OIL MINES REGULATIONS, 1984

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[1]1. Published in the Gazette of india, Extraordinary, Pt. II, See. 3(i) dated 26th October, 1984. In exercise of the powers conferred by

Section 57 of the said Act, the Central Government after referring the said draft to the Mining Boards constituted under the said Act and after giving such Boards a reasonable opportunity of reporting as to the expediency of making the said regulations and as to the suitability thereof as required by sub-section (4) of Section 59 of the said Act read with Sec. 49 of the Mines (Amendment) Act, 1983 (42 of 1983) hereby makes the following regulations, namely:

CHAPTER 1
Preliminary

1. Short title, extent and application :-

(1) These regulations may be called the Oil Mines Regulations, 1984.

(2) They 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 m the Official Gazette.

2. Definitions :-
In these regulations, unless the context otherwise require :

(1) "Act" means the Mines Act, 1952 :

(2) "acidizing" means the treatment of oil-hearing formation by chemical reaction with acid in order to increase production :

(3) "annular space" means the space surrounding pipe suspended in the well and the outer wall of the annular space may be an open hold or it may be a string of larger pipe :

(4) "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:

(5) "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:

(6) "blowout" means uncontrolled sudden violent escape of fluids from a well:

(7) "blowout poventer" means,-

(a) a device attached above the casing of a well to control pressure

and to prevent escape of fluids from the annular space between tubing and casing or between drill pipe and casing or to shut-off the well if no drill pipe or tubing is in the hole, should a kick or blowout occur: or

(b) a device attached above the well-head or Christmas tree or rise pipes to control pressure during work-over operations and to prevent escape of fluids from the space between the wire-line and tubing or casing, should a kick or blowout occur :

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

(9) "casing line" means steel wire rope used for lowering and raising of pipes in a well through crown block and travelling block ;

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

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

(12) "cat-walk" means footway giving access to rig floor :

(13) "cellar" means an excavation under the derrick to provide space for Items of 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;

(14) "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 ;

(15) "Christmas tree" means the valves and fittings assembled at the top of a well to control the flow of the fluids:

(16) "competent person" means a person who is capable of identifying existing and predictable hazards in the surroundings of working conditions which are unsanitary, hazardous or dangerous to work person and who has authorisation to take prompt corrective measures to eliminate them:

(17) "completed well" means a well in which the petroleum bearing

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 produce petroleum:

(18) "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:

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

(20) "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 : Provided that In the case of a mine which Is situated partly In one district and partly in another, the District Magistrate for the purposes of these regulation shall be the District Magistrate authorised in this behalf by the Central Government :

(21) "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 producing well:

(22) "drilling" means perforation of the earth's surface crust by mechanical means (Irrespective of whether the hole caused by perforation Is vertical, inclined or horizontal) and includes all operations for preventing collapse uf the sides of such hole or for preventing such hole from being filled with extraneous material Including water :

(23) "drilling rig" means the complete structure and machinery required for drilling purposes at the borehole site :

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

(25) "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 ;

(26) "explosimeter" means an instrument to measure the concentration of flammable gas:

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

(28) "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:

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

(30) "flash point" will have the same meaning as is assigned to the term In the Petroleum and Natural Gas Rules, 1959, framed under Oilfields (Regulation and Development) Act, 1948 :

(31) "flare" means an open flame used to dispose of unwanted gas ;

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

(33) "form" means a form as set out in the First Schedule :

(34) "fracturing" means the process of forcing a fluid in the sub-surface strata with the purpose of opening flow passages for production ;

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

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

(i) the percentage of any flammable gas does not exceed 20 per cent. of lower explosive limit of such gas, and

(ii) the percentage of oxygen Is not less than 19 :

(37) "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:

(38) "group gathering station" means a production installation used

for gathering, treating or storing petroleum and includes central tank farm, oil collecting station, gas compressor station and well-head Installation :

(39) "hazardous area" means an area where hazardous atmosphere exists or is likely to occur :

(40) "hazardous atmosphere" means an atmosphere containing any flammable gas in a concentration capable of ignition :

(41) "installation" means any fixed installation or part of a fixed installation which is maintained within the mine or is to be established there in connection with exploitation of petroleum or with exploration with a view to such exploitation ;

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

(43) "Ionising radiation" means emission due to self-distruptive fission of atomic nucleus or any radio-active substance which is hazardous to health :

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

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

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

(47) "machinery" means:

(a) any stationary 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, stated , transmitted, converted or utilised thereby is, under or intende use in connection with mining operations:

(48) "monkey board" means cable or fixed platform installed above derrick floor on which v. persons stand to handle pipes or other equipment racked on the ck ;

(49) "mud" means a liquid that ." circulated through the well during drilling or work-over operations:

(50) "mud tank" means the reservoir or tank through which the drilling mud is cycled to allow sand and fine sediments to settle out where additives are mixed wit mud and where the fluid is temporarily stored before being pumped back Into the well :

(51) "mud-pump" means a pump used to circulate down the drill pipe and up to the annulus. under normal operation :

(52) "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 installation manager, safety officer and fire officer :

(53) "oil well" means a well which is producing or is capable of producing petroleum:

(54) "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:

(55) "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 :

(56) "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 :

(57) "platform" means a working space for persons elevated above the surrounding floor or ground for the operation of machinery and equipment:

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

(59) "racked" refers to tubular goods or rods standing In the derrick or mast or stored on a pipe rack :

(60) "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:

(61) "railway" means a railway as defined in the Railways Act, 1890 **1** :

(62) "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 of mines to which the mine belongs, over which he exercises his powers under the Act ;

(63) "rigging-up" means an act of assembling a drilling or workover rig and auxiliary equipment prior to commencement of drilling or work-over operation:

(64) "river" means any stream or current of water whether seasonal or perennial and includes its banks extending up to the highest known flood level:

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

(66) rotary table "means a power operated turntable on the rig floor primarily used for rotating the drilling string :

(67) "Schedule" means a Schedule appended to these regulations :

(68) "stand (s)" means sections of pipe consisting of two or more made-up lengths which are racked In a derrick :

(69) "standard railing" means a vertical barrier erected along exposed edges of a floor opening, wall opening, ramp, platform or walkway to prevent fall of persons:

(70) "sub-structure" means the foundation on which normally the derrick and enginessit:

(71) "swabbing" means the operation of a lifting device on a wireline to bring well fluids to the surface when the well does not flow naturally :

(72) "toe board" means a vertical barrier at floor level erected along exposed edges of a floor opening, wall opening, platform, walkway or ramp to prevent fall of materials ;

(73) "toxic dust 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 :

(74) "travelling 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;

(75) "well" means a hole in the ground,-

(a) made or being made by drilling, boring or 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 obtaining water for injection or for injecting natural gas. air. water or any other substance into underground formation ;

(76) "well-head" means an assembly on top of the well casing strings with outlets and valves for controlling flow of fluids :

(77) "well perforating" means perforating well casing and/or cement to provide flow passages for production or for testing or well-activation purposes;

(78) "work-over" or "well-servicing" means one or more of a variety of remedial operations on an oil well with the intention of restoring or increasing production:

(79) "zone '0' hazardous area" means an area in which hazardous atmosphere is continuously present ;

(80) "zone I hazardous area" means an area in which a hazardous atmosphere is likely to occur under normal operating conditions :

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

1. See now Railways Act, 1989 (24 of 1989).

CHAPTER 2

Returns, Notices and Flans

3. Notice of opening :-

(1) The notice required by Section 16 of the Act shall be submitted in Form 1.

(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 January, April, July and October 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 to name and addresses etc :-

(1) When a change occurs In the name of ownership of a mine or in the address of the owner, the owner, agent or manager shall within seven days from the date of the change give to the Chief Inspector and the Regional Inspector notice in Form I.

(2) When any appointment is made of an agent, manager. Installation manager, safety officer or fire officer 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 addresses 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 the Form 1.

7. Notice of accident :-

(1)

(a) When there occurs in or about a mine :

(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;

(vi) a breakage, or fracture of any essential part of draw-works, casing line or failure of emergency brake :

(vii) a breakage, fracture of 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) any accident due to explosives : the owner, agent or manager shall forthwith inform the Regional Inspector by telephone or express telegram or by special messenger and shall also within 24 hours of every such occurrence give notice thereof in Form IV-A to the District Magistrate, the Chief Inspector and the Regional Inspector.

(b) When an accident causing loss 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 by telephone, express telegram or special messenger.

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

(3) 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 within seven days of such occurrence or 15 days of the Injured returning to duty, as the case may be.

8. 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 manager shall, within three days of his being informed of the disease, give notice thereof in Form V to the District Magistrate, the Chief Inspector the Regional Inspector and Inspector of Mines (Medical).

9. Plans :-

(1) The owner, agent of manager of every mine shall keep the following plans accurately and up-to-date :

(a) A key plan 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 wells including abandoned wells, group gathering stations, including their access routes, railways. power transmission lines, public roads, buildings or other permanent structures not belonging to the owner, rivers and water courses within the winning areas: Provided that the Chief Inspector may. where necessary, call for a surface plan extending to an area up to 90 metres from the mine boundary.

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

(a) show the name of the mine of the owner and the purpose for which the plans is prepared:

(b) show the true north or magnetic meridian and the date of the latter :

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

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

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

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

CHAPTER 3
Inspectors, Management and Duties

10. Qualifications of Inspectors :-

(1) After, the coming into force of these regulations, no new person shall be appointed as Chief Inspector unless he holds a degree or diploma in mining engineering of an educational institution approved by the Central Government.

(2) After the coming into force of these regulations, no person shall be appointed as an Inspector unless he holds a degree or diploma

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 or diploma 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 or diploma In mechanical engineering of an educational institution approved by the Central Government may be so appointed, and

(iii) in relation to the provisions of the Act and of the regulations and of orders made thereunder which relate to matters concerning the health and welfare of persons, a person, holding a degree or diploma in medicine, surgery and/or In social science or labour welfare, as the case may be, of an educational institution approved by the Central Government may be so appointed.

11. Definition :-

For the purpose of this chapter, all borings, boreholes, petroleum wells and accessory petroleum conditioning plants, 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 specie therein, permit or require the division of any one such area into two or more separate mines.

12. Appointment of managers :-

(1) No mine shall be opened, worked, or re- opened unless there is a manager of the mine, being a person duly appointed. If any question arises whether any person so appointed Is competent to perform the duties of manager, it shall be referred to the Chief Inspector whose decision thereon shall be final.

(2) 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. 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 manager has not been able to exercise

effective supervision in the mines under his charge.

13. Appointment of installation managers :-

(1) At every mine one or more Installation managers shall be appointed to hold charge of the different Installations of the mine.

(2) An installation manager may hold charge of more than one installation : Provided that where the Regional Inspector is of the opinion that due to conditions existing at a mine. it is not possible for the Installation manager to perform his duties in proper manner, he may by an order in writing and for reasons to be recorded therein require the appointment of such number of installation managers as he may specify in the order.

14. Appointment of safety officer :-

The owner or agent of every mine shall appoint a Safely Officer to assist the manager In promotion of safety and health at work, who, to the best of the knowledge and belief of the owner or agent, has skills and competence suitable for the appointment. In case of any doubt the matter may be referred to the Chief Inspector whose decision thereon shall be final.

15. Appointment of fire officer :-

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

(2) No person shall be appointed as a Fire officer of more than one mine or In any other capacity in the same mine without prior permission in writing of the Regional Inspector and subject to such conditions as specified therein.

16. Appointment of officials and competent person :-

(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 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 shall be entered In a bound-paged book kept for the purpose. A list of such competent persons shall also be maintained.

17. General managment :-

(1) The owner, agent and manager shall provide for the safety 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.

18. 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 manager 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) 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.

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

(4) 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 other or interfere with any method or process adopted with a view to avoiding accidents and injuries to health.

(5) No person shall, while on duly, throw any stone or other missile with intent to cause injury or light or behave in a violent manner.

(6) No person shall sleep or rest in a dangerous place such as scaffolds or cranes or in the vicinity of dangerous or toxic substances, machinery, boiler, vehicles and heavy equipments.

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

(8) 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.

19. Duties of manager :-

(1) The manager shall be responsible for the safe and proper working of the mine by exercising supervision and control.

(2) The manager shall see that sufficient supply of proper material, and appliances for the purpose of carrying out the provisions of the Act. the regulations and order made thereunder and for ensuring the safely of (he 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. 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 lake 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. He may, however, by an order in writing delegate this duly to an installation manager or other official.

(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 safety or health of persons in or about the

mine.

(6) When an accident resulting in any serious bodily injury to any person or In 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. 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) Manager shall perform such other duties as have been specified in this behalf under this Act, the regulations and order 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, 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.

20. Duties of installation manager :-

The installation manager shall carry out the following duties :

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

(2) He shall see 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.

(3) He shall see that in the installation assigned to him, all work is carried out in accordance with the provisions of the Act and the regulations and orders made thereunder.

(4)

(a) He shall visit and examine the installations under his charge on every working day to see that safety in every respect is ensured.

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

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

(6) He shall see that all persons employed at the installation are thoroughly instructed and familiar with the provisions of the standing orders made under these regulations relating to prevention of blowout and fire.

(7) He shall see 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.

(8)

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

(b) No requirement in these regulations shall be taken as prohibiting or restricting the taking of such measures.

21. Duties of safety officer :-
The Safety Officer shall carry out the following duties:

(1) He shall 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.

(2) He shall advise the manager on measures necessary to prevent dangerous situations.

(3) He shall 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.

(4) He shall collect, compile and analyse information in respect of accidents and dangerous occurrences with a view to promole sale practices and improvement of working environment.

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

(6) He shall see that all new workers and workers transferred to new jobs receive adequate safety training, instructions and guidance.

(7) He shall maintain a detailed record of work performed by him every day.

(8) If any duties other than those specified above are assigned to the safety officer by the manager, a written notice thereof shall be sent to the Regional Inspector within three days of such assignment.

22. Duties of fire officer :-

The Fire Officer shall carry out the following duties:

(1) He shall ensure the observance of the provisions of the Act. regulations and orders made thereunder concerning fire-detection and fire- fighting systems and shall advise the manager on measures necessary to ensure adequate protection against fire.

(2) He shall ensure proper layout, installation and maintenance of fire- fighting equipment.

(3) He shall see that contingency plan for likely fire situations are prepared.

(4)

(a) He shall 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.

(b) He shall see that persons incharge of fire-fighting duties undertake stimulated fire drills at least once in every month to study promptness of response and effective tactics.

(5) He shall examine at least once in every quarter all devices and equipment of fire detection and fire-fighting systems in the mine and report any defect in the same to the manager.

(6) He shall exercise a general supervision and co-ordination during control and extinguishment of any fire in the mine.

(7) He shall enquire into the causes and circumstances of all fire with a view to prevent recurrence.

(8) He shall maintain detailed record of work performed by him every day.

(9) If any duties other than those specified above are assigned to the fire officer by the manager, a written notice thereof shall be sent to the Regional Inspector within three days of such assignment.

23. Duties of competent persons :-

(1) Every competent person shall be subject to orders of superior official.

(2) He 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) He shall on the appearance at his place of work any hazardous condition, take prompt corrective measures to eliminate the hazard.

CHAPTER 4
Drilling and Workover

24. Derricks :-

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

(2) The derrick shall be adequately secured to prevent it from over-turning.

25. 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. The platform shall be equipped on its outer edges with a two-rail railing at least one metre high the toe-board 0.15 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. The platforms shall completely cover the space from the working edge of the platform to the legs and girls of the derrick and shall be firmly secured.

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

26. 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) The top end of each ladder or ladder section shall extend not less than one metre above the platform.

(4)

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

(b) 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.

27. Safety belts and life lines :-

Every person who works above the first girt of the derrick shall be provided with approved type of safety belt and life line and shall use the same unless he is otherwise protected against the danger of falling from height.

28. Emergency escape device :-

(1) On every derrick there shall be installed and maintained an escape line. with a slide of adequate strength in such a manner that persons can come down safely from (he monkey board to

ground level 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 45 metres from the derrick base or equal to height of the derrick from ground level, whichever is more.

(3) A competent person shall Inspect every part of the emergency escape device once at least every day. 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.

29. Weight indicator :-

On every rig a weight indicator shall be provided and used to register a close indication of the load suspended from the casing line.

30. Escape exists :-

The rig floor area and each draw-works engine floor area shall have not less than two escape exists placed on opposite sides of the rig to give unobstructed escape.

31. Guardrails. hardrails and covers :-

(1) Floor openings and floor holes shall be guarded by a standard railing and toe-board and/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

.

32. Draw-works :-

(1) The draw-works shall be fitted with a suitable device with Its control near the drillers stand (o stop the draw-works in case of an emergent.

(2)

(a) No draw-works shall be operated unless all guards are in position and maintained.

(b) If lubrication fittings are not accessible with guards in place, machinery shall be stopped for oiling and greasing.

(3) The brakes, linkage and brake flanges of draw-works shall be examined by a competent person once atleast in every 24 hours. If any defect is discovered during such examination, (he draw-works shall not be used until such defect is remedied.

(4) The draw-works shall be provided with an automatic device which shall effectively prevent the travelling 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 o f (his sub-regulation not reasonably practicable, (he Chief Inspector may by an order in writing and subject to such conditions as he may specify therein, exempt or relax from these provisions.

33. Cathead and catline :-

(1) Catheads operated manually shall be equipped with a guide divider to ensure seperation 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)

(a) When a cathead is in use. a competent person shall be at the controls and in the event of any emergency, he shall immediately slop the rotation of the cathead.

(b) 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

34. 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 counterbalance 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.

35. Safety chains or wirelines :-

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

36. 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. 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 on any examination made as aforesaid there is discovered any weakness or defect by which the safety of persons may be endangered, such weakness qr defect shall be promptly reported in writing to the installation 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. The operation shall be carried out under the supervision of the driller or other competent person who shall record the date and other particulars thereof in a bound-paged book kepi for the purpose and shall sign and date the same.

37. Rigging equipment 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 over-head 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.

38. 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.

39. 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, tabular 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, unloading 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.

40. 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, snub 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 arresters.

(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.

41. Mud tanks and mud pumps :-

(1) Mud tanks shall be so designed and installed as to provide positive suction to mud pumps : Provided that the Regional Inspector may by an order in writing exempt any part of the mine from the observance of this precaution if he considers such observance not necessary.

(2) All mud pumps connected to a drilling rig shall be equipped with a safety pressure relief valve and an operating gauge In the system. The valve shall be set to discharge at a pressure not in excess of the established working pressure of the pump pipes and fittings.

(3) The discharge from a safety pressure relief valve shall be piped to a place where it will not endanger persons.

(4) There shall be no valve between a primp and its safety pressure relief valve.

42. Blowout preventer assembly :-

(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 bag type preventer for closing regardless whether drilling equipment is in the hole or not :

(b) one blind ram preventer for closing against an open hole :

(c) one pipe ram preventer, for closing against drill pipe in use in the hole : Provided that in respect of drilling rigs which were in use before coming into force of these regulations and which are so designed as to permit installation of not more than two blowout preventers, the provisions of his sub-regulation shall come into force from such date as the Chief Inspector may notify by a general or special order.

(3)

(a) In blowout preventer assembly, there shall be provided two seamless steel pipes at least 50 millimetre in diameter connected below each set of blowout preventer, one for bleeding off pressure and the other for killing the well. Such pipes shall be straight and lead directly to the opposite sides of the drilling platform. Provided that the Chief Inspector may. by an order in writing and subject to such conditions as he may specify therein, permit the use of flexible armoured high pressure steel hose suitable for use as choke and kill lines.

(b) Each pipeline shall consist of components having a working pressure equal to that of the blowout preventers.

(c) 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 cither the bleed-offline or kill line. each containing an adjustable choke and connected to a degassing system.

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

43. Control system for blowout preventers :-

(1) All manual controls for mechanically operated blowout preventers shall be located at least 0.60 metres outside the derrick sub-structure. Instructions for operating the controls shall be posted prominently near the control wheel.

(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 provision of this sub-regulation.

(3) A remote control panel for the blowout preventers shall also be Installed at ground-floor level at a safe distance from the derrick floor.

(4) All controls for blowout preventers, shall be clearly Identified with suitable markers.

44. Testing of blowout preventer assembly :-

(1) Blowout preventer assembly including its control valves, connected pipes and spacers, etc.. shall be pressure tested to the rated pressure of the assembly or the rated pressure of the casing pipe on which it is mounted, whichever Is less. soon after its initial installation, re- installation, following repair, and before drilling out cement plug from string of casing. Notwithstanding anything stated above, the bag type blowout preventer shall not be subjected to more than 70 per cent. of its rated pressure.

(2) The blowout preventer assembly including pipes and control valves, shall be function tested, -

(a) once in each trip in case of blind ram type preventers :

(b) at least once daily in case of pipe ram type preventers :

(c) in case of bag type preventer at least once every week on the drill pipe.

(3)

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

(b) 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.

45. Precautions against blowout :-

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

(b) a device to accurately measure the volume of mud required to keep the well filled at all times;

(c) a gas detector or explosimeter at the primary shale shaker and connected to audible or visual alarm near the drillers stand

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

(e) a control device near the drillers stand to close the mud pump when the well kicks: 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.

(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) The manager of every mine in which blowout preventer

assembly is Installed, shall submit to the Regional Inspector within 60 days of the coming Into force of these regulations or in the case of a new installation within 30 days of the installation, standing orders specifying the action to be taken when a well kicks and the duties of each person employed on the rig and such other persons as may be necessary for blowout drills and actual emergencies.

(b) The Regional Inspector may, by an order in writing approve of such standing order either in the form submitted to him or with such additions and alterations as he may think fit: the standing orders so approved shall be enforced at the mine.

(c) A copy of the standing orders 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 standing orders mentioned in sub-regulation (3), the blowout preventer assembly and be able to operate the controls for blowout preventers. Blowout prevention drill shall be conducted for this purpose once in seven days.

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

(6) When running-in or pulling-out tubings a gate value and tubing hanger shall be pre-assembled and kept readily available at the well.

46. 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 well.

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

(a) 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;

(i) all electrical installations within the danger zone shall be de-energised :

(ii) approved safety lamps or torches shall only be used within the danger zone;

(iii) no naked lights or vehicular traffic shall be permitted within danger zone;

(c) 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:

(d) there shall be available at or near the place, two approved type self- contained breathing apparatus or any other apparatus of approved type for use in emergency :

(e) adequate fire-fighting equipment shall be kept readily available for Immediate use.

47. Drilling operations :-

(1) At the beginning of every shift the instruments and controls at the driller's stand, draw-works, mud pumps, 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 driller shall see that no person remains in a position of danger at or near the rotary table before (he rotary table is set in motion.

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

.

(4) 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.

(5)

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

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

48. Drill stem test :-

(1) Prior to the commencement of drill stem test :

(a) 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. The kelly hose shall not be used as part of the test line ;

(e) the test line and valves shall be examined by a competent person 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-stein test shall be burnt through a flare-line.

CHAPTER 5
Production

49. Well completion by perforation :-

(1)

(a) Explosives used in well- perforation shall be transported in suitable containers.

(b) No person other than a competent person authorised for the purpose shall handle, transport and use explosives meant for well-perforation.

(2) Well-perforation operation shall be carried out under the direct persona] supervision of an official authorised for the purpose.

(3) Before commencement ol perforation operation, the official shall see that:

(a) the well is adequately filled with mud so as to keep the bottom hole pressure under control:

(b) the blowout preventer assembly is pressure and function tested :

(c) the perforation gun can be safely lowered down the well ;

(d) a lubricator and wire-line blowout preventer are provided at the wellhead while perforating through tubing : and

(e) all equipment including drilling rig. pipe rack and cabin used for perforation are efficiently earthed: electrical bounding is established between equipment and wellhead before connecting up explosive charges.

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

(5) Normal work at the well shall not be resumed until firing of the charge has been completed and the 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.

50. Well testing and activation :-

(1) Before commencement of testing or activation of a well, the Christmas tree and flow-lines including the associated fittings shall be subjected to the maximum pressure that is likely to be encountered.

(2) Well testing shall be done under the direct personal supervision of the installation manager: he shall see 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.

51. Group-gathering station :-

(1)

(a) When it is intended to construct any new group gathering station or carry-out alterations at any group-gathering station, the owner, agent or manager shall, not less than 60 days before such construction or alteration give notice of such intention to the Regional Inspector.

(b) The notice shall contain details c" production facilities, measures for protection against fire. bursting or failure of equipment, dangerous accumulation of inflammable vapour.

(c) The notice shall be accompanied by a plan showing the name and location of the production facilities, the name of each well connected to the station and any railway, public road or public works lying within 60 metres of the station : Provided that where it is essential to carry-out 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 (he said notice is given to the Regional Inspector as soon as the work for such alteration is commenced : Provided further that where a group-gathering station was constructed before coming into force of these regulations, copies of the plan- mentioned in the Cl. (c) and the details of production facilities and measures for protection against fire, etc. specified in Cl. (b) shall be submitted to the Regional Inspector within three months of the coming into force of these regulations.

(2) If (he 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.

52. Precautions during acidizing operations :-

(1) Acidizing operation 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 remain in the vicinity of the well :

(b) every person handling acid is provided with and uses protective outer clothing, gloves and footwear : and

(c) an adequate quantity of lime is readily ava.ilable and used to neutralize any acid spilled.

53. 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 up to the last valve on the wellhead shall be tested to a pressure one and a 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-energized ; and

(d) adequate fire-fighting equipment is available for immediate use.

(6) Pumping units shall be located crosswind at least 15 metres from the wellhead, and pumping shall be done during daylight hours.

54. 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 close shall be attended by a competent person authorised for the purpose.

(2) Loading and unloading of tankers carrying petroleum shall ordinarily be performed during day light hours : Provided that when it is necessary to carry out such operations after day- light hours, these shall be performed with such precautions as may be specified in writing by the manager or installation manager.

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

(4) No mechanically propelled tankers shall be loaded or unloaded until its engine has been stopped and battery isolated from the electrical circuit. The engine shall not be re-started 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 the compliance with the provisions 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.

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

55. Storage tank :-

(1)

(a) 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.

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

(c) The height of a storage tank shall not exceed one and half times its diameter or twelve metres whichever is less.

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

(d) An air space of not less than 5 per cent. of [he total capacity of the tank or the space prescribed in the specification referred to in sub-regulation (1) (a), whichever is less. shall be kept in each tank.

(2)

(a) Every storage tank after being installed or re-installed 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.

(b) A report of such test shall be maintained in a bound-paged book kept for the purpose and signed and dated by the person making the test.

(3)

(a) Every tank installed above ground having capacity in excess of 1,000 cubic metres shall be separately enclosed with a dyke or bound constructed above the ground level with an enclosure volume not less than the capacity of such tank.

(b) All enclosures mentioned in Cl. (a) shall be provided with proper discharge system to prevent accumulation of oil or water In the enclosures.

(4)

(a) Every storage tank including its roof and all metal connections shall be electrically connected with the earth in an efficient manner.

(b) All persons shall remain at a safe distance once in twelve months. The result of every such test shall be recorded in a bound-paged book kept for the purpose and shall be signed and dated by the person carrying out the test.

(5) Every storage tank shall be protected against lightning by suitable lightning arresters.

(6)

(a) 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.

(b) 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 self-contained breathing apparatus or a full facepiece mask with a pressure supply of respirable air.

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

(i) a competent person who is qualified to administer artificial respiration and first-aid shall be present on the spot throughout, and

(ii) approved portable hand-lamps shall be exclusively used in such work.

56. Well-servicing operations :-

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

(2)

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

(b) When operations are carried out with a hoist and stationary derrick, tile floor block shall be fastened to a substantial anchorage.

(3)

(a) Every person shall keep clear of the wire-line between the drum and floor block.

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

(4) A master gate valve and tubing hanger shall be pre-assembled and kept readily available at the well for immediate use in case the well kicks during pulling-out or running-in tubings.

(5)

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

maintained.

(b) Before commencement of well-servicing operation, the blowout preventer assembly shall be pressure and function tested,

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

57. 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 greasing 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.

58. Temporary closure of producing well :-

(1)

(a) 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 so that the hydrostatic pressure of the fluid column over-balances the formation pressure to prevent leakage of petroleum at the wellhead.

(b) The control valves of the Christmas tree shall be completely closed and the control wheels shall be removed.

(2)

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

(b) 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.

59. 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 accross the shoe of the surface casing ;

(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 three-metre cement plug.

(2) Every abandoned well shall be clearly identified at site

CHAPTER 6
Transport by Pipelines

60. Application :-
The regulations in this Chapter shall apply only to the transport of petroleum by means of pipelines within any mine as defined under regulation 11.

61. Approval of the route and design of pipeline :-

(1) No pipeline shall be laid except with the permission in writing of the Chief Inspector and in accordance with such conditions as he may specify therein. An application for permission under this sub-regulation shall be accompanied by two copies of an up-to-date plan of the area where pipelines are proposed to be laid showing the proposed route, extent of land over which right of user has been acquired and also a note containing details of construction, testing and provisions proposed to be made for the maintenance and patrolling of pipeline, protection against uncontrolled escape of fluids from the pipeline and pressures in excess of those for which the pipeline is to be designed, as also measures for prevention and control of lire.

(2) 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. A copy of the application shall also be sent in the case of a 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.

62. 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) Scraper launching and or receiving traps shall be fitted with positve pressure-release indicator fixed to the opening door.

63. Laying of pipeline :-

(1) Pipelines shall be laid at least one metre 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 to do so 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.

64. Emergency procedure for pipelines :-

(1) The Manager of every mine in which any pipeline is laid for transport of petroleum shall submit to the Regional Inspector within 60 days of the coming into force of these regulations or in the case of a new installation, within 30 days of the installation, emergency procedures specifying the action to be taken in the event of fire, uncontrolled escape of petroleum from the pipeline, bursting, or damage to the pipeline.

(2) The Regional Inspector may, by an order in writing, approve of such emergency procedures, either in the form submitted to him or with such additions and alterations as he may think fit; and the emergency procedures so approved shall be enforced at the mine.

CHAPTER 7
Protection against Gases and Fires

65. Storage and use of flammable material :-

(1) Except for fuel in the tanks of the operating 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 from the well and equipment.

(4) Any flammable liquid having a flash point of less than 65 celcius shall not be used for cleaning purposes without prior permission in writing of the manager or an installation manager.

66. 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 per cent. 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. Normal work shall not be resumed unless the area is made gas-free.

(3) Particulars of every occurrence referred to in subregulation (1) together with a statement 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. Every such entry shall be signed and dated by the competent person making the report and counter-signed by the installation manager.

67. 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 treator, crude-oil treator 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 arrester.

(5) Flare shall be sited not less than 90 metres from any part of a production installation or petroleum storage tanks.

68. 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 of 15 metres 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, 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 Ilquids 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 and air intake shut-off value with readily accessible remote control arrangment.

(4) Water bath treator and heater treator shall be provided with suitable device for remote ignition of burners.

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

69. Precaution during welding :-

(1) No person other than a competent welder duly authorised In writing by the manager or installation manager shall carry out welding or cutting work requiring use or 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 or installation manager. Copes

of 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. 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 making the examination.

(4) During the welding and cutting operations, the welder shall see 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 foam or dry-chemical type fire-extinguishers are 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 contained flammable fluid, the pipe is disconnected or binded, the line is isolated, drained or purged with inert gas or water before hot work is undertaken and adequate precautions are taken against build-up of pressure in the line while hot work is in progress: Provided (hat 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 shall ensure that where hot work permits are Issued, welding and cutting operations are carried out in accordance with the said permits.

<u>70.</u> Fire-fighting equipment :-

(1)

(a) At every drilling rig at least two foam and two dry chemical type fire-extinguishers shall be conveniently located.

(b) At every work-over rig at least one foam and one dry chemical type fire- extinguishers shall be provided.

(c) Foam shall not be used to extinguish electrical fires.

(2) At every group gathering station and petroleum storage tank, a water ring main with adequate storage of water at site. pump feeding hydrants and water monitors shall be provided and maintained.

(3) Fixed-roof storage tanks shall be provided with Fixed foam connections.

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

(5)

(a) 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 it is in proper working order.

(b) A report of every such examination or refilling shall be kept in a bound- paged book kept for the purpose and shall be signed and dated by the person making the examination or refilling.

71. 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 : regular fire drills shall be held for this purpose.

72. Contingency plan for fire :-

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

(2) The contingency plan shall contain, -

(a) organisation plan clearly staling the line of command and the responsibilities of each person involved in case of emergency situations;

(b) equipment plan clearly stipulating the equipments make and type, capacity, location, correct operation and field of operation ;

(c) action plan clearly stipulating-

(i) alarm and communication system,

(ii) system of notifying the authorities.

(iii) the duties of each involved.

(iv) when and how the equipment shall be used and when and how the action shall be carried out, and

(v) guidelines for terminating the action : and

(d) plan for training of personnel and for drills.

CHAPTER 8
Machinery. Plant and Equipment

73. 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 are or 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, ecuipment, 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.

74. Classification of hazardous area :-
After the coming into force of these regulations, 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.

75. Use of electrical equipment in hazardous area :-

(1) No electrical appliance, equipment, or machinery including lighting apparatus shall be used in zone '0' 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 I and zone 2 hazardous area which will be of such type, standard and make as approved by the Chief Inspector by a general or special order in writing. 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 as aforesaid shall not be used in such hazardous area.

76. General provisions about 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.

77. 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 of starting the engine a non-return valve shall be provided in the compressed air line 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 precautions 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.

78. Apparatus under pressure :-

(1) All apparatus used as or forming part of the equipment of a mine which contains or produces air, gas 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 shall be fitted with a safety valve and air gauze which shows pressure in excess of the atmospheric pressure.

(3) Before an air receiver 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 maximum permissible working pressure. A similar test shall be made after every renewal or repair and in any case at intervals of not more than three years. The results of every such test shall be recorded in a bound-paged book kept for the purpose and shall be signed and dated by the competent person carrying out the test.

(4)

(a) The discharge line of a gas compressor shall be provided with a pressure relieving safety device : there shall be no valve or fitting between the compressor and its pressure relieving safety device or between the device and point of discharge, as would render the device ineffective.

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

(c) The pressure relieving safety device shall be tested once in every six months and a record of every such test shall be kept in a bound-paged book kept for the purpose by the person making the test.

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

(6) 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.

79. Precautions regarding moving parts of machinery :-

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

(2) Every fly wheel and every other dangerous exposed part of any machinery used as or forming part of (he equipment of a mine 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 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 any engine room or in any way interfere with the engine.

80. Engine rooms and their exits :-

Every engine, motor, compressor and pump room and every room in which highly flammable materials are stored shall be kept clean, and be provided with at least two exits. Every such exit shall be properly maintained and kept free from obstruction.

81. 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 see 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) Every person in charge of an air-receiver shall see that no extra

weight is added to tlie safety valves and that the permissible pressure of air is not exceeded.

(4) A competent person or persons appointed for the purpose shall, once atleast in every seven days, make a thorough inspection of all machinery and plant in use. and shall record the result thereof in a bound paged book kept for the purpose. In respect of electrical machinery and plant, the competent person shall be a person holding qualifications specified in the Electricity Rules, 1956 .

CHAPTER 9
General Safety Provision

82. Housekeeping :-

(1) Loose material which are not required for use shall not be placed or left so as to dangerously obstruct work places 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) Work places and passage-ways that are slippery owing to oil, mud or other causes shall be cleaned up or strewn with sand, sawdust or the like.

(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.

83. 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 eyestrain.

84. Electric lighting :-

(1) Every electrical lighting apparatus 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 Electricity Rules, 1956 .

(3) Every electrical lighting apparatus shall be so fitted as to protect it from accidental damage.

85. Standards of lighting :-
The Chief Inspector may from time to time by notification in the Official Gazette specify the standards of lighting to be provided In any specified area or places in a mine.

86. Emergency lighting :-
Adequate number of self-contained portable hand lamps of approved type shall be made and kept available for immediate use in emergency.

87. 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 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 Interval as the Chief Inspector may specify by a general or special order in writing: Provided that where such protective footwear is damaged during its legitimate use, it shall be immediately replaced free of cost.

(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.

88. Supply and use of protective helmet :-

(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 as 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 interval 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 arises: Provided that when a helmet is damaged during its legitimate use, it shall be immediately replaced free of cost.

89. Protective equipment :-
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 and approns :

(b) suitable protective outer clothing for use in rain and extreme weather conditions.

90. Supply and use of protective footwear, helmets and equipment :-

(1) The owner, agent or manager shall provide protective footwear, helmet and equipment free of charge.

(2) Every person provided with protective footwear, helmet and equipment shall wear the same while at work.

91. Protection against noise :-

(1) The owner, agent or manager shall take reasonably practicable means to reduce the noise level and to reduce the exposure of work persons to noise.

(2) No person shall enter or be allowed to enter without appropriate

ear protection, and area in which the sound level is 115 d B (A) or more.

(3) No person shall enter or be allowed to enter an area in which the sound level is 140 d B (A) or more.

(4) The Chief Inspector may, from time to time by notification In the Official Gazette, specify the permissible noise exposures in any area or place in a mine.

92. Communication :-

(1) Efficient means of communication shall be provided and maintained in good working order between manned installations, the office of the manager and other places of work wherever possible this shall be by radio telephone and an alternative means of signalling shall also be provided.

(2) The communication and signalling system installed in the mine shall comply with the provisions of the Electricity Rules, 1956 .

93. Safety belts and life lines :-

Where any person cannot be protected against fall from heights by other means, the owner, agent or manager shall provide an approved safety belt suitable for the hazard exposure which shall be attached by means of a life line to a fixed anchor and adjusted to allow a drop not exceeding 1.8 metres in case of fall.

94. Precaution 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.

95. Safety-warning signs :-

(1) Storage area and containers of toxic, corrosive, flammable,

poisonous and radio-active material shall be properly labelled 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.

(5) Pipelines carrying steam or fluids at high pressure shall be conspicuously identified.

96. 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.

(2) 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.

(3) 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 a 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 : and

(c) to run over or damage any land, highway or public road.

(4)

(a) Gas produced at any installation shall not be discharged to the atmosphere unless burnt in accordance with Cl. (b) or in the manner otherwise approved by the Chief Inspector through a general or special order.

(b) Gas to be burned, referred to in Cl. (a) shall be discharged from a flare line in the following manner,-

(i) the flare-line shall terminate with the vertical rise of at least 9 metres or such greater height as may be required by the Regional

Inspector by an order in writing ;

(ii) the flare-line shall be adequately anchored and provided with suitable means to prevent extinction of the flame : and

(iii) 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.

97. Fencings :-

(1) The Christmas tree provided at any well 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 metres in height.

(3)

(a) Precautions shall be taken to prevent any unauthorised person from having access to any place which has been duly fenced.

(b) Every fence shall once at least in every seven days be examined by a competent person. A report of every such inspection 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.

(4) If any doubt arises as to whether any fence, guard, barrier or gate provided under these regulations is adequate, proper or secure, it shall be referred to the Chief Inspector for decisions, whose decision thereon shall be final.

CHAPTER 10
Miscellaneous

98. General safety :-
No person shall negligently or wilfully do anything likely to endanger life or limb in the mine or negligently or wilfully omit to do anything necessary for the safety of the mine or of the persons employed therein.

99. Safety and health education and instructions :-
In every mine, safely and health education and instruction programmes shall be organised regularly to make the workers safety conscious and instill an awareness or occupational safety and health at every level.

100. 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 or the Inspector to whom notice of the accident Is required to be given under sub-section (1) of Section 23 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 said 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 la 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 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 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 of mines.

101. Pointing out of contravention 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 for their rectification.

(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 at least 15

days. 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 removed.

(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 rectifiable contraventions pointed out by him on the spot. 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 these contraventions, whereupon the Chief Inspector, or Inspector, may omit to include these contraventions in the intimation under sub-regulation (1).

102. Signing of returns, notices and correspondence :-
All returns and notice's required under or correspondence made In connection with the provisions of the Act and of those regulations and 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 functions to any other specified person : Provided further that in respect of notice of accident, the manager may delegate this function to any installation manager.

103. Chief Inspector to exercise powers of the Regional Inspector :-
A n y 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.

104. Appeals to the Chief Inspector :-
Against an order made by the Regional Inspector under any of these regulations, an appeal shall he to the Chief Inspector, who may confirm, modify or cancel the order. Every such appeal shall be preferred within 15 days of the receipt of the order by appellant.

105. Appeals to Committee :-

(1) Against any order of the Chief Inspector an appeal shall lie

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.

106. Repeal and saving :-

Oil Mines Regulations, 1983. are hereby repealed Provided that all acts done or orders issued under any of the said regulations shall so far as they are not inconsistent with these regulations, be deemed to have been done or issued under the corresponding provisions of these regulations.

SCHEDULE 1
SCHEDULE

SCHEDULE 2
SCHEDULE

(See regulation 70) Form for hot work permit
Shri.....and his co-workers named below are permitted to undertake welding/cutting work in connection with the Job/jobs listed hereinafter at.....
of..... (name of installation)
.....oil mine,
on.....
from.....to..... hours on condition that the
..... safety measures mentioned below are strictly complied with : Job list and work procedure In brief: Safety measures: 1. Welding/cutting shall commence only after provisions of regulation 70 (3) are complied with. 2. During the operation, tests for presence of hazardous atmosphere shall be made with explosimeter at every.....hours interval. If during any such test it is found that the area is not gas-free, all welding/cutting work shall be stopped forthwith and the operation shall not be resumed till the area Is made gas-free. 3. The provisions of regulation 70(4) shall be strictly complied with; a copy of these provisions is attached. 4. Any other provisions : Name(s) of co-workers Signature of welder Signature of Manager/Installation Manager Date.....
Date.....