have already commenced, the safety case shall be prepared and submitted within 180 days from the date of coming into force of these regulations.

(3) The safety case specified under sub-regulation (1) shall be reviewed and updated atleast once in every five years or at shorter interval as may be considered necessary and a copy of the same duly signed by the manager shall be submitted forthwith to the Regional Inspector.

(4) The Regional Inspector may require such modifications or alterations in the safety case as he deems fit.

114. Fitness of offshore installations.-

(1) Appropriate measures shall be taken to construct, install and maintain all offshore installations under foreseeable meteorological, oceanographic, environmental and sea-bed conditions.

(2) The measures specified under sub-regulation (1) shall include an assessment of the design and construction of the installation in relation to the conditions under which it is to be installed and used in accordance with approved standard.

(3) Every offshore installation shall have a valid certificate of fitness as provided under the provisions of the Merchant Shipping Act, 1958:

Provided that in case of the installations commissioned prior to the coming in force of these regulations, the certificate of fitness shall be obtained within six months of the coming into force of these regulations.

115. Identification of offshore installations.-

At every offshore installation there shall be displayed its name or other designation in such manner as to make the installation readily identifiable on approach by sea or air and is so equipped as to help locate or indicate its presence in hours of darkness and bad weather.

116. Underwater Operation. -

(1) The owner, agent or manager shall ensure that all diving activities are coordinated with the safety management system for the safe operation.

(2) Diving safety management system shall be based on relevant international recognised standard and shall include design, inspection, maintenance and testing of diving plant and equipment, training of diving personnel, hazard analysis including collision avoidance, safe practices manual and operational procedure during various stages of diving.

(3) The emergency procedure for specific situations of hazard and accident including lost bell and trapped drivers shall be formulated and established.

117. Operations in rough weather conditions.-

(1) The owner, agent, manager or installation manager shall identify the rough weather conditions and take adequate precaution in case of adverse weather and tidal conditions:

Provided that in case of adverse weather, work shall be stopped and all work persons shall be evacuated to safe place well in advance.

(2) The owner, agent, manager or installation manager shall take adequate steps to ensure safe transfer of personnel and cargo between the vessel and installation:

Provided that such transfers shall be stopped during adverse or unsuitable conditions.

118. Securing of wells before abandoning.-

(1) All wells shall be secured before they are abandoned so that well integrity remains intact during the time they are abandoned.

(2) With regard to sub-sea completed wells, the well integrity shall be monitored if the wells are planned to be temporarily abandoned for more than twelve months.

(3) The control of the well integrity shall be ensured by reconnection to temporarily abandoned wells.

(4) No radioactive sources shall be left behind in the well:

Provided that in case it is not possible to retrieve the radio-active source, the same shall be left in the well after adopting proper abandonment procedure as per the guidelines of the department of Atomic Energy, Government of India.

119. Permit to work.-

(1) Where the risks arising from the work to be performed under a given circumstance at an offshore installation demand a stringent system of control to ensure safety, it shall be ensured that such work is carried out only in accordance with the written instructions hereinafter called work permit, issued by a person authorised by the installation manger.

(2) The work permit shall specify the place, date, time and duration of such work, the precautions to be taken and the persons responsible for compliance.

(3) The permit to work system shall form part of Safety Management Plan.

(4) Different colours of permit shall be issued for different types of work and the period for which a permit to work remains valid.

(5) All permit to work system shall incorporate a mechanical isolation procedure which involves the physical locking off and tagging of isolation valves.

(6) A permit to work and its consequent isolation, both mechanical and electrical shall remain in force until the work is sufficiently complete for the permit to be signed off and the equipment returned to operation.

(7) Copies of all issued permits to work shall be displayed at a convenient location and in a systematic arrangement such that process operating person can readily see and check which equipment is under maintenance and not available for operation.

(8) Owner, agent and manager shall be responsible for and undertake training of all persons, their own or those of contractors, in the detailed permit to work procedures where those persons are required to act as designated or performing authorities and a record of such training shall be maintained and such trained persons shall carry documentary proof of having undergone such training.

120. Suspending a permit to work.-

(1) At the end of the shift when the work is to be suspended, the performing authority shall, after inspecting the site, sign the permit to the effect that the work is suspended and return it to the designated authority.

(2) The designated authority shall inspect the site to ensure that the work may be suspended safely and shall sign the permit accordingly.

(3) The permit, together with other suspended permits, shall be located in a prominent position in the control room or permit office clearly lebelled as suspended.

(4) Before re-issuing the permit to work, the designated authority shall ensure that the site is inspected again to ensure that all required isolation are still in place.

121. Prevention of fire and explosion at an offshore installation.-

(1) The owner, agent or manager shall submit to the Regional Inspector a fire risk analysis of the installation 30 days before its operation:

Provided that in the case of existing installations, fire risk analysis shall be submitted within 60 days of the coming into force of these regulations.

(2) Fire and explosion protection shall be integrated in the design of installations as active and passive fire protection measures or a combination of the two which shall be assessed on the totality of the measures taken including minimisation of petroleum inventory, drainage of spills of flammable liquids, installation layout to separate vulnerable targets from high risk areas, ventilation to disperse leaks, elimination of ignition sources, system to provide early detection of gas and fire, localisation of fire by fire and explosion resistant walls, floors and ceilings, reduction of over pressures by equipment layout, venting and minimisation of missiles.

(3) Any measures including fire deluge system to fight fire shall be so designed as to survive severe accident conditions and to be effective.

122. Emergency shut down system and fire shut down system.-

(1) Every process complex shall be provided with an emergency shut down system and a fire shut down system.

(2) The emergency shutdown system referred to in sub-regulation (1) shall be capable of shutting down all wells and all activities on process complex except those which may be required for dealing with the emergencies.

(3) The emergency shut down system and fire shut down systems shall also be capable of bleeding off petroleum from the flow lines.

(4) The fire shut down system shall be capable of activating the automatic fire fighting system at the affected area.

(5) The switches of the systems specified in this regulation shall be conveniently located at strategic points and shall be well marked.

123. Safety valves on offshore wells.-

A surface controlled sub-surface safety valve and a well head surface safety valve shall be provided and maintained at each well in accordance with the approved standards in addition to other well head valves.

124. Emergency escape survival craft.-

(1) Each offshore installation shall be provided with totally enclosed motor propelled survival craft (TEMPSC) having in aggregate sufficient capacity to accommodate safely on board 150% of the number of persons on the installation and such provision shall be readily accessible from the Temporary Safety Refuse (TSR).

(2) Each offshore installation shall be provided with life rafts having in aggregate sufficient capacity to accommodate safely on board at least the number of persons on board the installation, along with suitable ropes or scrambling nets to enable those persons to obtain access to the life rafts after they have been launched and deployed.

(3) A standing vessel shall be provided within easy reach of an offshore installation or a group of offshore installations which shall be equipped and maintained with the following facilities :-

(a) it shall be highly maneuverable and able to maintain its position;
(b) it shall provide full visibility of the water line in all direction from the bridge;
(c) it shall have atleast 360^{o} search lights capable of being remotely controlled;
(d) it shall have two fast rescue crafts which shall be able to travel at 25 knots in normal sea states.
(e) each of the fast rescue crafts referred to in clause (d) shall be provided with radio communication facilities and adequate portable search lights;
(f) it shall have means of rapid launching of its fast rescue craft;
(g) it shall have adequate means of communication by radio with its fast rescue crafts, the installation, nearby vessels and the shore;
(h) it shall have atleast two methods of retrieving survivors from the sea;
(i) it shall be manned by appropriate numbers of crew members and shall be operational at all time;
(j) crew members of standing vessels shall be imparted with adequate training including practical aspect of rescue of survivors and record shall be maintained on-shore.

(4) Installation manager and other persons on the installation shall be trained in the decision making in case of emergency by way of drills and exercises.

(5) Precautionary evaluations at regular interval shall be made of the drills and exercises and a record of such evaluation shall be maintained.

125. Transportation by helicopter.-

(1) No helicopter shall land or take off from an installation until radio and visual communication has been established between the helicopter, the installation and base, as the case may be.

(2) All necessary precaution shall be taken to ensure the safety of persons on or around the installation during helicopter operation including -

(a) vessels which may be along side; and

(b) crane movement as may endanger the helicopter operation.

(3) A suitable means shall be provided for ascertaining at any time the wind speed and direction, air temperature and barometric pressure.

(4) Procedure shall be established in respect of the installation providing for regular and systematic determination and recording of parameter specified under sub-regulation (3) and also visibility, cloud base, and cover.

(5) Adequate and suitable equipment as specified by Director-General, Civil Aviation shall be provided to ensure the safety of helicopter operation.

(6) A code of precautions specifying the safety guidelines for maintenance of helicopter, refueling, daily examination, duties of various persons and the checklists for the helicopter operations shall be framed by the manager in consultation with Director-General, Civil Aviation and made available to the concerned persons.

(7) A competent person appointed to be in control of helideck operations on the offshore installation shall be present on the installation.

(8) The competent person shall carry out appropriate duties before any helicopter lands on the offshore installation or takes off from it.

(9) Procedures shall be established and equipment provided to secure landing and take off of helicopters without risks to the safety of personnel and the installation.

126. Landing area.-

(1) Where a helicopter landing area is provided, it shall be located, demarcated constructed and maintained to the standard specified by Director-General, Civil Aviation.

(2) The floor of the helideck at the installations shall be of a type that afford adequate friction to avoid skidding of the helicopter.

127. Control of helicopter movement.-

(1) A competent person shall be appointed at each installation as helicopter landing official, to be responsible for the control of helicopter operations in relation to the installation.

(2) No person shall be appointed as helicopter landing official unless he has been adequately trained and duly authorised by the installation manager in writing.

(3) All persons engaged in helicopter operation on an installation or base or who may be in or around the helicopter landing area shall be subjected to the immediate and effective control of the helicopter landing official.

128 Transport by marine vessels.-

(1) While transporting persons by sea to and from the installation, adequate precaution shall be taken for their safety.

(2) It shall be ensured that while persons are being transferred from vessels to installation or installation to vessels, adequate arrangements are made for their safe transfer.

(3) No transfer from vessel to the installation or visa-versa shall be carried out on rough seas.

(4) A code of precautions specifying the safety guidelines, maintenance of vessels, daily examination, duties of various persons and the checklists for the vessels operations shall be framed by the manager and made available to the concerned persons.

129. Life saving appliances for offshore installations.-

(1) Suitable life saving appliances such as life boat, life raft, life-buoys, life-jackets, working-vests, scrambling nets and escape ladders, escape capsules etc., shall be provided in sufficient numbers and maintained on each installation in accordance with the provisions of the Merchant Shipping Act.

(2) The life saving appliances as mentioned in sub-regulation (1) shall be -

(a) of type, number, capacity, design and construction as per the approved standard; and

(b) maintained and kept in working order.

(3) All persons shall be properly trained in effective use of the life saving appliances mentioned in sub-regulation (1).

(4) Small transmitters or detectors shall be provided on life-jackets in order to assist in the finding of personnel in the dark and luminescent strips shall be of a colour other than orange.

130. Means and routes of escape on offshore installations.-

(1) Sufficient and suitable routes of escape to abandonment areas and to sea level shall be provided and maintained on each installation.

(2) The escape route shall be –

(a) kept and maintained free from obstruction;

(b) clearly indicated by suitable fluorescent signs, and

(c) effectively protected.

(3) Any appliance provided as part of means of escape and which does not form part of the installation shall be stored and clearly marked so as to be readily available for immediate use.

131. Unmanned platform.-

(1) Not less than two persons shall be permitted to go or remain at any unmanned platform or work in any isolated area.

(2) All unmanned platforms shall be adequately equipped to afford safe working conditions to workpersons.

132. On board medical officer.-

(1) The owner agent or manager shall ensure that at each manned installation, depending on its size, a qualified medical officer or a paramedic is available at all times.

(2) The medical officer on board shall promote good health and contribute to prevention of disease and injury through-

(a) collection and dissemination of information on such features of the workplace that may affect health;
(b) ensuring that adequate standards of hygiene are maintained;
(c) taking appropriate preventive action within his area of responsibility;
(d) diagnosis and treatment of disease and injury, and first aid after accidents;
(e) incorporation of health emergency preparedness into the general emergency preparedness of the enterprise, including transport of the sick and injured;
(f) taking steps to prevent spread of communicable diseases on the installation.

133. Accommodation.-

(1) The number of persons accommodated on a facility shall normally not exceed the number that the facility was designed for.

(2) The number of persons accommodated on a facility may in emergent cases and in consultation with the safety officer, exceed the number that the facility was designed for.

(3) When decision is made concerning the duration and extent of such accommodation under this regulation, the consequences shall be considered and compensating actions shall be taken to ensure safety and necessary rest and restitution.

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CHAPTER-XI
MACHINERY, PLANT AND EQUIPMENT

134. Use of certain machinery and equipment.-

(1) The Chief Inspector may, from time to time, by notification in the official Gazette, specify appliances, equipment, machinery or other material that may be used in a mine which shall be of such type, standard and make as approved by the Chief Inspector by a general order and where any such appliance, equipment, machinery or other material has been specified by the Chief Inspector, no appliance, equipment, machinery or material other than that approved by the Chief Inspector as aforesaid shall be used in any mine.

(2) Where in the opinion of the Chief Inspector or Regional Inspector any appliance, equipment, machinery or other material not notified under sub-regulation (1) is likely to endanger life or safety of any person employed in any mine, the Chief Inspector may by an order in the writing prohibit the use of such appliance, equipment, machinery or material in any mine.

135. Use of mobile cranes.-

(1) Mobile cranes shall not be used for lifting loads beyond their rated capacity.

(2) A safe load indicator shall be provided in the mobile cranes to give warning when overload occurs.

(3) A load radius indicator shall be provided to indicate appropriate safe working load and radius which shall be clearly visible to the crane operator.

(4) Motion limit devices shall be provided to limit hoisting, swinging and boom extending.

(5) Effective audio visual alarm shall be provided which shall get actuated automatically whenever the crane is reversed.

(6) The crane operator shall have a clear view of the load being handled and where it is not practicable to do so, suitable signaling system shall be provided for giving suitable signals for safe operations.

(7) Certified and tested slings shall only be used.

(8) Only competent and trained crane operator shall be permitted to operate.

(9) Mobile crane shall be examined by a competent person at such interval and in accordance with the procedure as laid down by the manager or deputy manager or installation manager and the results of such inspection shall be recorded by the person making the inspection.

136. Lifting appliances and gears.-

(1) Lifting appliances, gears system shall be properly maintained and operated to ensure safety of the persons.

(2) The engineer authorised for the purpose shall ensure that -

(i) the design, construction and installation of lifting appliances, gears and ropes are in accordance with approved standard; and

(ii) selection of appliances and gears are suitable for the purpose for which they are intended for use.

(3) Personnel engaged for lifting operations shall be imparted job related training for safe operation.

137. Classification of hazardous area.-

The areas in the mine shall be classified into different zones according to the degree of probability of the presence of hazardous atmosphere by the Chief Inspector or an Inspector assisted by such assistants and after such investigations as he may consider necessary.

138. Use of electrical equipment in hazardous area.-

(1) No electrical appliance, equipment, or machinery including lighting apparatus shall be used in zone 'O' hazardous area.

(2) The Chief Inspector may from time to time by notification in the official Gazette specify appliances, equipment and machinery that are or may be used in zone 1 and zone 2 hazardous area which shall be of such type, standard and make as approved by the Chief Inspector by a general or special order in writing and where any such appliances, equipment or machinery has been specified by the Chief Inspector, any appliances, equipment or machinery other than that approved by the Chief Inspector shall not be used in such hazardous area.

139. Construction and maintenance of machinery.-

All parts and working gear whether fixed or moveable including the anchoring and apparatus used as or forming part of the equipment of a mine and all foundations in or to which any such appliances are anchored or fixed shall be of good construction, suitable material, adequate strength and free from visible defect and shall be properly maintained.

140. Maintenance System.

(1) All machinery and equipment in the installation shall be maintained in an efficient working order and kept in good repair.
(2) Procedure shall be established for the maintenance of machinery and equipment.
(3) The procedure referred to in sub-regulation (2) shall -
    (a) specify the nature and frequency of examination;
    (b) provide for an examination to be carried out, where appropriate, before the machinery and equipment is first used on the installation and also after major modification or repair.

(4) The examination referred to in sub-regulation (3) shall mean critical scrutiny of machinery and equipment, in or out of service as appropriate, using suitable techniques, including testing where appropriate:
    (a) to assess its suitability for the purpose for which these are to be used;
    (b) to assess its actual condition; and
    (c) to determine any remedial measures.

(5) The procedure established under this regulation shall include a plan for implementation of the remedial measures identified.

(6) All measuring gadgets, meters, relief valves, etc., shall be calibrated at regular intervals specified by the manufacturers.

141. Internal combustion engines.-

(1) Internal combustion engines of over 30 horse power shall be provided with means, other than manual, for starting them :
    Provided that nothing in this sub-regulation shall be deemed to prohibit manual starting in an emergency.
(2) Where compressed air is used for starting the engine, a non-return valve shall be provided in the compressed airline as close to the engine as practicable.
(3) The exhaust system of the engine shall be provided with suitable device to prevent discharge of open flame and sparks from the exhaust.

(4) Adequate precaution shall be taken to prevent accumulation of flammable vapour near the internal combustion engine.
(5) The electrical accessories of an internal combustion engine shall comply with the provisions of Indian Electricity Rules, 1956.

142. Apparatus under pressure.-

(1) All apparatus used as or forming part of the equipment of a mine which contains or produces air, gas, petroleum or steam at a pressure greater than atmospheric pressure shall be so constructed, installed and maintained as to obviate any risk of fire, bursting, explosion or collapse or the production of noxious gases.

(2) Every air receiver or container or separator used for storage of petroleum or gas or steam under pressure shall be fitted with a safety valve and pressure measuring device which shows pressure in excess of the atmospheric pressure.

(3) Before an air receiver or a container containing petroleum or gas or steam is cased in or put in commission, a competent person shall subject it to a hydraulic test at a pressure atleast one and half times of the maximum permissible working pressure and similar test shall be made after every renewal or repair and in any case at intervals of not more than three years or at such shorter intervals as may be required by the Chief Inspector, and the results of every such test shall be recorded by the competent person carrying out the test and countersigned and dated by the manager, deputy manager or installation manager.

(4) The discharge line of a pressure apparatus shall be provided with a pressure relieving safety device.

(5) There shall be no valve or fitting between the pressure apparatus and its pressure relieving safety device or between the device and point of discharge, as would render the device ineffective.

(6) The pressure relieving safety device shall be set to open at a pressure not exceeding 10 percent above the maximum allowable working pressure.

(7) The pressure relieving safety device shall be tested and calibrated at least once in a year, and a record of every such test shall be kept in abound paged book kept for the purpose by the person making the test, duly signed and dated by him.

(8) Discharge end of relief valve of separator, heater treater or other pressure vessel, etc., shall be connected by suitable piping to a tank:

Provided that such other suitable system shall also be provided for avoiding oil and gas spillage in case of opening of relief valve.

(9) Every in-coming gas line connected to any gas compressor shall be provided with a shut-off valve at safe distance outside the compressor shed.

(10) No repairs shall be undertaken in respect of any gas compressor and pipelines and fittings connected to it unless the control valves on the inlet and discharge lines are closed and securely locked.

143. Precautions regarding moving parts of machinery.-

(1) Every winch shall be provided and used with a stopper, pawl or other reliable holder.

(2) Every flywheel and every other dangerous exposed part of any machinery used as or forming part of the equipment shall be adequately fenced by suitable guards of substantial construction to prevent danger and such guards shall be kept in position while

the parts of the machinery are in motion or in use but they may be removed for carrying out any examination, adjustment or repairs if adequate precautions are taken.

(3) No person shall be allowed to repair, adjust, clean or lubricate machinery in motion where there is risk of injury.

(4) No person shall be allowed to shift or adjust a driving belt, chain or rope while the machinery is in motion unless a proper mechanical appliance is provided for the purpose.

(5) No person in close proximity to moving machinery shall wear or be permitted to wear loose outer clothing.

(6) No unauthorised person shall be permitted to enter in any engine room, including gas turbine, compressor, or other machine area, or in any way interfere with the machinery.

144. Engine rooms and their exits.-

(1) Every engine, motor, compressor, turbine and pump room, and every room in which highly flammable materials are stored shall be kept clean, and be provided with atleast two exits.

(2) Every exit shall be clearly marked, properly maintained and kept free from obstruction.

145. Working and examination of machinery.-

(1) No machinery shall be operated otherwise than by or under the constant supervision of a competent person.

(2) Every person in charge of any machinery, apparatus or appliance shall before commencing work ensure that it is in proper working order and if he observes any defect therein, he shall immediately report the fact to the installation manager or other competent person.

(3) Person in charge of an air-receiver shall ensure that no extra weight is added to the safety valves and that the permissible pressure of air is not exceeded.

(4) A competent person or persons appointed for the purposed shall, once at least in every seven days, make a thorough inspection of all machinery and plant in use, and shall record the result thereof.

(5) In respect of electrical machinery and plant, the competent person shall be a person holding qualifications specified in the India Electricity Rules, 1956.

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CHAPTER- XII
GENERAL SAFETY PROVISION

146. Housekeeping.-

(1) Loose materials which are not required for use shall not be placed or left so as to dangerously obstruct workplaces and passage-ways.

(2) All projecting nails and ends of railings shall be bent over to prevent injury.

(3) Scrap, waste and rubbish shall not be allowed to accumulate in work places, access or egress.

(4) Workplaces and passage-ways that are slippery owing to oil, mud or other causes shall be cleaned up and made safe.

(5) Portable equipment shall be returned after use to its designated storage place.

(6) Equipment, tools and small objects shall not be left lying about where they could cause an accident either by falling or causing person to trip.

147. General lighting.-

(1) Adequate general lighting arrangements shall be provided during working hours at the following places -

(a) Where the natural lighting is insufficient;
(b) derrick floor;
(c) driller's stand and control panel;
(d) monkey board;
(e) every engine and pump house;
(f) derrick sub-structure near blowout preventer controls;
(g) every place where persons are to work;
(h) every means of escape, access or egress;

(2) The lighting provided in a mine shall as far as possible be so arranged as to prevent glare or eye strain.

148. Electric lighting.-

(1) Every electrical lighting apparatus used in hazardous area shall be of a type approved by the Chief Inspector.

(2) The lighting system installed in the mine shall comply with the provisions of the Indian Electricity Rules, 1956.

(3) Every electrical lighting apparatus shall be so fitted as to protect it from accidental damage.

149. Standard of lighting.-

The Chief Inspector may from time to time by notification in the Official Gazette specify the standard of lighting to be provided in any specified area or places in a mine.

150. Emergency lighting.-

Adequate number of self contained portable hand lamps of approved type or any other source of self contained back up power system shall be made and kept available for immediate use in emergency.

151. Supply and use of protective footwear.-

(1) No person shall go into work or be allowed to go into work in a mine unless he wears a protective footwear of such type as may be approved by the Chief Inspector who may specify by a general or special order in writing.

(2) Protective footwear referred to in sub-regulation(1) shall be supplied free of cost by the owner, agent or manager at interval not exceeding one year or such other intervals as the Chief Inspector may specify by a general or special order in writing.

(3) The owner, agent or manager shall at all times maintain a sufficient stock of protective footwear in order to ensure immediate supply as and when need for the same arises.

152. Supply and use of protective helmet and footwear.-

(1) No person shall go into or work or be allowed to go into work in a drilling rig or work-over rig or rig building or rig dismantling or at such other place of work where there is a hazard from flying or falling objects unless he wears a helmet of such type as may be approved by the Chief Inspector by a general or special order in writing.

(2) The helmet referred to in sub-regulation (1) shall be supplied free of cost at intervals not exceeding three years by the owner, agent or manager who shall at all times maintain a sufficient stock of helmets in order to ensure immediate supply as and when need for the same arise:

Provided that when a helmet is damaged during its legitimate use, it shall be immediately replaced free of cost.

(3) The owner, agent or manager shall provide protective footwear and helmet free of charge.

(4) Every person provided with protective footwear and helmet shall wear the same while at work.

153. Protective equipment.-

(1) Every person engaged in the operations and every other person who may be exposed to the risk of injury, poisoning or disease arising from the operations shall be provided with -

(a) depending upon the risk, suitable protective equipment including respiratory protective equipment, eye protectors, gloves, coverall and aprons; and

(b) suitable protective outer clothing for use in rain and extreme weather conditions;

(2) All the protective equipment shall be provided free of charge.

(3) Every person provided with protective equipment shall use the same while at work.

154. Personal survival and escape equipment for off shore installations.-

(1) Each individual on board an installation shall be provided with -

(a) a personal survival (or immersion) suit;
(b) a life jacket;
(c) a smoke hood of a simple filter type to exclude smoke and provide protection for atleast 10 minutes during escape to or from the Temporary Safety Refuse;
(d) a torch; and
(e) fire-resistant gloves.

(2) The articles mentioned in sub-regulation (1) shall be kept in the accommodation.

(3) Survival suits, life jackets and smoke hoods for atleast one and half times the number of persons on the installations shall be stored in containers placed at suitable location of the installations.

(4) Small transmitters or detectors shall be provided on life-jackets in order to assist in the finding of personnel in the dark and luminescent strips shall be of a colour other than orange.

155. Protection against noise.-

(1) The owner, agent or manager shall take steps to reduce the noise level and to reduce the exposure of work persons to noise.

(2) No person shall be allowed to work without appropriate ear protection in an area if he is exposed to an equivalent continuous noise level exceeding 90 dB(A).

(3) No person shall enter or be allowed to enter an area in which the sound level is 140dB(A) or more.

(4) The Chief Inspector may, from time to time, by notification in the Official Gazette, specify the permissible noise exposure in any area or place in a mine.

156. Communication.-

(1) Efficient means of communication shall be provided and maintained in good working order between manned installations, and the office of the manager and other places of work:

Provided that wherever possible, communication shall be by radio telephone and an alternative means of signaling shall also be provided.

(2) Equipment for external communication shall be chosen on the basis of operational needs, type of activity and defined situations of hazard and accident.

(3) Communication equipment and associated power supply shall be designed and protected so as to remain functional in situations of hazard and accident.

(4) The communication and signaling system installed in the mine shall comply with the provisions of the Indian Electricity Rules, 1956.

157. Safety while working at height.-

Where any person is working at more than 1.8 meters height, the owner, agent or manager shall provide an approved safety belt suitable for the hazard exposure which shall be attached by means of a lifeline to a fixed anchor.

158. Precautions against toxic dusts, gases and ionising radiation.-

(1) The emission of toxic dust, gases fumes and ionising radiation shall be prevented or controlled at source as far as reasonably practicable.

(2) Every person liable to be exposed to toxic dust, gases, fumes and ionising radiation shall be instructed in the safe working methods and techniques, by a competent person appointed for the purpose.

(3) The Chief Inspector may from time to time, by notification in the Official Gazette, specify the permissible limits of exposure to toxic dusts, gases fumes and ionising radiations.

159. Safety warning signs.-

(1) Storage area and containers of toxic, corrosive, flammable, poisonous and radioactive material shall be properly labeled and appropriately stored according to content.

(2) Warning signs shall be posted to denote any hazardous situation.

(3) Warning signs shall be posted in areas where the use of personal protective equipment is required.

(4) Identification signs shall be conspicuously posted to locate emergency equipment and directions of escape route.

(5) Pipelines carrying steam or fluid at high pressure shall be conspicuously identified.

160. Protection against pollution of environment.-

(1) Any oil discharged from a well during its completion, testing and repairs shall be collected in suitably constructed and adequately fenced disposal pits or burnt in case of off shore operations through a special type of oil burners.

(2) In offshore operations, the oil spill preparedness and combating shall be in accordance with the National Emergency plan, 1996 issued by Coast Guard Headquarters, New Delhi (Ministry of Defence), as amended time to time.

(3) No disposal pits shall be constructed within 45 metres of any railway, public road or of any public works or of other permanent structure not belonging to the owner:

Provided that in case where special conditions exist, the Chief Inspector may by an order in writing and subject to such conditions as he may specify therein, permit such construction in variation with these provisions.

(4) Untreated sewage, formation water, oil, drilling fluid, waste, chemical substances or refuse from a well, tank or other production installation shall not be permitted, -

(a) to create hazard to public health and safety;
(b) to run into or contaminate any fresh water structure or body of water or to remain in a place from which it might contaminate any fresh water or body of water;
(c) to run over or damage any land, highway or public road; and
(b) to be disposed off in the sea.

(5) Before any fluid is discharged into sea or fresh water structure or any body of water, it shall be treated and samples of fluid at regular interval shall be obtained and analysed and the results of such analysis shall be maintained by the person collecting the sample and analysing the same.

(6) No scrap, surplus or unused material shall be permitted to be dumped or disposed off in the sea or in the vicinity of any installation.

(7) Gas produced at any installation shall not be discharged to the atmosphere unless it is burnt, or in the manner otherwise approved by the Chief Inspector through a general or special order.

(8) Gas to be burned, referred to in clause (a) shall be discharged from a flare line in the following manner:-

(a) flare-line shall terminate with the vertical rise of at least 9 meters or such greater height as may be required by Regional Inspector by an order in writing;
(b) the flare-line shall be adequately anchored and provided with suitable means to prevent extinction of the flame;
(c) when the gas-flow is intermittent, the flare-line shall be provided with a remote controlled electrical ignition device to ensure continuous ignition of any gases; and
(d) a green belt of adequate width shall be developed around the flare:

Provided that where practical difficulties exists, the Regional Inspector may relax the provisions of this regulation subject to such condition as may be required.

161. Fencings.-

(1) The Christmas tree provided at any well on land shall be kept securely fenced with access gates securely locked.

(2) The protected area surrounding every drilling or work over installation, production installation, storage tank and flare stack shall be provided with fence of not less than 1.8 meters in height.

(3) Precaution shall be taken to prevent any unauthorised person from access to any place which has been duly fenced.

(4) Every fence shall once atleast every seven days be examined by a competent person and a report of every such inspection shall be recorded in a bound paged book kept for the purpose duly signed and dated by the person who made the examination.

(5) If any doubt arises as to whether any fence, guard, barrier or gate provided under this regulation is adequate, proper or secure, it shall be referred to the Chief Inspector for decisions, whose decision thereon shall be final.

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CHAPTER- XIII
MISCELLANEOUS

162. Contractors and Service providers.-

While hiring contractor or service provider, the owner and the agent shall ensure that the contractors and the service providers as the case may be, are qualified to carry out the requirements under the Act, or the rules, regulations, byelaws or orders made thereunder, and shall ensure that such contractor or service provider comply with the requirements or duties assigned to them at the mine.

163. General Safety.-

No person shall negligently or willfully do anything likely to endanger life or limb in the mine or negligently or willfully omit to do anything necessary for the safety of the mine or of the persons employed therein.

164. Safety and health education and instructions.-

In every mine, safety and health education and instruction programmes shall be organised regularly to make the workers safety conscious and instil an awareness of occupational safety and health at every level.

165. Place of accident not to be disturbed.-

(1) Whenever there occurs in or about a mine an accident causing loss of life or serious bodily injury to any person, the place of accident shall not be disturbed or altered before the arrival or without the consent of the Chief Inspector to whom notice of the accident is required to be given under sub-section (1) of section 23 of the Act, unless such disturbance or alteration is necessary to prevent any further accident, to remove bodies of the deceased or to rescue any person from danger, or unless discontinuance of work at the place of accident would seriously impede the working of the mine :

Provided that where the Chief Inspector or the concerned Inspector fails to inspect the place of accident within seventy two hours of the time of the accident, work may be resumed at the place of accident.

(2) Before the place of accident involving a fatal or serious accident is disturbed or altered due to any reason whatsoever, a sketch of the site illustrating the accident and all relevant details shall be prepared in duplicate and such sketch shall be duly signed by the manager or assistant manager, safety officer, surveyor and the workmen's inspector or, where there is no workmen's inspector, by a workperson nominated by the workers in this behalf:

Provided that if the place is disturbed or altered to prevent further accident or to rescue persons from danger before the sketch could be prepared, the same shall be prepared immediately thereafter, giving all relevant details as existed before the place was disturbed or altered.

(3) One of the authenticated sketches shall be delivered or sent to the concerned Inspector.

166. Pointing out of contraventions detected during inspections.-

(1) If the Chief Inspector or an Inspector during his inspection of any mine, finds, or comes to know of any contravention of any provisions of the Act or the regulations, rules, bye-laws or orders made thereunder, he shall submit a report thereon and either himself intimate or cause the same to be intimated to the owner, agent or manager of the mine, of such contravention.

(2) The owner, agent or manager shall, within three days of the receipt of intimation under sub-regulation (1), display the contents thereof on the notice board of the mine for a period of atleast 15 days and when so required, the owner, agent or manager shall also supply the copies thereof to the registered or recognised trade unions and to the State Government concerned.

(3) The owner, agent or manager of the mine shall, within a period not exceeding fifteen days from the date of receipt of the intimation under sub-regulation (1), intimate to the Regional Inspector the action taken to remedy each of the contraventions and the manner in which such contraventions have been remedied.

(4) The agent or manager or in their absence the next senior most official of the mine shall accompany the Chief Inspector or Inspector during his inspection and note down immediately the contraventions pointed out by him on the spot.

(5) The owner, agent or manager of the mine, shall as soon as possible, intimate to the Chief Inspector or the Inspector who made the inspection, details of action taken to remedy the contraventions, intimated under sub-regulation(1).

167. Signing of returns, notices and correspondence.-

All returns and notices required under or correspondence made in connection with the provisions of the Act and of the regulations or orders made thereunder shall be signed by the owner, agent or manager of the mine:

Provided that the owner may, by a power of attorney, delegate these function to any other specified person:

Provided further that in respect of notice of accident, the manager may delegate this function to any deputy manager/installation manager.

168. Chief Inspector to exercise power of the Regional Inspector.-

Any power granted under these regulations to the Regional Inspector may be exercised by the Chief Inspector or any other Inspector authorised in writing in that behalf by the Chief Inspector.

169. Appeal to the Chief Inspector.-

An appeal may be preferred against an order made by the Regional Inspector under any of these regulations, to the Chief Inspector who may confirm, modify or cancel the order and every such appeal shall be preferred within 15 days of the receipt of the order by appellant.

170. Appeal to Committee.-

(1) An appeal may be preferred against against any order of the Chief Inspector within 20 days of the receipt of the order by the appellant to the Committee constituted under section 12 of the Act.

(2) Every order of the Chief Inspector against which an appeal is preferred under sub-regulation (1) shall be complied with pending receipt at the mine of the decision of the Committee :

Provided that the Committee may, on application by the appellant, suspend the operation of the order appealed against, pending the disposal of the appeal.

****

FIRST SCHEDULE
FORM-I
(See regulation 3 and 6)
Notice of opening, closing or change of name

From
.....
.....

To
1. The Chief Inspector of Mines, Dhanbad.
2. The Regional Inspector of Mines, ...Region
3.
4.

Sir,
I have to furnish the following particulars in respect of (i) ..... at .....(name) mine of.....(owner).

1. In case of CHANGE OF NAME OF MINE
old name of mine..... Date of change.....

---

2. *(1) Situation of the mine;
Village.....
Police station.....
District.....
State.....

*(2) In case of a NEW MINE, particulars of situation of mine:
Post office.....
Telegraph office.....
Railway station.....
Present Previous

---

(3)* Intimation concerning Offshore Installation

Name and location of Offshore Installation :
(Longitude/Latitude)

Type of Installation (Fixed/Mobile) :

Type of Operations (Drilling/Production/Work-over)

	Present	Previous

4. (1) Name and postal address of (ii)
   (a) Owner.....
   (b) Agent, if any
   (c) Manager
   *(2) In case of change, date of change .....

*5. (1) Name of manager/installation manager whose appointment is terminated/who is appointed (iii) .....

(2) Date of appointment/termination of appointment (iii)

*6. Date on which it is intended to open/reopen abandon/discontinue (iii) the mine

*7. Actual date of opening/reopening/abandonment/discontinuance (iii) of the mine_____

8. Any other Information

Yours faithfully
Signature.....
Designation- Owner/Agent/Manager .....
Date.....

INSTRUCTIONS
*Only such columns to be filled in respect of which notice given:
(i) Mention the matter to which the notice refers.
(ii) Need not be filled in if the notice relates to item 4.
(iii) Delete whichever is not applicable.

FORM – II

(See regulation 4)

Quarterly return for the quarter ending 20

1. Name of Mine:
Postal address of Mine:

2. Situations of Mine:
Place:
District:
State:

3. Name of Owner:
Postal address of owner

4. Name of agent, if any:
Postal address of agent

5. Name of manager
Postal address of manager
Table A to C dully filled in are attached.
Certified that the information given above and in Table A to C is correct to the best of my knowledge.

Signature.....
Designation- Owner/Agent/Manager
.....
Date.....

Table A
PRODUCTION *

Type of Product of oil/gas	Production of oil/gas	Value of oil/gas produced**	Despatch		Closing Stock
			To Refinery	To market	Domestic consumption
1	2	3	4A	4B	4C 5

Signature.....
Designation- Owner/Agent/Manager .....
Date.....

INSTRUCTIONS
* The figures should be stated in kilolitres/cubic metres.
** Value should be calculated upon actual or estimated selling price, at the mine. Any charges incurred in transporting the oil outside the mine property should not be included Royalty figures will not be accepted.

Table B
Number of Man-days, Etc.

Give maximum number of persons employed on any day during the quarter ..... (Number) on.....(a) Number of working days during the quarter:

Classification	Aggregate member of man-days worked		Aggregate number of mandays lost on account of absence	
	(b) Men	(c) Women	(d) Men	(e) Women
(a) Clerical and supervisory staff (s)				
(i) Supervisors				
(ii) Clerks				
(b) Other workers employed at				
(i) Drilling				
(ii) Production				
(iii) Workshops etc.				
(iv) Fire-services				
(v) Miscellaneous				
Total				

If there is any marked increase or decrease in attendance or absence, please account for it.

Signature.....
Designation- Owner/Agent/Manager .....
Date.....

INSTRUCTIONS

(a) Give day of the week and the date and month.

(b) The information should cover all person 'employed' in the mines as defined in section (1)(h) of the Mines Act, 1952 including electrical and subordinate supervisory staff.

(c) Total number of man-days worked should be obtained by adding the daily attendance or the whole quarter.

(d) Total number of man-days lost by absence should be obtained by adding the daily absences for the whole quarter.

(e) Absences should include all cases in which a person is 'scheduled to work' or is expected to turn up for work but does not. All permanent employees are to be treated as 'Scheduled to work'. So far as temporary or casual employees are concerned, a person who attended work during the preceding week should be considered as 'scheduled to work' during the week under consideration unless:

(i) he has reported his intention to quite; or

(ii) his services have been terminated by the management; or

(iii)he does not turn up for work during the whole week.

A person who has not worked during the preceding week should be considered as 'scheduled to work' only from the day in which he joins work during the week under consideration. Absence due to strike, lockout, lay off or maternity leave should not be included in absence here.

(f) Supervisory staff does not include senior officers like agent, manager, installation manager, welfare officer etc. but includes only the subordinate supervisory staff.

TABLE C
HOURS OF WORK AND EARNING

Information should be furnished in respect of one complete working week during the last month of the quarter(a).

1. Attendance, man-hours worked and cash earnings.

Classifications	Average daily attendance during the week (b)	Aggregate number of manhours worked during the week (c)	Total cash payments for work done during the week (d)			
			Basic	Dearness allowances	Other wages payment	Total cash (e)
(a) Clerical and supervisory staff (s)						
(i) Supervisors						
(ii) Clerks						
(b) Other workers employed at--						
(i) Drilling						
(ii) Production						
(iii) Workshops etc.						
(iv) Fire-services						
(v) Miscellaneous						

2. Total estimated value of concessions in kind (g) given during the week : Rs. —--------

3. Normal hours of production shifts :

From
To
1st Shift----------
2nd Shift ----------
3rd Shift ----------

4. Number of working days in the week----------

If there is any major change in wages or hours of work as compared to the preceding month please account for the change here.

Signature.....
Designation- Owner/Agent/Manager .....
Date.....

INSTRUCTIONS

(a) The information should cover all persons “employed” as in Table C. Particulars relating to payments etc., to monthly paid staff should be included on a pro-rata basis.

(b) Average daily attendance should be obtained by dividing the aggregate number of attendance on all the shifts on all days during the week by the number of working days. Any day on which the mine did not work, for any cause whatsoever, should not be treated as a working day.

(c) Aggregate number of man-hours worked during the week should be obtained by adding for the whole week, the number of man-hours worked every day. The number of man-hours worked on a day is obtained by summing up the number of hours worked by each person attending work on each of the shifts during the day, including overtime worked, if any.

(d) Total cash payments should include all remuneration payable (and paid) for work done during the week before making deductions, if any, towards fines, provident fund contributions, etc.,Employer’s contributions to the provident fund or on account of welfare provisions should not be included. Bonuses not payable for every pay-period should also not be included.

(e) Including over-time payments.

(f) Persons employed in the removal of overburden should be included among “Others” and not among “Miners and Loaders”.

(g) Concessions in kind (such as supply of food-stuff etc. Free or at subsidized prices) should be estimated in terms of the difference between the monetary value of the food stuffs, etc. at cost price and the value realised by sale at confessional price.

First Schedule
Form III
(See Regulation 5)

Annual Return for the year ending on the 31st December, ……
Mineral: Oil and Gas

Table A. Identification particulars of the Mine

Item no.	Item description	Detail information
(1)	(2)	(3)
1.	Name of Mine	
2.	State	
3.	District	
4.	Name of Zonal office of DGMS	
5.	Name of Regional office of DGMS	
6.	Name of Sub-regional office of DGMS	
7.	Postal Address of mine	
8.	Date of opening of mine	
9.	Date of closing, if any	
10.	Date of re-opening of mine, if any	
11.	Name of owner	
12.	Postal address of owner	
13.	Name of Agent	
14.	Postal address of Agent	

Item no.	Item description	Detail information
(1)	(2)	(3)
15.	Name of Manager	
16.	Postal address of Manager	
17.	Telephone no. of Manager	
18.	E-mail ID of Manager	
19.	FAX No. of Manager	
20.	Nature of power used	
21.	Whether machinery used (Please write Yes/ No)	
22.	Please specify which of the tables filled up - A, B, C, D	
23.	Whether all the tables are filled up(write Yes/ No)	
24.	If 'No' in item 23, please specify name of tables not filled up	
25.	Please give reasons if entry is there in item 24	

Certified that the tables, as mentioned in item 22 above, in prescribed format are duly filled in & enclosed, no additional sheet is attached and information and/ figures given in all the tables are correct to the best of my knowledge.

Signature of Manager with seal

Place:

Dated:

Employment related table

1. **Table B** - Details of mandays worked, no. of days worked and average daily employment

Machinery related tables

1. **Table C** - Details of electrical apparatus used
2. **Table D** - Details of machinery and equipments used other than electrical apparatus

Production related table

1. **Table E** - Details of production

Drilling/ rigs/ pipelines related table

1. **Table F** - Details of drilling and other rigs, oil and gas wells and pipelines production

Table B. Details of mandays worked, no. of days worked and average daily employment

Maximum number of persons employed on any one day during the year …… and Date: ……..

Item no.	Item description	Total number of mandays worked during the year			No. of days worked during the year	Average daily employment			Total wages/ salary for the year
		Direct	Contract	Total (col.3+col4)		Male	Female	Total (col.7+col.8)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	**Clerical & Supervisory Staff**								
1.1	Supervisors								
1.2	Clerks								
2	**Other workers employed at**								
2.1	Drilling								
2.2	Production								
2.3	Work over								
2.4	Workshop etc.								
2.5	Fire services								
2.6	Others (specify)								
3.	**TOTAL**(column total)								
4	**Total contract employment**								

Instructions for Table B:

i) Total contract employment (item 4) = Total number of mandays worked on contract during the year (item 3, col. 4) / maximum number of days worked in any category(maximum of Col. 6)

ii) Average daily employment of an item = Total number of mandays worked during the year of the item / Corresponding number of days worked

iii) Clerical & Supervisory: Senior Supervisory Officials like Agents, Managers, Under Managers, Engineers, Doctors are excluded.

Table C. Details of electrical machineries used

1. Voltage at which current is used for :

i) **Lighting ……..**

ii) **Power …….**

2. Length of cables (in metres):

i) **High pressure …….**

ii) **Medium pressure ……..**

Item no.	**Item description**	**Total number of units in use**	**Total HP**
(1)	(2)	(3)	(4)
1	Draw works		
2	Hoists		
3	Pumps		
4	Portable machine		
5	Traction		
6	Workshop including foundry smithy etc.		
7	Miscellaneous (Specify)		
8	**Total**		

Instructions for Table C:

Total HP is the sum of HP of number of units used of the same item

Table D. Details of machinery & equipment used other than electrical apparatus

Item no.	Item description	Total number of units in use	Total HP
(1)	(2)	(3)	(4)
1	**Power generation**		
1.1	Boilers		
1.2	Steam turbines		
1.3	Gasoline, gas or oil engines other than diesel engines		
1.4	Diesel engines		
1.5	Air compressor		
2	**Machinery**		
2.1	Drills		
2.2	Hoists		
2.3	Pumps		
2.4	Portable machine		
2.5	Traction		
2.6	Workshop including foundry smithy etc.		
2.7	Miscellaneous (Specify)		
3	**Total**		

Instructions for Table D: Total HP is the sum of HP of number of units used of the same item

Table E. Details of production

Item no.	Type of product	Opening stock as on 1st January	Production	Value (in Rs.)	Despatches			Closing stock as on 31st December
					To refinery	To market	For house consumption	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	**Oil (in Metric Tonnes)**							
2	**Gas (in M^3)**							

Instructions for Table E: Value should be calculated upon actual or estimated selling price at the mine. Any charges incurred in transporting the oil/ gas outside the mine should not be included.

Table F. Drilling and other rigs, oil and gas wells and pipelines

Item no.	Classification	Type of Rig	Total number of units in use
(1)	(2)	(3)	(4)
1	**Drilling, Workover and other rigs**		
1.1	**Drilling**		
1.2	**Workover**		
1.3	**Other Rigs**		
2	**Oil, gas and other wells**		
2.1	Wells drilled		
2.2	Wells abandoned		
2.3	Gas wells completed		
2.4	Oil wells completed		
2.5	Gas wells on production		
	Gas wells where production discontinued		
2.6	Oil wells on production		
2.7	Oil wells where production discontinued		
3	**Pipelines**	**Length in metres**	**Diameter in centimetres**
3.1	Flowlines laid from wells to gathering station		
3.2	Pipelines laid from gathering station to central storage tanks		
3.3	Others (specify)		

FORM IVA
(See regulation 9)
Notice to accident/occurrence

From :
.....
.....
To:
1. The Chief Inspector of Mines , Dhanbad – 826001,
2. The Regional Inspector of Mines .....Region .....
3. The District Magistrate
4. The Electrical Inspector of Mines (in case of electrical accident only), Dhanbad-826001.

Sir,
I have to furnish the following particulars of a fatal accident/serious accident/dangerous occurrence/major accident which occurred at ..... Mine of..... (owner).

1. PARTICULARS OF THE MINE :

Situation of mine	Name and postal address of owner (Also state telephone and telex numbers)
Village	
Post office	
Police station	
District	
State	

Place and location in mine(site) of accident/occurrence:

Nature of operation under taken at the place of accident/occurrence:

2. Particulars of the Accident/Occurrence

(a) Date, shift and hour of accident/occurrence :
(c) Classification of accident/occurrence(**)
(d) Cause, circumstances and description of accident/occurrence,
(if cause not yet established information to be sent as soon as possible).

3. Nature & extent of damage

	Within the establishment	Outside the establishment
(i) Number of persons----		
--- exposed to the accident / occurrence		
--- killed		
--- seriously injured		
--- affected by gas		
(ii) Particulars of material damage		
(iii) State whether the danger is still present / no longer exists.		

4. Particulars of injuries etc.

Name of persons (s) (In block capital)	Nature of employment	Age	Sex	Nature of injury and if fatal, cause of death
Killed:				
1.				
2.				
3.				
Injured :				
1.				
2.				
3.				
4.				
5.				

5. Measures taken or envisaged:---
(a) to alleviate the effects of the accident occurrence.
(i) short term.
(ii) medium or long term.
(b) to prevent recurrence of similar accident occurrence.

6. Any other relevant information .....
Particulars in respect of every person, killed or injured, in form V are enclosed/ shall be forwarded within a week (i).

Yours faithfully,
Signature .....
Designation : Owner/Agent/Manager
Date .....

INSTRUCTIONS
(**) Under one or other of the following heads, namely :--
1. (a) Explosion and ignition of inflammable gas and/or coal dust :
(b) Blow out.
(c) Out break of fire.
2. Hazardous emission of petroleum
3. In drilling/work over rig.
4. Suffocation by gases
5. Explosives
6. Machinery
7. Electricity
8. Miscellaneous
Attach separate sheet, where necessary.";
(b) after Form-V, following Forms shall be inserted:--

FORM IV-B
(See Regulation 9)
Particulars of Deceased / Injured person

(To be given separately in respect of every person killed or injured in an accident in the mine)

1. General :
(i) Name of mine .....
(ii) Owner .....
(iii) District .....
(iv) State .....

2. Name of Injured Worker .....

3. Time of Accident :
(i) Date .....
(ii) Time .....
(iii) Shift .....
(iv)Number of shifts worked per day at the mine .....
(v) Time when the worker began work on the day of the accident.....

4. Occupation and Experience of the Worker :
(i) State the nature of job he was doing at the time of accident.....
(ii) Was it his regular occupation ? .....
(a) If yes, state length of experience at the occupation at your mine .....previous experience , if any .....
(b) If no, state how long employed at this job.....
(iii) State total experience in mining , coal and non-coal.....
(iv) Give details of experience in mining work .....

5. Place of accident :

6. Nature of Injury :
(i) State whether fracture, amputation, laceration, bruise, sprain, crushing injury or other (to be specified).....(ii) Part of body injured (to be specified precisely) .....

7. Degree of Disability :
(i) if fatal, date and time of expiry .....
(ii) If permanent disablement, specify :-
(a) the part or parts of the body lost, if any .....
(b) the part or parts of body gone out of use .....
(c) Whether disablement, was total or partial .....
(iii) if temporary disablement, state number of days forced to remain idle

8. Responsibility for the Accident :
(i) was any safety provision(s) contravened ? .....
(ii) if so, by whom ? .....
(iii) what action was taken against the offence ? .....
(iv) could the accident have been avoided ? .....
(v) if so, how ?

Signature .....
Designation : Owner/Agent/Manager
Date .....

FORM IVC
(See Regulation 9)
Particulars of injured persons returned to duty

(To be given separately in respect of every person within 15 days of his return duty)

1. General:
(i) Name of Mine:
(ii) Owner:
(iii) District:
(iv) State:

2. Date of Accident:

3. Name of injured worker:

4. Return to duty:
(i) Date when returned to work
(ii) Whether returned to regular job or some other job (to be specified)

5. Compensation:
State amount of compensation paid or to be paid if any.

Signature:
Designation: Owner/Agent/Manager
Date:

FORM V
(See Regulation 10)
Notice of Disease notified under section 25

From :
.....
.....

To
1. The Chief Inspector of Mines, Dhanbd, E.Rly.
2. The Regional Inspector of Mines .....
3. The District Magistrate/District Collector .....
4.

Sir,
I have to furnish the following particulars with respect to an occupational disease contracted by a person employed in the .....Mine of ..... (owner).

1. PARTICULARS OF THE MINE ETC:
(i) Situation of mine.....
Village.....
Post office.....
Police station.....
District.....
State.....
(ii) Name and postal address of owner .....

2. PARTICULARS OF PERSON AFFECTED :
(i) Name (in Block Capitals) .....
(ii) Permanent address –
Village.....
Post office.....
Police station.....
District.....
State.....
(iii) Sex.....
(iv) Date of birth (or age).....
(v) Occupation ..... How long engaged ? .....
(vi) Date of commencement of employment :
(a) in this mine .....
(b) in petroleum industry .....

3. PARTICULARS OF DISEASE ETC.:
(i) Nature of disease from which the person is suffering (state stage) .....
(ii) Date of detection of disease .....
(iii) Name, registration number and address of Medical Practitioner suspecting disease.....

Signature .....
Designation : Owner/Agent/Manager
Date .....

FORM-VI

(See Regulation 80)

Notice of construction of or alterationin a group gathering station.

From

. . . . . .

. . . .

To

1. The Chief Inspector of Mines, Dhanbad – 826001.
2. The Regional Inspector of Mines..... Region .....
3. The District Magistrate,. . . . .

Sir,

I hereby give notice of our intention to construct a new group gathering station|carry out alterations in . . . . group gathering station and furnish the following particulars in that behalf : ---

(a) name and address of the mine to which the group gathering station belongs;

(b) name and address of the owner;

(c) name and full address of the site of group gathering station;

(d) date on which it is intended to commence the activity (or in case of an existing station, date of commissioning thereof);

(e) information relating to the site, namely:-

(i) area of site covered by the group gathering station;

(ii) name, location and maximum quantity of petroleum (gas/liquid) likely to be on the site;

(iii) constructional details of the installation and description of the process of storage/handling of petroleum (in case of alteration, details thereof);

(f) Organisational structure for the proposed activity and set up for ensuring occupational safety and health and for testing, maintenance and patrolling of the installations and safety gadgets;

(g) information relating to the potential for major accidents (viz| fire, explosion, bursting or failure of equipment, hazardous escape and accumulation of flammable substances etc.), namely :-

(i) identification of major accident hazard;

(ii) conditions or events which could be significant in causing a major accident;

(iii) brief description of the measures taken to prevent any major accident and to limit the consequences thereof;

(iv) area likely to be affected by any major accident and population distribution therein;

(v) maximum number of persons likely to be present at any time on the site and of whom the number likely to be exposed;

(h) arrangement for training of persons working on site and equipment necessary to ensure their safety;

(i) providing to persons off the site who are likely to be in an area liable to be affected by any major accident, with the information about the nature of hazard and measures which should be adopted in the event of an emergency arising there from;

(j) any other relevant information :

Signature . . . .

Designation : Owner | Agent | Manager

Date . . . . . .

FORM--VII
(See Regulation 80)
SAFETY REPORT

From :
. . . .
. . . .

To
1. The Chief Inspector of Mines, Dhanbad – 826001.
2. The Regional Inspector of Mines . . . . . Region, ...
3. The District Magistrate
. . . .
. . ..

Sir,
I have to furnished the following particulars in respect of . . . . group gathering station :

1. The name and address of ----
(b) Mine
(c) Owner
(d) Group gathering station.

2. Description of the installation, namely :--
(a) site.
(b) Construction design.
(c) Identification of hazardous areas and safety distances.
(d) Accessibility of plant.
(e) Maximum number of persons working on exposed to the hazard.

3. Description of the process namely :--
(a) technical purpose of the activity
(b) basic principles of the technological process
(c) process and safety-related data for the individual process stages
(d) process description
(e) safety-related types of utilities

4. Description of the hazardous substances namely :--
(a) quantities, substance data, safety-related data, toxicological data and threshold values
(b) the form in which the hazardous substance may occur on or into which it may be transformed in the event of the abnormal conditions.
(c) the degree of purity of the hazardous substance.

5. Information on the preliminary hazard analysis, namely :-
(a) types of accident
(b) system elements or events that can lead to a major accident
(c) hazards
(d) safety relevant components

6. Description of safety-relevant units, amongst others:-
(a) special design criteria
(b) control and alarms

(c) special relief systems
(d) quick acting valves
(e) collecting tanks | dump tank
(f) sprinkler system
(g) fire-fighting etc.

7. Information on the hazard assessment, namely :--
(a) identification of hazards
(b) the causes of major accidents
(c) assessment of hazards according to their occurrences frequency
(d) assessment of accident consequences
(e) safety system
(f) known accident history.

8. Description of information on organisational system used to carry on the activity safely, namley:--
(a) maintenance and inspection schedules
(b) guidelines for the training of personnel
(c) allocation and delegation of duties for plant safety
(d) implementation of safety procedures.

9. Information on assessment of the consequences of major accidents, namely :--
(a) assessment of the possible release of petroleum.
(b) possible dispersion of released petroleum.
(c) assessment of the effects of the releases (size of the affected area, health effects, property damaged).

10. Information on the mitigation of major accidents, namely:--
(a) fire brigade.
(b) alarm system.
(c) emergency plan containing system of organisation used to fight the emergency, the alarm and the communication routes, guidelines for fighting the emergency, information about hazardous substance, examples of possible accident sequences.
(d) coordination with the district emergency authority and its off-site emergency plan.
(e) notification of the nature and scope of the hazard in the event of an accident.
(f) antidotes, if any, in the event of a release of a hazardous substance.

11. Any other information considered relevant.

Signature: . . . . . .
Designation: Owner | Agent | Manager
Date : . . . . . .

FORM –VIII

(See Regulation 94)

Permission for laying a new pipeline or making any significant alteration in existing pipeline.

From

. . . .
. . . .
. . . .

To

1. The Chief Inspector of Mines, Dhanbad – 826001.
2. The Regional Inspector of Mines . . . . . Region, ...
3. The District Magistrate

. . . .
. . ..

Sir,

I hereby submit my application for permission for laying of pipeline | carrying out significant alteration (a) in . . . . pipeline and furnish the following particulars in that behalf: --

(a) name and address of the mine to which the pipeline belongs;
(b) name and address of the owner;
(c) full postal addresses of the places where the pipeline would originate and terminate as also of the places from where the pipeline activities would be controlled:
(d) constructional details of proposed pipeline including all associated works and apparatus;
(e) diameter and length of the pipeline and maximum quantity of petroleum gas or liquid likely to be contained therein at any time and transported on any day;
(f) normal operating pressure and the pressure for which the pipeline is designed;
(g) anticipated date and scheme of commissioning of the pipeline activity;
(h) organisational structure for the proposed activity and set up for ensuring occupational safety and health including testing, maintenance and petrolling test pipeline and safety gadget;
(i) provision proposed to be made or steps to be taken for:--
(i) protection against uncontrolled escape of fluids from the pipeline;
(ii) prevention and control of fire or explosion or major emission of petroleum and limiting consequences thereof;
(iii) providing to the persons working on the site with the information, training and equipment required to ensure their safety; and
(iv) providing to persons off the site who are likely to be in an area liable to be affected by any major accident, with the information about the nature of hazard and measures which should be adopted in the event of an emergency arising therefrom;
(i) any other relevant information.

Signature . . . .
Designation : Owner | Agent | Manager.

SECOND SCHEDULE
(See regulation 107)

HOT WORK PERMIT
for
HOT WORK / ENTRY TO CONFINED SPACE

Sl.No._____

Name of Mine : Name of Installation:

Work clearance from _____hrs of date_____To_____hrs of date _____(Valid for the shift unless renewed)

Issued to (Department / Section / Contractor)_____

Exact Location of work (Area / Unit / Equipment no. etc)_____

Description of work

_____

_____

THE FOLLOWING ITEMS SHALL BE CHECKED BEFORE ISSUING THE PERMIT
(Tick mark in the appropriate box. Checklist items marked with asterisk (*) shall be complied by receiver)

Sr no	Item	Done	Not Reqd.	Sr no.	Item	Done	Not Reqd
A	General points			B	For Hot work / Entry to confined Space		
1	Equipment / Work Area inspected			1	Proper ventilation and Lighting providing		
2	Surrounding area checked, cleaned and covered			2	Proper means of exit / escape provided		
3	Sewers, manholes, CBD etc and hot surfaces nearby covered			3	Standby personnel provided from Process / Maint / Contractor / Fire / Safety dept.		
4	Considered hazard from other operations and concerned persons alerted.			4	Checked for oil and Gas trapped behind the lining in Equipment		
5	Equipment blinded/disconnected / closed / isolated / wedge opened			5*	Shield provided against spark		
6	Equipment properly drained and depressurized			6*	Portable equipment / nozzles properly grounded		
7	Equipment properly steamed / purged			7*	Standby persons provided for entry to confined		

					space		
8	Equipment water flushed						
9	Iron sulfide removed / kept wet			C	For Vehicle Entry		
10	Equipment electrically isolated and tagged vide permit no.			1*	Spark Arrestor on the mobile equipment / vehicle provided.		
11	Gas test : HCs = %LEL Toxic gas = ppm, O2 = %						
12 *	Running water hose / Fire extinguisher provided. Fire water system available.			D	For Excavation works		
13 *	Area cordoned off and Precautionary tags / Boards provided.			1	Clearance obtained for excavation / road cutting / Dyke cutting from concerned depart.		

REMARKS:

1. The activity has the following expected residual hazards (Tick the relevant items): Lack of Oxygen / H2S, Toxic Gases / Combustible gases / Pyrophoric Iron / Corrosive Chemicals / Steam – Condensate / Others .
2. Following PPEs to be used in addition to standards PPEs (Helmet, Safety Shoes, Hand gloves, Boiler suit): Face Shield / Apron / Goggles / Dust Respirator / Fresh Air Mask / Lifeline / Safety Belt / Airline / Earmuff etc.
3. Additional precautions if any:

_____

Issuer Name & Designation	Issuer Signature	Receiver Name and Designation	Receiver Signature

Clearance renewal

Date	Time		Gas Test Values for HC's, Toxic, O2 etc	Additional precautions if any, Otherwise mention "NIL"	Issuer's Name, Designation & Signature	Receiver Name, Designation and Signature
	From	To				

Closing of the work permit:

Receiver: Certified that the subject work has been completed / stopped and area cleaned.			Issuer: Verified that the job has been completed and area cleaned and is safe from any hazard.		
Date & Time	*Name & Designation*	*Signature*	*Date & Time*	*Name & Designation*	*Signature*

General Instructions:

1. The work permit shall be filled up carefully and accurately in clear handwriting ensuring that complete information is provided in all sections / subsections and none of column is left blank. Sketches should be provided wherever possible to avoid miscommunication.
2. Appropriate safe guards and required personnel protective equipment shall be determined by a careful analysis of the potential hazards and the operations to be performed prior to starting the work.
3. In case of fire alarm / siren, all work must immediately be stopped.
4. Only certified vehicle / engines and permitted type of electrical equipment and tools are allowed in operating areas.
5. Welding machines should be located in non-hazardous and ventilated areas.
6. No hot work should be permitted unless the explosive meter reading is Zero.
7. When a person is entering confined space, the receiver must keep minimum two standby-designated persons at the manhole or entry point.
8. Before box up of any vessel manhole cover, ensure that no men / materials are inside the vessel.
9. For renewal of work clearance, the issuer shall ensure that the conditions are satisfactory for the work to continue. If the conditions have changed, it may be necessary to issue a new permit or amend the existing permit.
10. This clearance on the same permit can be renewed / extended upto a maximum of seven calendar days.
11. This permit must be available at work site at all times.
12. On completion of the work, the permit must be closed and kept as record.
13. The industry may add other relevant instructions based on their operating and maintenance practices.

THIRD SCHEDULE
(See regulation 108)

COLD WORK PERMIT

Sl.No._____

Name of Mine : Name of Installation:

Work clearance from_ _____hrs of date_____ To _____hrs of date _____(Valid for the shift unless renewed)

Issued to (Department / Section / Contractor) _____

Exact Location of work (Area / Unit / Equipment no.etc)_____

Description of work

_____

_____

THE FOLLOWING ITEMS SHALL BE CHECKED BEFORE ISSUING THE PERMIT
(Tick mark in the appropriate box. Checklist items marked with asterisk (*) shall be complied by receiver)

Sr no.	Item	Done	Not Reqd.	Sr no.	Item	Done	Not Reqd.
1	Equipment / Work Area inspected			6	Equipment water flushed		
2	Surrounding area checked, cleaned and covered			7	Equipment properly steamed / purged		
3	Equipment blinded/disconnected / closed / isolated / wedge opened			8	Proper ventilation and lighting provided		
4	Equipment properly drained and depressurized			9*	Area cordoned off & caution boards / tags provided.		
5	Equipment electrically isolated and tagged vide Permit no. ----------			10	Gas test: HCs / Toxic etc. HCs = % LEL Toxic gas = ppm		

Remarks:

1. <u>The activity has the following expected residual hazards (Tick the relevant items)</u>: Lack of Oxygen / H2S, Toxic Gases / Combustible gases / Pyrophoric Iron / Corrosive Chemicals / Steam – Condensate / Others _____
2. <u>Following additional PPE to be used in addition to standards PPE (Helmet, Safety Shoes, Hand gloves, Boiler suit</u>): Face Shield / Apron / Goggles / Dust Respirator / Fresh Air Mask / Lifeline / Safety Belt / Airline / Earmuff etc.
3. Additional precaution if any: _____

Issuer Name & Designation	Issuer Signature	Receiver Name & Designation	Receiver Signature

Closing of the work permit:

Receiver : Certified that the subject work has been completed / stopped and area cleared			Issuer: Verified that the job has been completed and area cleared and is safe from any hazard.		
Date & Time	*Name & Designation*	*Signature*	*Date & Time*	*Name & Designation*	*Signature*

Clearance renewal

Date	Time		Additional precautions if any, Otherwise mention "NIL"	Issuer's Name, Designation & Signature	Receiver's Name, Designation and Signature
	From	To			

General Instructions:

1. The work permit shall be filled up carefully and accurately in clear handwriting ensuring that complete information is provided in all the sections / subsections. Sketches should be provided wherever possible to avoid miscommunication.
2. Appropriate safe guards and required personnel protective equipment (PPEs) shall be determined by a careful analysis of the potential hazards and the operations to be performed prior to starting the work.
3. Requirement of standby personnel from Process / Maintenance / Contractor / Fire / Safety etc if any shall be mentioned in the additional requirement.
4. In case of fire alarm / siren, all work must immediately be stopped.
5. For renewal of work clearance, the issuer shall ensure that the conditions are satisfactory for the work to continue. If the conditions have changed, it may be necessary to issue a new permit or amend the existing permit.
6. This clearance on the same permit can be renewed / extended upto a maximum of seven calendar days.
7. This permit must be available at work site at all times.
8. On completion of the work, the permit shall be closed.

The industry may add other relevant instruction based on their operating and maintenance practices.

[File no. S-66012/01/2008-ISH.II]

(A.C.Pandey)
Joint Secretary to the Government of India.

[To be published in the Gazette of India Extraordinary, Part II, Section- 3-Sub section–(i)]

Ministry of Labour and Employment

NOTIFICATION

New Delhi, dated , 2011.

G.S.R.----------(E).- The following draft of certain regulations which the Central Government proposes to make, on the recommendations of the Committee constituted under section 12 of the Mines Act, 1952 (35 of 1952), in exercise of the powers conferred by section 57 of the said Act, and in supersession of the Oil Mines Regulations, 1984, except as respects things done or omitted to be done before such supersession, are hereby published as required by sub-section (1) of section 59 of the said Act, for the information of all persons likely to be affected thereby and notice is hereby given that the said draft regulations will be taken into consideration after the expiry of a period of three months from the date on which copies of the Gazette in which this notification is published, are made available to the public;

1. The objections or suggestions, if any, may be addressed to Shri S.K.Singh, Under Secretary, Ministry of Labour and Employment, Shram Shakti Bhawan, Rafi Marg, New Delhi – 110 001.

2. Any objection or suggestion, which may be received from any person in respect of the said draft regulations within the period specified above, will be considered by the Central Government.

DRAFT REGULATIONS

C O N T E N T S