.THE TELANGANA FACTORIES RULES, 1950

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[1]Telangana Factories Rules, 1950

CHAPTER I

PRELIMINARY

1. Short title, extent and commencement

(1) These rules may be called the **[1]Telangana Factories Rules, 1950**

(2) These rules shall extend to the whole of the State of [2] **Telangana**.

2. Definitions

In these rules, unless there is anything repugnant in the subject or context-

(a) "Act" means the Factories Act, 1948.

(b) "Appendix " means an appendix appended to these rules.

(c) "Artificial humidification " means the introduction of moisture into the air of a room by any artificial means whatsoever, except the unavoidable escape of steam or water vapour into the atmosphere directly due to a manufacturing process.

Provided that the introduction of air directly from out side through moistened mats or screens placed in openings at times when the temperature of the room is 80 degrees or more, shall not be deemed to be artificial humidification.

(d) "Belt" includes any driving strap or rope.

(e) "Degrees" (or temperature) means degrees of the Fahrenheit scale.

(f) "District Magistrate" includes the Additional District Magistrate and any other officer appointed by the Government in that behalf

(g) "Family" means the wife, son, daughter, mother, brother or sister of the owner of any place wherein a manufacturing process is carried on who lives with or is dependent on such owner.

(h) "Fume " includes gas or vapour.

(i) "Health officer " means the Municipal Health Officer in a Municipality or Corporation, the District Health Officer concerned in any area within the jurisdiction of a district board or panchayat or such other officer as may be appointed by the State Government for any area in that behalf irrespective of whether such area is within the limits of a municipality or the jurisdiction of a

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[1] The Andhra Pradesh Factories Rules, 1950. The said Rules in force in the combined State as on 2-6-2014, has been adapted to the State of Telangana, under Section 101 of the Andhra Pradesh Reorganisation Act, 2014 (Central Act 6 of 2014) vide the notification issued in G.O.Ms. No 39 of Labour, Employment, Training and Factories Department, dated 30-12-2015.

[2] For the words " Andhra Pradesh", the word "Telangana" substituted by G.O.Ms.No. 39 of Labour, Employment, Training and Factories Department, dated 30-12-2015.

district board or panchayat.

(j) "Hygrometer" means an accurate wet and dry bulb hygrometer conforming to the prescribed conditions as regards construction and maintenance.

(k) Omitted

(l) "Maintained" means maintained in an efficient state, in efficient working order and in good repair.

(m) "Manager " means a person nominated or appointed as such by the occupier of the factory under Section 7 for the purposes of the Act.

(n) "Local Authority " means the Commissioner in the case of an area within the limits of a municipality or corporation, the executive officer in the case of an area within the jurisdiction of a panchayat and the president of a district board in the case of any other area.

(o) "Public Health Authority " means the Local Health Officer having jurisdiction over the area.

(p) "Section" means a section of the Act.

(q) "Week" for the purposes of Section 2(f) of the Act and these rules shall mean, for any local area or any class of factories, the period of seven days commencing from the mid-night of Saturday or of such other day preceding the day on which the factories of that area or class are ordinarily closed every week according to any scheme, order, arrangement, regulation, usage or custom, Provided that, where work is ordinarily carried on continuously in the factory on all days of the calendar week, the term "week" in relation to any worker of the factory shall mean that period of seven days commencing from the day on which the worker is not required to work.

[2A-Competent Persons:— (1) The Chief Inspector may recognize any person as a competent person' under the provisions of the Act within such area and for such period as may be specified for the purposes of carrying out the number of tests, examinations, inspections and certification periodically as prescribed for such buildings, dangerous machinery, hoists and lifts, lifting machines and lifting tackles, pressure plant,' confined space, ventilation systems, evaluation of exposure of employees to airborne contaminants and physical agents at the work place, solvent extraction plant and such other process or plant and equipment as stipulated i n the Act and the Rules made thereunder, located in a factory, if such a person possesses the qualifications, experience and other requirements as set out in the Schedule annexed to this rule.

The Chief Inspector of Factories may recognize any person or an institution of repute, as a Competent Person under the Act for the purpose of carrying out tests, examinations, inspections and issuing certification as stipulated under the Act and Rules in respect of buildings, dangerous machinery, hoists and lifts, lifting tackles, chains, ropes, pressure plants, confined spaces, ventilation system, evaluation of exposure of employees to airborne contaminants and physical agents at the work place, solvent extraction plant and other processes or plants and equipments located in a factory:

Provided that such a person possesses the required qualifications, experience and other facilities, equipment etc., as set out in the Schedule annexed to this rule,

and

In case of an institution, the institution shall be equipped with persons possessing the required qualifications and experience as prescribed and also the facilities, equipment, etc., for carrying out the tests, examinations and inspections.

(2) Every person/institution seeking recognition or renewal of recognition as competent person (CP) shall submit an application in the prescribed form accompanied by a treasury receipt towards the remittance of the prescribed fee and all the relevant documentary proof in the office of the Director of Factories, [3]**Telangana** Hyderabad before 2 months in advance. The fee once paid is not refundable.

(3) The Person seeking recognition as a Competent Person shall not be above the age of 62 years and physically fit for the purpose of carrying out tests, examinations and inspections.

(4) The Chief Inspector may relax the requirements of qualifications in respect of a Competent Person if such person is exceptionally experienced and knowledgeable, but not the requirements in respect of the facilities at his end.

(5) The Chief Inspector, on receipt of an application in the prescribed form from a person or an institution intending to be recognized as a "Competent Person" for the purpose of this Act and the Rules made thereunder shall register such an application and, within a period of sixty days from the date of receipt of the application, either, after having satisfied himself as regards competence and facilities available at the disposal of the applicant, recognize the applicant as a Competent Person and issue a certificate of competence in the prescribed form or reject the application specifying the reasons thereof Certificate of the recognition so granted shall be valid for a period of one year as specified in the certificate.

(6) Every application for recognition or renewal of recognition as competent person shall be accompanied by a treasury receipt towards the remittance of the prescribed fee shown in the Schedule annexed to this rule under the head of account as prescribed i n rule 11. The fee once paid is not refundable.

(7) The Chief Inspector may, after giving an opportunity to the competent person of being heard, revoke the certificate of competency,

(i) If he has the reason to believe that the competent person/ Institution-

(a) has violated any condition stipulated in the certificate of competency;

or[3] has carried out a test, examination and inspection or has acted in a manner inconsistent with the intent or the purpose of this Act or the

3. For the words " Andhra Pradesh", the word "Telangana" substituted by G.O.Ms.No. 39 of Labour, Employment, Training and Factories Department, dated 30-12-2015.

Rules made thereunder; or has omitted to act as required under the Act and the Rules made thereunder; or

(ii) for any other reasons to be recorded in writing.

(8) The Chief Inspector may, for reasons to be recorded in writing, require recertification of lifting machines, lifting tackles, pressure plants or ventilation system, as the case may be, which has been certified by a competent person.

(9) The qualifications required, experience for the purpose, facilities at his command, quantum of fee, application format and the competency certificate prescribed are shown in separate Schedules annexed to this rule.

SI. No.	Section or Rules under Factories Act 1948 and A.P. Factories Rules, 1950 under which competency is recognized	Qualification required	Experience for the purpose	Facilities at his command	Schedule of fee prescribed	
(1)	(2)	(3)	(4)	(5)	(6) Rs.	(7) Rs.
1.	Rules made under Section 6 and Section 112 Certificate of stability for buildings	Degree in Civil or Structural Engineering or equivalent	(i) A minimum of 10 years experience in the design of construction or testing or repairs of structures (ii) Knowledge of non-destructive testing, various codes of practices that the current and the effect of the vibrations and natural forces on the stability of		3,500	3,000

			the building; and (iii) Ability to arrive at a reliable conclusion with regard to the safety of the structure of the building.			
2.	Rule 53 under Section 21(2) for power presses	Degree in Mechanical or Electrical Engineering or equivalent	(i) A minimum of 7 years experience in. (a) design or operation or maintenance; or (b)testing, examination and inspection of relevant machinery, their guards, safety devices and appliances. (ii) He shall — (a)be conversant with safety devices and their proper functioning; (b) be able to identify defects and any other cause leading to failure; and	Gauges for measurement; instruments for measurement of speed and any other equipment or device to determine the safety in the use of the dangerous machines.	3,000	2,500

			(c) have ability to arrive at a reliable conclusion with regard to the proper functioning of safety device and appliance and machine guard.			
3	Section 28 Lifts and Hoists & Section 29- Lifting Machinery and lifting tackles	A degree in Mechanical and/or Electrical Engineering or its equivalent	(i) A minimum experience of 7 years in (a) design or erection or maintenance or (b) Inspection and test procedures; of lifts and hoists; (c) testing, examination and inspection, of lifting machinery chains, ropes and lifting tackles.	Facilities for load testing, tensile, testing, heat-treatment equipment, gauges equipment/ gadgets for measurement and any other equipment required for determining the safe working conditions of lifts, hoists, lifting machinery & lifting tackles. (ii) He shall be, (a) conversant with relevant codes of practices and test procedures that are current; (b)Conversant with other statutory requirements covering the	2,500	2,000

				safety of the hoists and lifts & lifting tackles. (c) able to identify defects and arrive at a reliable conclusion with regard to the safety of h o i s t s and lifts, lifting machinery, chains, ropes and lifting tackles. (d)conversant with fracture mechanics and metallurgy of the material of construction (e) conversant with heat treatment/ Stress relieving techniques as applicable to stress bearing parts of lifting machinery and lifting tackles:		

4.	Section 31 — "Pressure Plant"	Degree in Mechanical or Electrical or Chemical or Metallurgi-cal or Engineering or its equivalent	(i) A minimum experience of 10 years in (ii) design or erection or maintenance, or (a)testing, examination and inspection, of pressure plants. (ii) He shall be (a) conversant with relevant codes of practices and test procedures relating to pressure vessels; (b)conversant with statutory requirements concerning the safety of unfired pressure vessels and equipment operating under pressure; (c) conversant with non-destructive testing techniques as are applicable to able to identify defects and arrive at a reliable conclusion with regard to the safety of pressure plants.	Facilities for carrying out hydraulic test, non-destructive test, gauges equipment/ gauges for measurement and any other equipment or gauges to determine the safety in the use of pressure vessles.	3,000	2,500

5	(i) Section 36 — Precautions against dangerous fumes (ii) Rules made under Sections 41 & 112 concerning ship building and ship repairs (iii) Safety belts under Rule 61-C (iv) Thermic Fluid heaters under Rule 61(M) (v) Oven and Driers under Rule 61(0)	Master's degree in Chemistry, or a degree in Chemical Engg. or a degree in Mechanical Engg. Or Electrical Engg.,	(i) A minimum of years in collection and analysis of environmental samples and calibration of monitoring equipment, (ii) He shall,- (a)be conversant with the hazardous properties of chemicals and their permissible limit values; (b) be conversant with the current techniques of sampling and analysis of the environmental contaminants; and (c) be able to arrive at a reliable conclusion as regards the safety in respect of entering and carrying out hot work.	Meters, instruments and devices duly calibrated and certified for carrying Out the tests and certification of safety in working in confined spaces.	3,000	2,000

6.	ventilation systems as required under various Schedules framed under Section 87, such as Schedules on- (i) Grinding or glazing of metals and processes incidental thereto Schedule V under Rule 95. (ii) Cleaning or smoothing, roughening, etc, of articles, by a jet sand, metal shot, or grit, or other abrasive propelled by a blast of compressed air or steam Schedule XIX under Rule 95. (iii) Handling and processing of asbestos ' Schedule XVIII under rule 95. (iv)Manufacturing of Rayon by viscos process and Schedule XXVIII under Rule	Degree in Mechanical or Electrical Engineering or equivalent Degree Chemical or its equivalent Degree in Mechanical/ Electrical Engineering or Chemical Technology or its equivalent	(i) A minimum of 7 years in the design, fabrication, installation, testing of ventilation system and systems used for extraction and collection of dusts, fumes and vapours, and other ancillary equipment. (ii) He shall be conversant with relevant codes of practice and tests procedures that are current in respect of ventilation and a traction system for fumes, and shall be able to arrive at a reliable conclusion with regard to effectiveness of the system. (i) A minimum of	Facilities for testing the ventilation system, instruments and gauges for testing the effectiveness of the extraction systems for dusts, vapours and fumes, and any other equipment needed for determining the efficiency and adequacy of these systems_ He shall have the assistance of a suitable qualified technical person who can reasonable conclusion as to the adequacy of the system.	3,500 2,000	3,000

	95. Foundry operations Schedule XXX under Rule 95. (v) Solvent Extraction plant Schedule XXII under Rule 95. (vi) Chemical works Schedule XV under Rule . 95.		5 years industrial experience in the concerned field (ii) He shall be (a) conversant with relevant codes of practice and test procedures relating to ventilation system (b) Capable to identify defects and arrive at a reliable conclusion with regard to the safety of the system. (i) A minimum of 5 years industrial experience in the concerned field. (ii) He shall be (a) conversant relevant codes of practices and test come to a	Facilities for carrying out tests in solvent extraction plant, chemical works and carbon di-sulphide plant		

	(viiil Carbon disulphide plant Schedule XXIII under Rule 95.		procedures relating to oils, fats and chemicals. (b) able to identify defects and arrive at a reliable conclusion with regard to the safety of the system.	such as (a) Portable Hexane vapour detector (b) Ultrasonic Thickness tester (c) Pressure gauge calibrator (d) vacuum gauge calibrator calibrator (e) Ear th merger and (f) Techno meter]			

Form of Application for Grant of Certificate to a Person/Under Sub-rule (2) of Rule 2A

[See Rule 2A]

1. Name and Addr ess

2. Date of Birth

3.Name of organization (If not self—employed)

4. Designation

5. Educational Qualification (Xerox copies of testimonials to be attached)

6. Details of professional experience (in chronological order)

Name of he Organisation	Period of service	Designation	Area of Responsibility

7.Membership, if any of Professional Bodies

• Details of facilities (examination testing, etc.,) at his disposed

(ii) Arrangements for calibrating : and maintaining the accuracy of these facilities

** Purpose for which competency Certificate is sought (section or

• Sections of the Act should be stated

• Whether the applicant has been declared as a competent person under any statute (if so the details).

• Any other relevant, information Declaration by the applicant

I,.....hereby declare

that the information furnished above is true. I undertake.

- that in the event of any change in the facilities at my disposal (either addition or deletion) or my leaving the aforesaid organization. 1 will promptly inform the Director of Factories.
- to maintain the facilities in good working order, calibrated periodically as per manufacturer's instructions or as per National standards, and
- to fulfill and abide by all the conditions stipulated in the certificate of Competency and instructions issued by the Chief Inspector of Factories from time to time.

Signature of the Applicant

Place:

Date:

** Please furnish the following information in a separate sheet duly signed by the applicant.

List of buildings so far:

(i) Constructed and its value.
(ii) A detailed note regarding non-destructive testing various codes of practices that are current and the effect of the vibrations and natural forces on the stability of the buildings is enclosed.

Form of Application n for Grant of Certificate of Competency to Any Institution n U under Sub-rule (2) of Rule -2A

[See Rule 2A]

Name and full address

2. Organization's status (specify whether Government, autonomous, Co - operative, Corporate or Private)

3. Purpose for which competency certificate is sought (specify Section(s) of the Act) ;

4. Whether the organization has been declared as competent person under this or any other statute. If so, give details.

5. Particulars of persons employed and possessing qualification and experience as set out in Schedule annexed to rule 2 -A.

6. Details of facilities (relevant to item 3 above and arrangements made for their maintenance and periodic calibration)

Any other rrelevant iinformation.

Declaration:

I , … … … … … … … … … … … . here by..... o n behalf of

of……..
certify that the details furnished above are correct to the best of my knowledge.

I under ta ken to -

(i) maintain the facilities in good working order, calibrated periodically as per manufacturer's instructions or as per National standards; and

(ii) to fulfill and abide by all the conditions stipulated in the certificate of competency and instructions issued by the Chief Inspector from time to time.

(iii)

Place: Signature of Head of the Institution

Date: or of the persons authorized to

Sign on his behalf

Certificate of Recognition as Competent Person
(Issued in pursuance of sub-rule (5) of Rule 2 A)
[See Rule 2A]

CP (0) No. Date:

The Director of Factories, [4]**Telangana,** Hyderabad in exercise of the powers conferred under Section 2 (ca) of the Factories Act and Rules made thereunder, hereby recognize* …….

represented by**.....to be a

competent person for the purpose of carrying out test, examination inspection and certifications for *** used in factories subject to the conditions overleaf.

The Jurisdiction extends all over [4]**Telangana** desh /is restricted to M/s …….

This certificate is valid from… … … … … …… …… … …… … …… …… … …

Office Seal Director of Factories

Revalidation details

From	To	Signature of authority
(I)	(2)	(3)

* Na me of the institution

[4] For the words " Andhra Pradesh", the word "Telangana" substituted by G.O.Ms.No. 39 of Labour, Employment, Training and Factories Department, dated 30-12-2015.

** Na me of the competent person

*** (a) Building (b) Hoists (c) Lifts
• Chains (e) Lifting ma chines (f) Ropes
(g) Lifting tackles (h) Pressure plant (i) Ventilation system
(j) Confined space (k) Plants & equipment of dangerous processes as applicable.

This certificate is issued subject to the conditions stipulated hereunder: -

(i) tests, examinations and inspections shall be carried out in accordance with the provisions of the Act and the Rules

(ii) tests, examinations and inspections shall be carried out under direct supervision of the competent person or by a person so authorized by an institution recognized to be a competent person.

(iii) the certificate of competency issued in favour of a person shall stand cancelled if the person leaves the organization mentioned in this application.

(iv) the institution recognized as a competent person shall keep the Chief Inspector informed of the names, designation and qualifications of the person authorized by it to carry out tests,, examinations and inspections.

(v) the competent person should be physically present at the time of testing and examination.

(vi) records of daily work done should be maintained in a log book incorporating therein the details regarding the date, the work done, observations made,, directives given etc.,

(vii) copies of examination on certificates in all cases where defects are noticed and repairs are ordered or any conditions imposed on its use are to-be marked to the Inspector of Factories concerned.

(viii) application for renewal of certificate along with a brief account of work done during the period of validity of the certificate may be made atleast one month before the certificate expires together with fees prescribed for the purpose;

(ix) this recognition is subject to constant review and liable to be cancelled if deficiencies come to notice].

RULES 3 TO 11 PRESCRIBED UNDER SUB-SECTION (1) OF SECTION 6

3. Submission and Approval of plans

(1) In the case of any factory where,

(a) any hazardous process of the nature specified in the First Schedule of the Act is proposed to be carried on whether or not with the aid of power and notwithstanding that the number of persons employed is less than any number specified in Section 2(m) of the Act ; or

(b) the installed power is proposed to be or extended to [1]30 H.P. or more ;

No site shall be used for the location of a factory nor shall any building in a factory be constructed, extended or taken into use as a factory or part of a factory and no machine, or plant or any permanent fixture shall be installed or fixed, nor shall any manufacturing process be carried on in any factory or part of a factory, unless the occupier or the owner of the factory obtains the previous permission in writing approving the plans from the Chief Inspector [2]through online.

(2) [1]The owner or occupier of every factory falling under sub-rule (1) and the owner or occupier of any other factory shall upload through online for approval of plans in the prescribed Form No.1 by remitting the plans scrutiny fee at the following rates:

Factories wherein the Maximum installed Horse Power is upto 100	Rs.1,000/-
Factories wherein the Maximum installed Horse Power is upto 101 to 500	Rs.3,000/-
Factories wherein the Maximum installed Horse Power is upto 501 to 1500	Rs.5,000/-
Factories wherein the Maximum installed Horse Power is upto 1501 to 10,000	Rs. 10,000/-
Factories wherein the Maximum installed Horse Power is above 10,000	Rs.15,000/-

(3) If the Chief Inspector is satisfied that the plans [1]uploaded under sub-rule (2) are in accordance with the requirements of the Factories Act, 1948 and Telangana Factories Rules, 1950 he shall by an order grant the permission applied for through online subject to conditions, if any";

(4) If the Chief Inspector is of the opinion that the plans uploaded under sub-rule (2) are not in accordance with the requirements of the Act, or if he finds it fit or expedient to specify any conditions of approval, including conditions relating to cancellation or modifications of prior approvals, he shall, after giving the applicant a reasonable opportunity of being heard, send to the applicant a speaking order [2]through online either approving the plans subject to such conditions as may be specified therein or refuse the permission applied for.[3]

1. Substituted by G..Ms.No. 33 of LET & F (Lab.II) Department, dated 7-11-2019
2. Added by G..Ms.No. 33 of LET & F (Lab.II) Department, dated 7-11-2019
3. **The words along with a copy of the plans approved or rejected** Omitted by G..Ms.No. 33 of LET & F (Lab.II) Department, dated 7-11-2019

(5) If no order is communicated to the applicant within thirty days from the date on which the application has been [1]uploaded through online, the permission applied for shall be deemed to have been granted.

(6) [1]No manufacturing process shall be carried on in any building in a factory which is not in accordance with the plans approved by the Chief Inspector and does not satisfy the conditions subject to which the plans have been approved."

(7) For the purposes of this rule, for computing the quantity of power, the power for the plant, machinery used in the manufacturing process, or the installed horse power of any captive generation of power, whichever is higher, shall be taken into account and no account shall be taken of the power for lighting, or for any office equipment or appliances or any stand by captive generation of power.

(8) [1]In the case of any factory not covered by sub-rule (1), the Government or the Chief Inspector may, having regard to any special circumstances in any particular existing or proposed factory, by order, require the owner or occupier to submit the particulars and plans of the factory in Form No. 1 within thirty days of the service of the order.

Rule 3 A- Approval of Plans : [2]Omitted

4. Grant of Licence

(1) [1]The Occupier of every factory, shall atleast fifteen days before commencing any manufacturing process in any factory upload through online an application for the registration of the factory and for grant of the licence in the prescribed Form No.2 along with online payment of annual licence fee up to ten times prescribed in the schedule to Rule 6.

(2) (a) The Occupier shall send and intimate in Form No.2 to the Inspector immediately after the commencement of manufacturing process.

(b) The premises shall be deemed to be licenced from the date of intimation of commencement of manufacturing process until such date the Inspector refuses in writing to grant the licence.

(3) The Inspector on notice any defect in the license application or violation of any provision may be a speaking order and after giving the applicant a reasonable opportunity of being heard, refuse to grant a licence:

Provided that if no order is communicated to the occupier within a period of 30 days from the date on which the occupier has sent intimation under sub rule 2 (a), the license shall be deemed to have been granted and thereupon the license shall be issued forthwith.

(4) If the grant of license has not been refused in accordance with sub-rule (3), the Inspector shall grant the license in Form No. 4 and send the license to the applicant.

(5) [1]Every Licence granted is permanent and valid till it has been duly cancelled provided the requisite annual licence fee is remitted through online for that period.

1. Substituted by G..Ms.No. 33 of LET & F (Lab.II) Department, dated 7-11-2019
2. Omitted by G..Ms.No. 33 of LET & F (Lab.II) Department, dated 7-11-2019

(6) No manufacturing process shall be carried on in any factory unless a licence is valid for the time being.
(7) A licence granted shall be caused to be produced on demand by the Inspector.

5. Amendment of Licence

(i) [1]The occupier of a factory shall, within fifteen days of occurrence of any change in the name or in particulars of the maximum horse power installed or maximum number of persons employed, apply through online for amendment of the licence stating the nature of amendment to be made and the reasons there for together with online payment of prescribed fee";

(ii) The fee for the amendment of a licence shall be the amount, if any, by which the fee ehat would have been payable if the licence had originally been issued in the amended form exceeds the licence fee payable for the relevant calender year but for the amendment along with an amendment fee or [1]Rs. 500/- (Rupees five hundred)

6. Payment of Annual Licence Fee or for a block period of [2]ten calendar years

Every licencee shall, before the commencement of any calendar year, remit the annual licence fee as prescribed in the schedule under this rule through online portal of Factories Department, Telangana State and services connected with the same either for one calendar year or more but does not exceed 10 calendar years, in case the licencee is intended to remit the licence fee for ten calendar years the amount payable shall be ten times the Annual Licence Fee as prescribed in the said schedule.

Provided that for computing the quantity of power, for the purposes of this rule, the power for the plant and machinery used in the manufacturing process only shall be taken into account and no account shall be taken of the power for lighting, or for any office equipment or appliances. The total installed horse power of plant, machinery and equipment or the captive generation of power whichever is higher shall be taken into consideration.

(2) If the prescribed annual licence fee is not fully paid within the prescribed period in sub-rule(1), simple interest at two percent per month or part of a month shall be payable on the part of the annual licence fee not paid from the first day of the calendar year till the last day of the calendar month in which the annual licence fee together with interest is paid:
Provided that the Chief Inspector may, if satisfied that there is sufficient reason for the non-payment of the annual licence fee within the time prescribed in sub-rule (1), by order in writing, waive the interest specified:

Provided further that the Chief Inspector may waive the annual licence fee and the interest thereon if it is shown to his satisfaction that no manufacturing process has been carried on in the factory on any day of the relevant calendar year and the owner or occupier applies for the cancellation of licence.

(3) [1]No manufacturing process shall be carried on in any premises unless the requisite annual licence fee is remitted through online before commencement of the licensing year."

1. Substituted by G..Ms.No. 33 of LET & F (Lab.II) Department, dated 7-11-2019
2. For the word **"three**" is substituted by the word **"ten"** by G.O.Ms.No. 39 of Labour, Employment, Training and Factories Department, dated 30-12-2015.

7. Cancellation of Licence

(1) The Inspector may, by a speaking order served on the occupier, cancel any licence issued if the annual licence fee together with interest has not been paid, and thereupon no manufacturing process shall be carried on in that factory,

Provided that the Inspector has previously served a written notice on the Occupier, calling upon him to pay the fee with interest within a period of thirty days from the date of service of the notice and the occupier has not complied with the terms of the notice,

Provided further that the Inspector may also cancel a licence if an application has been made for such cancellation by the owner or occupier and in such a case, the notice referred to in the first proviso of this sub-rule shall not be required.

8. Transfer of Licence

[1]A licence may be transferred from one owner or occupier to another consequent to any transfer of the factory and the transferee shall upload the application through online along with requisite documents mentioned therein by remitting the transfer fee of Rs. 500/- (Rupees five hundred) and such application shall be deemed to be endorsement of transfer until the transfer is endorsed by the Inspector unless the application has been refused by speaking order in writing within a period of thirty working days from the date of uploading the application."

9. Procedure on death or disability of licensee

If a licensee dies or becomes insolvent, the person carrying on the business of such licensee shall not be liable to any penalty under the Act for exercising the powers granted to the licensee by the licence during such time as may reasonably be required to allow him to make an application for the amendment of the licence under Rule 5 in his own name for the unexpired portion of the original licence.

10. [2]Omitted

11. Payment of Fee

"(1) [1]Every application made under these rules through online for which a fee has been prescribed shall be followed by remitting the prescribed fee through the online portal of Factories Department, Telangana State."

(2) [1]The Annual Licence Fee payable under Rule 6 above is as prescribed in the Schedule and the items in the Note vide G.O.Ms.No.77, LET&F (Lab) Department, Dated: 28.12.2016.

12. Notice of Change of occupier or manager

(1) The occupier of every factory shall, within seven days of any change in the manager of any factory, send notice thereof in Form No. 2-A to the Inspector.

(2) Every new occupier of a factory shall, within seven days of the change of occupation, send notice thereof in Form No. 2-A to the Inspector.

1. Substituted by G..Ms.No. 33 of LET & F (Lab.II) Department, dated 7-11-2019
2. Omitted by G..Ms.No. 33 of LET & F (Lab.II) Department, dated 7-11-2019

12-A. Exemption from Section 7-A(3)

All factories in which less than three hundred workers are employed shall be exempted from the provisions of sub-section (3) of Section 7-A of the Act.,.

Provided that this exemption shall not apply to cases where Chapter IV- A relating to hazardous processes apply,

Provided further that where the Chief Inspector is of the opinion that it is necessary to do so, having regard, in the case of any particular factory, to the scale of operation and the dangerous or hazardous nature of the processes carried on or in the interest of public safety, he may, after giving the owner or occupier a reasonable opportunity of being heard, by a speaking order in writing, direct that the exemption contained in this rule shall not apply to thatfactory.

12-B. Guidelines, instructions and records

(1) without prejudice to the general responsibility of the Occupier to comply with the provisions of Section 7-A the Chief Inspector may, from time to time, issue guidelines and instructions regarding the general duties of the occupier relating to health, safety and welfare of all workers while they are at work in the factory:

(2) the Occupier shall maintain such records, as may be prescribed by the Chief Inspector in respect of monitoring of working environment in the factory.

12-C Certificate of stability:- (1) No manufacturing process shall be carried on in any building of a factory constructed, reconstructed or extended or in any building which has been taken into use as a factory or part of a factory until a certificate of stability in respect of that building in the form given below has been sent by the occupier or manager of the factory to the Chief Inspector and accepted by him.

CHAPTER II

THE INSPECTING STAFF

RULE PRESCRIBED UNDER SECTION 9

3. Powers of Inspectors

(1) An Inspector shall, for the purpose of the execution of the Act have power to do all or any of the following things, that is to say-

(a) to photograph any worker, to inspect, examine, measure, copy, photograph, sketch or test, as the case may be, any building or room, any plant, machinery, appliance or apparatus, any register or document or any thing provided for the purpose of securing the health, safety or welfare of the workers employed in a factory.

(b) in the case of an Inspector who is a duly qualified medical practitioner, to carry out such medical examinations as may be necessary for the purposes of his duties under the Act.

(c) to prosecute conduct or defend before a Court any complaint or other proceeding arising under the Act or in discharge of his duties as an Inspector.

(2) The qualifications of the Inspectors to be appointed under the Act shall as specified in the rules issued under the proviso to Article 309 of the Constitution.

(3) When, in any area, an inspection is made by an additional Inspector, he shall prepare the report and shall within ten days of the Inspection, send to the Inspector under Section 8(1) for action. In no case shall an additional Inspector communicate copy of his report to the occupier or the manager of a factory direct.

(4) An Inspector may, if he has reason to believe, as a result of any inspection, examination or enquiry that an offence under the Act has been or is being committed, search any premises, plant and machinery and take possession or copies of any register, records or other documents or portions thereof pertaining to the factory after following the provisions of the Code of Criminal Procedure, 1973 (Central Act 2 of 1974) so far as may be applicable, relating to search and seizure under that Act.

RULE PRESCRIBED UNDER SUB-SECTION (4) OF SECTION 10

4. Duties of certifying surgeon

(1) For purposes of the examination and certification of young persons, who wish to obtain certificates of fitness, the Certifying Surgeon shall arrange a suitable time and place for the attendance of such persons, and shall give previous notice in writing of such arrangements to the managers of factories situated within the local limits assigned to him.

(2) The Certifying Surgeon shall issue his certificates in Form No. 5 The foil and counter-foil shall he filled in and the left thumb mark of the person in whose name the certificate is granted shall be taken on them. On being satisfied as to the correctness, of the entries made therein and of the fitness of the person examined, he shall sign the foil and initial the counterfoil and shall deliver the foil to the person in whose name the certificate is granted. The foil so delivered shall

be the certificate of fitness granted under Section 69. All counter-foils shall be kept by the Certifying Surgeon for a period of at least two years after the issue of the certificate.

(3) The certifying surgeon shall, upon request by the Chief Inspector, carry out such examination and furnish him with such report as he may indicate, for any factory or class or description of factories where-

(a) cases of illness have occurred which it is reasonable to believe or due to the nature of the manufacturing process carried on or other conditions of work prevailing therein, or

(b) by reason of any change in the manufacturing process carried on, or in the substances used therein, or by reason of the adoption of any new manufacturing process or of any substance for use in a manufacturing process, there is a likelihood of injury to the health of workers employed in that manufacturing process, or

(c) young persons are or about to be, employed in any work which is likely to ca use injury to their health.

(4) For the purpose of the examination of persons employed in process covered by the rules relating to dangerous operations, the Certifying Surgeon shall visit the factories within the local limits assigned to him at such intervals as are prescribed by the rules relating to such dangerous operations.

(5) At such visits, the certifying surgeon after examining a worker, shall issue a certificate of fitness in Form 17-A. The record of examination and re-examinations carried out shall be kept in the custody of the manager of the factory.

(6) If the certifying surgeon finds as a result of his examination that any person employed in such process is no longer fit for medical reasons to work in that process, he shall suspend such persons from working in that process for such time as he may think fit and no person after suspension shall be employed in that process without the written sanction of the certifying surgeon in the Health Register.

(7) The manager of a factory shall afford to the certifying surgeon facilities to inspect any process in which any person is employed or is likely to be employed.

(8) The manager of a factory shall provide for the purpose of any medical examination which the certifying surgeon wishes to conduct at the factory (for his exclusive use on the occasion of an examination) a room which shall be properly cleaned and adequately ventilated and lighted and furnished with a screen, a table (with writing materials) and chairs.

14-A. Fees for certifying surgeon for examination of young persons

(1) The certifying surgeon shall be entitled to the following fees for examination and grant of certificate of fitness under sub-section(2) of Section 69.

(i) Rs. 5 for the first young person and Rs. 3 for every subsequent person examined on a single day when the person to be examined goes to the certifying surgeon for the purpose of such examination.

(ii) Rs 3 for the first young person and Rs 1 for every subsequent young person examined on a single day when the person to be examined goes to the certifying surgeon for the purpose of such examination.

(iii) If a certifying surgeon has to travel beyond a radius of 8 kilometers from his dispensary or place of posting to examine any young person or persons he shall be entitled to an additional fee at the rate of 0.50 paise per kilometer for the total distance travelled by him. A certifying surgeon who is an employee of the State Government shall charge this additional fee from the occupier of a factory only if he does not charge any travelling allowance for the journey from the State Government.

(2) The certifying surgeon shall send his bill of fees direct to the occupier of the factory in which the young persons are employed or are to be employed.

(3) The fees and additional fees prescribed in this rule shall be paid by the occupier of the factory concerned.

(4) The fees and the additional fees for the renewal of certificate of fitness shall be the same as prescribed in these rules for grant of certificate of fitness.

14-B. Fees for certifying surgeons for carrying examination under sub-rule(3) of Rule 14-A

The certifying surgeon shall be paid by the occupier of the factory besides the additional fees for travelling a daily professional fee at the rate of Rs. 10 per day irrespective of the number of persons examined but this fee shall be reduced to Rs. 5 if the examination does not take more than half of a day. Provided that if the number of factories visited exceeds four on a single day the professional fee shall be subject to a minimum of Rs. 15 per day per factory.

14-C. Fees for examination of persons employed in dangerous operations

The fees and additional fees for examination of persons employed in dangerous operations specified in Rule 95 shall be the same as prescribed in Rule 14-A and shall be payable by the occupier of the factory in which the persons examined are employed.

CHAPTER III

HEALTH

EXEMPTIONS UNDER SUB-SECTION (2) OF SECTION 11

5. Exemption from Section 11(1)(d)

(1) The provisions of Clause (d), (dd) and (e) of sub-section (1) of Section 11 shall not apply to any class of factory subject to the condition that the inside walls, partitions, ceilings or tops of rooms and all walls, sides and tops of passages and staircases are kept clean by effective means and they are painted as often as necessary, and subject to the condition in sub-rule (2) of this rule.

(2) If it appears to the Chief Inspector that any part of a factory which is exempted under sub-rule (1) of this rule is not kept in a clean state, he may after giving an opportunity to the occupier to be heard, by written order require the occupier to carry out washing, painting or varnishing within such reasonable period of not less than two months as may be specified in the order.

RULES PRESCRIBED UNDER SUB-SECTION (2) OF SECTION 12

17. Disposal of trade wastes and effluents

The arrangements made in every factory for the treatment of wastes and effluents due to the manufacturing process carried on therein shall be in accordance with those approved by the relevant Water and Air Pollution Boards appointed under the Water (Prevention and Control of Pollution) Act, 1974 (Central Act No. 6 of 1974) and the Air (Prevention and Control of Pollution) Act, 1981 (Central Act No. 14 of 1981) and other appropriate authorities.

RULES PRESCRIBED UNDER SECTION 13 (2)

17-A. Standards of ventilation

(1) In every room of a factory, doors and windows shall be provided in the proportion of 0.5 square metres at least for each worker employed in such a room, and the openings shall be such as to admit of a continued supply of fresh air.

(2) No window provided in a wall shall be of a size less than 1.5 metres x 0.90 metres.

(3) The lower sill level of a window shall not be more than 90 cm from the floor level of the room.

(4) The doors and windows shall be so spaced as to be not more than 3 metres from centre to centre.

(5) A second set of windows of not less than 1.2 x 0.9 metres shall be provided if the height of the building at the eaves 6 metres or more and fixed directly above the first set of windows and doors.

(6) In every room of the factory where machinery is installed, roof openings to provide for adequate natural ventilation shall be provided to the satisfaction of the Inspector.

(7) No verandah, portico or any structure shall be constructed nor any material stored so as to adversely effect the entry of fresh air into the room of a factory.

RULES PRESCRIBED UNDER SECTION 13 (3)

17-B. Ventilation and Temperature

(1) Limits of temperature and air movement..- In any factory the maximum wet bulb temperature of air in a work room at a height of 1.45 metres (5 feet) above the floor level shall not exceed 308-C, (860-1) and adequate air movement of at least 30 metres per minute (100 feet per minute) shall be provided; and in relation to dry bulb temperature in the wet bulb temperature in the workroom at the said height shall not exceed the temperature shown in the Schedule below or as regards a dry-bulb reading intermediate between the two dry-bulb readings that specified in relation to the higher of these two dry-bulb readings.

Provided that if the temperature measured with a thermometer to be inserted in a hollow globe of 15 cm.(6 in) dia coated mat black outside and kept into the environment for not less that 20 minutes exceeds the dry bulb temperature of air, the temperature so recorded by the globe thermometer shall be taken in place of the dry-bulb temperature;

Provided further than when the reading of the wet bulb temperature outside in the shade exceeds 27deg C, (80.6 deg F)., the value of the wet bulb temperature allowed in the schedule for a given dry bulb temperature may correspondingly exceed to the same extent.

Provided further that this requirement shall not apply in respect of factories covered by Section 15 and in respect of factories where the nature of work carried on involves production of excessively high temperature referred to in clause (b) of sub-section (1) to which workers are exposed for short periods of time not exceeding one hour followed by an interval of sufficient durations in thermal environments not exceeding those otherwise laid down in this rule.

Provided further that the Chief Inspector, having regard to the health of the workers, may in special and exceptional circumstances; by an order in writing exempt any factory or part of a factory from the forgoing requirement in so far as restricting the thermal conditions, within the limits and down in the schedule, are concerned, to such extent that he may consider necessary subject to such conditions as he may specify.

(2) Provision of the thermometers.

(i) If it appears to the Inspector that in any factory, the temperature of air in a work room is sufficiently high and is likely to exceed the limits prescribed in sub-rule(l) he may serve on the manager or of the factory an order requiring him to provide sufficient number of whirling hygrometers or any other type of hygrometers and direct that the dry bulb and wet bulb readings in each such work room shall be recorded as such positions as approved by the Inspector twice during each working shift by a person specially nominated for the purpose by the manager and approved by the Inspector.

(**i**) If the Inspector has reason to believe that a substantial amount of heat is added inside the environment of a work room by radiation from walls, roof or other solid surroundings, he may

serve on the manager of the factory an order requiring him to provide one or more globe thermometers referred to in the first proviso in sub-rule(l), and further requiring him to place the globe thermometers at places specified by him and keep a record of the temperatures in a suitable register.

(3) Ventilation

(i) In every factory the amount of ventilation openings in a work room below the Caves shall, except where mechanical means of ventilation as required by Clause 1

(**i**) are provided, be of an aggregate area of not less than 15% of the floor area and so located as to afford a continued supply of fresh air.

Provided that the Chief Inspector may relax the requirements regarding the amount of ventilating openings if he is satisfied that having regard to the location of the factory, orientation of the work room, prevailing winds, roof height and the nature of manufacturing process carried on, sufficient supply of fresh air into work room is afforded during most part of the working time:

Provided further that this requirement shall not apply in respect of work rooms of factories-

(i) covered by Section 15; or

(ii) in which temperature and humidity are controlled by refrigeration.

(iii) Where, in any factory owing to special circumstances such as situation with respect to floor space, the requirements of ventilation openings under clause(i) cannot be complied with or in the opinion of the Inspector the temperature of air in a work room is sufficiently high and likely to exceed the limits prescribed in clause(i), he may serve on the manager of the factory an order requiring him to provide additional ventilation either by means of roof ventilators or by mechanical means.

(iv) The amount of fresh air supplied by mechanical means of ventilation in an hour shall be equivalent to at least six times the cubic capacity of the work room and shall he distributed evenly throughout the work room without dead air pockets or under draughts caused by high inlet velocities.

(v) In regions where in summer (15th March-15th July) dry bulb temperatures of outside air in the shade during most part of day exceed 35 deg C (95 deg F) and simultaneous wet bulb temperatures are 25 deg (67deg F) or below and in the opinion of the Inspector the manufacturing process carried on in the work room of a factory permits thermal environments with relative humidity of 50% or more, the Inspector may serve on the manager of the factory an order to have sufficient supply of outside air for ventilation cooled by passing it through water sprays either by means of unit type of evaporative air coolers (desert coolers) or, where supply of outside air is provided by mechanical means through ducts in a plenum system, by means of central air washing plants.

17-C

(1) Columns pillars or walls supporting the roof in a factory in which a manufacturing process is carded on shall be at least 4.25 metres high from the floor level.

(2) Every factory shall be constructed with pucca masonry walls of brick stone or other material approved by the Chief Inspector of Factories and of sufficient thickness.

(3) The roof material used in a factory shall be non-heat radiating and fire retarding Provided that the Chief Inspector of Factories may approve any other material used for a roof when asecondary ceiling of non-heat radiating material is provided with a minimum air gap of 10cms.

17-D. Powers of Chief Inspector to exempt

Where the Chief Inspector is satisfied in respect of any particular factory or part thereof or in respect of and description of workroom of process that any requirement of the Rules 17-A, 17-B, or 17-C is in appropriate or is not reasonably practicable, he may by order, in writing, exempt the factory or part thereof, or description of workroom or process from such requirement to such extent and subject to such conditions as he may specify.

RULES 18 TO 28 PRESCRIBED UNDER SUB-SECTION (1) OF SECTION 15

18. When artificial humidification not allowed

There shall be no artificial humidification in any room of a factory-

(a) by the use of steam during any period when the dry bulb temperature of that room exceeds 29.5 degrees centigrade.

(b) at any time when the wet bulb reading of the hygrometer is higher than that specified in the following Schedule in relation to the dry bulb reading intermediate between any two bulb readings indicated consecutively in the schedule when the dry bulb reading does not exceed the wet bulb reading to the extent indicated in relation to the lower of these two dry bulbreadings.

Schedule

Provided however, that clause (b) shall not apply when the difference between the wet bulb temperature is indicated by the hygrometer in the department concerned and the wet bulb temperature taken with a hygrometer outside in the shade is less than 20 degrees centigrade.

19. Provision of Hygrometer

In all departments of a factory wherein artificial humidification is adopted hygrometers shall be provided and maintained in such positions as are approved by the Inspector. The number of hygrometers shall be regulated according to the following scale:-

(a) Weaving department:- One hygrometer for departments wit less than 500 looms, and one additional hygrometer for every 500 or part of 500 looms in excess of 500.

(b) Other factories:- One hygrometer for each room of less than 8500 cubic metres capacity and one extra hygrometer for each 5670 cubic metres or part thereof, in excess of this.

(c) One additional hygrometer shall be provided and maintained outside the factory wherein artificial humidification is adopted and in a position approved by the Inspector, for taking hygrometer shade readings.

20. Exemption from maintenance of hygrometers

When the Inspector is satisfied that the limits of humidity allowed by the schedule to Rule 18 are never exceeded, he may for any department of a factory grant exemption from the maintenance of the hygrometer. The Inspector shall record such exemption in writing.

21. Copy of Schedule to Rule 18 to he affixed near every hygrometer

A legible copy of the schedule to Rule 18 shall be affixed near each hygrometer.

22. Temperature to be recorded at each hygrometer

At each hygrometer maintained in accordance with Rule 19, correct wet and dry bulb temperatures shall be recorded thrice daily during each working day by competent persons nominated by the manager and approved by the Inspector. The temperature shall be taken between 7 a.m. and 9 a.m. between 11 a.m. and 2 p.m. (but not in the rest interval) and between 4 p.m. and 5.30 p.m. In exceptional circumstances, such additional readings and between such hours as the Inspectormay specify, shall be taken. The temperatures shall be entered in a Humidity Register in the prescribed Form No. 6, maintained in the factory. At the end of each month, the persons who have taken the readings shall sign the register and certify the correctness of the entries. The register shall always be available for inspection by the Inspector.

23. Specifications of hygrometers

(1) Each hygrometer shall comprise two mercurial thermometers of wet bulb and dry bulb of similar construction, and equal in dimensions, scale and divisions of scale. They shall be mounted on a frame with a suitable reservoir containing water.

(2) The wet bulb shall be closely covered with a single layer of muslin kept wet by means of wick attached to it and dropping into the water in the reservoir. The muslin covering and the wick shall be suitable for the purpose, clean and free from size or grease.

(3) No part of the wet bulb shall be within 3 inches from the dry bulb or less than one inch from the surface of the water in the reservoir and the water reservoir shall be below it, on the side of it away from the dry bulb.

(4) The bulb shall be spherical and of suitable dimensions and shall be freely exposed on all sides to the air of the room.

(5) The bores of the stems shall be such that the position of top of the mercury column shall be readily distinguishable at a distance of 2 feet.

(6) Each thermometer shall be graduated so that accurate readings may be taken between 50 and 120 degrees.

(7) Every degree from 50 degrees upto 120 degrees shall be clearly marked by horizontal lines, on the stem of each fifth and tenth degrees shall be marked by longer marks than the intermediate degrees and the temperature marked opposite each tenth degree, i.e., 50, 60, 70, 80, 90, 100, 110 and 120.

(8) The markings as above shall be accurate, that is to say, at no temperature between 50 and 120 degrees shall the indicated readings, be in error by more than two-tenths of a degree.

(9) A distinctive number shall be indelibly marked upon the thermometer.

(10) The accuracy of each thermometer shall be certified the National Physical Laboratory, London, or some competent authority appointed by the Chief Inspector and such certificate shall be attached to the Humidity Register.

24. Thermometers to be maintained in efficient order

Each thermometer shall be maintained at all times during the period of employment in efficient working order, so as to give accurate indications and in particular-

(a) the wick and the muslin covering of the wet bulb shall be renewed once a week;

(b) the reservoir shall be filled with water which shall be completely renewed once a day. The Chief Inspector may direct the use of distilled water or pure rain water in any particular mill or mills in certain localities;.

(c) no water shall be applied directly to the wick or covering during the period of employment.

25. An inaccurate thermometer not to be used without fresh Certificate

If an Inspector gives notice in writing that a thermometer is not accurate, it shall not, after one month from the date of such notice, be deemed to be accurate unless and until it has been re-examined as prescribed and a fresh certificate obtained which certificate shall be kept attached to the Humidity Register.

26. Hygrometer not to be affixed to wall, etc., unless protected by wood

(1) No hygrometer shall be affixed to a wall, pillar, or other surface unless protected there from by wood or other non-conducting material at least half an inch in thickness and distant at least one inch from the bulb of each thermometer.

(2) No hygrometer shall be fixed at a height of more than 5 feet 6 inches from the floor to the top of thermometer stem or in the direct droughts from a fan, window or ventilating opening.

27. No reading to he taken within 15 minutes of renewal of water

No reading shall be taken for record on any hygrometer within 15 minutes of the renewal of water in the reservoir.

28. How to introduce steam for humidification

If any room in which steam pipes are used for the introduction of steam for the purpose or artificial humidification of the air the following provisions shall apply-

(a) The diameter of such pipe shall not exceed 50 mm and in the case of pipes installed after 1st day of April, 1949 the diameter shall not exceed 25 mm.

(b) Such pipes shall be as short as is reasonably practicable

(c) All hangers supporting such pipes shall be separated from the base pipes by an efficient insulator not less than half an inch in thickness

(d) No uncovered jet from pipe shall project more than 11.5 cm. beyond the outer surface of any cover

(e) The steam pressure shall be as low as practicable and shall not exceed 5 kg. per square inch

(f) The pipe employed for the introduction of steam into the air in a department shall be effectively covered with such non-conducting material, as may be approved by the Inspector in order to minimise the amount of heat radiated by them into the department.

RULES 29 TO 33 PRESCRIBED UNDER SUB-SECTION (4) OF SECTION 17

29. Artificial lighting

Omitted

30. Lighting of interior parts

(1) The general illumination over those interior parts of a factory where persons are regularly employed shall be not less than 65 Lux measured in the horizontal plain at a level of 90 cm. above the floor,

Provided that in any such parts in which the mounting height of the light source for general illumination has to necessarily exceed 7.6 mtrs. measured from the floor or where the structure of the room or the position or construction of the fixed machinery or plant prevents the uniform attainment of the standard specified above, the general illumination at the said level of 7.6 mtrs. shall be not less than 22 Lux and where work is actually being done the illumination shall be not less than 65 Lux candles.

(2) The illumination over all other interior parts of the factory over which persons employed pass shall, when and where a person is passing be not less than 0.50 foot candles at floor level.

(3) The standard specified in this rule shall be without prejudice to the provision of any additional illumination required to render the lighting sufficient and suitable for the nature of the work.

31. Prevention of glare

(1) Where any source of artificial light in the factory is less than 4.9 mtrs. above floor level, no part of the light source of the lighting fitting having a brightness greater than 55 candles per square inch shall be visible to persons while normally employed with 30 mtrs. of the source, except where the angle of elevation from the eye to the source or part of the fitting as the case may be exceeds 20 degrees.

(2) Any local light that is to say, an artificial light designed to illuminate particularly the area or part of the area of work of a single operative or small group of operatives working near each other shall be provided with a suitable shade of opaque material to prevent glare or with other effective means by which the light source is completely screened from the eyes of every person employed at a normal working place or shall be so placed that no such person is exposed to glare there from.

32. Power of Chief Inspector to exempt

Where the Chief Inspector is satisfied in respect of any particular factory or part thereof or in respect of any description of workroom or process that any requirement of Rules 30 and 31 is inappropriate or is not reasonably practicable, he may, by order in writing, exempt the factory or part thereof, or description of work room or process from such requirement to such extent and subject to such conditions as he may specify.

33. Omitted

RULES 34 TO 39 PRESCRIBED UNDER SUB-SECTION (4) OF SECTION 18

34. Quantity of drinking water

The quantity of drinking water to be provided for the workers in every factory. shall be at least 5 liters per worker employed in the factory and such drinking water shall be readily available at all times during working hours.

35. Source of Supply

The water provided for drinking shall be supplied from public water supply system or, where no public water supply is available to the factory, from such other source that provides clean potable water.

36. Means of supply

If drinking water is not supplied directly from taps either connected with the public water supply system or any other water supply of the factory it shall be kept in suitable vessels, receptacles or tanks fitted taps and having dust proof covers placed on raised stands or platforms in shade and having suitable arrangement of drainage to carry away the split water. Such vessels, receptacles and tanks shall be kept clean and the water renewed at least once every day. All practicable measures shall be taken to ensure that the water is free from contamination.

37. Cleanliness of Well or reservoir

(1) Drinking water shall not be supplied from any open well or reservoir unless it is so constructed, situated, protected and maintained as to be free from the possibility of pollution by chemical or bacterial and extraneous impurities .

(2) Where drinking water is supplied from such well or reservoir the water in it shall be sterilized once a week or more frequently if the Inspector by written order, so requires, and the date on which sterilizing is carried out shall be recorded :

Provided that this requirement shall not apply to any such well or reservoir the water therein is filtered and treated to the satisfaction of the Health Officer before it is supplied for consumption.

38. Report from Health Officer

(1) The Inspector may, by order in writing, require the Health Officer at such intervals as he may direct, to enquire into and report on the fitness for human consumption of the water supplied to the workers in any factory.

(2) The Inspector may by order in writing require the occupier at such time or such interval as he may direct to get the water samples tested by the laboratories recognised by the Chief Inspector or Health Officer on the fitness for human consumption of the water supplied to the workers for drinking purpose.

39. Cooling of water

In every factory wherein more than two hundred and fifty worker are ordinarily employed-

(a) the drinking water supplied to the workers shall during hot weather, be cooled by ice or mechanical refrigeration Provided that, if ice is placed in the drinking water, the ice shall be clean and wholesome

(b) the cooled drinking water shall be supplied in every canteen, lunch-room and rest-room and also at conveniently accessible points throughout the factory which for the purpose of these rules shall be called water centres

(c) the water centre shall be sheltered from the weather and adequately drained

(d) the number of water centres to be provided shall be one "centre" for every 150 persons employed at any one time in the factory,

Provided that in the case of a factory where the number of persons employed exceeds 500, it shall be sufficient if there is one such "centre" as aforesaid for every 150 persons upto the first 500 and for every 500 persons thereafter,

Provided that the distance between the place of work of any worker shall not be more than 50 metres from the nearest water centre or any distance may be specified by the Inspector.

(e) every water centre shall be maintained in clean and orderly condition;

(f) The means of supply of cooled drinking water shall be either directly through taps connected to water coolers or any other system for cooling of water or by means, of vessels, receptacles or tanks/fitted with taps and having dust proof covers and placed on raised stands or platforms in shades, and having suitable arrangements of drainage to carry away the split water. Such vessels, receptacles or tanks shall be kept clean and the water renewed at least once every day.

RULES 40 TO 49 PRESCRIBED UNDER SUB-SECTION (3) OF SECTION 19

40. Latrine accommodation

In every factory, latrine accommodation shall be provided on the following scale, namely:-

(i) in the case of latrines of flush out system, one latrine for every twenty five or lesser number of workers, where the number of workers does not exceed one hundred, and four for the first one hundred and one for every fifty or lesser number in excess of one hundred, where the number of workers exceeds one hundred

(ii) in the case of latrines of non-flush out system, one for every twenty workers

(iii) in calculating the number of seats required under this rule, any odd number of workers less than 25, 50 or 20 specified in Clauses (i) and (ii) above shall be reckoned as 25, 50 or 20 respectively as the case may be; and only the maximum number of persons working in the factory at any time, and not the total number of persons employed in the factory shall be taken into account

(iv) where workers of both sexes are employed separate latrines shall be provided for each sex.

(v) [1] Sanitary Napkins of adequate quantity conforming to Indian Standards shall be provided and maintained in the Women's toilets for their use and the same replenished on dairy basis;

(vi) [1] Disposable bins with lids shall be provided within the women's toilets for the collection of used napkins. The used napkins shall be disposed off as per the procedure approved by the Inspector".

41. Latrines to conform to public health requirements

Latrines, other than these connected with an efficient water-borne sewage system, shall comply with the requirements of the Public Health authorities.

42. Privacy of latrines

Every latrine shall be under suitable cover and every seat in the latrine shall he so partitioned off as to secure privacy and each partition shall have a proper door and fastenings.

43. Signboards to be displayed

Where workers of both sexes are employed there shall be displayed outside each latrine block a notice in the language understood by the majority of the workers "For Men only" or "For Women only" as the case may be. The notice shall also bear the figure of a man or of a woman, as the case may be.

44. Urinal accommodation

Urinal accommodation shall be provided for the use of males and shall not be less than 60 cm. in length for every 50 workers: provided that where the number of workers employed exceeds 500, it shall be sufficient if there is one urinal for every 50 males upto the first 500 employed, and one for every 100 thereafter. Where women are employed separate urinal accommodation shall be provided for them on the same scale as mentioned above.

In calculating the urinal accommodation required under this rule, and odd number of workers less than 50 or 1 00, as the case may be, shall be reckoned as 50 or 100 and the maximum number of persons working in the factory, at any time and not the total number of persons employed in the factory, shall be taken into account.

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1 Sub-rule (v) & (vi) added as per the Amendment vide G.O.Ms.34, dated 19-11-2019 of Labour, Employment & Training and Factories Department.

45. Urinals to conform to public health requirements

Urinals other than those connected with an efficient water-borne sewage system and urinals in a factory wherein more than two hundred and fifty workers are ordinarily employed shall comply with the requirements of the Public Health authorities.

46. Certain latrines and urinals to the connected to sewage system

When any general system of underground sewage with an assured water-supply for any particular locality is provided in a municipality all latrines and urinals other than such septic tank latrines and any other type of latrines and urinals to be approved for this purpose by the Public Health authority, of a factory situated in such locality shall, if the factory is situated within 100 feet of an existing sewer, connected with the sewage system.

47. Cleaning and painting of latrines and urinals

The walls, Ceiling and partition of every latrine or urinal shall be kept clean and disinfected, washed and painted as often as is necessary Provided that the Chief Inspector may, by order in writing, having regard to the special circumstances of any particular case and after giving the occupier an opportunity of being heard, require that the latrines or urinals be disinfected, washed or painted in such manner and such intervals as may be specified in the order.

48. Construction and maintenance of drains

All drains carrying waste or sullage water shall be constructed in masonry or other impermeable materials and shall be regularly flushed and effluent disposed of by connecting such drains with a suitable drainage line, Provided that, where there is no such drainage line, the effluent, shall be deodorized and rendered innocuous and then disposed in a suitable manner to the satisfaction of the Health Officer.

49. Water taps in latrines

Where piped water supply is available, a sufficient number of water taps, conveniently accessible shall be provided in or near such latrine accommodation. Where there is no continuous supply of water, cisterns with cans should be provided for washing purposes.

RULES 50 TO 52 PRESCRIBED UNDER SUB-SECTION (2) OF SECTION 20

50. Number and location of spittoons

(1) In any factory or part of a factory where spitting is prohibited by the occupier or manager, no spittoons shall be provided and no worker shall spit in any such factory or part of a factory.

(2) In cases not covered by sub-rule (1), there shall be provided adequate spittoons and noworker shall spit except in the spittoons provided.

51. Type of spittoons

The spittoons shall be of either of the following,

(a) a galvanized iron container with a conical funnel-shaped cover. A layer of suitable disinfectant liquid shall always be maintained in the container, or

(b) a container filled with dry, clean sand and covered with a layer of bleaching powder, or

(c) any other type approved by the Chief Inspector.

52. Cleaning of spittoons

The spittoon mentioned in clause (a) of Rule 51 shall be emptied, cleaned and disinfected at least once everyday and the spittoon mentioned in Clause (b) of Rule 51 shall be cleaned by scraping out the to -layer of sand as often as necessary or at least once everyday.

CHAPTER IV

SAFETY

FURTHER PRECAUTIONS PRESCRIBED UNDER SUB-SECTION (2) OF SECTION 21

53. Further Safety precautions

(1) Without prejudice to the provisions of sub-section (1) of Section 21 in regard tothe fencing of machines, the further precautions specified in the schedules annexed hereto shall apply to the machines noted in each schedule.

(2) [Omitted by G.O.Ms.No.978, dated 4-5-1960].

(3) Register prescribed under Section 22 (I):- Register to record the name of specially trained adult workers shall be in Form No.35.

(4) The occupier of every 'factory', wherein the operations referred to in sub-section (1) of Sec.22 are carried on, shall provide free of cost, two sets of suitable and tight fitting clothing to each worker who is required to wear them, the used sets being replaced by new once after the end of every six months. Each such set shall consist of a closely fitting shirt and a closely fitting half-sleeve shirt or vest. No worker should be compelled to wear the tight fitting clothing which was once used by another worker and no worker shall be required to return the used set or sets on termination of his services or when the used sets are replaced by new sets.

(5) Omitted

Schedule I Textile machinery

Schedule II - Cotton ginning

Schedule III - Wood working machinery

Schedule IV - Rubber mills

Schedule V- Special rule for printing press, jute mill, tea, brick and decorticating factories

Schedule VI -All factories

Schedule VII -Power presses

Schedule VIII -Shears, slitters, guillotine machines

54. RULE PRESCRIBED UNDER SUB-SECTION (2) OF SECTION 23

The machines specified in Section 28, 29 and 30 and the machines mention below shall be deemed to be of such dangerous character that young persons shall not work at them unless the provisions of Section 23 (1) are complied with.

Power press other than hydraulic presses

Milling machines used in the metal trades

Circular saws

Platen printing machines

Guillotine machines

RULE UNDER SECTION 26 (3)

54-A. Omitted

RULE PRESCRIBED UNDER SECTION 28

55. Hoists and lifts

(1) The report of the competent person shall be obtained in Form No. 38.

(2) Exemption of certain hoists and lifts:- In pursuance of the provisions of sub-section (4) of Section 28, in respect of any class or description of hoist or lift specified in the first column of the following schedule, the requirement of the Section 28 specified in the second column of the said schedule and set opposite to that class or description of hoists or lift shall not apply.

SCHEDULE

Class or description of hoist or lift	Requirements which shall not apply
Hoists or lifts mainly used for raising material for charging blast furnaces or lime kilns	Sub-section (1) (b) in so far as it requires a gate at the bottom landing; subsection (1) (b); sub-section (1)(e)
Hoists not connected with mechanical power and which are not used for carrying persons	Sub-section (1) (b) in so far as it requires the hoist way or lift way enclosure to be so constructed as to prevent any person or thing from being trapped between part of the hoist or lift and any fixed structure or moving part sub-section 1(e)

(3) 'Competent person' means a person who is capable by virtue of his qualifications, training and experience of conducting a thorough examination and who is approved by Chief Inspector of Factories.

Explanation:- A person declared as competent person by the Chief Inspector of any State is deemed to be as competent person under this rule if he obtains an endorsement on the competency certificate from the Chief Inspector.

RULES PRESCRIBED UNDER SECTION 29(2)

55-A. Lifting Machine

Every lifting machine and lifting tackle in use in a factory shall be thoroughly examined by a competent person and particulars of examination shall be entered in a register in the prescribed **Form No. 38** or a report in the prescribed Form No. 38 shall be filled.

Explanation:- A person declared as competent person by the Chief Inspector of any State is deemed to be as competent person under this rule if he obtains an endorsement on the competency certificate from the Chief Inspector.

56. Rules prescribed under sub-section (3) of Section 31

(1) Every pressure vessel or plant used in factory-

(a) shall be properly designed on sound engineering practice;

(b) shall be of good construction, sound material, adequate strength and free from any patent defects ; and

(c) shall be properly maintained in a safe condition:

Provided that the pressure vessel or plant in respect of the design and construction of either there is an Indian standard of the country of manufacture or any other law or regulation in force, shall

be designed and constructed in accordance with the said standard, law or regulation, as the case may be, and a certificate thereof shall be obtained from the manufacturer or from the competent person which shall be kept and produced on demand by an Inspector.

(2) Every pressure vessel shall be fitted with-

(a) a suitable safety valve or other effective pressure relieving device of adequate capacity to ensure that the maximum permissible working pressure and when more than one protective device is provided, only one of the devices need be set to operate at the maximum permissible working pressure and at the additional device shall be set to discharge or a pressure not more than 5 per cent in excess of the maximum permissible working pressure ;

(b) a suitable pressure gauge with a dial range not less than 1.5. times the maximum permissible working pressure easily visible and designed to show at all times the correct internal pressure marked with a prominent remark at the maximum permissible working pressure;

(c) a suitable nipple and globe connected for the exclusive purpose of attaching a test pressure gauge for checking the accuracy of the pressure gauge referred to in clause (b) of sub-rule

(d) a suitable stop valve or valves by which the pressure vessel may be isolated from other pressure vessels or plant or source of supply of pressure. Such a stop valve or valves shall be located as close to the pressure vessel as possible and shall be easily accessible; and

(e) a suitable drain cock or valve at the lowest part of the pressure vessel for the discharge of the liquid or other substances that may collect in the pressure vessel :

Provided that it shall be sufficient for the purpose of this sub-rule if the, safety valve or pressure relieving device, the pressure gauge and the stop valve are mounted on a pipeline immediately adjacent to the pressure vessel and where there is a range of two or more similar pressure vessels served by the same pressure load. Only one set of such mountings need be fitted on the pressure load immediately adjacent to the range of pressure vessels, provided they cannot be isolated.

(3)

(a) Every pressure vessel which is designed for a working pressure less than the pressure at the source of supply or less than the pressure which can be obtained in the pipe connecting the pressure vessels with any other source of supply, shall be fitted with suitable pressure reducing valve or other suitable automatic device to prevent the maximum permissible working pressure of the pressure vessel being exceeded.

(b) To further protect the pressure vessel in the event of failure of the reducing valve or device, at least one safety valve having a capacity sufficient to release all the steam, vapour or gas without undue pressure rise as determined by the pressure at the source of supply and the size of the pipe connecting the source of supply, shall be fitted on the low pressure side of the reducing valve.

(4)

a) No new pressure vessel or plant shall be taken into use in any factory after coming into force of this rule unless it has been hydrostatically tested by a competent person at a pressure at least 1.3 times the design pressure and no pressure vessel or plant which has been previously used or has remained isolated or idle for period exceeding two months or which has undergone alterations or repairs shall be taken into use in a factory unless it has been thoroughly examined by a competent person externally, and internally, if practicable; and has been hydrostatically tested by the competent person at a pressure which shall be 1.5 times the maximum permissible working pressure,

Provided that the pressure vessel or plant which is so designed and constructed that it cannot be safely filled with water or liquid or is issued in service when even some traces of water cannot be tolerated, shall be pneumatically tested at pressure not less than design pressure to the maximum permissible working pressure as the case may be,

Provided further that the pressure vessel or plant which is lined with glass shall be tested hydrostatically or pneumatically as required at a pressure not less than the design pressure or maximum permissible working pressure as the case may be.

Note:- (a) Design pressure shall be not be less than the maximum permissible working pressure and shall take into account the possible fluctuations of pressure during actual operation.

(b) No pressure vessel or plant shall be used in a factory unless there has been obtained from the maker of the pressure vessel or plant or from the competent person a certificate specifying the design pressure or maximum permissible working pressure thereof, and stating the nature of tests to which the pressure vessel or plant and its fittings, if any, have been subjected, and every pressure vessels or plants so used in a factory shall be marked so as to enable it to be identified as to bethe pressure vessel or plant to which the certificate relates and the certificate shall be kept available for perusal by the Inspector.

(c) No pressure vessel or plant shall be permitted to be operated or used at a pressure higher than its design pressure or maximum permissible working pressure as shown in the certificate.

(5) Every pressure vessel or plant in service shall be thoroughly examined by a competent person.

(a) externally, once in every period of six months

(b) internally, once in every period if twelve months. If by reason of the construction of a pressure vessel or plant, a thorough internal examination is not possible, this examination may be replaced by a hydrostatic test which shall be carried out once in every period of two years,

Provided that for a pressure vessel or plant in continuous process which cannot be frequently opened, the period of internal examination may be extended to four years and,

(c) hydrostatically tested once in every period of four years;

Provided that in respect of pressure vessel of plant with thin walls, such as sizing cylinder made of copper or any other non-ferrous metal, periodic hydrostatic test may be dispensed with subject to the condition that the requirements laid down in sub-rule (6) are fulfilled,

Provided further that when it is impracticable to carry out thorough external examination of any pressure vessel or plant every six months as required in clause (a) of this rule, or if owing to its construction and use, a pressure vessel or plant cannot be hydrostatically tested required in clauses (b) and (c) of this sub-rule, a thorough external examination of the pressure vessel or plant shall be carried out at least once in every period of two years, and at least once in every period of four years a thorough systematic non-destructive test like ultrasonic test for metal thickness or other defects of all parts the failure of which might lead to eventual rupture of the pressure vessel or plant, shall be carried out.

(b) The hydrostatic test pressure to be carried out for the purpose of this rule shall be 1.25 times the design pressure or 1.5 times the maximum permissible working pressure whichever is less.

(6)

(a) In respect of any pressure vessel or plant of thin walls such as sizing cylinder made of copper or any other non-ferrous metal, the maximum permissible working pressure shall be reduced at the rate of five per cent of the original maximum permissible working pressure for every year of its use after the first five years and no such cylinder shall be allowed to continue to be used for more than twenty years after it was first taken into use.

(b) If any information as to the date of construction, thickness of walls, or maximum permissible working pressure is not available the age of such pressure vessel or plant shall be determined by the competent person in consultation with the Chief Inspector from the other particulars available with the manager.

(c) Every new and second hand pressure vessel or plant of thick wall to which repairs likely to affect its strength or safety have been carried out, shall be tested before use to at least 1.5 times maximum permissible working pressure.

(7)

(a) If during any examination any doubt arises as to the ability of the pressure vessel or plant to work safely until the next prescribed examination the competent person shall enter in the prescribed register his observations, findings and conclusions with other relevant remarks with reasons and may authorise the pressure vessel or plant to be used and kept in operation subject to a lowering of maximum permissible working pressure, or to more frequent or special examination or test or subject to both of these conditions.

(b) A report of the result of every examination or test carried out shall be completed in Form No.8 and shall be signed by the person making the examination of test, and shall be kept available for perusal by the inspector at all hours when the factory or any part thereof is working.

(c) Where the report of any examination under this rule specified any condition for securing the safe working of any pressure vessel or plant, the pressure vessel or plant shall not be used unless the specified condition is fulfilled.

(d) The competent person making report of any examination under this rule, shall within seven days of the completion of the examination, send to the Inspector a copy of the report in every case where the maximum permissible working pressure is reduced or the examination shows that the pressure vessel of plant or any part thereof cannot continue to be used with safety unless certain repairs are carried out or unless any other safety measure is taken.

(8)

(a) The requirements of this rule shall be in addition to and without any prejudice to and not in derogation of the requirements of any other law in force.

(b) Certificates or reports of any examination or test of any pressure vessel or plant to which sub-rules (5) to (7) to (9) do not apply, conducted or required to be conducted under any other law in force and other relevant record relating to such pressure vessel or plant shall he properly maintained as required under the said law and shall be produced on demand by the Inspector.

(9) In this rule,

(a) 'design pressure' means the maximum pressure that a pressure vessel or plant is designed to withstand safety when operating normally;

(b) 'maximum permissible working pressure' means the maximum pressure at which a pressure vessel or plant is permitted to be operated or-used under this rule and is determined by the technical requirements of the process ;

(c) 'Plant' means a system of piping that is connected to a pressure vessel and is used to contain a gas, vapour or liquid under pressure greater than the atmospheric pressure, and includes the pressure vessel ;

(d) 'pressure vessel' means a vessel that may be for containing, storing, distributing, transferring, distilling, processing or otherwise handling any gas, vapour or liquid under pressure greater than the
atmospheric pressure and includes any pipeline fitting or other equipment attached thereto or used in connection therewith; and

(e) 'competent person' means a person who is capable by virtue of his qualifications, training and experience of conducting a thorough examination and pressure tests, as required, on pressure vessel or plant, and of making a full report on its condition and approved by Chief Inspector of Factories.

(10) Nothing in this rule shall apply to-

(a) Vessels having internal diameter nor exceeding 150 mm.(6") and capacity not exceeding 141.585 meters (5 cu.ft.)

(b)Vessels made of ferrous materials having an internal operating pressure not exceeding 1 Kg/sq.cm (15 lbs/ square inch)

(b) steam boilers steam and feed pipes and their fitting coming under the purview of Indian Boilers Act, 1923, (V of 1923)

(c) Metal bottles or cylinders used for storage or transport of compressed gases or liquified or dissolved gases under pressure covered by the Gas Cylinder Rules, 1940 framed under the Indian Explosives Act, 1884 (IV of 1884)

(d) Vessels in which internal pressure is due solely to the static head of liquid;

(e) Vessels with a nominal water, capacity not exceeding 500 litres connected in a water pumping system containing air that is compressed to serve as a cushion

(f) Vessels for nuclear energy application

(g) Refrigeration plant having a capacity of 3 tons or less of refrigeration in 24 hours and,

(h) Working cylinders of steam engines or prime mover; feed pumps and steam traps turbine casings; compressor cylinders; steam separators or dryers; steam strainers; steam device super-heaters; oil separators, air receivers for fire sprinkles installations; air receivers of monotype machines provided the maximum working pressure of the air receiver does not exceed 1.33 Kg.f /sq.cm. (20 cu.ft.); and the capacity 84.95 litres (3 cu.ft.) air receivers of electrical circuit breakers; air receivers of electrical relays; air vessels on pumps pipe coils, accessories of instruments and appliances; such as cylinders and piston assemblies used for operating relays and interlocking, type of guards; vessels with liquids subjected to static head only, and hydraulically operating cylinders other than any cylinder communicating with an air loaded accumulator.

(11) The Chief Inspector may exempt, subject to such condition as he may deem necessary, any pressure vessel from the operation of all or any of the provisions of this rule, if he is satisfied that the construction or use of the vessel is such that the inspection of such vessel is not necessary or practicable.

56-A. Gas holder

(1) The expression "gas holder" means a water-sealed gas holder which has a storage capacity of not less than 141.5 cubic metres (5,000 cu. ft.).

(2) Every gas holder shall be of adequate material and strength, sound construction and properly maintained.

(3) Where there is more than one gas holder in a factory every gas holder shall be marked in a conspicuous position with a distinguishing number or letter.

(4) Every gas holder shall be thoroughly examined externally by a competent person, at least once in a period of 12 months. (see Form 8-B)

(5) In the case of a gas holder of which any lift has been in the use for more than 1 0 years, the internal state of the sheeting shall, within one year from the date of coming into operation of this rule and thereafter at least once in a period of 12 months externally and once in a period of three years internally be examined by a competent person by means of electronic or other accurate devices.

(i) Provided that if the Chief Inspector of Factories is satisfied that such electronic or other accurate devices are not available, he may permit the cutting of samples from the crown and the sides of the holder,

(ii) Provided, further that if the above inspection raises a doubt, an internal visual examination shall be made.

(6) Every gas holder shall be provided with a gas mask readily available in case of emergency.

(7) All possible steps shall be taken to prevent or minimise ingress of impurities into the gas holder.

(8) No gas holder shall be repaired or demolished except under the direct supervision, of a person, who by his training and experience and his knowledge of the necessary precautions against risks of explosion and of person being overcome by gas, is competent to supervise such work.

(9)

(i) All sample discs cut under sub-rule (5) above, shall be kept readily available for inspection;

(ii) A permanent register in Form 8-A duly signed by the occupier or manager shall be maintained.

RULE PRESCRIBED UNDER SUB-SECTION (2) OF SECTION 34

57. Excessive weight

(1) No woman or young person shall unaided by another person, lift, carry or move by hand or on head, any material, article, tool or appliance exceeding the maximum limit in weight set out in the following schedule.

Persons	Maximum weight of material, article, tool or appliance in Kgs
a) Adult Male	50
(b) Adult female	30
(c) Adolescent male	30
(d) Adolescent female	20

(e) Male child (above 14 years)	16
(f) Female child (above 14 years)	14

(2)

No woman or young person shall engage, in conjunction with others, in lifting or moving by hand or on head any material, article, tool or appliances, if the weight thereof exceeds the lowest weight fixed by the schedule to sub-rule (1) for any of the persons engaged by the number of the persons engaged.

RULE PRESCRIBED UNDER SECTION 35

58. Protection of eyes

Effective screens or suitable goggles shall be provided for the following processes-

(a) The processes specified in schedule I annexed hereto, being processes which involve risk of injury to the eye, from particles or fragments thrown off in the course of the process.

(b) The processes specified in schedule II annexed hereto, being processes which involve risk or injury to the eyes by reason of exposure to excessive light or infrared or ultraviolet radiations.

RULE PRESCRIBED UNDER SUB-SECTION (6) OF SECTION 36

59. Minimum dimensions of manholes

Every chamber, tank, vat, pipe, flue or other confined, space which persons may have to enter and which may contain dangerous fumes to such an extent as to involve risk of the persons being overcome thereby, unless there is other effective means of egress, be provided with a manhole which may be rectangular, oval or circular in shape, and which shall-

(a) in the case of rectangular or oval shape, be not less than 16 inches long and 12 inches wide

(b) in the case of circular shape, be not less than 16 inches diameter.

EXEMPTIONS UNDER SUB-SECTION (5) OF SECTION 37

60. Exemptions

The requirements of sub-section (4) of Section 37 shall not apply to the following processes carried on in any factory:-

(a) The operation of repairing a water-sealed gas-holder by the electric welding process subject to the following conditions:-

(i) The gas-holder shall contain only the following gases, separately or mixed at a pressure greater than atmospheric pressure, namely, town gas coke-oven gas, producer gas, blast furnace gas or gases other than air used in their manufacture,

Provided that this exemption shall not apply to any gas-holder containing acetylene or mixture of gases to which acetylene has been added intentionally.

(ii) Welding shall only be done by the electric welding process and shall be carried out by experienced operator under the constant supervision of a competent person.

(b) The operations of cutting or welding steel or wrought iron gas mains and services by the application of heat subject to the following conditions:

(i) The main of service shall be situated in the open air, and it shall contain only the following gases, separately or mixed at a pressure greater than atmospheric pressure, namely gas, coke-oven as, producer gas, blast furnace gas or gases other than air, used in their manufacture

(ii) the main or service shall not contain acetylene or any gas or mixture of gases of which acetylene has been added intentionally ;

(iii) the operation shall be carded out by an experienced person or persons and at least two persons (including those carrying out the operations experienced in work on gas mains and over 18 years of age shall be present during the operation ;

(iv) the site of the operation shall be free from any inflammable or explosive gas or vapour ;

(v) where acetylene gas is used as a source of beat in connection with an operation, it shall be compressed and contained in a porous substance in a cylinder ; and

(vi) , prior to the application of any flame to the gas main or service this shall be pierced or drilled and the escaping gas ignited.

(c) The operation of repairing an oil tank on any ship by the electric welding process, subject to the following conditions :

(i) The only oil contained in the tank shall have a flash point of not less than 150 degrees F (close test) and a certificate to this effect shall be obtained from a competent analyst

(ii) the analyst's certificate shall be kept available for inspection by an inspector or any person employed or working on the ship ;

(iii) the welding operation shall be carried out only on the exterior surface of the tank at a place (a) which is free from oil or oil leakage in inflammable quantities and (b) which is not less than one foot below the nearest part of the surface of the oil within the tank; and

(iv) welding shall be done only by the electric welding and shall be carried out by experienced operative under the constant supervision of a competent person.

RULES PRESCRIBED UNDER SECTIONS 38 AND 41

61-Fire Protection

(1) Processes, equipment, plant, etc., involving serious explosion and serious fire hazards -

(a) All processes, storages, equipment's, plants etc. involving serious explosion and flash fire hazards shall be located in segregated buildings where the equipment shall be so arranged that only a minimum number of employees are exposed to such hazards at any one time.

(b) All industrial processes involving serious fire hazard should be located in buildings or work places separated from one another by walls of fire-resistant constructions.

(c) Equipment and plant involving serious fire or flash fire hazard shall, wherever possible, be so constructed and installed that in case of fire, they can be easily isolated.

(d) Ventilation ducts, pneumatic conveyors and similar equipment's involving a serious fire risk should be provided with flame arresting or automatic fire extinguishing appliances, or fire resisting dampers electrically interlocked with heat sensitive/ smoke detectors and the air-conditioning plant system.

(e) In all workplaces having serious fire or flash fire hazards, passages between machines, installations or piles the clearance between the ceiling and the top of the pile should not be less than 2mm.

(2) Access for fire fighting:-

(a) Buildings and plant shall be so laid and roads, passage ways etc. so maintained as to permit unobstructed access for fire fighting.

(b) Doors, and window openings shall be located in suitable positions on all external walls of the building to provide easy access to the entire area within the building for fire fighting.

(3) Protection against lightning:- Protection from lightning shall be provided for-

(a) buildings in which explosive or highly flammable substances are manufactured, used handled or stored ;

(b) storage tanks containing oils, paints, or other flammable liquids

(c) grain elevators ;

(d) Buildings, tall chimneys or stacks where flammable gases, fumes, dust or lint are likely to be present; and switch yards ;

(e) sub-station buildings and out-door transformers and switch yards.

(4) Precautions against ignition..- Wherever there is danger of fire or explosion from accumulation of flammable or explosive substances in air-

(a) all electrical apparatus shall either be excluded from the area of risk or they shall he of such construction and so installed and maintained as to prevent the danger of their being a source of ignition ;

(b) Effective measures shall be adopted for prevention of accumulation of static charges to a dangerous extent ;

(c) workers shall wear shoes without iron or steel nails or any other exposed ferrous materials which is likely to cause sparks by friction ;

(d) smoking, lighting or carrying of matches, lighters or smoking materials shall be prohibited ;

(e) transmission belts with iron fasteners shall not be used ; and

(f) all other precautions as are reasonably practicable shall be taken to prevent initiation of ignition from all other possible sources such as open flames, frictional sparks overheated surfaces of machinery or plant, chemical or physical-chemical reaction and radiant heat.

(5) Spontaneous ignition:- Where materials are likely to induce spontaneous ignition, care shall be taken to avoid formation of air pocket and toensure adequate ventilation. the material susceptible to spontaneous ignition should be stored in dry conditions and should be in heaps of such capacity and separated by such passage which will prevent fire. The materials susceptible to ignition and stored in the oven shall be at a distant not less than 10 metres a way from process or storage buildings.

(6) Cylinders containing compressed gas:- Cylinders containing compressed gas may only be stored in open if they are protected against excessive variation of temperature, direct rays of sun, or continuous dampness. Such cylinders shall never be stored near highly flammable substances, furnaces or hot processes. The room where such cylinders are stored shall have adequate ventilation.

(7) Storage of flammable liquids:-

(a) The quantity of flammable liquids in any work room shall be the minimum required for the process or processes carried on in such room. Flammable liquids shall be stored in suitable containers with close fitting covers;

Provided that not more than 20 litres of flammable liquids having a flash point of 21 deg C or less shall be kept or stored in any work room.

(b) flammable liquids shall be stored in closed containers and in limited quantities in well ventilated rooms of fire resisting constructions which are isolated from the remainder the building by fire walls and self closing fire doors.

(c) Large quantities of such liquids shall be stored in isolated adequately ventilated building or fire resisting construction or in storage tanks, preferably under ground and at a distance from any building as required in the Petroleum Rules, 1976.

(d) Effective steps shall be taken to prevent leakage of such liquids into basements, sumps or drains and to confine any escaping liquid within safe limit.

(8) Accumulation of flammable dust, gas, fume or vapour in air or flammable waste material on the floors:-

(a) Effective steps shall be taken for removal or prevention of the accumulation in the air of flammable dust, gas, fume or vapour to an extent which is likely to be dangerous.

(b) No waste material Of a flammable nature shall be permitted to accumulate on the floors and shall be removed at least once in a day or shift, and more often, when possible, such materials shall be placed in suitable metal containers with covers wherever possible.

(9) Fire Exits:-

(a) For the purpose of this sub-rule-

(i) "horizontal exit" means an arrangement which allows alternative egress from a floor area to another floor at or near the same level in an adjoining building or an adjoining part of the same building with adequate separation; and

(ii) "travel distance" means the distance an occupant has to travel to reach an exit.

(b) An exit may be a doorway, corridor, passageway to an external stairway or to a verandah or to an internal stairway segregated from the rest of building by fire resisting walls which shall provide continuous and protected means of egress to the exterior of a building or to an exterior open space. An exit may also include horizontal exit leading to an adjoining building at the same level.

(c) Lifts, escalators and revolving doors shall not be considered as exits for the purpose of this sub-rule.

(d) In every room of a factory exits sufficient to permit safe escape of the occupants in case of fire or other emergency shall be provided which shall be free of any obstruction.

(e) The exits shall be clearly visible and suitable illuminated with suitable arrangement, whatever artificial lighting is to be adopted for this purpose, to maintain the required illumination in case of failure of the normal source of electric supply.

(f) The exits shall be marked in a language understood by the majority of the workers.

(g) Iron ring ladders or spiral staircases shall not be used as exit staircases.

(h) Fire resisting doors or roller shutters shall be provided at appropriate places along the escape routes to prevent spread of fire and smoke, particularly at the entrance of lifts or stairs where funnel or flue effect may be created inducing an upward spread of fire.

(i) All exits shall provide continuous means of egress to the exterior of a building or to an exterior open space leading to a street.

(j) Exit shall be so located that the travel distance to reach at least one of them on the floor shall not exceed 30mts.

(k) In case of those factories where high hazard materials are stored or used, the travel distance to the exit shall not exceed 22.5 metres and there shall be at least two ways of escape from every room, however small except toilet rooms, so located that the points of access thereto are out of or suitably shielded from areas of high hazard.

(l) Wherever more than one exit is required for any room space or floor, exits shall be placed as remote from each other as possible and shall be arranged to provide direct access in separate directions from any point in the area served.

(m) The unit of exit width used to measure capacity of any exit shall be 50 cm. A clear width of 25 cm shall be counted as an additional half unit. Clear width of less than 25 cm shall not be counted for exit width.

(n) Occupants per unit width shall be 50 for stairs and 75 per doors.

(o) For determining the exits required, the occupant load shall be reckoned on the basis of actual number of occupations within any floor area or 10 square metres per person, whichever is more.

(p) There shall not be less than two exits serving every floor area above and below the ground floor, and at least one of them shall be an internal enclosed stairway.

(q) For every building or structure used for storage only, and every section thereof considered separately, shall have access to at least one exit so arranged and located as to provide a suitable means of escape for any person employed therein, and in any such room wherein more than 10 persons as may be normally present at least two separate means of exit shall be available, as remote from each other as practicable.

(r) Every storage area shall have access to at least one means of exit which can be readily opened.

(s) Every exit door way shall open into an enclosed stairway, a horizontal exit on a corridor or passage way providing continuous and protected means of egress.

(t) No exit doorway shall be less than 100 cm. in width Doorways shall be not less than 200 cm. in height.

(u) Exit doorways shall open outwards, that is, away from the room but shall not obstruct the travel along any exit. No door when opened, shall reduce the required width of stairway or landing to less than 90 cm. Over-head of doors shall not be installed for this purpose.

(v) An exit door shall not open immediately upon a flight of stairs. A landing at least 1.5 m X 1.5 m in size shall be provided in the stairway at each doorway. The level of landing shall be the same as that of the floor which it serves.

(w) The exit doorways shall be openable from the side which they serve without the use of a key.

(x) Exit corridors and passage ways shall be of a width not less than the aggregate required width of exit doorways leading from there in the direction of travel to the exterior.

(y) Where stairways discharge through corridors and passageways the height of the corridors and passageways shall not be less than 2.4 mts.

(aa) A staircase shall not be arranged round a lift shaft unless the latter is totally enclosed by a materials having a fire resistance rating not lower than that of the type of construction of the former.

(bb) Hollow combustible construction shall not be permitted.

(cc) The minimum width of an internal staircase shall be 100 cm.

(dd) The minimum width of treads without nosing shall be 25 cm for an internal staircase. The treads shall be constructed and maintained in a manner to prevent slipping.

(ee) The maximum height of a riser shall be 19 cm. and the number of risers shall be limited to 12 per flight.

(ff) Hand rails shall be provided with a minimum height of 100 cm and shall be firmlysupported.

(gg) The use of spiral staircase shall be limited to low occupant load and to a building of height of 9 metres, unless they are connected to platforms such as balconies and terraces to allow escapes to pause. A spiral staircase shall be not less than 300 cms. in diameter and have adequate headroom.

(hh) The width of a horizontal exit shall be same as for the exit doorways.

(ii) The horizontal exit shall be equipped with at least one fire door of self closing type.

(jj) The floor area on the opposite or refuge side of a horizontal exit shall be sufficient to accommodate occupants of the floor areas served, allowing not less than 0.3 square metre per person. The refuge area shall be provided with exits adequate to meet the requirements of this sub-rule. At least one of the exits shall lead directly to the exterior or street.

(kk) Where there is difference in level between connected areas for horizontal exit, ramps not more than 1 in 8 slope shall be provided. For this purpose steps shall not be used.

(ll) Doors in horizontal exits shall be openable at all times.

(mm) Ramps with a slope of not more than 1 to 10 may be substituted for the requirements of staircase. For all slopes exceeding 1 to 10 and wherever the use in such as to involve danger of slipping, the ramp shall be surfaced with non-slipping material.

(nn) In any building not provided with automatic fire alarm a manual fire alarm system shall be provided if the total capacity of the building is over 500 persons, or if more than 25 persons are employed above or below the ground floor, except that no manual fire alarm shall be required in one storey buildings where the entire area is undivided and all parts thereof are clearly visible to all occupants.

(10) First-aid fire fighting arrangements:-

(a) In every factory there shall be provided and maintained adequate and suitable fire fighting equipment for fighting fires in the early stages, those being referred to first-aid fire fighting equipment in this rule.

(b) The types of first-aid fire fighting equipment to be provided shall be determined by considering the different types of fire risks which are classified as follows:-

(1) "Class A fire" - Fire due to combustible materials such as wood, textiles, paper, rubbish and the like.

(i) "Light hazard" - Occupancies like offices, assembly halls, canteens, rest-rooms, ambulance rooms and the like;

(i) "Ordinary hazard" - Occupancies like saw mills, carpentry shop, small timber yards, book binding shops, engineering workshop and the like;

(ii) "Extra hazard" - Occupancies like large timber yards, god owns storing fibrous materials, flour mills, cotton mills, jute mills, large wood working factories and the like.

(2) "Class B fire" - Fire in flammable liquids like oil, petroleum products, elements, paint etc.

(3) "Class C fire" - Fire arising out of gaseous substances.

(4) "Class D fire" - Fire from reactive chemicals, active metals and the like.

(5) "Class E fire" - Fire involving electrical equipment and delicate machinery and the like.

(c) The number and types of first-aid fire fighting equipment to be provided for 'light hazard' occupancy shall be as given in Schedule 1. For "ordinary hazard or extra hazard" occupancies equipment as given in paragraph 10 shall be provided in addition to that given in Schedule I.

(d) The first-aid fire fighting equipment shall conform to the relevant Indian Standards.

(e) As far as possible the first-aid fire fighting equipment shall be similar in shape and appearance and shall have the same method of operation.

(f) All first-aid fire fighting equipment shall be placed in a conspicuous position and shall be readily and easily accessible for immediate use. Generally, these equipment shall be placed as near as possible to the exits or stair landing of normal routes of escape.

(g) All water buckets and pump type extinguishers shall be filled with clean water. All and buckets shall be filled with clean dry and fine sand.

(h) All other extinguishers shall be charged appropriately in accordance with the instructions of the manufacturers.

(i) Each first-aid fire fighting equipment shall be allotted a serial number by which it shall be referred to in the records. The following details shall be painted with white paint on the body of each equipment.

(1) Serial number;

(2) Date of last refilling ; and

(3) Date of last inspection.

(j) First - aid fire fighting equipment shall be placed on platforms on cabinets in such a way that their bottom is 750 mm. above floor level. Fire buckets shall be placed on books attached to a suitable stand or wall in such a way that their bottom is 750 mm. above the floor level. Such equipment if placed outside the building shall be under sheds or cover.

(k) All extinguishers shall be thoroughly cleaned and re-charged immediately after discharge. Sufficient refill material shall be kept readily available for this purpose at all times.

(l) All first-aid fire fighting equipment shall be subjected to routine maintenance, inspection, and testing to be carried out by properly trained persons. Periodicity of the routine maintenance, inspection and test shall conform to the relevant Indian Standards.

11. **Other fire fighting arrangements :**

(a) In every factory adequate provisions of water supply for fire fighting shall be made and where the amount of water required in litres per minute as calculated from the formula A+B+C+D divided by 20 in 550 or more, power driven trailer pumps of adequate capacity to meet the requirement of water as calculated above shall be provided and maintained.

In the above formula:-

A=the total area in square meters of all floors including galleries in all buildings of the factory;

B= the total area in square meters of all floors and galleries including open spaces in which combustible materials are handed or stored;

C= the total area in square meters of all floors over 15 meters above ground level; and

D= the total area of square meters of all floors of all buildings other than those of fire resisting construction.

Provided that in areas where the fire risk involved does not require use of water, such areas under B, C or D may for the purpose of calculation, be solved.

Provided further that where the areas under B, C or D are protected by permanent automatic fire fighting installations approved by any fire association or fire insurance company such areas may, for the purpose of calculation, be halved.

Provided also that where the factory is situated at not more than 3 kames. from an established city or town fire service, the pumping capacity based on the amount of water arrived at by the formula above may be reduced by 25% but no account shall be taken of this reduction in calculating water supply required under clause (a).

(b) Each trailer pump shall be provided with equipment as per Schedule II appended to this rule. Such equipment shall conform to the relevant Indian Standards.

(c) Trailer pumps shall be housed in a separate shed or sheds which shall be sited close to a principal source of water supplies in the vicinity of the main risks for the factory.

(d) In factories where the area is such as cannot be reached by man-hauling of trailer pumps within reasonable time vehicles with towing attachment shall be provided at the scale of one for every four trailer pumps with a minimum of one such vehicle kept available at all times.

(e) Water supply shall be provided to give flow of water as required under clause (a) for at least 100 minutes. At least 50% of this water supply or 450,000 litres which ever is less, shall be in the form of static tanks of adequate capacities (not less than 450,000 litres each) distributed round the factory with due regard to the potential fire risks in the factory.

Where piped supply is provided, the sizer of the main shall not be less than 15 cms in diameter and it shall be capable of supplying a minimum of 4500 litres per minute at a pressure of not less than 7 kilogram per square centimetre.

(f) All trailer pumps including the equipment provided with -them and the vehicles for towing them shall be maintained in good condition and subjected to periodical inspection and testing as required.

(12) Personnel in charge of equipment and for fire fighting, fire drills, etc.

(a) The first-aid and other fire fighting equipment to be provided as required in sub-rules (10) and (11) shall be in charge of a trained responsible person.

(b) Sufficient number of persons shall be trained in the proper handling of fire fighting equipment as referred to in clause (a) and their use against number of persons are available for fire fighting both by means of first-aid fire fighting equipment and others. Such persons shall be provided with clothing and equipment including helmets, belts and boots, preferably gumboots. Wherever vehicles with towing attachment are to be provided as required in clause (d) of sub-rule(11) sufficient number of persons shall be trained in driving these vehicles to ensure the trained persons are available for driving them whenever the need arises.

(c) Fire fighting drills shall be held as often as necessary and at least once in every period of 2 months.

(13) Automatic sprinklers and fire hydrants shall be in addition and not in substitution of the requirements in sub rules (10) and (11).

(14) If the Chief Inspector is satisfied in respect of any factory or any part of the factory that owing to the exceptional circumstances such as inadequacy of water supply or infrequency water supply or infrequency of the manufacturing process or for any other reason, to be recorded in writing, all or any of the requirements of the rules are impracticable or not necessary for the protection of workers, he may by order in writing (which he may at his discretion revoke) exempt such factory or part of the factory from all or any of the provisions of the rules subject to conditions as he may by such order prescribe.

RULE UNDER SUB-SECTION (2) OF SECTION 40-B

61-A Safety Officer

(1) QUALIFICATIONS:

(a) A person shall not be eligible for appointment as Safety Officer unless he -

(i) Possesses a recognized degree in any branch of engineering or technology and has had practical experience of working in a factory in supervisory capacity for a period of not less than two years (or)

A recognized diploma in any branch of engineering or technology and has had practical experience of Working in a factory in a supervisory capacity for a period of not less than five years (or)

a recognized Degree in physics or chemistry and has had practical experience of working in a factory in supervisory capacity for a period of not less than three years. The practical experience for the purpose of this sub rule shall necessarily be in manufacturing or maintenance or Safety Department of a factory

(ii) Possesses a full time degree or diploma or certificate in industrial safety or equivalent of duration not less than one Year awarded by any university incorporated under the Central or State legislations or Department of Technical

Education or Board of Technical education of any State Government of India duly following the guidelines as specified in the Annexure at the end of this Rule.

(iii) has adequate knowledge of Telugu and the language spoken by majority of the workers in the region in which the factory where he is to be appointed is situated.

(b) Notwithstanding the provisions contained in clause (a), any person who possesses a recognized degree or diploma in engineering or technology and has had experience of not less than 5 years in a Department of the Central or State Government which deals with the administration of the Factories Act, 1948 or the Indian Dock Laborers Act,

1934; or

Possesses a recognized degree or diploma in engineering or technology and has had experience of not less than 5 years, full time, on training, education, or research in the field of industrial safety and occupational Health in any institution of central or state government, shall also be eligible for appointment as a Safety Officer.

Provided that the Chief Inspector may subject to such conditions as he may specify, grant exemption from the requirements of this sub-rule, if in his opinion, a suitable person possessing the necessary qualifications and experience is not available for appointment:

Provided further that every person who has been working as a Safety Officer after being appointed as per the prescribed procedure and after his appointment was notified to and taken on

record by the Chief Inspector as on date of commencement of this rule, shall continue to be a safety officer under this rule irrespective of whether he satisfies the above criteria prescribed in sub rule (a) or (b) above.

(2) Number of Safety Officers to be appointed: The required number of safety officers to be appointed in the factories shall be as specified in the table below**.**

S.No.	**Number of Workers**	**Number of Safety Officers to be appointed**
1	Upto 2000 workers	one
2	From 2001 to 3000	Two
3	From 3001 to 4000	Three
4	From 4001 to 5000	Four
5	From 5001 to 10,000	Five
6	From 10,000 to 20,000	Six
7	For every additional 5,000 workers or fraction there of	One additional

(3) Recruitment:

(i) Selection for appointment to the post(s) of Safety Officer(s) shall be made from among the candidates applying for the post(s) by a committee appointed by the

Occupier of the factory

(ii) The appointment when made shall be notified by the Occupier to the Chief Inspector of Factories giving the details of the qualifications, age, pay, previous experience and other relevant particulars of the officer appointed and the terms and conditions of his service. The Chief Inspector may call for further additional information if not satisfied with the information furnished by the occupier. The Chief Inspector ratify the appointment of the Safety Officer in the factory in writing within 30 days from the date of receipt of the information or the additional information, as the case may be, furnished by the occupier.

Provided that any person who has already been ratified once for the post of Safety Officer or Chief safety Officer in any factory situated in thestate of [5]**Telangana** is eligible for appointment as Safety Officer / Chief Safety Officer in any other factory carrying out the similar manufacturing activity and in such cases, the occupier shall send an intimation in writing duly referring the same to the Chief Inspector of Factories for the purpose of this sub rule.

[5] The words, **"Andhra Pradesh**" substituted by "**Telangana** " by G.O.Ms.No. 39 of Labour, Employment, Training and Factories Department, dated 30-12-2015.

(4) Conditions of Service:

(a) Wherever more than one safety officer is to be appointed in a factory as required by this rule, one of them shall be designated as the Chief Safety Officer by a committee appointed by the occupier and shall have a status higher than that of the others. The Chief Safety Officer shall be in overall charge of the safety functions as envisaged in sub-rule (5) and other safety officers working under his control.

(b) The Chief Safety Officer or the Safety Officer in the case of factories where only one Safety Officer is required to be appointed shall be given the status of a senior executive and he shall work directly under the control of the Chief Executive of the factory. All other Safety Officers shall be given appropriate status to enable them to discharge their functions effectively.

(c) The scale of pay and the allowance to be granted to the Safety Officer and the Chief Safety Officer, and the conditions of their service shall be the same as those of the officers of the corresponding status in the factory. In no case they shall be less than the total emoluments being paid by a State Government to an Inspector of Factories at the minimum of his scale of pay, in case of a safety officer and to that of a Deputy Chief Inspector of Factories in case of a Chief Safety Officer

(d) The conditions of service of Safety officer shall be the same as those of the other members of the executive staff of corresponding status in the factory.

(e) The services of a Safety Officer shall not be dispensed with, or he shall not be reverted, without the written concurrence of the Director of Factories, Hyderabad who shall record reasons therefore.

(f) No punishment such as withholding of increments, including stoppage at any efficiency bar, reduction to a lower state in the time scale, suspension dismissal or termination of service, except censure shall be imposed by the management on a Safety officer, except with the previous concurrence of the Director of Factories.

(g) A Safety Officer, who has been dismissed from service or whose services have been terminated in any other manner than as provided in clause (iv) above may within 30 days from the date of receipt of the order by him, appeal to the State Government against the order of punishment made by the management with the concurrence of the Director of Factories and the decision of the State Government thereon shall be final.

Provided that when the management terminates the service or probation of a safety officer the reasons for such a termination of service or probation shall be reported to the State Government or such authority, as may be, empowered by them in this behalf.

(5) Duties:

The duties of the Safety Officer shall be to advise and assist the factory management in the fulfillment of its obligation, statutory or otherwise, concerning prevention of personal injuries and maintaining a safe working environment. These duties shall include the following namely;

(i) to advise the concerned department in a factory in planning and organizing measures necessary for the effective control of personal injuries.

(ii) to check and evaluate the effectiveness of the action taken or proposed to be taken to prevent personal injuries;

(iii) to advise on safety aspects in all job studies, and to carry out detailed job safety studies of selected jobs;

(iv) to advise the purchasing and stores department in ensuring high quality and availability of personal protective equipment;

(v) to provide advice on matters related to carrying out plant safety inspections;

(vi) to carry out plant safety inspections in order to observe the physical conditions of work and the work practices and procedures followed by the workers and to render advice on measures to be adopted for removing unsafe physical conditions and preventing unsafe actions by workers;

(vii) to render advice on matters related to reporting and investigation of industrial accidents and diseases;

(viii) to investigate all reportable accidents;

(ix) to investigate the case of industrial diseases contracted and dangerous occurrences under Rule 96;

(x) to advise on the maintenance of such records as are necessary relating to accidents, dangerous occurrences and industrial diseases;

(xi) to promote setting up of safety committees and act as adviser and catalyst to such committees;

(xii) to be instrumental in designing and implementing the various creative initiatives in association with the concerned departments like campaigns, competitions, contests and other activities which will develop and maintain the interest of the workers and enhance the workers participation in occupational safety and health management.

(xiii) to design and conduct either independently or in collaboration with the training department, suitable training and educational programmes towards occupational safety and health management.

(xiv) to coordinate with qualitative and quantitative risk assessment studies with either internal or external resources and follow up the compliance of all the recommendations/suggestions;

(xv) to coordinate all third party inspections/survey/investigations/testing and examinations either statutory or otherwise aimed towards management of occupational safety and health;

(xvi) to advise the management of the factory in fulfilling obligations under all occupations Safety and health related legislations applicable

(6) Facilities: An occupier of the factory shall provide each Safety Officer with such facilities, equipment, staff, information etc., as are necessary to enable him to discharge his duties effectively but not less than those recommended if any by the Chief Inspector, from time to time.

(7) Prohibition of Performance of other duties: No Safety officer shall be required or permitted to do any work which is inconsistent with or detrimental to the performance of the duties prescribed in sub-rule (5)

(8) Safety Officer's Report: Every Chief Safety officer or Safety officer where there is no Chief safety officer, working in a factory as required under this rule, shall submit through the occupier of his factory, a report in writing with all relevant details to the Chief inspector of Factories, in the month of January every year, on the activities/initiatives taken up during the preceding calendar year and the progress achieved.

ANNEXURE

(See item (ii) of sub-rule (1) (a) of Rule 61-A)

GUIDELINES FOR DIPLOMA AND DEGREE COURSES ON INDUSTRIAL SAFETY FOR APPOINTMENT OF SAFETY OFFICERS.

1. Contents of Course and Teaching Hours: The course leading to the grant of diploma or degree in Industrial safety should fulfill the following minimum requirements:

(a) The hours allocated for teaching of subjects on Industrial Safety (including industrial health) should not be less than that allocated by Central Labour Institute, Mumbai for the course of Advanced Diploma in Industrial Safety. This includes time allocated for lectures, discussion, seminars, case studies, and laboratory work but does not include the time allocated for visit to the factories and term work / project works;

(b) The subjects of study shall be in confirmation to the syllabus followed by Central Labour Institute, Mumbai for the course of Advanced Diploma in Industry Safety;

(c) The Chief Inspector may add or substitute any of the subjects and topics in the said syllabus depending upon the need based requirement of industry and technologies.

2. Standard for Admission to the Course:

(A) Basic Educational qualification and Minimum Experience required for admission to the Course leading to a degree or diploma or certificate course in Industrial Safety:

Basic Educational Qualifications	Minimum Experience required
Recognized degree in any branch of technology / engineering	No experience is required for the purpose of admission to the said course.
Recognized Diploma in any branch of technology / engineering	At least 2 years of practical experience in supervisory capacity in manufacturing, maintenance or safety department in a factory
Recognized degree in physics / chemistry.	At least 1 year of practical experience in supervisory capacity in manufacturing, maintenance, R&D or safety department in a factory

RULES FRAMED UNDER SECTION 41

61-B Electricity Rules

These rules shall apply to all factories-

(1) Definitions:-

(a) "Authorised person" means a person over 21 years of age who may be either-

(i) the occupier or (ii) a contractor for the time being under contract with the occupier or (iii) a person employed, appointed or selected by the occupier or by a contractor as aforesaid, to carry out certain duties incidental to the generation, transformation, conversion switching, controlling, regulating, distribution or use of electrical energy; such occupier, contractor, or person being a person who is competent for the purposes of the rule in which the term is used.

(b) "Apparatus " means electrical apparatus, and includes all apparatus, machines and fittings in which conductors are used or of which they form a part.

(c) "Bare" means not covered with insulating material.

(d) "Circuit " means an electrical circuit forming a system or branch of a system.

(e) "Conductor" means an electrical conductor arranged to be electrically connected to asystem.

(f) "Covered with insulating material" means' adequately covered with insulating materials of such quality and thickness that there is no danger.

(g) "Danger " means danger to health or danger to life or limb from shock, burn, or other injury to persons employed, or from fire attendant upon generation, transformation, distribution or use of electrical energy.

(h) "Dead" means at, or about, zero potential, and disconnected from any live system.

(i) "Earthed" means connected to the general mass of earth in such manner as will ensure at all time an immediate discharge of electrical energy without danger.

(j) "Insulating Stand" means a floor, platform stand or mat.

(k) "Insulating Screen means a screen.

(1) "Insulating Books " means books.

(m) "Insulating Gloves" means gloves.

(Of such size, quality and construction according to the circumstances of the use thereof, that a person is thereby adequately protected from danger).

(n) "Live " means electrically charged.

(o) "Pressure" means the difference of electrical potential between any two conductors or between, a conductor and earth as read by a hot wire an electrostatic volta meter.

(p) "Low pressure " means a pressure in a system normally not exceeding 250 volts where the electrical energy is used.

(q) "Medium pressure " means a pressure in a system normally above 250 volts but not exceeding 650 volts where electrical energy is used.

(r) "High pressure" means a pressure in a system normally above 650 volts, but not exceeding 3,000 volts, where the electrical energy is used or supplied.

(s) "Extra High pressure" means a pressure in a system normally exceeding 3,000 volts where the electrical energy is used or supplied.

(t) "Switch Board" means the collection of switches or fuses, conductors and other apparatus in connection therewith, used for the purpose of controlling the current or pressure in any system or part of a system.

(u) "Switch Board Passage-way" means any passage way or compartment large enough for a person to enter, and used in connection with switch board when live.

(v) "System " means an electrical system in which all the conductors and apparatus are electrically connected to a common source of electro motive force.

(2) All apparatus and conductors shall be adequate in size and power for the work they are called upon to do and so constructed, installed, protected, worked and maintained as to prevent danger so far as reasonably practicable.

(3) Every electrical joint and connection shall be of proper construction as regards conductivity, insulation, mechanical strength and protection.

(4) Efficient means, suitably located, shall be provided for protecting from excess of current to every part of a system as may be necessary to prevent danger.

(5) All parts, of generators, motors, transformers, or other similar apparatus, within reach from any position in which any person employed may be required to be, shall be, so far as reasonably practicable, so protected as to prevent danger.

(6) All accessible metallic portions of electrical plant or apparatus which though normally not forming part of an electrical circuit, may become alive, accidentally, shall be protected by an insulating covering or by other adequate means or shall be connected to earth by a conductor of adequate size.

(7) Adequate working space and means of access, free from danger shall be provided for all apparatus which have to be worked or attended to by any person.

(8) Where one of the conductors of a system is connected to earth, no single pole switch other than a link for testing purposes, or switch for use in controlling a generator shall be placed in such conductor or any branch thereof.

(9) Every fuse and every automatic circuit-breaker used instead thereof shall be so constructed and arranged as effectively to interrupt the current before it so exceeds the working rate as to involve danger. It shall be of such construction or be so guarded or placed as to prevent danger from over heating, or from arcing or the scattering of hot metal or other substance which it comes into operation. Every fuse shall be either of such construction or so protected by a switch that the fusible metal may be readily renewed without danger.

(10) Conductors which in accordance with the conditions of operation are required to be earthed shall, as a general rule not be protected by fuses.

(11) The general arrangement of switch-boards shall, so far as reasonably practicable, be such that:-

(a) all parts which may have to be adjusted or handled are readily accessible

(b) the course of every conductor may, where necessary, be readily traced;

(c) conductors arranged for connection to the same system are kept well apart, and can, where necessary, be readily distinguished;

(d) all bare conductors are so placed or protected as to prevent danger from accidental short circuit.

(12) Every switch board having bare conductors normally so exposed that they may be touched, shall, if not located in any area or areas set apart for the purposes thereof, where necessary be suitably fenced or enclosed.

No person except an authorised person, or a person acting under his immediate supervision, shall, for the purpose of carrying out his duties, have access to any part of an area so set apart.

(13) Every motor shall be provided with an efficient switch or circuit breaker for starting and stopping the motor, so placed as to be easily and safely operated by the person controlling the motor. Such a switch or circuit breaker may be embodied in the starting controlling device used with the motor.

(14) In every place in which machines are being driven by an electric motor, there shall be means at hand for either switching off the motor, or stopping machines if necessary to prevent danger.

(15) Every flexible wire for portable apparatus shall be connected to the system either by efficient permanent joints or connections, or by a properly constructed connector.

In all cases where the person handling portable apparatus or pendent lamps with switches, would be liable to get a shock through a conducting floor or conducting work or otherwise, if the metal work of the portable apparatus became charged, the metal work must be efficiently earthed; and any flexible metallic covering of the conductors shall be itself efficiently earthed and shall not itself be the only earth connection or the metal of the apparatus.

A lamp holder shall not be in metallic connection with the guard or other metal work of a portable lamp.

In such places the portable apparatus and its flexible wire shall be controlled by efficient means suitably located, and capable of cutting of the pressure, and the metal work shall be efficiently earthed independently of any flexible metallic cover of the conductors and any such flexible covering shall itself be independently earthed.

(16) In plug and socket connection for transportable apparatus the socket shall be connected to the conductor and the plug to the appliance.

(17) Plug for connecting moveable conductors shall he of such construction that they do not get in the socket connections meant for higher current. Plug and socket connection shall be of such construction that the plug cannot be inserted or withdrawn while the current is on.

(18) Efficient means, suitably located, shall be provided for cutting off all pressure from every part of a system as may be necessary to prevent danger.

(19) All conductors shall either be covered with insulating material and further efficiently protected where necessary to prevent danger or they shall be so placed and safeguarded as to prevent danger so far as is reasonably practicable.

(20) Knife switches shall be of such construction that the breaking area cannot reach the operating handle and they shall be so connected that when open the blades are dead.

(21) All conductors and apparatus exposed to the weather wet corrosion, inflammable surroundings or explosive atmosphere, or used in any process or for any special purpose other than for lighting or power, shall be so constructed or protected, and such special precautions shall be taken as may be necessary to prevent danger in view of such exposure or use.

(22) In any place where inflammable substance or explosive dust or gas is liable to be present :

(a) No lamp except incandescent lamp with its holder completely enclosed in a fitting having thick glass glove and an adequate radiating surface shall be used.

(b) All generators, motors, plants and their tunnels and every electrical fitting shall be of gas tight construction.

(c) The cables for their entire length shall be enclosed in the gas tight conduits.

(d) No portable apparatus shall be used unless such apparatus is approved by the Chief Inspector.

(e) Switches, cut outs and all other accessories liable to are shall where practicable be located out side such places, but where this is impracticable they shall be of flame-proof type.

(23) Adequate precautions shall be taken to prevent any conductor or apparatus from being accidentally or inadvertently electrically charged when persons are working thereon.

(24) Where necessary insulating stands or screens shall be provided adequately to prevent danger and kept permanently in position, and shall be maintained in sound condition.

(25) Portable insulating stands, screens, boots, or other suitable means shall be provided and used when necessary adequately to prevent danger, and shall be periodically examined by an authorised person. A record of such examinations shall be kept in suitable register which shall be readily available for perusal by an Inspector.

(26) No person except an authorised person or a competent person acting under his immediate supervision shall undertake any work where technical knowledge or experience is required in order adequately to avoid danger; and no person shall work alone in any case in which the Chief Inspector directs that he shall not. No person except an authorised person or a competent person over 21 years of age acting under his immediate supervision, shall undertake any repair, alteration, extension, cleaning or similar work where technical knowledge or experience is required in order to avoid danger, and no one shall do such work unaccompanied.

(27) When work is being carried on the power lines a notice board of a size not less than 1'-0" x 0'-9" labelled in red "Caution, person working on line" and its equivalent in vernacular shall be placed on the switch board.

(28) Instructions, both in English and in the vernacular of the district as to the treatment of persons from electric shock, shall be affixed in all premises where electrical energy is generated, transformed, converted, switched, controlled, regulated, distributed or used.

(29) Exemptions..-

(1) Nothing in this rule shall apply to any service lines or apparatus on the supply side of the consumer's terminal or to any chamber containing such service lines or apparatus where the supply is obtained from an outside authority.

Provided always that no live metal is exposed so that it may be touched.

(2) This rule shall not apply to any installation generating, transforming, converting or using electrical energy at a voltage of 24 volts or less.

(3) The State Government may by order exempt from the operation of this rule either in whole or in part any premises to which any special rules or regulations under any other Act as to the generation, transformation, conversion, switching, controlling, distribution and use of electrical energy apply; and may revoke such order.

(4) If the occupier can show, with regard to any requirement of this rule, that the special conditions in his premises are such as adequately to prevent danger, that requirement shall be deemed to be satisfied and the Chief Inspector may by order in writing direct, that any class of special condition

defined in the requirements of this rule adequately to prevent danger are satisfied, and may revoke such order. In particular the following shall be deemed for all the purposes of this rule adequately to prevent danger-

Room in which-

(a) the floor is of wood or otherwise insulated

(b) there is no machinery or other earthed metal with which a person handling any non-earthed lamp fittings or any portable lamp is liable to be in contact

(c) no process rendering the floor wet is carried on ; and

(d) no live conductor is normally exposed so that it may be touched.

61-C. Safety belts

Where any person is required or allowed to work at a place from which he may be liable to fall through a distance of more than three metres, he shall be provided with a safety belt with leather shoulder straps of not less than five centimetres in width and a 'D' ring at the back for fastening a rope, the other end of which shall be securely tied or hooked to some suitable rigid fixture. The safety belt so provided shall be tested and examined thoroughly by a competent person at least once in six months and a certificate with regard to its suitability obtained from the said competent person and entered in a register, which shall be produced before the Inspector on demand.

Provided that where Chief Inspector is satisfied that in respect of any particular work in a factory or any location thereof, wearing of safety belt is not convenient or is inappropriate or is not reasonably practicable and where alternate safety precautions have been taken and provided by the management for the safety of the workers, on the application of the manager of the factory he may, by order in writing, exempt the factory or any part thereof or description of work, from the requirement of providing safety belts under the rule subject to such conditions as he may specify.

61-D. Fragile roofs, provision of crawling Boards etc.

In any factory, no person shall be required to stand or pass over or work on or near, any roof or ceiling covered with fragile material through which he is liable to fall, in case it breaks or gives way, a distance of more than three metres, unless -

(a) suitable and sufficient ladders, duck ladders or crawling boards which shall be securely supported, are provided and used; and

(b) a permit to work on the fragile roof is issued to him each time he is required to work thereon by a responsible person of the factory concerned.

61-E Supply of Protective Equipment and Clothing

Save as otherwise expressly provided for in these rules, suitable personal protective equipment and clothing, such as helmets, goggles, respirators, aprons, leggings, boots or other foot-wear, gloves, and clothing, as may be specified by the Inspector by an order in writing shall be supplied to workers engaged in any process which in the opinion of the Inspector, is likely to be injurious to the health and safety of the workers.

All such equipment shall be maintained in good condition.

61-F. Building and Structure

(1) Buildings and Structures: No building, wall, chimney bridge, tunnel, road, gallery, stair-way, ramp, floor, platform, staging, or other structure, whether of a permanent or temporary character, shall be, constructed or situated, maintained in any factory in such manner as to cause risk of bodily injury.

(2) Machinery and Plant:- No machinery, plant or equipment shall be erected, situated, operated or maintained in any factory in such a manner as to cause risk of bodily injury.

(3) Methods of work:- No process or work shall be carried on in any factory in such a manner as to cause risk of bodily injury.

(4) Stacking and storing of material etc.:- No material or equipment shall be stacked or stored in such a manner as to cause risk of bodily injury.

61-G. Ship building and Ship-repairing

1. Application:- These rules shall apply as respects of work carried out in any of the operations.

2. Definitions:- In these rules unless there is anything repugnant in the subject or context

(a) "Certificate of entry" means a certificate which-

(i) is given by a person who is a competent analyst and who is competent to give such certificates ; and

(ii) certifies that he has in an adequate and suitable manner tested the atmosphere in the oil-tank or oil-tanks specified in the certificate and found that having regard to all the circumstances of the case, including the likelihood or otherwise of the atmosphere being or becoming dangerous, entry to the oil-tank or oil-tanks without wearing breathing apparatus may in his opinion, be permitted;

(b) "hot work" means any Work which involves-

(i) welding, burning, soldering, brazing, sand blasting or chipping by spark producing tools; or

(ii) use of non-flame proof electrical equipment or equipment with internal combustion engines; and includes any other work which is likely to produce sufficient heat capable of igniting flammable gases or vapours.

(c) "naked light certificate" means a certificate which -

(i) is given by a person who is a competent analyst and who is competent to give such certificates; and

(ii) certifies that he has in an adequate and suitable manner tested for the presence of inflammable vapour the oil-tank, compartment, space or other part of the vessel specified in the certificate and found it to be free therefrom and that having regard to all the circumstances of the case, including the likelihood or otherwise of the atmosphere becoming inflammable, the use of naked lights, fires, lamps or heated rivets or any hot work to be carried out may in his opinion be permitted in the oil-tank, compartment, space or other part of the vessels specified in the certificate:

(d) "oil" means any liquid which has a f lash point below 132 deg C (270deg F) and also includes lubricating oils, liquid methane, liquid butane and liquid propane :

Explanation:- Flash point wherever it occurs in these rules, shall be flash point as determined by Abel Closed Cup or Pensky-Marten Closed Cup Procedures as described in I.S.1448-1960.

(e) "Oil-tank" means any tank or compartment in which oil is or has been carried;

(f) "the operations" means-

(i) construction, reconstruction or breaking up of any ship or vessel, repairing, refitting, painting and finishing;

(ii) the sealing, surfing or cleaning of its boilers (including combustion chambers or smoke boxes) ; and

(iii) the cleaning of its bilges or oil-fuel tanks or any of its tanks last used for carrying oil.

For the purpose of this definition the expression "Oil" means oil of any description whether or no oil within the meaning of foregoing definition of that expression:

(g) "Ship" and "vessel" shall have the same meanings as in the Merchant Shipping Act, 1958;

(h) "Shipyard" means any yard or dry dock (including the precincts thereof) in which ships or vessels are constructed, reconstructed, repaired, refitted or finished;

(i) "Stage" means any temporary platform on or from which persons employed perform work in connection with the operations, but does not include a boatswain's chair;

(j) "Staging" includes any stage, and any upright, thwart, pin, wedge, distance piece, belt or other appliance or material not being part of the structure of the vessel, which is used in connection with the support of any stage, and any guard-rails connected with a stage;

(k) "Tanker" means a vessel constructed or adopted for carrying a cargo of oil in bulk.

ACCESS AND STAGING

3. General access to vessels in shipyard:- All main gangways giving general access to a vessel in a shipyard, whether from the ground or from a wharf or quay, and all cross, gangways leading from such a main gangway on the vessel shall -

(i) be at least 60 cm. wide

(ii) be securely protected on each side to a height of at least 90cm. by strongly constructed upper and lower hand-rails and by a secure to board projecting at least 15 cm. above the floor;

(iii) be of good construction, sound material and adequate strength

(iv) be stable and wherever practicable, of permanent construction,

(v) be kept in a position as long as required and,

(vi) maintained in good repairs

4. Access to dry dock:-

(a) Every flight of steps giving access from ground level either to an altar or to the bottom of a dry dock shall be provided throughout on each side with a substantial hand rail. In the case of an open side, secure friends to a height of at least 90 cm. shall be provided by means of upper and lower rails, taut ropes or chains or by equally safe means. For the purposes of this sub-rule a flight steps which is divided into two by a chute for materials, with no space between either side of the chute and the steps shall be deemed to be one flight of steps.

(b) Such hand rails and fencings as aforesaid shall be kept in position save when and to the extent to which their absence is necessary (whether or not for the purpose of the operations) for the access of persons, or for the movement of materials or vessels or for traffic or working, for repair, butt handrails or fencings removed for any of those purposes shall be kept readily available and shall be replaced as soon as practicable.

5. Access to vessels in dry dock:-

(a) If a ship is lying in a dry dock for the purpose of undergoing any of the operations, there shall be provide means of access for the use of workers at such times as they have to pass to, or from, the ship or dry dock -

(i) where reasonably practicable one more ships accommodation ladders, or

(ii) One or more soundly constructed gangways or similar constructions.

(b) The means so provided shall not be less than 55 cm. wide properly secure and fenced throughout on each side to a clear height of 90 cm. by means of upper and lower rails, taut ropes or chains or by any other safe means, except that in the case of the ships accommodation ladder, such fencing shall be necessary on one side only provided where the other side is properly protected by the ships side.

(c) Where at any dry dock, there is a gangway giving access from an alter of the dock to vessel which is in the dock for the purpose of undergoing any of the operations, and the edge of the altar is unfenced, adequate hand-holds shall be available for any length of the altar which workers commonly use when passing between the gangway and the nearest flight of steps which gives access to ground level.

6. Access to and from bulwarks..- Where there is a gangway leading on to a bulwark of a vessel there shall be provided.

(a) Wherever practicable, a platform at the in-board end of the gangway with safe means of access therefrom to the decks ; or

(b) Where such a platform is not practicable, a second gangway or stairway leading from a bulwark on to the deck which are either attached to the first mentioned gangway or place continuous to it in which case means of access securely protected by fencing shall be provided from one toother.

7. Access to staging etc.:-

(a) Where outside staging is erected on a shipyard, there shall be provided sufficient ladders giving direct access to the stages having regard to extent of the staging and to the work to be done.

(b) Where a vessel is under construction or reconstruction and workers are liable to go forward or aft or athwarship across or along uncovered deck beams, or across or long floors, sufficient planks shall be provided on these deck-beams or on these floors for the purpose of access to or from places of work, and sufficient and suitable portable ladders shall be provided so as to give access either from the ground or outer bottom plating to the top of the floor.

(c) Without prejudice to any other provision in these rules requiring a greater width, no footway or passageway constructed of planks shall be less than 45 cm. wide.

8. Ladders:-

(a) Subject to clauses (b) and (c) of this rule, every ladder which affords a means of access, communication of support to a person shall-

(i) be soundly constructed and properly maintained; and

(ii) be of adequate strength for the purpose of which it is used; and

(iii) be securely fixed either-

(i) as near its upper resting place as possible or

(ii) where this is impracticable at its base, or where such fixing is impracticable a person shall be stationed at the base of the ladder when in use to prevent it from slipping; and

(iv) Unless there is other adequate hand-hold, extent to a height of at least 75 cm; above the place of landing or the highest of the right rung to be reached by the foot of any person working on the ladder, as the case may be, or, if this is impracticable, to the greatest practicable height.

(b) Requirements (iii) and (iv) of the preceding clause of this rule shall not apply to fixed ladders of ship or to rope ladders. Effective measures by means of roping off or other similar means shall be
taken to prevent the use of fixed ladders of a ship which do not comply with requirements (i) and (ii) of that sub-rule.

(c) Any worker who removes any ladder and sets it up in a new position shall, as regards that ladder, comply with requirements (c) of clause (a) of this rule.

(d) Rope ladders shall provide foot-hold of a depth including any space behind the ladder of not less than 12 cm. and so far as is reasonably practicable, suitable provision shall be made for preventing such ladders from twisting.

9. Lashing of Ladders:-

(a) A fibre rope, or rope made with stands consisting of wire ropes covered with fibre, shall not be used to secure a ladder used for the purpose of the operation.

(b) A wire rope shall not be used to secure any such ladder unless its ends are furled, but this provision shall not apply in the case of an end which is so situated or protected that a person using the ladder is not liable to come into contact with it s as to suffer injury.

10. Material for staging:-

(a) A sufficient supply of sound and substantial material and appliances shall be available in convenient place or places for the construction of staging.

(b) All planks and other materials and appliances intended to be used or re-used for staging shall be carefully examined, before being taken into use or re-use in any staging. Every examination required by this clause shall be carried out by a person competent for the purpose.

11. Staging, dry dock altars and shoring sills:-

(a) All staging and every part thereof shall be of good construction, of suitable and sound material and of adequate strength for the purpose for which it is used and shall be properly maintained, and every upright and thwart shall be kept so fixed, secured or placed in position as to prevent, so far as is reasonably practicable, accidental displacement.

(b) All planks forming stages shall be securely fastened to prevent them from slipping unless they extend 45 cm. or more beyond the ins de edge of the thwart or support on which they rest.

(c) All staging used in connection with the operations shall be inspected before use, and thereafter at regular and frequent intervals, by a responsible person.

(d) All dry dock altars and shoring sills on or from which persons perform work in connection with the operations shall be of sound construction and properly maintained.

(e) All parts of stages, all parts of footways or passageways constructed of planks, and all parts of dry dock altars or shoring connection with the operations, shall so afar as is reasonably practicable, be kept clear of all substances likely to make foot-hold or hand-hold insecure.

12. Upright used for hosting block:-

(a) If any upright forming part of staging is used as a fixing for a pulley for hosting materials,

(i) it shall be properly housed in the ground or shall otherwise be adequately secured so as to prevent it from rising; and

(ii) it shall be suitably protected against damage by the action of the chain or wire or other means of securing the pulley block to the upright.

(b) No upright forming part of staging shall be used as an anchorage for a load pulley block, unless the upright is not likely to be displaced by such use.

13. Support of stages on planks:- Planks supported on the rungs of ladders shall not be used to support stages.

14. Suspended stages:-

(a) Stages suspended by ropes or chains shall be secured as far as possible so as to prevent them swinging.

(b) A fibre rope, or a rope made of stands consisting of wire cores covered with fibre shall not be used for suspending a stage except that fibre ropes may be used in the case a stage of which the suspension ropes are received through blocks.

(c) Chains, ropes, blocks and other gear used for the suspension of stages shall be of sound material, adequate strength and suitable quality, and in good condition.

(d) Appropriate steps shall be taken to prevent ropes or chains used for supporting a stage from coming into contact with sharp edges of any part of vessel.

15. Boatswain's Chains:-

(a) Boatswains' chains and chains, ropes or other gear used for their suspension shall he of sound material, adequate strength and suitable quality and the chains, ropes or other gear shall be securely attached.

(b) Suitable measures shall be taken to prevent where possible the spinning of a boatswain's chair to prevent the tipping of a boatswain's chair and to prevent any occupant falling therefrom.

16. Rising stages:- All planks forming a rising stage at the bow end of a vessel shall be securely fastened to prevent them from slipping.

17. Width of staging..- Without prejudice to the other provisions of these Rules, all stages shall be of sufficient width as is reasonable in all the circumstances of the case to secure the safety of the persons working thereon.

18. Stages from which a person is liable to fall more than 2 m. or into water..-

(a) This Rule applies to stages from which a person is liable to fall a distance of more than 2 m. or into water, in which there is a risk of drowning.

(b) Every stage to which this Rule applies -

(i) shall so far as is reasonably practicable, be closely boarded, planked or plated

(ii) shall be constructed or placed that a person is not liable to fall as aforesaid through gap in the staging not being a gap necessary and no larger than necessary having regard to the nature of the work being carried on;

(iii) shall be at least 45 cm. wide.

(c) Every side of a stage to which this rule applies shall -

(i) if it is not a side immediately adjacent to any part of a vessel, of be fenced (subject to the provisions of sub rules (d) to (g) this Rule) with a guard rail or guard rails to a height of at least 1 m. above the stage, which rail or rails shall be so placed as to prevent so far as practicable the fall of persons from the stage or from any standing raised place on the stage; or

(ii) if it is a side immediately adjacent to any part of a vessel, be placed as near as practicable to that part having regard to the nature of the work being carried on, and to the nature of the structure of the vessel.

(d) In the case of stages which are suspended by ropes or chains and which are used solely for painting, the fencing required by clause (i) of the preceding sub-clause may be provided by means of taut guard rope or taut guard ropes.

(e) no side of a stage or as the case may be, no part of the side of a stage need be fenced in pursuance of sub-clause (c) (i) of this sub-rule in cases where, and so long as, the nature of the work being carded on makes the fencing of that side, or, as the case may be, that part impracticable.

(f) guard rails provided in pursuance of sub-clause (c) (i) of this sub-rule may be removed for the time and to the extent necessary for the access of persons or for the movement of materials; but guard rails removed for either of these purposes shall be replaced as soon as practicable.

(g) where it is not reasonably practicable to comply with the provisions of sub-clause (c) (i) of this sub-rule, workers shall be provided with suitable safety belts equipped with life lines which are secured with a minimum amount of slack to a fixed structure.

FURTHER PRECAUTIONS AGAINST FALL OF PERSONS, MATERIALS AND ARTICLES

19. Fencing of dry docks:-

(a) Fencing shall be provided at or near the edges of a dock at a ground level, including edges above flights of steps and chutes for materials. The height of such fencing shall at no point be less than 1 m.

(b) Such fencing as aforesaid shall be kept in position save when and to the extent to which its absence is necessary (whether or not for the purposes of the operations) for the access of persons, or for movement of materials or vessels or for traffic or working, or for repair but fencing removed for any of those purposes shall be kept readily available and shall be replaced as soon as practicable.

20. Protection of openings..-

(a) Every side or edge of an opening in a deck or tank top of a vessel, being a side or edge which may be a source of danger to workers shall, except where and while the opening is securely covered or where the side or edge is protected to a height of not less than 75 cm. by a earning or other part of the vessel, be provided with fencing to height of not less than 90 cm. above the edge or side and such fencing shall be kept in position save and when to the extent to which its absence is necessary (whether or not for the purposes of the operations) for the access of persons, or the movement of materials, or for traffic or working, or for repair, but fencing removed for any of these purposes shall be kept readily available and shall. he replaced as soon as practicable.

(b) Sub-clause (a) of this sub-rule shall not apply-

(i) to that. part of an opening in a deck or tank top which is at the head of a stairway or ladder-way intended to be used while the operations are being carried on; or

(ii) to parts of a deck or tank to which are intended top. be plated except such parts where plating has necessarily to be delayed so that the opening may be used for the purpose of the operation.

21. Fall of articles from stages:- Where workers are at work outside a vessel on a stage adjacent to part of the structure of the vessel and other workers are at work directly beneath that stage, the planks of the stage shall be in such a position that no article liable to cause injury to the workers can fall between the planks, and the inside plank of the stage shall be placed as near as practicable to the structure of the vessel having regard to the nature of the work being carried on.

22. Boxes for rivets etc.:-

(a) Boxes or other suitable receptacles for rivets, nuts, bolts and welding rods shall be provided for the use of workers.

(b) It shall be the duty of the workers to use, as far as practicable, the boxes or other suitable receptacles so provided.

23. Throwing down materials and articles..-

(a) Subject to the provisions of a sub-clause (b) of this sub-rule, parts of staging, tools and other articles and materials shall not be thrown down from a height where they are liable to cause injury to workers, but shall be properly lowered.

(b) When the work to be done necessarily involves the throwing down from a height of articles or materials, conspicuous notices shall be posted to warn persons from working or passing, underneath the place from which articles or materials may fall, or the work shall be done under the direct supervision of a competent person in authority.

(c) No person shall throw down any articles or materials from a height except in accordance with the requirement of this sub-rule.

24. Loose articles or materials:- As far as practicable, steps shall be taken to minimise the risk arising from loose articles or materials being left lying about in any place from which they may fall on workers or persons passing underneath.

RAISING AND LOWERING

25. Secureness of loads:-

(a) Loads shall be securely suspended or supported whilst being raised or lowered, and all reasonable precautions shall be taken to prevent danger from slipping or displacement.

(b) Where by reason of the nature or position of the operations load is liable, whilst being moved by a lifting machine or lifting tackle, to come into contact with any object so that the object may become displaced, special measures shall be adopted to prevent the danger as far as reasonably practicable.

26. Support of lifting machines and lifting tackle:- Every lifting machine and all lifting tackle shall be adequately and suitably supported or suspended having regard to the purpose for which it is used.

27. Wire ropes with broken wires:- No wire rope shall be used if in any length of ten diameters the total number of visible broken wires exceeds five percent of the total number of wires, or if the rope shows signs of excessive wear of coercion or other serious defect.

28. Supplies in wire-ropes:- A thimble or loop splice made in any wire rope shall have at least three tucks with a whole stand of the rope and two tucks with one half of the wires cut out of each stand. All tucks shall be against the lay of the rope:

Provided that this sub-rule shall not operate to prevent the use of another form of splice which can be shown to be as efficient as the form of splice specified in this sub-rule.

29. Knotted chains, etc.:-

(a) No chain or wire rope shall be used when there is a knot tied in any part thereof.

(b) No chain which is shortened or joined to another chain by means of bolts and nuts shall be used :
Provided that this does not exclude the use of a chain bolted or joined to another chain by an approved and properly constructed attachment.

30. Precautions against damage to chains and ropes:- Appropriate steps shall be taken to prevent, so far as practicable, the use of chains or ropes for raising or lowering in circumstances in which they are in or liable to come into contact with sharp edges of plant materials or loads or with sharp edges of any part of the vessel on which work is being carried out.

31. Loads on lifting appliances:- No loads shall be left suspended from a lifting appliance other than a self sustaining manually operated lifting appliance, unless there is a competent person in charge of the appliance while the load is so left.

32. Heavy loads:- Where there is reason to believe that a load being lifted or lowered on a lifting appliance weights more than 20 tonnes, its height shall be ascertained by means of an accurate weighing machine or by the estimation of a person competent for the purpose, and shall be clearly marked on the load :

Provided that this sub-rule shall not apply to any load lifted or lowered by a crane which has either a fixed or a derricking jib and which is lifted with an approved type of indicator in good working order which,-

(i) indicates clearly to the driver or person operating the crane the load being carried approaches safe working load of the crane for the radius of the jib at which the load is carried; and

(ii) gives an efficient sound signal when the load moved is in excess of the safe working load of the crane at that radius.

PRECAUTIONS AGAINST ASPHYXIATION, INJURIOUS FUMES OR EXPLOSIONS

33. Certification for entry into confined spaces likely to contain dangerous fumes:- A Space shall not be certified under Section 36(3)(a) of the Act unless-

(i) effective steps have been taken to prevent any ingress of dangerous fumes

(ii) any sludge or other deposit liable to give off dangerous fumes has been removed and the space contain no other material liable to give off dangerous fumes ; and

(iii) the space has been adequately ventilated and tested for dangerous fumes and has a supply of air adequate for respiration, but no account shall be taken for the purposes of sub-paragraph (ii) of his paragraph of this sub-rule of any deposit or other material liable to give off dangerous fumes in insignificant quantities only.

34. Precautions against shortage of oxygen:- No person shall enter or remain in any confined space in vessel, being a confined space in which there is reason to apprehend that the proportion of oxygen in the air is so low as to involve risk of persons being overcome, unless either-

(i) the space has been and remains adequately ventilated and a responsible person has tested it and certified that it is safe for entry without breathing apparatus; or

(ii) he is wearing a suitable breathing apparatus and a safety belt securely attached to a rope, the free end of which is held by person standing outside the confined space.

35. Rivet fires.-

(a) Rivet fires shall not be taken into or used in or remain in any confined space on board or in a vessel unless there is adequate ventilation to prevent the accumulation of fumes.

(b) No person employed shall move a rivet fire into any confined space on board or in a vessel he has been authorised by his employer to move the fire into that space.

36. Gas cylinders and acetylene generators:-

(a) No cylinder which contains or has contained oxygen or any flammable gas or vapour at a pressure above atmospheric pressure and no acetylene generating plant, shall be installed or placed within 5 M. of any substantial source of heat (including any boiler or furnace when alight) other than the burner or blow pipe operated from the cylinder or plant.

(b) No such cylinder and no such plant shall be taken below the weather deck in the case of a vessel undergoing repair, or below the topmost completed deck in the case of a vessel under

construction, unless it is installed or placed in a part of the vessel which is adequately ventilated to prevent any dangerous concentration of gas or fumes.

37. Further provision as to acetylene generators:-

(a) The following provisions shall be observed as respects any acetylene generating plant:

(i) no such plant shall be installed or placed in any confined space unless effective and suitable provision is made for securing and maintaining the adequate ventilation of that space so as to prevent, as far as practicable, any dangerous accumulation of gas;

(ii) any person attending or operating any such plant shall have been fully instructed in its working and a copy of the maker's instructions for that type of plant shall be constantly available for his use;

(iii) the charging and cleaning of such plant shall so far as practicable be done during day light; and

(iv) partly spent calcium carbide shall not be recharged into an acetylene generator.

(b) No person shall smoke or strike a light or take a naked light or a lamp in or into any acetylene generator house or shed or in or into dangerous proximity to any acetylene generating plant in the open air or on board a vessel;

Provided that this sub-clause shall not apply as respects a generator in the open air or on board vessel which, since it was last charged, has been thoroughly cleaned and freed from any calcium carbide and acetylene gas.

(c) A prominent notice prohibiting smoking, naked lights and lamps shall be exhibited on or near every acetylene generating plant whilst it is charged or is being charged or is being cleaned.

38. Construction of plant for cutting, welding or heating metal:-

(a) Pipes or hoses for the supply of oxygen or any flammable gas or vapour to any apparatus for cutting, welding or heating,, metal shall be of good construction and sound material and be properly
maintained.

(b) Such pipes or hoses shall be securely attached to the apparatus and other connections by means of suitable clips or other equally effective appliances.

(c) Efficient reducing and regulating valves for reducing the pressure of the gases shall be provided and maintained in connection with all cylinders containing oxygen or any flammable gas or vapour at
a pressure above atmospheric while the gases or vapours from such cylinders are being used in any process of cutting, welding or heating metal.

(d) Where acetylene gas is used for cutting, welding or heating metal-

(i) a properly constructed and efficient back-pressure valve and flame arrestor shall be provided and maintained in the acetylene supply pipe between each burner or blow-pipe and the acetylene generator, cylinder or container from which it is supplied, and shall be placed as near as practicable to the burner or blow- pipe, except that those requirements shall not apply where an acetylene cylinder serves only one burner or blow-pipe; and

(ii) any hydraulic valve provided in pursuance of the preceding clause shall be inspected on each day by every person who uses the burner or blow-pipe on that day and it shall be the duty of every worker who used the burner or blow-pipe to inspect the hydraulic valve accordingly.

(e) The operating valves of burners or blow-pipes to which oxygen or any flammable gas or vapour is supplied for the purposes of cutting, welding or heating metal shall be so constructed, or the operating mechanism shall be so protected that the valves cannot be opened accidentally.

39. Precautions after use of apparatus for cutting, welding or heating metal:-

(a) In the case of apparatus on board a vessel and used for cutting, welding, or heating metal with the aid of oxygen or any flammable gas or vapour supplied at a pressure above atmospheric pressure, the precautions specified in the following sub-clause of this sub-rule shall be taken when such use ceases for the day or a substantial period and the apparatus is to be left on board, but need not be taken when such use is discontinued merely during short interruptions of work. The requirements in sub-clauses (a) and (b) of this sub-rule shall not apply during a meal interval, provided that a responsible person is placed in charge of the plant and equipment referred to therein.

(b) Supply valves of cylinders, generators and gas mains shall be securely closed and the valve key shall be kept in the custody of a responsible person.

(c) Moveable pipes or houses used for conveying oxygen of flammable gas or vapour and welding cutting torches shall in the case of vessel undergoing construction, be brought to the topmost completed deck, or in the case of a vessel undergoing repair to a weather-deck, or in either case to some other place of safety which is adequately ventilated to prevent any dangerous concentration of gas or fumes

Provided that were owing to the nature of the work it is impracticable to comply with the foregoing requirements of this sub-rule, the pipes or noses shall be disconnected from cylinders, generators or gas mains as the case may be.

(d) When cylinders or acetylene generating plant have been taken below deck as permitted by sub-clause (b) of sub-rule (36) such cylinders or acetylene generating plant shall be brought to a weather deck, or, in the case of vessel undergoing construction to the topmost completed deck.

40. Naked light and hot work on oil-carrying vessels..-

(a) Subject to the provisions of sub-clause (b) of this rule and to the provisions of sub-rule (48) and without prejudice to the provisions of Rules 46 and 47, no naked light, fire or lamp (other than a safety lamp of a type approved for the purpose of this sub-rule-

(vii) shall be permitted to be applied to or to be in or any hot work permitted to be carried out in any part of the tanker, unless, since oil was last carried in that tanker, a naked light certificate, has been obtained and is in force in respect of those part of the tanker for which in the opinion of a competent analyst, a naked light certificate is necessary

Provided that a naked light, fire or lamp of a kind specified, in writing by a competent analyst may be applied to, or be in,. or any hot work of a type specified by him carried on any part of the tanker so specified

(viii) shall be permitted-

(a) to be in any oil-tank on board or in a vessel in which oil tank the oil last carried was oil having a flash point of less than 23degC (73 deg F). or was liquid methane, liquid propane or liquid butane, or any hot work permitted to be carried out in a such oil-tank or vessel unless a naked light certificate has previously been obtained on the same day and is in force in respect of that oil tank and of any oil-tank, compartment or space adjacent thereto ;

(b) to be applied to the outer surface of any oil-tanker in board or in a vessel in which oil-tank the oil last carried was such oil as aforesaid or any work of such a nature which is likely to produce sufficient heat capable of igniting inflammable gas or vapours permitted to be carried out on the outer surface of such oil-tank or vessel, unless a naked light certificate has previously been obtained on the same day and is in force in respect of that oil-tank ;

(c) to be applied to the outer surface of, or to be in any compartment or space adjacent an oil-tank on board or in a vessel in which oil-tank the oil last carried was such oil as aforesaid, or any hot work permitted to be carried out in such compartment or space as aforesaid or any work of such nature which is likely to produce sufficient heat capable of igniting inflammable gases or vapours, permitted to be carried out on the outer surface of such compartment or space, unless a naked light certificate has previously been obtained on the same day and is in force in respect of that compartment or space ;

Provided that where in any such case referred to in sub-clause (i), (ii) or (iii) of this sub-rule a competent analyst has certified that daily naked light certificates are necessary or are necessary only to specified extent, such a daily certificate need not be obtained or, as the case may be, need only be obtained to the specified extent;

(ix) shall be permitted to be applied to the outer surface, of, or to be in, any oil-tank on board or in a vessel or any hot work permitted to be carried out in any such oil-tank or vessel or any work of such nature which is likely to produce sufficient heat capable of igniting inflammable gases or vapours permitted to be carried out on the outer surface of the oil-tank or vessel, unless since oil was last carried in that oil-tank, a naked light certificate has been obtained and is in force in respect of that oil tank

(x) shall be permitted to be applied to the outer surface of, or to be in, any compartment or space adjacent to an oil-tank on board or in a vessel or any hot work permitted to be carried out in any such compartment or space, or any work of such nature which is likely to produce sufficient heat capable of igniting inflammable gases or vapours, permitted to be carried out on the outer surface of any such compartment or space, unless since oil was last carried as car o in that oil-tank, a naked light certificate has been obtained and is in force in respect of that compartment or space.

(b) Notwithstanding anything in clause (a) of this sub-rule, heated rivets may be permitted in any place without naked light certificate being in force in respect of that place if expressly so authorised by competent analyst who certified that after adequate and suitable testing, he is satisfied having regard to all the circumstances of the atmosphere becoming ease, including the likelihood or otherwise of the atmosphere becoming flammable, that the place is sufficiently free from flammable vapour, but such heated rivets shall, where practicable, be passed through tubes.

(c) No person shall introduce, have or apply naked light, fire or lamp (other than safety lamp of a type approved for the purpose of this sub-rule) into, in or to any place where they are prohibited by this sub-rule.

(d) No person shall carry out hot work or any work of such nature which is likely to produce sufficient heat capable of igniting inflammable gases or vapours, in any place or any surface where they are prohibited by this sub-rule.

(e) In this sub-rule the, expression 'competent analyst' means an analyst who is competent to give a naked light certificate.

41. Entering oil-tanks:-

(a) No person (other than an analyst entering with a view to issuing a certificate of entry) shall, unless he is wearing a breathing apparatus of a type approved for the purpose of this sub-rule, enter or remain in an oil-tank on in a vessel unless since the oil-tank last contained oil, a certificate of entry has been obtained and is in force in respect of the tank.

(b) Without prejudice to Clause (a) of this sub-rule, no person (other than an analyst entering as aforesaid) shall be allowed or required to enter or remain in an oil-tank on board or in a vessel in which oil tank, the oil last carried was oil having a flash point of less than 230deg C (73deg F) unless since the oil-tank last contained oil, an analyst has certified that the atmosphere is sufficiently free from inflammable mixture.

(c) The provisions of this sub-rule are without prejudice to the requirements of sub-rule (34).

42. Duration of certificates:- Any naked light certificates or certificates of entry may be issued subject to a condition, that it shall not remain in force after a time specified in the certificate.

43. Posting of certificates:- Every occupier for whom a naked light certificate or certificate of entry is obtained shall ensure that the certificate or a duplicate thereof is posted, as soon as may be, and remains posted in a position where it may be conveniently read by all persons, concerned.

44. Maintaining safe atmosphere..-

(a) When conditions in an oil-tank are such in respect of which a naked light certificate has been issued that there is possibility of oil vapour being released from residues or other sources, test shall be carried out by a competent analyst at such intervals, as may be required so as to ensure that the condition in the tank are maintained safe.

(b) Whenever hot work carried on or a naked light, fire or lamp is allowed to be, on the whether deck over spaces, in respect of which a naked light certificate has not been issued all covers of man holes or openings on deck and all valves (except those which are connected to high vent pipes) connecting the weather deck with the said spaces, shall be closed.

(c) A record of all the tests carried out for the purpose of sub-rules(34),(40) and (4 1) shall be maintained in a register which should furnish the date, time location and results of the tests.

45. Cleaning of oil-tanks:-

(a) Subject to the provisions of sub-rule (4), before a test f6r flammable vapour is carried out with a view to the issue of a naked light certificate for the purposes of sub-rule (40) in respect of an oil-tank on board or in a vessel, that oil-tank shall, since oil was last introduced into the tank, be cleaned and ventilated in accordance with clause (b) of this sub-rule.

(b) The said cleaning and ventilation shall be carried out by the following methods, namely-

(i) the oil-tank shall be treated in such a manner and for such period as will ensure the vaporisation of all volatile oil;

(ii) all residual oil on any sludge or other deposition in the oil tank shall be removed therefrom;

(c) After the oil tank has been so cleaned

(i) All covers of man-holes and other openings therein shall be removed and it shall be thoroughly ventilated by mechanical or other efficiency means with a view to the removal of all oil vapour; and

(ii) The interior surfaces, if any deposit remains thereon, shall be washed or scrapped down.

46. Invalidation of certificates..-

(a) If during the course of work in, or to the surface or, any part of tanker or aircraft carrier, any pipe or tank joint is opened or broken on any other event occurs so that there is a risk of oil vapour entering or arising in that part of the tanker or aircraft carrier, that work shall be suspended thereafter any certificates of entry previously issued in respect of any oil-tank, oil-tank in that part and any naked light certificate previously issued in respect of that part shall be no longer in force.

(b) If (in the case of vessel other than a tanker or a aircraft carrier) during the course of work in any oil-tank or any compartment or space adjacent thereto, any pipe or tank joint is opened or broken
or any other event occurs so that, there is a risk of oil vapour entering or arising in the oil tank, or in any compartment or space adjacent thereto shall be suspended and thereafter any certificate of entry previously issued in respect of oil tank and any naked light certificate previously issued in respect of oil-tank or any compartment or space adjacent thereto shall be no longer in force.

47. Provisions as to work in other compartment or spaces:-

(a) Without prejudice to the other provisions of these rules, if the presence of oil in such quantity and in such position as to be likely to give rise to fire or explosion is detected in any part of a vessel, being a part to which this sub-rule applies and in which repairs of the following, kind are to be or are being undertaken, that is to say repairs involving the use of a naked light, fire or lamp (other than a safety lamp of a type approved for the purpose of sub-rule (40), or involving hot work, such repairs shall not be started or continued until a naked light certificate has been issued or, as the case may be, reissued in respect of that part of the vessel).

(b) This sub-rule shall apply to beiges, shaft tunnels, pump rooms, lamp rooms, and to compartments and spaces other than those to which clause (a) (iv) of sub-rule (40) applies.

48. Exemptions..- If the Chief Inspector is satisfied, by reason of the nature of the work and the circumstances in which it is carried out, that any provisions of sub-rules (33) and (45) or part thereof can be suspended or relaxed without danger to the health or safety of any person, he may grant suspension or relaxation in writing specifying such conditions as he may consider fit. Any such suspension or relaxation may be revoked at any time.

PRECAUTIONS IN USE OF ELECTRICAL ENERGY

49. Earthing:- Electric energy other than that generated by an independent generating unit on board shall not be taken for use, or used in, or in connection with any of the operations unless the body of the ship is securely earthed in such a manner as to ensure an immediate and safety discharge of energy to the earth. A ship or vessel shall not be considered as securely earthed for the purpose of this rule, only on account of its being partly submerged in water.

50. Arc welding:-

(a) Electric arc welding shall not be carded on in connection with any of the operations unless separate and fully insulated welding return conductor or conductors, as the case may be, of adequate electrical capacity are provided for return of the current to the transformer or generator of the welding set.

(b) The return end of source of the welding current shall not be earthed.

(c) All work on which welding is carried on shall be securely earthed independently to an earth electrode by means of conductor or conductors, as the case may be, of adequate capacity, unless

all such works are connected to any structure of the ship or vessel in such manner as to ensure adequate connection to earth as aforesaid.

51. Cutting of energy in certain cases:- Electrical energy shall be cut off from all portable electric tools and manual electrode holders within any tank compartment or space referred to in sub-rules (34) and (40) or in any other confined space during all times when such tools or holders are not in operation:

Provided that for determining whether any such portable electric tool or electrode holder is not in operation no account shall be taken of brief interruptions of work occurring during normal working.

Provided further that energy may not be cut off from any such equipment if a responsible person is left in charge of it in such tank, compartment or space concerned;

Provided further that cutting of all electrical energy by operation of any switch or control provided on the portable tool or electrodes holder itself should not be taken as fulfilling the requirements of this sub-rule.

MISCELLANEOUS SAFETY PROVISIONS

52. Lighting:- All parts of a vessel and all other places where the operations are being carried on, and all approaches to such parts and to places to which a worker may be required to proceed in the course of his employment shall be sufficiently and suitably lighted in providing such lighting, due regard shall be given to avoidance of glare and formation of shadows, to the safety of the vessel and cargo, of the navigation of other vessels, and to any local statutory requirements as to the lighting of the harbour or dock.

53. Work in boilers etc.:-

(a) No work shall be permitted in any boiler, furnace or boiler flue until it has been sufficiently cooled to make work safe for the workers.

(b) Before any worker enters any steam boiler which is one of a range of two or more steam boilers,

(i) all inlets through which steam or hot water might otherwise enter the boiler from any other part of the range shall be disconnected from that part, or

(ii) all valves or taps controlling such entry shall be closed and securely locked.

(c) While workers remain in any steam boiler to which clause (b) of this sub-rule applies all such inlets as are referred to in that clause in shall remain disconnected or all such valves or taps as are there referred to shall remain closed and securely locked.

(d) No worker shall be allowed or required to enter or remain in, and no person shall enter or remain, in any steam boiler to which clause, (b) of this sub-rule applies unless the provisions of that clause are being complied with.

54. Hatch beams:- The hatch beams of any hatch in use for the options shall, if not removed be adequately secured to prevent their displacement.

55. Jumped-up bolts:- Bolts which have been jumped-up and rescrewed shall not be used for securing plates on the sides of vessels, and no worker shall use such bolts for this purpose.

56. Work in or on life boats..-

(a) Before workers are permitted to work in or on any life boat, either stowed or in suspended positions, precautions shall be taken to prevent the boat from falling due to accidental tripping of the releasing gear or movement of the davits and capsizing of the boat if in chocks.

(b) Workers shall not be permitted to remain in fire boats while the life boats are being hoisted into final stowed position.

PROTECTIVE WEAR

57. Hand protection:- Adequate protection for the hands shall be available for all workers when using cutting or welding apparatus to which oxygen or any flammable gas vapour is supplied a pressure greater than atmospheric pressure or when engaged in machine caulking or machine riveting or on transporting or stacking plate or in handling plates at machines.

58. Protection in connection with cutting or welding..

(a) Suitable goggles fitted with tinted eye-pieces shall be provided and maintained for all persons employed when using cutting or welding apparatus to which oxygen or any flammable gas or vapour is supplied at a pressure above atmospheric pressure

(b) There shall be provided and maintained for the use of all persons employed when engaged in the process of electric welding-

(i) suitable helmets or suitable head shields or suitable hand shields to protect the eyes and face from hot metal and from rays likely to be injurious; and

(ii) suitable gauntlets to protect the hands forearms from hot metal and from rays likely to be injurious.

(c) When electric welding is in progress at any place and persons other than those engaged in that process are employed in a position where the rays are likely to be injurious to their eyes, screens shall, whenever practicable, be provided at that place for the protection of those persons. Where it is not practicable to provide effective protection of these persons by screening, suitable goggles shall be provided for their use.

59. Eye protection for other processes:- Suitable goggles of effective screens shall be provided to protect the eyes of all workers in any of the following processes :

(a) the cutting out or cutting off of cold rivets bolts from boilers or other plant or form ships ;

(b) the chipping, scaling or scurfing or boiler or ship's plates

(c) drilling by means of portable machine tools

(d) dry grinding of metals.

60. Head Protection:- When workers are employed in areas where there is danger of falling objects they shall be provided with suitable safety helmets.

61. Safety belts and life lines..-

(a) Whenever any worker is engaged on work at place from which he is liable to fall more than 2 m. he shall be provided with safety belts equipped with life lines which are secured with a minimum of slack, to a fixed structure unless any other effective means such as provision of guard rails or ropes are taken to prevent his falling.

(b) All safety belts and life lines shall be examined at frequent intervals by a competent person to ensure that no belt or life line which is not in good condition is used.

HEALTH AND WELFARE

62. Prohibition of employment of young persons in certain processes:- Employment of young persons are prohibited in the following processes namely-

(a) the application of asbestos by means of a spray; or

(b) the breaking down for removal of asbestos lagging; or

(c) the cleaning of socks or other container which have contained asbestos; or

(d) the cutting of material containing asbestos by means of portable power driven saws; or

(e) the scaling, surfing or cleaning of boilers, combustion chambers or smoke boxes where his work exposes him to dust of such a character and to such an extent as to be likely to be injurious or offensive to persons employed in such work.

63. Lead Processes:-

(a) Lead paint shall not be applied in the form of a spray, in the interior painting of any part of a ship or vessel.

(b) Wherever lead sheathing work is carried on for making cold storage chambers in the ships, efficient exhaust draughts with portable extractors should be provided to remove the lead fumes from the confined spaces.

64. Stretchers ambulances and ambulances rooms etc.:-

(a) In every shipyard there shall be provided and kept readily available-

(i) a sufficient number of suitably constructed sling stretchers or other similar appliances for raising injured persons;

(ii) a sufficient number of carrying or wheel stretchers; and

(iii) a sufficient supply of suitable reviving apparatus and oxygen, and the stretchers and appliances and apparatus so provided shall be properly maintained.

(b) In every shipyard there shall always be readily available during working hours responsible person or responsible persons whose duty it is to summon an ambulance or other means of transport if needed in cases of accident or illness. Legible copies of a notice indicating that person or, as the case may be, those persons shall be affixed in prominent positions in every shipyard.

(c) In every shipyard other than a dry dock available for hire-

(i) in which the number of persons employed normally exceeds five hundred ; or

(ii) in which the number of persons employed normally exceeds one hundred and which is more than ten miles from a hospital; there shall be provided and maintained in good order and in clean condition a properly constructed ambulance room containing at least the equipment prescribed by the rules framed under Section 45 of the Act. The room shall be used only for the purpose of treatment and rest and shall be in the charge of a suitably qualified person who shall always be readily available during working hours, and record shall be kept of all cases of accident or sickness treated at the room.

65. Young persons:-

(a) No young person shall, until he was employed in a shipyard or shipyards for at least six months be employed in connection with the operations in a shipyard on a stage from which, or in any part of a ship where he is liable to fall a distance of more than 2 m. or into water in which there is a risk of drowning.

(b) Any young person under the age of sixteen shall, when employed in the operations in shipyard, be placed under the charge of an experienced workman.

66. Safety supervision:- In the case of every shipyard other than a dry dock available for hire being a shipyard where the number of workers regularly or from time to time, exceeds five- hundred, a person experienced in the work of such yards shall be appointed and employed exclusively to

exercise general supervision of the observance of these sub-rules and to promote the safe conduct of the work generally.

61 -H.

The occupier of a factory employing 100 or more workers shall plant and maintain trees within the precinct of the factory. The number, type and lay-out of trees should be approved by the District Forest Officer concerned or any qualified horticulturist.

61-1. Reaction Vessels and Kettles

(1) This rule applies to reaction vessels and kettles, hereinafter referred to as reaction vessels, which normally work at a pressure not above the atmospheric pressure but in which there is likelihood of pressure being created above the atmospheric pressure either due to reaction getting out of control or due to any other circumstances.

(2) In the event of the vessel being heated by electrical means, suitable thermostatic control devices shall he provided to prevent the temperature exceeding the safety limit.

(3) Where steam is used for heating purposes in a reaction vessel, it shall pass through a suitable pressure reducing valve or any other suitable automatic device to prevent escape of excessive steam into the vessel so that the maximum permissible pressure of steam only is allowed into the supply line itself

(4) Suitable safety valve or rupture disc of adequate size and capacity shall be provided to effectively prevent the pressure being built up in the reaction vessel beyond the safety limit. Effective arrangements shall be made to ensure that the released gases, fumes, vapours, liquids or dust, as the case may be, are lead away and disposed of through suitable pipes without causing any hazard. Where flammable gases or vapours are likely to be vented out as discharge from the vessel, it shall be provided with a flame arrestor.

(5) Every reaction vessel shall be provided with a pressure gauge having the appropriated range.

(6) In addition to the devices as mentioned in the foregoing provisions there shall also be provided means or devices for automatically stopping the feed into the vessel as soon as process conditions excessively deviate from the normal limits and which deviation can be considered to be dangerous.

(7) Where necessary, an effective system for cooling, flooding or blanketing shall be provided, for the purpose of controlling the reaction and process conditions within the safe limits of temperature and pressure.

(8) An automatic auditory and visual warning device, shall also be provided for clear warning whenever process conditions exceed the normal limits. This device, wherever possible, shall be integrated with automatic process correction systems.

(9) A notice pointing out the possible circumstances and conditions under which pressures above atmospheric pressure may be built up in the reaction vessel, the dangers involved and the precautions to be taken by the operators shall be displayed clearly at a conspicuous place near the vessel which always shall be in a visible conditions

61-J. Examination of eye sight of certain workers

(1) No person shall be employed to operate a crane, locomotive or work-lift truck, or to give signals to a crane or locomotive operator unless his eye sight and colour vision have been examined and declared fit by a qualified ophthalmologist to work whether with or without the use of corrective glasses.

(2) The eye sight and colour vision of the person employed as referred to in clause (i) shall be examined at least once in every period of 12 months up to the age of 45 years and once in every 6 months beyond that age.

(3) Any fee payable for an examination of a person under this sub-rule shall be paid by the occupier shall not be recoverable from that person.

(4) The record of examination or re-examination carded out as required under sub-rule(l) shall be maintained in Form No.8 C.

FORM NO. 8-C

[Prescribed under sub-rule (4) of Rule 61-J]
Record of Eye Examination

Serial Number	Department / work	Name of worker	Sex	Age on last birthday	Occupation	Examination of eye sight		Signature of Ophthalmologist	Remarks
					Nature Date of employment	Date	Result		

RULE PRESCRIBED UNDER SECTION 41 AND 112

61-K. Railways in factories

(1) This rule shall apply to railways in the precincts of a factory which are not subject to Indian Railways Act 1890.

(2) Gateways:- A gateway through which a railway track passes shall not be used for the general passage of workers into or out of a factory.

(3) Barriers and Turn gates:-

(a) Where buildings or walls contain doors or gates which open to a railway tract, a barrier about 1 metre high shall be fixed parallel to and about 60 cm. away from the building or wall outside the opening and extending several feet beyond it at other end, so that any person passing out may become aware of an approaching train when his pace is checked at the baffler.

If the traffic on the nearest track is all in one direction, the barrier shall be in the form of an " L" with end of the short leg abutting on to the wall and the other end opening towards the approaching train ;

(b) If the distance between wall and track cannot be made to accommodate such a barrier, the barrier of a turngate shall be placed at the inside of the opening ; and

(c) Where a footway passes close to a building or other obstructions as it approaches a railway track, a barrier or a turngate shall be fixed in such a manner that a person approaching the track is compelled to move away from the building or obstruction and thus obtain timely sight of an approaching locomotive or wagon.

(4) Crowds:-

(a) Worker's pay-windows, first-aid stations and other points where a crowd may collect shall not be placed near a railway track ; and

(b) At any time of the day when workers are starting or ending work all railway traffic shall cease for not less than five minutes.

(5) Locomotive:-

(a) No locomotive shall be used in shunting operations unless it is in good working order;

(b) Every locomotive and tender shall be provided with efficient breaks, all of which shall be maintained in good working order. Brake shoes shall be examined at suitably fixed intervals and those that are worn out replaced at once

(c) Water-gauge glasses or every locomotive whatever its boiler pressure, shall be protected with substantial glass or metal screens

(d) Suitable steps and hand-holds shall be provided at the corners of the locomotive for the use of shunters

(e) Every locomotive crane shall be provided with lifting and jacking pads at the four corners of the locomotive for assisting in re-railing operations ; and

(f) It shall be clearly indicated on every locomotive crane in English and in language understood by the majority of the workers in the factory, for what weight of load and at what reading the crane safety.

(6) Wagons:-

(a) Every wagon (and passenger coach, if any) shall be provided either with self-acting brakes capable of being applied continuously or with efficient hand brakes which shall be maintained in good working order. The hand brakes shall be capable of being applied by co-person on the ground and fitted with a device for retaining them in the applied position ;

(b) No wagon shall be kept standing within three metres of any authorised crossing ; and

(c) No wagon shall be removed with the help of crow bars or pinch bars.

(7) Riding on locomotive, wagon or other rolling stock:- No person shall be permitted to be upon (whether inside or outside) any locomotive wagon or after rolling stock except where secure foot-hold and handhold are provided.

(8) Attention to brakes and doors:-

(a) No locomotive, wagon or other rolling stock shall be kept standing unless its brakes are firmly applied and, where it is on a gradient, without sufficient number of properly constructed scotches placed firmly in position; and

(b) No train shall be set in motion until the shunting jamadar has satisfied himself that all wagon doors are securely fastened.

(9) Projecting loads and cranes:-

(a) If the load on a wagon projects beyond its length, a guard or dummy-truck shall be used beneath the projection ;

(b) No loco-crane shall travel without lead unless the jib is completely lowered and positioned in line with the track and

(c) when it is necessary for a loco-crane to travel with a load, the jib shall not be swung until the loco-crane has come to rest.

(10) Loose shunting:- Loose-shunting shall be permitted only when it cannot be avoided. It shall never be performed on a wagon not accompanied by a man capable of applying and pinning down the brakes. A wagon not provided with brakes in good working order and capable of being easily pinned down shall not be loose-shunted unless attached to it at least another wagon with such brakes. Loose-shunting shall not be performed with, or against a wagon containing passengers, live-stock or explosives.

(11) Fly-shunting..- Fly-shunting shall not be permitted on any factory railway.

(12) The shunting Jamadar..-

(a) Every locomotive or wagon in motion in a factory shall be kept under the control of a well trained jamadar ; and

(b) Before authorising a locomotive or wagon to be moved, the shunting jamadar shall satisfy himself that no person is under or in between or in front of the locomotive or wagon.

(13) Hand Signals:- The hand signals used by the shunting jamadar in day and night shall be those prescribed by the shunting rules of railways, working under the Indian Railway Act 1890 (IX of 1890).

(14) Night work and fog:-

(a) In factories, where persons work at night, no movement of locomotive, wagon or other rolling stock otherwise than by hand shall be permitted between sunset and sunrise unless the tracks and their vicinity are lighted on a scale of not less than 10 lux as measured at the horizontal plane at the ground level ; and

(b) In no circumstances any locomotive or train shall be moved between sunset and sunrise or at any time when there is fog, unless it carries a white head light and a red rear light.

(15) Speed control:-

(a) A locomotive or train shall not be permitted to move at a speed greater than seven kilometers per hour ; and

(b) A train, locomotive, wagon or other rolling stock shall not be moved by mechanical or electrical power unless it is preceded at a distance of not less than 10 metres during the whole of its journey by shunting jamadar. He shall be provided with a signalling flags or lamp and whistle necessary for calling the attention of the driver.

(16) Tracks:-

(a) The distance (i) between tracks and (ii) between tracks and buildings, blind walls or other structures and (iii) tracks and materials deposited on the ground shall be respectively not less than-

(aa) from centre to centre of parallel tracks, the overall width of the widest wagon of that gauge plus twice the width of the door of such a wagon when opened directly outward plus 1 metre ;

(bb) from a building or structure other than a loading platform to the centre of the nearest track, half the overall width of the widest wagon of that gauge, plus the width of its door when opened outward, plus 1.5 metres ; and

(cc) from material stacked or deposited alongside the track, on the ground or on a loading platform, to the centre of the nearest track, half the, overall width of the widest wagon of that gauge, plus half the width of its door when opened directly outward, plus 1 metre.

(b) Sleepers of a track shall be in level with of the ground and at all crossings of the track with a road or walkway, the surface of the road or walkway shall be in level with the top of the rails ;

(c) All track ends shall be equipped with buffer stops of adequate strength ;

(d) Barriers of substantial construction shall be securely and permanently fixed across any doorway or gateway in a building or in a wall which conceals an approaching trade from view, between the building and the track as prescribed in clause (a) of sub-rule (3).

(e) Where track are carded on a gantry or other elevation, a safe footway or footways with hand rails and toe-boards shall be provided at all positions where persons work or pass on foot, and where there is an opening in the stage of an elevated track for the dropping of materials to a lower level, the position shall be adequately fenced or the opening itself provided with a grill through which a person cannot fall

(f) All point levers shall have their movements parallel, to, not across, the direction of the track ;

(g) All loading platforms which are more than 60 cms above the level of the ground on which the track is laid and more than 15 metres in length, shall be provided with stops at intervals not greater than 15 metres apart from to enable the platform to be easily mounted from the track

(h) Turn tables on plant railways shall be provided with locking devices which will prevent the tables from turning while locomotives or wagon are being run on or off the tables ; and

(i) workers shall be prohibited from passing under, between or above railway wagons.

(17) Crossings:-

(a) At all crossings of a track with a road or walk way, danger or crossing signs and wherever reasonably practicable, blinking lights or alarm lights shall be provided, at all important crossings, gates or barriers manned by watchman shall be provided. Swinging gate and barriers shall be secured against inadvertent opening or closing.

61.L. Quality of personal protective equipment

All personal protective equipment provided to workers as required under any of the provisions of the Act or the Rule shall have certification of B.1. S. or any other national standard of Advanced countries in case B.1.S. has not standard.]

61-M. Thermic Fluid heaters

(1) All heaters shall be on such construction that coils are removable for periodic cleaning, visual inspection and hydraulic test.

(2) Suitable arrangement shall be made for cooling furnace effectively in case of failure.

(3) Before restarting the furnace, it shall be effectively purged.

(4) Velocity of flow of thermic fluid shall not be allowed to fall below the minimum recommended by the manufacturers while the heater is in operation.

(5) The thermic fluid shall be circulated in a closed circuit formation with an expansion cum deaerator tank. This tank shall be located outside the shed where the heater is installed.

(6) Every heater shall be provided with a photo-resister actuated audio-visual alarm indicate flame failure and automatic burner cut off.

(7) The stack temperature motor-cum-controller with audio visual alarm shall be provided so as to warn the operator in case the outlet temperature exceeds the specified min.

(8) Where inspection doors are provided on the furnace they shall be interlocked with the burner itself so that they cannot be opened until burner is shut off and furnace is cooled sufficient.

(9) All heaters shall also be provided with the following safety devices:-

(i) level control in the expansion tank

(ii) temperature control of thermic fluid

(iii) differential pressure switch on the out let line of the heater tubes and

(iv) temperature control device for the fuel oil supply the burner.

(10) All devices mentioned in paragraph 9 shall have interlocking arrangement with burner so that in case of any predetermined limits being crossed the supply of fuel and air to burner shall automatically be cut-off.

(11) All safety interlocks when operated shall be indicated on the control panel of the heater by a suitable audio-visual alarm.

(12) Every heater unit shall be provided as a standard necessary an arrangement for sniffing with low pressure steam or nitrogen for putting out the fire.

(13) Electric panel for the heater shall be located near the heater but not so close as to be exposed to spilling or leaking oil.

(14) The heater shall be located in a place partitioned off with fire proof material from other manufacturing activities.

(15) Explosion vent shall be so installed that release takes place at safe location.

(16) The heater coil shall be subjected to pressure test by competent person once at least in every 12 months. This test pressure shall not be less than twice the operating pressure.

(17) If repairs are carded out to the coil, it shall be tested before taking it into use.

(18) The thermic fluid shall confirm to the specifications prescribed by the manufacturers and shall be tested by competent person for suitability at least once in every three months period. Such test shall include test for acidity, suspended matter, ash contents, viscosity and flash point.

(19) Cleaning of internal surface of the heater or soot and check up of refractory surface on the inside shall be carried out every month or as often as required depending upon working conditions. The coils shall be removed and surface of the coils cleaned thoroughly once at least in a period of six months. The nozzles of filters and pumps shall be cleaned once a week during the period of use.

(20) A separate register containing the following information shall be maintained:

(i) Weekly checks carried out confirming the effectiveness of the interlock

(ii) Weekly checks confirming that all accessories are in goof state of repairs ; and

(iii) information regarding fuel oil temperature, pressure thermic fluid inlet/outlet pressure and temperature fuel gas temperature recorded at hourly interval.

(21) The heater when in operation shall always be kept in charge of a trained operator.

61-N. Protective equipment

The inspector may having regard to the nature of the hazards involved in work and process being carried out, order the Occupier or the Manager in writing to supply to the workers exposed to particular hazard any personal protective equipment as may be found necessary.

61-0. Oven and Driers

(1) Application:- This rule shall apply to ovens and driers, except those used in laboratories or kitchens of any establishment and those which has a capacity below 325 litres.

(2) Definitions:- For the purpose of this rule, "oven or drier" means any enclosed structure, receptacle, compartment or box which is used for baking, drying or otherwise processing of any article or substance at a temperature higher than the ambient temperature of the air in the room or space in which a flammable or explosive mixture of air and a flammable substance, is likely to be evolved within

the enclosed structure receptacle, compartment or box or part thereof on account of the article or substance which is baked, dried or otherwise processed within it:

(3) Separate electrical connection:- Electrical power supplied to every oven or drier shall be by means of a separate circuit provided with an isolation switch.

(4) Design, construction, examination and testing:-

(a) Every oven or drier shall be properly designed on sound engineering practice and be of good construction, sound materials and adequate strength, from any patent defects and safe if properly used.

(b) No oven or drier shall be taken into use in factory for the first time unless a competent person has thoroughly examined all its parts and carried out the tests as are required to establish that the necessary safe systems and controls provided for safety in operation for the processes for which it is to be used and a certificate of such examination and tests signed by that competent person has been obtained and is kept available for inspection.

(c) All parts of an oven or drier which has undergone any alteration or repair which has to effect of modifying any of the design characteristics, shall not be used unless a thorough examination and tests as have been mentioned in clause (1) has been carried out by a competent person and a certificate of such examination and tests signed by that competent person has been obtained and is kept available for inspection.

(5) Safety Ventilation..

(a) Every oven or drier shall be provided with a positive and effective safety ventilation system using one or more motor-driven centrifugal fans so as to dilute any mixture of air and any flammable substance that may be formed within the oven or drier and maintain the concentration of the flammable substance in the air at a safe level of dilute.

(b) The safe level of dilution referred to in clause (a) shall be so as to achieve a concentration of the concerned flammable substance in air of not more than 25 per cent of its lower explosive limit:

Provided that a level of concentration in air upto 50 per cent of the lower explosive limit of the concerned flammable substance may be permitted to exist subject to installation and maintenance of an automatic device which-

(i) Shows continuously the concentration of the flammable substance in air present in the oven or drier at any instant

(ii) Sounds an alarm when the concentration of the flammable substance in air in any part of the oven or drier reaches a level of 50 per cent of its lower explosive limit; and

(iii) Shuts down the heating system of the oven or drier automatically when the concentration in air of the flammable substance in any part of the oven or drier reaches a level of 60 per cent of its

lower explosive limit, is provided to the oven or drier and maintained in efficient working condition.

(c) No oven or drier shall be operated without its safety ventilation system working in an efficient manner.

(d) No oven or drier shall be operated with a level of dilution less than what is referred to in clause (b).

(e) Exhaust ducts of safety ventilation systems should be so designed and placed that their ducts discharge the mixture of air and flammable substance away from the workrooms and not near windows or doors or other openings from where the mixture could re-enter the workrooms.

(f) The fresh air admitted into the oven or drier by means of the safety ventilation system shall be circulated adequately by means of circulating fan or fans through all parts of the oven or drier so as to ensure that there are no locations where the flammable substance can accumulate in the air or become pocketed to any dangerous degree.

(g) Throttling dampers in any safety ventilation system should be so designed by cutting away a portion of the damper or otherwise, that the system will handle at least the minimum ventilation rate required for safety when they are set in their maximum throttling position.

(6) Explosion panels..-

(a) Every oven or drier having an internal total space of not less than half cubic meter shall be provided with suitably designed explosion panels so as to allow release of the pressure of any possible explosion within the oven or drier through explosion vents. The area of openings to be provided by means of such vents together with area of openings of any access doors which are provided with suitable arrangements for their release in case of an explosion shall be not less than 2200 square centimetre for every one cubic meter of volume of the oven or drier. The design of the explosion panels and doors as above said shall be much as to secure the complete release under the internal pressure of 0.25 Kg. per square centimeter.

(b) The explosion releasing panels, shall as far as practicable, be situated at the roof of the oven or drier or at those portion of the walls where persons not remain in connection with operation of the oven or drier.

(7) Interlocking arrangements: -

(a) In each oven or drier efficient inter-locking arrangements shall be provided and maintained to ensure that-

(i) all ventilating fans and circulating fans whose failure would adversely effect the ventilation rate or flow pattern are in operations before any mechanical conveyor that may be provided for fee~ the articles to be processed in the oven or drier is put into operation.

(ii) failure of any of the ventilating or circulating fans will automatically stop any conveyor as referred to in clause (i) as may be provided, as well as stop the fuel supply by closing the shut off valve and shut off the ignition in the case of gas or oil fired oven and in the case of electrically heated ovens switch off the electrical supply to the heaters.

(iii) the above said mechanical conveyor is set in operation before the above said, shut off valve can be energized; and

(iv) the failure of the above said conveyor will automatically close and above said shut off value in the case of ovens and driers heated by gas, oil or steam and reactivate the ignition system, or cut off the electrical heaters in the case of electrically heated ovens or furnaces.

(8) Automatic pre-ventilation..- Every oven or drier heated by oil, steam, gas or electricity shall be provided with an efficient arrangement for automatic pre-ventilation consisting of at least 3 volume changes with fresh air by operation of the safety ventilation fans and the circulating fans (if used) so as to effect purging of the oven or drier of any mixture of air and a flammable substance before the heating system can be activated and before the conveyor can be placed in position.

(9) Temperature Control:- Every oven or drier shall be provided with an automatic arrangement to ensure that the temperature within does not exceed a safe upper present limit to be decided in respect of the particular processing being carried on.

(10) Multistage processes:- Wherever materials are to be processed 'in ovens or driers in successive operations, suitable arrangements should be provided to ensure that the operating temperatures necessary for safe operation at each stage are maintained within the design limits.

(11) Combustible substances not to drip on electrical heaters or burners flame:- Effective arrangements shall be provided in every oven or drier to prevent dripping of combustible substances on electric heaters or burner flame used for heating.

(12) Periodical examination testing and maintenance:-

(a) All parts of every oven and drier shall be properly maintained and thoroughly examined and the various control as mentioned in this rule and the working of the oven or drier tested at frequent intervals to ensure its safe operation by a responsible person designated by the occupier or manager, who by his experience and knowledge of necessary precautions against risks of explosion is fit to undertake such work.

(b) A register shall be maintained in which the details of the various tests carried out from time to time under clause (a) shall be entered and every entry made shall be signed by the person making the tests.

(13) Training of operators: No person shall be assigned any task connected with operation of any oven or drier unless he has completed 18 years of age and he is properly trained.

(14) Polymerising machines..-

(a) Printed fabric shall be thoroughly dried by passing them over drying cans or through hot flue or other equally effective means, before the same is allowed to pass through polymerising machines.

(b) Infrared ray heaters of polymerising machines shall be cut off while running the prints.

CHAPTER IV (A)

61 (SG) A. Safety Committee

(1) In every factory-

(a) Working with the aid of power, wherein 100 or more workers are ordinarily employed;

(b) Which carries on any process or operation declared to be dangerous under Section 87 of the act ; or

(c) Which carries on 'hazardous process' as defined under Section 2(cb) of the Act., there shall be a safety committee.

(2) The representatives of the management on safety committee shall include

(a) A senior official, who by his position in the organization can contribute effectively to the functioning of the committee shall be the Chairman.

(b) A safety officer and a factory Medical Officer, wherever available and the safety officer in such a case shall be the Secretary of the Committee.

(c) A representative each from the production, maintenance and purchase departments.

(3) The workers representatives on this committee shall be nominated from their worker members by the recognized or else trade union or where such Trade Union is not in existence, the representatives shall be elected by the workers directly.

(4) The tenure of the committee shall be co-terminus with the tenure of the Trade Union or two years where there is no. Trade Union.

(5) Safety Committee shall meet as often as necessary but at least once in every quarter. The minutes of the meeting shall be recorded and produced to the Inspector on demand.

(6) Safety committee shall have the right to be adequately and suitably informed of-

(a) Potential safety and health hazards to which the workers may be exposed at workplace.

(b) data on accidents as well as data resulting from surveillance of the working environment and of the health of workers exposed to hazardous substances so far as the factory is concerned,

Provided that the committee undertakes to use the data on a confidential basis and solely to provide guidance and advice on measures to improve the working environment and the health and safety of the workers.

(7) Function and duties of the Safety committee shall include-

(a) Assisting and co-operating with the management in achieving the aims and objectives outlined in the 'Health and Safety Policy' of the occupier

(b) dealing with all matters concerning health; safety and environment and to arrive at practicable solutions to problems encountered

(c) creating safety awareness amongst all workers

(d) undertaking educational, training and promotional activities;

(e) discussing reports on safety, environmental and occupational health surveys, safety audits, risk assessment, emergency and disaster management plans and implementation of the recommendations made in the reports ;

(f) carrying out health and safety surveys and identify causes of accidents ;

(g) looking into any complaint made on the likelihood of an imminent danger to the safety and health of the workers and suggest corrective measures ; and

(h) reviewing the implementation of the recommendations made by it.

(8) Where owing to the size of the factory, or any other reasons the functions referred to in sub-rule (7) cannot be effectively carried out by the Safety Committee, it may establish sub-committees as may be required to assist it.

RULES PRESCRIBED UNDER SUB-SECTION (1) OF SECTION 41 -A

61. (SA) A: Site appraisal committee

(1) Constitution:-'The following provisions shall govern the functioning of the Site appraisal committee, hereinafter, be referred to as the 'Committee' in these rules:-

(a) The State Government may constitute a site Appraisal Committee and reconstitute the Committee as and when necessary;

(b) The State Government may appoint a senior official of the factories Inspectorate, preferably with qualification in Chemical Engineering to be the Secretary of the Committee;

(c) The State Government may appoint the following as members of the Committee:

(i) a representative of the Fire Service Organisation of the State Government;

(ii) a representative of the State Department of Industries

(iii) A representative of the Director General of Factory Advice Service and Labour Institutes, Bombay.

(2) No member, unless required to do so by a Court of Law, shall disclose otherwise than in connection with the purpose of the Act, at any time any information relating to manufacturing or commercial business or any working process which may come to his knowledge during the tenure as a Member on this Committee.

(3) Applications for appraisal of sites-

(a) Application for appraisal of sites in respect of the factories covered under section 2 (cb) of the Act shall be submitted to the Chairman of the Site Appraisal Committee.

(b) The application for site appraisal along with 15 copies thereof shall be submitted in the Form annexed to this Rule. The Committee may dispense with furnishing information on any particular item in the application form if it considers the same may not be relevant to the application under consideration.

(4) Function of the Committee-

(a) The Secretary shall arrange to register the applications received for appraisal of site in a separate register and acknowledge the same within a period of 7 days.

(b) The Secretary shall fix up meeting in such a manner that all the applications received and registered and referred to the committee within a period of one month from that of their receipt.

(c) The committee may adopt a procedure for its working keeping in view of the need for expeditious disposal of application.

(d) The committee shall examine the application for appraisal of a site with reference to the prohibitions and restriction on the location of industry and the carrying on of process and operations in different areas as per the provisions of Rule 5 of the Environment (protection) Rules, 1986 framed under Environment Protection Act, 1986.

(e) The committee may call for documents, examine experts, inspect the site if necessary and take other steps for formulating its views in regard to the suitability of the site.

(f) Wherever the proposed site requires clearance by the Ministry of Industry or the Ministry of Environment and Forests, the application for site Appraisal will be considered by the Site appraisal committee only after such clearance has been received.

FORMAT OF APPLICATION TO THE SITE APPRAISAL COMMITTEE

1. Name and address of the applicant:

2. Site Ownership Data:

(1) Revenue details of site such as Survey No. Plot No. etc.

(2) Whether the site is classified as forest and if so, whether approval of the Central Govt., under section 5 of the Indian Forests Act, 1927 has been taken.

(3) Whether the proposed site attracts the provisions of section 3 (2) (v) of the E.P. Act, 1986, if so, the nature of the restrictions.

(4) Local authority under whose jurisdiction the site is located.

3. Site Plan..-

(1) Site plan with clear identification of boundaries and total area proposed to be occupied and showing the following details nearby the proposed site.

(a) Historical monuments, if any, in the vicinity.

(b) Names of neighbouring manufacturing units and human habitats, educational and training institutions, petrol installations, storages of LPG and other hazardous substances in the vicinity and their distance from the proposed unit.

(c) Water sources (rivers, streams, canals, dams, water filtration plants, etc.) in the vicinity.

(d) Nearest hospitals, fire-stations, civil defence stations and police station and their distances.

(e) High tension electrical transmission lines, pipe lines for water, oil gas or sewerage, railway lines, roads, stations: jetties and other similar installations.

(2) Details of spill conditions and depth at which hard strata obtained.

(3) Contour map of the area showing nearby hillocks and difference in levels.

(4) Plot Plan of the factory showing the entry and exit points, reads within, water drains, etc.

4. Project Report:-

(1) A summary of the salient features of the Project

(2) Status of the organisation (Govt. Semi-Govt.) Public or Private etc.)

(3) Maximum number of persons likely to be working in the factory.

(4) Maximum amount of power and water requirements and source of their supply.

(5) Block diagram of the buildings and installations, in the proposed supply.

(6) Details of housing colony, hospital, school and other infrastructural facilities proposed.

5. Organisation structure of the proposed Manufacturing Unit / Factory.-

Organisation diagrams of proposed enterprise in general
- Health, Safety and Environment protection departments and their linkage to operation and technical departments

(1) Proposed health and Safety Policy

(2) Area allocated for treatment of wastes and effluent.

(3) Percentage outlay on safety, health and environment protection measures.

6. Meteorological data relating to the site:-

(1) Average, minimum and maximum of
- Temperature
- Humidity
- Wind velocities during the previous ten years.

(2) Seasonal variations of wind direction

(3) Highest water level reached during the floods in the area recorded so far

(4) Lightening and seismic data of the area

7. Communication links..-

(1) Availability of Telephone/Telex/Wireless and other communication facilities for outside communication

(2) Internal communication facilities proposed.

8. Manufacturing Process Information..-

(1) Process flow diagram

(2) Brief write up on process and technology

(3) Critical process parameters such as pressure build-up temperature else and run-away reactions.

(4) Other external effects critical to the process having safety implications, such as ingress of moisture of water, contact with incompatible substances, sudden power failure.

(5) Highlights of the built in safety pollution control devices or measures/ incorporated in the manufacturing technology.

9. Information of Hazardous Materials:-

(1) Raw materials, intermediates, products and by-products and their quantities (Enclose Material Safety Data Sheet in respect of each hazardous substance).

(2) Main and intermediate storage proposed for raw materials/ intermediates/products/byproducts (Maximum quantities to be stored at any time).

(3) Transportation methods to be used for materials inflow and outflow, their quantities and likely routes to be followed.

(4) Safety measures proposed for:
- handling of materials
- internal and external transportation; and
- disposal (packing and forwarding of finished products)

10. Information on disposal / Disposal of wastes and Pollutants:-

(1) Major pollutants (gas, liquid, solid) their characteristics and quantities (average and at peak loads).

(2) Quality and quantity of solid wastes generated, method of their treatment and disposal.

(3) Air, Water and solid pollution problems anticipated and the proposed measures to control the same including treatment and disposal of effluents.

11. Process Hazards Information:-

(1) Enclose a copy of the report on environmental impact assessment.

(2) Enclosed a copy of the report on Risk Assessment Study.

(3) Published (open or classified) reports, if any, on accident situations/ occupational health hazards or similar plants elsewhere (within or outside the country).

12. Information of proposed safety and occupational Health Measures.-

(1) Details of fire fighting facilities and minimum quantity of Water, CO_2 and or other fire fighting measures needed to meet the emergencies.

(2) Details of in-house medical facilities proposed.

13. Information on Emergency Preparedness..-

(1) On site emergency plan.

(2) Proposed arrangements, if any, for mutual aid scheme with the group of neighbouring factories.

14. Any other relevant information..-

I certify that the information furnished above is correct to best of my knowledge and nothing of importance has been concealed while furnishing it.

Name and signature of
the Applicant

RULES MADE UNDER SECTION 7A(3), 4 1 B(2) AND 112

61 (SB) A. Health and Safety Policy

(1) Occupier of every factory, except as provided for in sub-rule (2) shall prepare a written statement of his policy in respect of health and safety of workers at work.

(2) All factories

(a) Covered under section 2 (m) (i) but employing less than 100 workers

(b) and the following categories of factories

(i) Khandasari Sugar factories

(ii) Cotton ginning and pressing factories

(iii) Tobacco redrying factories

(iv) Fruit processing units

(v) Salt factories

are exempted from requirements of sub-rule (1)

Provided that they are not covered in the First Schedule under Section 2 (cb) or carrying out processes or operations declared to be dangerous under section 87 of the Act.

(3) Notwithstanding anything contained in Sub-rule (2) the Chief Inspector may require the occupiers of any, of the factories or class description of factories to comply with the requirements of sub-rule (1) if, in his opinion, it is expedient to do so.

(4) The Health and Safety Policy should contain or deal with

(a) declared intention and commitment of the top management to health safety and environment and compliance with their relevant statutory requirements

(b) arrangements, for making the policy effective.

5. In particular, the policy should specify the following-

(a) arrangements for involving the workers ;

(b) intentions of taking into account the health and safety performance of individuals at different levels while considering their career advancement

(c) fixing the responsibility of the contractors, sub-contractors transporters and other agencies entering the premises

(d) providing a resume of health and safety performance of the factory in its Annual Report

(e) relevant techniques and methods, such as safety audits and risk assessment for periodical assessment of the status on health, safety and environment and taking all the remedial measures

(f) stating its intentions to integrate health and safety in all decisions including those dealing with purchase of plant equipment machinery and material as well as selection and placement of personnel

(g) arrangements for informing. educating and training and retraining its own employees at different levels and the public, wherever required.

6. A copy of the declared Health and Safety policy signed by the occupier shall be made available to the Inspector having jurisdiction over the Factory and to the Chief Inspector.

7. The policy shall be made widely known by-

(a) making copies available to all workers including contract workers, apprentices, transport workers, suppliers, etc.

(b) displaying copies of the policy at conspicuous places ; and

(c) any other means of communication; in a language understood by majority of workers.

8. The Occupier shall revive the safety policy as often as may be appropriate, but it shall necessarily be revised under the following circumstances:

(a) whenever any extension or modification having implications on safety and health of persons at work is made; or

(b) Whenever new substances or articles are introduced in the manufacturing process having implications on health and safety of persons exposed to such substances.

RULES MADE UNDER SECTION 41B AND SECTION 112 MATERIAL SAFETY DATA SHEET

61 (SB) B. Collection and development and dissemination of information

(1) The occupier of every factory carrying on a 'hazardous' process' shall arrange to obtain or develop information in the form of Material Safety Data Sheet (MSDS) in respect of every hazardous substance or material handled in the manufacture, transportation and storage in the factory. It shall be accessible upon request to a worker for reference:-

(a) Every such Material safety Data Sheet shall include the following information:

(i) The identity used on the label

(ii) Hazardous ingredients of the substance

(iii) Physical and chemical characteristics of the hazardous substance

(iv) The physical hazards of the hazardous substance, including the potential for fire, explosion and reactivity;

(v) The health hazards of the hazardous substance, including signs and symptoms of exposure, and by medical conditions which are generally recognised as being aggravated by exposure to the substance ;

(vi) The primary route (s) of entry

(vii) The permissible limits of exposure prescribed in the Second Schedule under Section 4 1 -F of the Act, and in respect of a Chemical not covered by the said Schedule, any exposure limit used

Or recommended by the manufacturer, importer or occupier ;

(viii) Any generally applicable precautions for safe handling and use of the hazardous substance, which are known including appropriate hygienic practices, protective measures during repairs and maintenance of contaminated equipment procedures for clean-up of spills and leaks

(ix) Any generally applicable control measures, such as appropriate engineering, controls, work practices, or use of personal protective equipment;

(x) Emergency and first-aid procedures ;

(xi) The date of preparation of the Material Safety Data Sheet, or the last change to it ; and

(xii) The name, address and telephone number of the manufacturer, importer, occupier or other responsible party preparing or distributing the Material Safety Date Sheet, who can provide additional information on the hazardous substances and appropriate emergency procedures, if necessary.

(b) The occupier while obtaining or developing a Material Safety Data Sheet in respect of a hazardous substance shall ensure that the information recorded accurately reflects the scientific evidence used in making the hazard determination. If he becomes newly aware of any significant information regarding the hazards of a substance, or ways to protect against the hazards, this new information shall be added to the Material Safety Data Sheet as soon as practicable.

(c) An example of such Material Safety Data Sheet (MSDS) is given in the schedule to this Rule-

Labelling:

2(A) Every container of a hazardous substance shall be clearly labelled or marked to identify :

(a) the contents of the container

(b) The name and address of the manufacturer or importer of the hazardous substances ;

(c) the physical and health hazards ; and

(d) the recommended personal protective equipment needed to work safety with the hazardous substance.

(B) In case a container is required to be transported by road outside the factory premises it should in addition be labelled or married in accordance with the, requirements laid down under Rule 61 (SB)H.

Information contained in this material data sheet is believed to be reliable but no representation, guarantee or warranties of any kind are made as to its accuracy, suitability for a particular application or results to be obtained from them. It is up to the manufacturer/seller to ensure that the information contained in the material safety data sheet is relevant to the product manufactured / handled or sold by him as the case may be. The Government makes no warranties expressed or implied in respect of the adequacy of this document for any particular purpose.

61(SB)C. Disclosure of information to workers

(1) The occupier of a factory carrying on a 'hazardous processes" shall supply to all workers the following information in relating to handling of hazardous materials or substances in the manufacturer, transportation, storage and other processes:-

(a) Requirements of Section 41 B, 41 C, and 41 H of the Act

(b) A list of 'hazardous process' carried on in the factory

(c) Location and availability of all Material Safety Data sheets as per Rule 61 (SB) B

(d) Physical and health hazards arising from the exposure to or handling of substances;

(e) Measures taken by the occupier to ensure safety and control of physical and health hazards

(f) Measures to be taken by the workers to ensure safety handling, store and transportation of hazardous substances ;

(g) Personal protective equipment required to be used by workers employed in 'hazardous process' or 'Dangerous' operations

(h) Meaning of various label and markings used on the containers of hazardous substances as provided under Rule 61(SB)B

(i) Signs and symptoms like to be manifested on exposure to hazardous substances and to whom to report

(j) Measures to be taken by the workers in case of any spillage or leakage of hazardous substance

(k) Rule of workers vis-a-vis the emergency plan of the factory in particular evacuation procedures

(l) any other information considered necessary by the occupier to ensure safety and health of workers.

(2) the information required by sub-rule (1) shall be complied and made known to workers individually, through supply of booklets or leaflets and display of cautionary notices at the work places.

(3) The booklets, leaflets and the cautionary notices displayed in the factory shall be in the language understood by the majority of the workers, and also explain to them.

(4) The Chief Inspector may direct the occupier to supply further information to the workers deemed necessary.

[61(SB)D. Control of Industrial Major Accident Hazardous Rules, 1990:--

61(SB)D.1. These Rules are supplement to the Rules already notified under Chapter 1V-A of the Factories Act, 1948.

(SB) D. 2. **Definitions:** In these Rules, unless the context otherwise requires:--

(a) *Hazardous chemical"* means:--

(i) any chemical which satisfies any of the criterial laid down in Part-I of Schedule I, and is listed in column (2) of Part-II of this Schedule: or

(ii) any chemical listed in column (2) of Schedule 2; or

(iii) any chemical listed in column (2) of Schedule 3.

(b) *"Industrial Activity"* means:--

(i) an operation or process carried out in an industrial installation referred to in Schedule 4, involving or likely to involve one or more hazardous chemicals and includes on-site storage or on-site transport which is associated with that operation or process as the case may be; or

(ii) Isolated Storage

c)"isolated storage" means storage where no other manufacturing other than pumping of hazardous chemical is carried out and that storage involves at least a quantity of that chemical set out in Schedule 2, but does not include storage associated with an installation specified in Schedule 4 on the same site.

(d) "major accident" means an occurrence (including in particular, a major emission, fire or explosion) involving one or more hazardous chemicals and resulting from uncontrolled developments in the course of an industrial activity or owing to natural events, leading to a serious danger to persons, whether immediate or delayed, inside or outside the installation or damage to property or adverse effects on the environment;

(e) "pipeline" means a pipe (together with any apparatus and works associated therewith), or system of pipes (together with any apparatus and works associated therewith) for the conveyance of a hazardous chemical, other than a flammable gas as set out in column (2) of Part-II of Schedule 3 at a pressure of less than 8 bars absolute;

(f) "Schedule" means schedule appended to these Rules;

(g) *"Site"* means any location where hazardous chemicals are manufactured or processed, stored, handled, used, disposed of and includes the whole of an area under the control ofoccupier;

(h) Words and expressions not defined in these Rules but defined or used in the Factories Act, 1948 and the Rules made thereunder have the same meaning as assigned therein.

(SB) D. 3. Collection, development and dissemination of information:

(1) This Rule shall apply to industrial activity in which a hazardous chemical which satisfies any of the criteria laid down in Part-I of Schedule and is listed in column (2) of Part-II of this Schedule is or may be involved.

(2) An occupier who has control of an industrial activity in terms of sub-rule (1) of this rules, shall arrange to obtain or develop detailed information on hazardous chemical in the form of a material safety data sheet as indicated in Schedule 5. The information shall be accessible to workers upon request for reference.

(3) The occupier while obtaining or developing a material safety data sheet as indicated in Schedule 5 in respect of a hazardous chemical handled by him shall ensure that the information is recorded accurately and reflects the scientific evidence used in making the hazard determination. In case, any significant information regarding hazard of a chemical is available, it 'shall be added to the material safety data sheet as indicated in Schedule 5 as soon as practicable.

(4) Every container of a hazardous chemical shall be clearly labelled or marked to identify:—

(a) the contents of the container;

(b) the name and address of the manufacturer; or importer of the hazardous chemical; and

(c) the physical, chemical and toxicological data of the hazardous chemical.

(2) In terms of sub-rule (4) where it is impractical to lable a chemical in view of the size of the container of the nature of the package, provision should be made for other effective means like tagging or accompanying documents.

(SB) D. 4. General responsibility of the occupiers:

(1) This rule shall apply to:--

(a) an industrial activity, other than isolated storage in which a hazardous chemical which satisfies any of the criteria' laid in Part-I of Schedule-I is listed in column (2) of Part-II of this Schedule therein is or may be involved; and

(b) isolated storage in which there is involved a quantity of a hazardous chemical listed in column (2) of Schedule 2 which is equal to or more than the quantity specified in the schedule for that chemical in column (3) thereof.

(2) An occupier who has control of an industrial activity in terms of sub-rule (1) shall provide evidence to show that he has:--

(a) Identified the major accident hazards; and

(b) taken adequate steps to:--

(i) Prevent such major accidents and to limit their consequences to persons and the environment and

(ii) Provide the persons working on the site with the information, training and equipment including antidotes necessary, to ensure their safety.

(SB) D. 5. Notification of major accidents:

(1) Where a major accident occurs on a site, the occupier shall forth with !notify the Inspector and the Chief Inspector of that accident, and furnish thereafter to the Chief Inspector a report relating to the accident in installments, if necessary in Schedule 6.

(2) The Chief Inspector shall on receipt of the report in accordance with sub-rule (1) shall undertake a full analysis of the major accidents and send the requisite information to the Directorate General, Factory Advice Service and Labour Institutes (DGFASLI) and the Ministry of Labour through appropriate channel.

(SB) D. 6. Industrial Activities to which Rule (SB) D (7) to SB (D) (15) Apply:-

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(1) (a) Rules (SB) (D) 7 to (SB) D 9 and (SB) D 13 to (SB) D 15 shall apply to an industrial activity, other than isolated storage, in which there is involved a quantity of hazardous chemical listed in column (2) of Schedule (3) which is equal to or more than the quantity specified in the entry for that chemical in column (3).

(b) Rules (SB) D 10 to (SB) D 12 shall apply to an industrial activity, other than isolated storage in which there is involved a quantity of a hazardous chemical listed in column (2) of Schedule 3 which is equal to or more than the quantity specified in the entry for the chemical in column (4):

(c) Rules (SB) D 7 to (SB) D 9 shall apply to an industrial activity, other than isolated storage, in which there is involved a quantity of a hazardous chemical listed in Column (2) of Schedule 2 which is equal to or more than the quantity specified in the entry for that chemical in column (5); and

(d) Rules (SB) D 10 to (SB) D 15 shall apply to an isolated storage in which there is involved a quantity of hazardous chemical listed in column (2) of Schedule 2 which is equal to or more than the quantity specified in the entry for that chemical in column (4).

(2) For the purposes of Rules (SB) D 7 to (SB) D 15.

(a) A *"New industrial activity"* means an industrial activity which:--

(i) was commenced after the date of coming into operation of these Rules; or,

(ii) If commenced before that date, is an industrial activity in which there has been since that date a modification which would be likely to have important implications for major accident hazards,

and that activity shall be deemed to have been commenced on the date on which the modifications was made; and

(b) an *"existing industrial activity"* means an industrial activity which is not a new industrial activity.

(SB) D. 7. Notification of Industrial activities:

(1) An occupier shall not undertake any industrial activity unless he has submitted a written report to the Chief Inspector containing the particulars specified in Schedule 7 atleast 3 months before commencing that activity or before such shorter time as the Chief Inspector may agree and for the purposes of this sub-rule, an activity in which subsequently there is or is liable to be a quantity given in column (3) of Schedules 2 and 3 or more of an additional hazardous chemical shall be deemed to be a different activity and shall be notified accordingly.

(2) No report under sub-rule (1), need to be submitted by the occupier, if he submits a report under Rule 10(1).

(SB) D. 8. Updating of the Notification under Rule 7:

Where an activity has been reported in accordance with Rule (SB) D 7(1) and the occupier makes a change in it (including an increase or decrease in the maximum quantity of a hazardous chemical to which this rule applies which is or is liable to be at the site or in the pipeline or the cessation of the activity) which affects the particulars specified in that report or any subsequent report made under this rule. The occupier shall forthwith furnish a further report to the Chief Inspector.

(SB) D. 9. Transitional provision:

Where,--

(a) at the date of coming into operation of these Rules an occupier who is in control of an existing industrial activity which is required to be reported under Rule (SB)D7;

(b) within 6 months after that date an occupier commences any such new industrial activity it shall be a sufficient compliance with that Rule, if he reports to the Chief Inspector as per particulars in Schedule 7 within 3 months after the date of coming into operation of these Rules or, within such longer time as the Chief Inspector may agree in writing.

(SB) D. 10. Safety reports:

(1) Subject to the following sub-rules of this Rule, an occupier shall not undertake any industrial activity to which this Rules applies, unless he has prepared a safety report on that industrial activity containing the information specified in Schedule 8 and has sent a copy of that report to the Chief Inspector atleast 3 months before commencing that activity.

(2) In the case of a new industrial activity which an occupier commences, or by virtue of sub-rule (2)(a)(ii) of Rule (SB) (D) 6 is deemed to commence, within 6 months after coming into operation of these rules, it shall be a sufficient compliance with sub-rule (1), if the occupier sends to the Chief Inspector a copy of the report required in accordance with that sub-rule within 3 months after the date of coming into operation of these Rules.

(3) In the case of an existing industrial activity, until five years from the date of corning into operation of these rules, it shall be a sufficient compliance with sub-rule (1) if the occupier on or before 3 months from the date of the coming into the operation of these Rules, sends to the Chief Inspector the information specified in Schedule 7 relating to that activity.

(SB) D. 11. Updating of reports under Rule (SB) D. 10:

(1) Where an occupier has made a safety report in accordance with sub-rule (1) of Rule SB (D) 10 he shall not make any modification to the industrial activity, to which that safety report relates, which could materially affect the particulars in that report, unless he has made a further report to take account of those modifications and has sent a copy of that report to the Chief Inspector at least 3 months before making those modifications.

(2) Where an occupier has made a report in accordance with Rule 10 and sub-rule (1) and that industrial activity is continuing, the occupier shall within three years of the date of the last such report, make a further report which shall have regard in particular to new technical knowledge, which has affected the particulars in the previous report relating to safety and hazard assessment, and shall within 1 month or in such longer time as the Chief Inspector may agree in writing send a copy of the report to the Chief Inspector.

(SB) D. 12. Requirements for further information:

Where in accordance with Rules SB (D) 10(1), an occupier has sent a safety report relating to an industrial activity to the Chief Inspector, the Chief Inspector may, by a notice served on the occupier, require him to provide such additional information as is specified in the notice and the occupier shall send that information to the Chief Inspector within such time as is specified in the notice or within such extended time as the Chief Inspector may subsequentlyspecify.

(SB) D. 13. Preparation of on-site emergency plans by the occupiers:

(1) An occupier who has control of an industrial activity to which this rule applies shall prepare in consultation with the Chief Inspector, keep up-to-date and furnish to the Chief Inspector and the Inspector on-site emergency plan detailing how accidents will be dealt with on the site on which the industrial activity is carried on and that plan shall include the name of the person who is responsible for the safety on the site and the names of those, who are authorised to take action in accordance with the plan in case of an emergency.

(2) The occupier shall ensure that the emergency plan prepared in accordance with sub-rule (1) takes into account any modification made in the industrial activity and

that every person on the site, who is affected by the plan is informed of its relevant provisions.

(3) The occupier shall prepare the emergency plan required under sub-rule (1).

(a) in the case of new industrial activity, before that activity is commenced, except that, in the case of a new industrial activity is commenced or is deemed to have been commenced before a date 3 months after the coming into operation of these Rules by that date; or

(b) in the case of an existing industrial activity within 3 months of coming into operation of these Rules.

(SB) D. 14. Preparation of off-site emergency plans:

(1) It shall be the duty of the District Collector or the District Emergency Authority designated by the State Government in whose area there is a site on which an occupier carried on an industrial activity to which this Rule applies, to prepare and keep up-to-date on adequate off-site emergency plan detailing how emergencies relating to a possible major accident on that site will be dealt-with and while preparing that plan, the Authority shall consult the occupier, the Chief Inspector and such other persons as appear to the Authority to be appropriate.

(2) The occupier shall provide the District Collector or the District Emergency Authority with such information relating to the industrial activity under his control as may be necessary to enable the District Collector or the District Emergency Authority to prepare an off-site emergency plan under sub-rule (1) including the nature, extent and likely effects off-site of possible major accidents as well as any additional information as the District Collector or the District Emergency Authority may require in this regard.

(3) The District Collector or the District Emergency Authority shall provide the occupier with information from the off-site emergency plan which relates to his duties under Rule (SB) D. 13 of sub-rule (2).

(4) The District Collector or the District Emergency Authority shall prepare its emergency plan for any industrial activity, required under sub-rule (1).

(a) in the case of a new industrial activity before that activity is commenced;

(b) in the case of an existing industrial activity within 6 months of its being notified by the occupier of the industrial activity.

(SB) D. 15. Information to be given to persons liable to be affected by a major accident:

(1) The occupier shall take appropriate steps to inform persons outside the site, who are likely to be in an area which might be affected by a major accident at any site on which an industrial activity under his control to which this Rule applies, is carried on either directly or through the District Emergency Authority, about

(a) the nature of the major accident hazard; and

(b) the safety measures and the correct behaviour which should be adopted in the event of a major accident:

(c) The occupier shall take steps required under sub-rule (1) to inform persons about an industrial activity, before that activity is commenced, except that, in the case of an existing industrial activity in which case of occupier shall comply with the requirements of sub-rule (1) within 3 months of coming into operation of these Rules.

(SB) D. 16. Disclosure of information notified under these rules:

Where for the purpose of evaluating information notified under Rule (SB) D (5) or Rules (SB) D (7) to (SB) D (15), the Inspector or the Chief Inspector, or the District Emergency Authority discloses, that information to some other person. Inspector or the Chief Inspector or the District Emergency Authority disclosing it, as the case may be, and before disclosing that information the Inspector or the Chief Inspector or the District Emergency Authority, as the case may be shall inform that other person of his obligations under these Rules.

(SB) D. 17. Improvement Notice:

(1) If an Inspector is of the opinion that an occupier--

(a) is contravening one or more of these Rules; and

(b) has contravened one or more of these Rules in circumstances that make it likely that the contravention will continue or be repeated he may serve on him, a notice referred to as "an improvement notice", stating that he is of that opinion specifying the Rule or Rules as to which he is of that opinion giving particulars of the reasons why he is of that opinion and requiring that occupier to remedy the contravention or, as the case may be, the matters occasioning it within such period, as may be specified in thenotice.

(2) A notice served under sub-rule (1) may (but need not) include directions to the matters to be taken by the occupier to remedy any contravention or matter to which the notice relates.

(SB) D. 18. Power of the State Government to modify the Schedules:

The State Government may, at any time, by notification in the official Gazette, make suitable changes in the Schedules:

Schedule 1

See Rules (SB) D2 (a) (i); (SB) D. 3 (1); (SB) D 4 (1) (a) and (SB) D 4 (2) (1).

Indicative criteria and list of chemicals indicative criteria

PART I

a. *Toxic chemicals:-* Chemicals having the following values of acute toxicity and which, owing to their physical and chemical properties, are capable of producing major accident hazards

Sl. No.	Degreeof toxicity	Oral Toxicity LD50(mg/kg)	Dermal Toxicity (dermal LD 50) (mg/kg)	Inhalation toxicity by dust and mists (mg/1)
1	Extremely Toxic	1-50	1-200	0.1-0.5
2	Highly toxic	51-500	201-2000	0.5-2.0

b. Flammable Chemicals :

(i) Flammable gases : Chemical which in the gaseous state at normal pressure and mixed with air become flammable and the boiling point of which at normal pressure is 20^{o} C or below;

(ii) highly flammable liquids: chemicals which have a flash point lower than 23^{o}C and the boiling point of which at normal pressure is above 20^{o}C;

(iii) flammable liquids : chemicals which have a flash point lower than 65^{o}C and which remain liquid under pressure, where particular processing conditions, such as high pressure and high temperature, may create major accident hazards;

c.Explosives: - Chemicals which may explode under the effect of flame, heat or photo-chemical conditions or which are more sensitive to shocks or friction than dinitrobenzene.

PART II

List of Hazardous and Toxic Chemicals

Sl.No	Name of the chemical	Sl. No.	Name of the Chemical	Sl. No.	Name of the Chemical
1	Acetone	2	Acetone cyanohydrine	3	Acetyl chloride
4	acetylene(ethyne)	5	acrolein(2 propenal)	6	acrylonitrile
7	aldicarb	8	aldrin	9	alkyl phthalate
10	allyl alcohol	11	allylamine	12	alpha Napathy Thiourea(ANTU)
13	Aminnodipheny1-4	14	Aminophenol-2	15	Amiton
16	Ammonia	17	Ammonium nitrate	18	Ammonium nitrates in fertilizers
19	Ammonium sulfamate	20	Anabasine	21	Aniline
22	Anisidine-p	23	Antimony and compounds	24	antimony hydride (stibine)
25	Arsenic hydride (arsine)	26	Arsenic pentoxide, arsenic, (v) acids and salts	27	Arsenic trioxide, arsenious (iii) acids and salts
28	Asbestos	29	Azinphos Ethyl	30	Asinphos Methyl
31	Barium azide	32	Benzene	33	Benzidine
34	Benzidine salts	35	Benzoquinone	36	Benzoyl chloride
37	Benzoyl peroxide	38	Benzyl chloride	39	Benzyl cyanide
40	Beryllium (powders, compounds)	41	Biphenyl	42	Bis (2-Chlorommethyl) ketone
43	Bis (2,4,6-Trinitrophenyl)amine	44	Bis (2-Chloroethyl) sulphide	45	Bis (chloromethyl) ether
46	Bis (tert-Butylperoxy) butane,-2,2	47	Bis (tert-Butylperoxy) cyclohexane.1. 1	48	Bis-1,2-Tribromophenoxxy-ethane
49	Bisphenol	50	Boron and compounds	51	Bromine
52	Bromine Penntafluoride	53	Bromoform	54	Butadiene-1. 3
55	Butane	56	Butanone-2	57	Butoxy ethanol
58	Butyl glycidal ether	59	Butyl peroxyacetate, tert	60	Butyyl peroxyisobutyrate, tert
61	Butyyl peroxyyisopropyl carbonate, tert	62	Butyl peroxymaleate, tert	63	Butyl peroxypivalate, -tert
64	Butyyl vinyl ether	65	Butyl-n-Mercaptan	66	Butylamine
67	C9-Aromatic hydrocarbon fraction	68	Cadmium and compounds	69	Cadmium oxide (fumes)
70	Calcium cyanide	71	Captan	72	Captofol
73	Carbaryl (sevin)	74	Carbofuran	75	Carbon disulphide
76	Carbon monoxide	77	Carbon tetrachloride	78	Carbophenothion
79	Cellulose nitrate	80	Chlorates (used in explosive)	81	Chlordane
82	Chlorfenvinphos	83	Chlorinated benzenes	84	Chhlorine
85	Chlorine di oxide	86	Chlorine oxide	87	Chlorine trifluoride
88	Chlormequate chloride	89	Chloroacetal chloride	90	Chloroacetaldehyde
91	Chloroaniline,-2	92	Chloroaniline,-4	93	Chlorobenzene
94	Chlorodiphenyl	95	Chloropoxypropane	96	Chloroethanol
97	Chloroethyl Chloroformate	98	Chlorofluorocarbons	99	Chloroform
100	Chloroformyl,-4 morpholine	101	Chloromethane	102	Chloromethyl ether
103	Chloromethyl methyl ether	104	Chloronitrobenzene	105	Chloroprene
106	Chlorosulphonic acid	107	Chlorotrinitrobenzene	108	Chloroxoron

109	Chromium annd compounnds	110	Cobalt and compounds	111	Copper and compounds
112	Coumafuryyl	113	Coumaphos	114	Coumatetralyl
115	Cresols	116	Crimidine	117	Cumene
118	Cyanophos	119	Cyanothoate	120	Cyanuuric fluoride
121	Cyclohexane	122	Cyclohexanol	123	Cyclohexanone
124	Cycloheximide	125	Cyclopentadiene	126	Cyclopentane
127	Cyclotetrammethylene tetranitramine	128	Cyclotrimethylene Trinitramine	129	DDT
130	Decabromodiphenyl oxide	131	Demeton	132	Di-Isobutyl peroxide
133	Di-n-Propyl peroxydicarbonate	134	Di-sec-Butyl peroxydicarbonate	135	Dialifos
136	Diazodinitrophenol	137	Diazomethane	138	Dibenzyl peroxydicarbonate
139	Dichloroacetylene-o	140	Dichloro-o-benzene-o	141	Dichlorobenzene-p
142	Dichloroethane	143	Dichloroethyl ether	144	Dichlorophenol, 2, 4
145	Dichlorophenol, -2, 6	146	Dichlorophenoxy acetic acid,-2,4 (2,4-D)	147	Dichloropropane, -1,2
148	Dichlorosalicylic acid,3,5	149	Dichlorvos (DDVP)	150	Dicrotophos
151	Dieldrin	152	Diepoxybutane	153	Diethyl peroxydicarbonate
154	Diethylene glycol dinitrate	155	Diethylene triamine	156	Diethyleneglycol butyl ether/Diethyle-neglycol butyl acetate
157	Diethylenetriamine(DETA)	158	Diglycidyl ether	159	Dishydroperoxypropane, -2, 2
160	Disobutyryl peroxide	161	Dimefox	162	Dimethoate
163	Dimethyl phosphoramidocyanidic acid	164	Dimethyl phthalate	165	Dimethylcarbomyl
166	Dimethylnitrosamine	167	Dinitrophenol, salts	168	Dinitrotoluene
169	Dinitro-o-cresol	170	Dioxane	171	Dioxathion
172	Dioxolane	173	Diphacinone	174	Diphosphoramide octamethyl
175	Dipropylene glycol methylether	176	Disulfoton	177	Endosulfan
178	Endrin	179	Epichhlorohydrine	180	EPN
181	Epoxypropane, 1,2	182	Ethion	183	Ethyl carbamate
184	Ethyl ether	185	Ethyl hexanol, -2	186	Ethyl mercaptan
187	Ethyl methacrylate	188	Ethyl nitrate	189	Ethylamine
190	Ethylene	191	Ethylene chlorohydrine	192	Ethylene diamine
193	Ethylene dibromide	194	Ethylene dichloride	195	Ethylene glycol dinitrate
196	Ethylene oxide	197	Ethyleneimine	198	Ethylthiocyanate
199	Fensulphothion	200	Fluenetil	201	Fluoro,-4,-2 hydroxybuteric acid and salts, esters and amides
202	Fluorcetic acid and salts, esters, amides	203	Fluorobuteric acid, -4 and salts,esters amides	204	Fluorocrotnic acid, -4, and salts, esters amides
205	Formaldehyde	206	Glyconitrile (Hydroxyacetonitrile)	207	Guanyl, -1, -4 nitrosaminogunyl -1 -tetrazene
208	Heptachlor	209	Hexachloro cyclopentadiene	210	Hexachlorecyclohexane
211	Hexachloromethane	212	Hexachlorodibenzo-dioxin, -1,2 ,3,7,8,9	213	Hexafluoropropene
214	Hexamethylphosphoramide	215	Hexamethyl,-3,3,6,9,9,-1,2,4,5-tetraoxacyclononane	216	Hexamethylenediameine

217	Hexane	218	Hexanitrostilbene,-2,2,4,4,6,6	219	Hexavalent chromium
220	Hydrazine	221	Hydrazine nitrate	222	Hydrochloric acid
223	Hydrogen	224	Hydrogine Bromide (hydrobromic acid)	225	Hydrogen chloride (liquified gas)
226	Hydrogen cyanide	227	Hydrogen fluoride	228	Hydrogen selenide
229	Hydrogen sulphide	230	Hydroquinone	231	Iodine
232	Isobenzene	233	Isodrin	234	Isophorone diisocyanate
235	Isopropyl ether	236	Juglone (5-hydroxynaaphathalene-1, 4-dione)	237	Lead (inorganicfumes & dusts)
238	lead 2,4, 6-trinitroresorcinoxide (lead styphnate)	239	Lead azide	240	Leptophos
241	Lindane	242	Liquified Petroleum Gas (LPG)	243	Maleic anhydride
244	Manganese & compounds	245	Mercapto benzothiazole	246	Mercury alkyl
247	Mercury fulminate	248	Mercury Methyl	249	Methacrylic anhydride
250	Methacrylonitrile	251	Methacryloyl chloride	252	Methamidophos
253	Methanesuphonyl fluoride	254	Methanethiol	255	Methoxy ethanol
256	Methoxyethylmercuric acetate	257	Methyl acrylate	258	Methyl alcohol
259	Methyl amylketone	260	Methyl bromide (bromomethane)	261	Methyl chloride
262	Methyl chloroform	263	Methyl cyclohexene	264	Methyl ethyl ketone peroxide
265	Methyl hydrazine	266	Methyl Isobutyl ketone	267	Methyl isobutyle ketone peroxide
268	Methyl isocyanate	269	Methyl isothiocyanate	270	Methyl mercaptan
271	Methyl methacrylate	272	Methyl parathion	273	Methyl Phosphonic dichloride
274	Methyl-N,2,4,6, tetranitroaniline	275	Methylene chloride	276	Methylenebis, -4,4 (2-chloroaniline)
277	Methyltrichlorosilane	278	Mevinphos	279	Molybdenum and compounds
280	N-Methyl-N,2,4,6,-N-tetranitroaniline	281	Naphtha (coal tar)	282	Naphthylamine,2
283	Nickel and compounds	284	Nickel tetracorbonyl	285	Nitroaniline-O
286	Nitroaniline-p	287	Nitrobenzene	288	Nitrochlorobenzene-p
289	Nitrocyclohexane	290	Nitroethane	291	Nitrogen dioxide
292	Nitrogen oxides	293	Nitrogen trifluoride	294	Nitroglycerine
295	NitroPhenol -p	296	Nitropropane-1	297	NitroPropane-2
298	Nitrosodimethylamine	299	Nitrotoluene	300	Octabromophenyl oxide
301	Oleum	302	Oleylamine	303	OO-diethyl s-ethyle sulphonyl
304	OO-diethyl s-ethylsulphonyl Methyl phosphorothioate	305	OO-diethyl s-ethylthiorimethyl Methyl phosphorothioate	306	OO-diethyl s-isopropylthiomethyl phosphorothioate
307	OO-diethyl s-propylthiomethyl phosphorodithioate	308	Oxyamyl	309	Oxydisulforon
310	Oxygen (liquid)	311	Oxygen difluoride	312	Ozone
313	Paraoxon (diethyl 4-nitrophenyl phosphate)	314	Paraquat	315	Parathion
316	Paris green	317	Pentaborane	318	Pentabromodiphenyl Oxide
319	Pentabromo phenol	320	Pentachloronaphthalene	321	Pentachloroethane
322	PentachloroPhenol	323	Pentaerythrithol tetranitrate	324	Pentane

325	Pentanone, 2, 4-Methyl	326	Peradetic acid	327	Perchloroethylene
328	Perchloromethyl mercaptan	329	Phenol	330	Phenyl glycidal ether
331	Phenylene p-diamine	332	Phenylmercury acetate	333	Phorate
334	Phosacetim	335	Phosalone	336	Phosfolan
337	Phosgene (carbonyl chloride)	338	Phosmet	339	Phosphamidon
340	Phosphine (hydrogen Phosphide)	341	Phosphoric acid and esters	342	Phosphoric acid, bromoethyl bromo (2, 2 - dimethylpropyl) bromoethyl ester
343	Phosphoric acid, bromoethyl bromo (2, 2 - dimethylpropyl) chloroethyl ester	344	Phosporic acid, chloroethyl bromo (2, 2 - dimethoxylpropyl) chloroethylester	345	Phosphorous and compounds
346	Phostalan	347	Picric acid (2, 4, 6-trinitrophenol)	348	Polybrominated biphenyls
349	Potassium arsenite	350	Potassium chlorate	351	Promurit (1 - (3, 4-dichlorophenyl) 3-triazenethaiocarboxamide)
352	Propenesultone-1,3	353	Propen, -1,-2 chloro-1, 3 - diol diacetate	354	Propylene oxide
355	Propyleneimine	356	Pyrazoxon	357	Selenium hexafluoride
358	Semicarbazide hydrochloride	359	Sodium arsenite	360	Sodiumazide
361	Sodiumchlorite	362	Sodium cyanide	363	Sodium picramate
364	Sodium selenite	365	Styrene, 1, 1, 3, 2-tetrachloroethane	366	Sulfotep
367	Sulphur dichloride	368	Sulphur dioxide	369	Sulpur trioxide
370	Sulphuric acid	371	Sulphoxide, 3 chloropropyloctyl	372	Tellurium
373	Tellurium hexafluoride	374	Tepp	375	Terbufos
376	Tetrabromobisphenol - A	377	Tetrachloro2,2,5,62,5 - cyclohexadiene-1, 4-dione	378	Tetrachlorodibenzo-p-dioxin,2,3,7,8 (TCDD)
379	Tetraethtyl lead	380	Tetrafluoroethane	381	Tetramethylenedisulphotetramine
382	Tetramethyl lead	383	Tetranitromethane	384	Thallium and compounds
385	Thionazin	386	Thionyl chloride	387	Tirpate
388	Toluene	389	Toluene -2 -4 diisocyanate	390	Toluidine-O
391	Toluene 2,6 -Diisocyanate	392	Trans-1, 4-chlorobutene	393	Tri-l, (Cyclohexyl) stannyl-1, H-1,2,3-trazole
394	Triamino, -1,3,5,2,4,6 - trinitrobenzene	395	Tribromophenol,2,4,6	396	Trichloro acetyl chloride
397	Trichloro ethane	398	Trichloro naphthalene	399	Trichloro (chlromethyl) silane
400	Trichlorodichlorophenylsilane	401	Trichloroethane, 1, 1, -1	402	Trichloroethyl silane
403	Trichloroethylene	404	Trichloromethanesulphenyl chloride	405	Trichloroophenol, 2,2,6
406	Trichlorophenol,2,4,5	407	Triethylamine	408	Triethlenemelamine
409	Trimethyl chlorosilane	410	Trimethylpropane phosphite	411	Trinitroaniline
412	Trinitroanisole, 2, 2, 4, 6	413	Trinitorbenzene	414	Trinitrobenzonic acid
415	Trinitrocresol	416	Trinitrophenetole, 2, 5,6	417	Trinitroresorcinol, 2,4,6 (styphnic acid)
418	Trinitrotoluene	419	Triorthocresyl phosphate	420	Triphenyltin chloride

421	Turpentine	422	Uranium and compounds	423	Vanadium and compounds
424	Vinyl chloride	425	Vinyl fluoride	426	Vinyl toluene
427	Warfarin	428	Xylene	429	Xylidine
430	Zinc and compounds	431	Zirconium and compounds		

SCHEDULE 2

(See Rules 2(e)(ii),4(1)(b), 4(2) and 6(1)(b))

Isolated Storage at Installations other than those covered by Schedule 4

(a) The threshold quantities set out below relate to each installation or group of installations belonging to the same occupier where the distance between installation is not sufficient to avoid, in forceable circumstances any aggravation or major accident hazards. These threshold quantities apply in any case to each group of installations belonging to the same occupier where the distance between the installations is less than 500 metres.

b. For the purpose of determining the threshold quantity of a hazardous chemical at an isolated storage, account

c. shall also be taken of any hazardous chemical which is :

i. in that part of any pipeline under the control of the occupier having control of the site, which is within
ii. 500 metres of that site and connected to it ;
iii. at any other site under the control of the same occupier any part of the boundary of which is within 500
iv. metres of the said site ; and
v. in any vehicle, vessel, aircraft or hovercraft under the control of the same occupier which is used for
vi. storage purpose either at the site or within 500 metres or it ;

but no account shall betaken of any hazardous chemical which is in a vehicle, vesssel, aircraft or hovercraft used for transporting it.

l.No.	Chemicals	Threshold Planning Quantities (M.T) for application of Rules 4,5 7 to 9 and 13 to 15	Threshold Planning Quantities (M.T) for application of Rules 10 to 12
1	Acrylonitrile	350	5000
2	Ammonia	60	600
3	Ammonium nitrate (a)	350	2500
4	Ammonium nitrate fertilizers (b)	1,250	10000
5	Chlorine	10	25
6	Flammable gases as defined in Schedule I, paragraph (b) (I)	50	300
7	Extremely flammable liquids as defined in Schedule I, Paragraph (b) (ii)	5,000	50000
8	Liquid oxygen	200	2000
9	Sodium chlorate	25	250
10	Sulphur Dioxide	20	500
11	Sulphur trioxide	15	100
12	Carbonyl chloride	0.75	0.750
13	Hydrogen Sulphide	5	50
14	Hydrogen fluoride	5	50

15	Hydergen cyanide	5	50
16	Carbon disulphide	20	200
17	Bromine	50	500
18	Ethylene oxide	5	501
19	Propylene oxide	5	50
20	2-Propenal (Acrolein)	20	200
21	Bromomethane (Methyl bromide)	20	200
22	Methyl isocyanate	0.15	0.150
23	Tetraethyl lead or tetramethyl lead	5	50
24	1,2 Dibromoethane (Ethylene diabromide)	5	50
25	Hydrogen chloride (liquified gas)	25	250
26	Diphenyl methane di-isocyanate (MDI)	20	200
27	Toluene di-isocyanate (TDI)	10	100
28	Very Highly flammable liquids as defined in Schedule 1, paragraph(b)(iii)	7,000	7,000
29	Highly flammable liquids as defined in Schedule 1 paragraph(b)(iv)	10,000	10,000
30	Flammable liquids as defined in Schedule-1 paragraph(b)(v)	15,000	15,000

* Where this chemical is in a state which gives it properties capable of creating a major accident hazard.

(a) This applies to ammonium nitrates and mixtures of sodium nitrate where the nitrogen content derived from the ammonium nitrates is greater than 28 percent by weight and to aqueous solutions of ammonium nitrate where the concentration of ammonium nitrate is greater than 90 per cent by weight.

(b) This applies to straight ammonium nitrate fertilisers and to compound fertilisers where the nitrogen content derived from the ammonium nitrate is greater than 28 per cent by weight (a compound fertiliser contains ammonium nitrate together with phosphate and or potash).

Schedule 3
[See Rule (SB) D(2) a (iii); (SB) D 6 (1) (a) and (b)}

List of hazardous chemicals for application of Rules of 5 and 7 to 15.

(a) The quantities set out below relate to each installation or group of installations belonging to the same occupier where the distance between the installations is not sufficient to avoid in for eseable circumstances, any aggravation of major accident hazards. These quantities apply in any case to each group of installations belonging to the same occupier where the distance between the installations is less than 500 metres.

(b) For the purpose of determining the quantity of a hazardous chemical in an industrial installation, account shall also be taken of any hazardous chemical which is:

(i) In that part of any pipeline under the control of the occupier having control of the site, which is within 500 metres of that site and connected to it;

(i) at any other site under the control of the same occupier any part of the boundary of which is within 500 metres of the said site; and

(ii) In any vehicle, vessel, aircraft or hovercraft under the control of the same occupier which is used for storage purpose either at the site or within 500 metres of it;

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Sl.No.	Chemicals	Threshold Quantity	CAS No.
	Group I -- Toxic Chemicals		
1	Aldicarb	100 Kg	116-06-3
2	4-Aminediphenyl	1 Kg	92-67-1
3	Amiton	1 Kg	78-53-5
4	Anabasine	100 Kg	494-52-0
5	Arsenic pentoxide.arsenic (V) acid and salts	500Kg	
6	Arsenic trioxide, arsenious (III) acid and salts	100Kg	
7	Arsine (arsenic hydride)	10Kg	7784-42-1
8	Azinpho-ethyl	100Kg	2642-71-9
9	Azinpho-methyl	100Kg	86-50-0
10	Benzidine	1Kg	92-87-5
11	Benzidine salts	1Kg	
12	Beryllium (powders, compounds)	10Kg	
13	Bis (2-chloroethyl) sulphide	1Kg	505-60-2
14	Bis (chloromethyl) ether	1Kg	542-88-1
15	Carbofuran	100Kg	1563-66-2
16	Carbophenothion	100Kg	786-19-6
17	chlorfenvinphos	100Kg	470-90-6
18	4-(Chloroformyl) morpholine	1Kg	15159-40-7
19	Chloromethyl methyl ether	1Kg	107-30-2
20	Cobalt (metal, oxides, carbonates, sulphides as powders)	1,000Kg	
21	Crimidine	100Kg	535-89-7
22	Cyanthoate	100Kg	3734-90-0
23	Cycloheximide	100Kg	66-81-9
24	Demeton	100Kg	8065-48-3
25	Dialifos	100Kg	10311-84-9

26	OO-Diethyl S-ethylsulphonylmethyl Phosphorothioate	100Kg	2588-06-8
27	OO-Diethyl S-ethylsulphonylmethyl Phosphorothioate	100Kg	2588-06-9
28	OO-Diethyl S-ethylthiomethyl Phosphorothioate	100Kg	2600-69-3
29	OO-Diethyl S-isopropylthio-methyl Phosphorothioate	100Kg	
30	OO-Diethyl S-propylthio-methyl Phosphorothioate	100Kg	3309-68-0
31	Dimefox	100Kg	115-26-4
32	Dimethylcarbomoyl chloride	1Kg	79-44-7
33	Dimethyl nitrosamine	1Kg	62-75-9
34	Dimethyl Phosphoramidocyanidic acid	1000Kg	7781-6
35	Diphacinone	100Kg	82-66-6
36	Disulfoton	100Kg	298-04-4
37	EPN	100Kg	2104-64-5
38	Eithion	100Kg	563-12-2
39	Fensulfothion	100Kg	115-90-2
40	Fluenetil	100Kg	4301-50-2
41	Fluoroacetic acid	1Kg	144-49-0
42	Fluoroacetic acid, salts	1Kg	
43	Fluoroacetic acid, ester	1Kg	
44	Fluoroacetic acid, amides	1Kg	
45	4-Fluorobutyric acid	1Kg	
46	4-Fluorobutyric acid, salts	1Kg	
47	4-Fluorobutyric acid, esters	1Kg	
48	4-Fluorobutyric acid, amides	1Kg	
49	4-Fluorocrotonic acid	1Kg	37759-72-1
50	4-Fluorocrotonic acid, salts	1Kg	
51	4-Fluorocrotonic acid, esters	1Kg	
52	4-Fluorocrotonic acid, amides	1Kg	
53	4-Fluoro-2 hydroxybutyric acid	1Kg	
54	4-Fluoro-2 hydroxybutyric acid, salts	1Kg	
55	4-Fluoro-2 hydroxybutyric acid, esters	1Kg	
56	4-Fluoro-2 hydroxybutyric acid, amides	1Kg	
57	Glycolonitrile (hydroxyacetonitrile)	100Kg	107-16-4
58	1,2,3,7,8,9-Hexaclorodibenzo p-dioxin	100Kg	19408-74-3
59	Hexamethylphosphoramide	1Kg	680-31-9
60	Hydrogen selenide	10Kg	7783-07-5
61	Isobenzan	100Kg	297-78-9
62	Isodrin	100Kg	465-73-6
63	Juglone (5-Hydron gnapth alene 1,4-dione	100Kg	481-39-0
64	4,4-Methylenebis (2 choroaniline)	10Kg	101-14-4
65	Methyl isocyanate	150Kg	624-83-9
66	Mevinphos	100Kg	7786-34-7
67	2-Naphthylamine	1Kg	91-59-8
68	Nickel (metal, oxides, carbonates, sulphide, as powders)	1000Kg	
69	Nickel tetracarbonyl	10Kg	13463-39-3
70	Oxydisulfoton	100Kg	2497-07-6
71	Oxygen difluoride	10Kg	7783-41-7
72	Paraoxon(diethyl 4-nitrophenyl phosphate)	100Kg	311-45-5
73	Parathion	100Kg	56-38-2
74	Parathion-methyl	100Kg	298-00-0

75	Pentaborane	100Kg	19624-22-7
76	Phorate	100Kg	298-02-2
77	Phosacetim	100Kg	4104-14-7
78	Phosgene (carbonyl chloride)	750Kg	75-55-5
79	Phosphamidon	100Kg	13171-21-6
80	Phosphine (Hydrogen phosphide)	100Kg	5836-73-7
81	Promurit (1-(3,4-diclorophenyl)3-triazenethio-carboxamide)	100Kg	5836-73-7
82	1,3-Propanesultone	1Kg	1120-71-4
83	1-Propen-2-chloro-1,3-diol diacetate	10Kg	10118-72-6
84	Pyrazoxom	100Kg	108-34-9
85	Selenium hexafluoride	10Kg	7783-79-1
86	Sodium selenite	100Kg	10102-18-8
87	stibine(antimony hydride)	100Kg	7803-52-3
88	Sulfotep	100Kg	3689-24-5
89	Sulphur dichloride	1000Kg	10545-99-0
90	Tellurium hexafluoride	100Kg	7783-80-4
91	TEPP (Tetraethyl Pyrophosphate)	100Kg	107-49-3
92	2,3,7,8-Tetrachlorodibenzo-p-dioxin(TCDD)	1Kg	1746-01-6
93	Tetramethylenedisulphotetramine	1Kg	80-12-6
94	Thionazin	100Kg	297-97-2
95	Tirpate(2,4-Dimethyl-1,3-dithiolane-2-carboxaldehyde O-methylcarbamoyloxime	100Kg	26419-73-8
96	Trichloromethanesulphenyl chloride	100Kg	594-42-3
97	1-Tri (cyclohexyl) v stannyl-1H-1,2,3-triazole	100Kg	4083-11-8
98	Triethylenemelamine	10Kg	51-18-3
99	Warfarin	100Kg	81-81-2
Group -2	**Toxic Chemicals**		
100	Acetone cyanohydrin (2-Cyanopropan-2-(1))	200 t.	75-86-5
101	Acrolein (2-Propenal)	20 t.	107-02-8
102	Acrylonitrile	20 t.	107-13-1
103	Allyl alcohol(Propen 1-01)	200 t.	107-18-6
104	Allyamine	200 t.	107-11-9
105	Ammonia	50 t.	7664-41-7
106	Bromine	40 t.	7726-41-7
107	Carbon disulphide	20 t.	75-15-0
108	Chlorine	10 t.	7782-50-5
109	Diphenyl methane di-isocyanate (MDI)	20 t.	101-68-8
110	Ethylene dibromide (1,2-Dibromoethane)	5 t.	106-93-4
111	Ethyleneimine	50 t.	151-56-4
112	Formaldehyde (concentration>=90%)	5 t.	50-00-0
113	Hydrogen chloride (liquified gas)	25 t.	7647-01-0
114	Hydrogen cyanide	5 t.	74-90-8
115	Hydrogen fluoride	5 t.	7664-39-3
116	Hydrogen sulphide	5 t.	7783-06-4
117	Methyl bromide (Bromomethane)	20 t.	74-83-9
118	Nitrogen oxides	50 t.	11104-93-1
119	Propyleneimine	50 t.	75-55-8
120	Sulphur dioxide	20 t.	9/5/46

121	Sulphur trioxide	15 t.	11/9/46
122	Tetraethyl lead	5 t.	78-00-2
123	Tetramethyl lead	5 t.	75-74-1
124	Toluene 2,4,-di-isocyanate (TDI)	10 t.	584-84-9
Group -3	**Highly Reactive Chemicals**		
125	Acetylene (ethyne)	5 t.	74-86-2
126	(a) Ammonium nitrate ©	350 t.	6484-52-2
	(b) Ammonium nitrate in the form of fertilizer (d)	250 t.	
127	2,2 Bis (tert-Butyl peroxy butane (concentration > =70%)	5 t.	2167-23-9
128	1,1-Bis (tert-butylperoxy) cyclohexane (concentration >=80%)	5 t.	3006-86-8
129	Tert-Butyl peroxyacetate (concentration 70%)	5 t.	107-71-1
130	Tert-Butyl peroxyisobutyrate(concentrate 80%)	5 t.	109-13-7
131	Tert-Butyl peroxy isopropyl carbonate (concentration 80%)	5 t.	2372-21-6
132	Tert Butyl peroxy maleate (concentration 80%)	5 t.	1931-62-0
133	Tert-Butyl peroxy povalate (concentration 77%)	50 t.	927-07-1
134	Dibenzyl peroxy dicarbonate (concentration 90%)	5 t.	2144-45-8
135	Di-sec-butyl peroxy dicarbonate (concentration 80%)	5 t.	19910-65-7
136	Diethyl peeroxy dicarbonate (concentration 30%)	5 t.	1466-78-5
137	2,2-Dihydrapderoxypropane (concentration 30%)	5 t.	2614-76-8
138	Di-isobutyryl peroxide (concentration 80%)	5 t.	3437-84-1
139	Di-n-propyl peroxydicarbonate (concentration 80%)	5 t.	16066-38-9
140	Ethylene oxide	5 t.	75-21-8
141	Ethylene nitrate	5 t.	625-58-1
142	3,3,6,6,9,9-Hexamethyl-1,2,3,4,5-tetroxacyclononane (concentration 75%)	5 t.	22397-33-7
143	Hydrogen	2 t.	1333-74-0
144	Methyl ethyl ketone peroxide (concentration 60%)	5 t.	1339-23-4
145	Methyl isobutyl ketone peroxide (concentration 60%)	5 t.	37206-2-5
146	Oxygen liquid	200 t.	7782-44-7
147	Peracetic acid (concentration 60%)	5 t.	79-21-0
148	Propylene oxide	5 t.	75-56-9
149	Sodium Chlorate	25 t.	7775-09-9
Group 4	**Explosive Chemicals**		
150	Barium Azide	50 t.	18810-58-7
151	Bis (2,4,6-trinitrophenyl)amine	50 t.	131-73-7
152	Chlorotinitrobenzene	50 t.	28260-61-9
153	Cellulose nitrate (containing 12.6 % nitrogen)	50 t.	9004-70-0
154	Cyclotetramethylenetetranitramine	50 t.	2691-41-0
155	Cyclotrimethylenetrinitramine	50 t.	121-82-4
156	Diazodinitrophenol	10 t.	87-31-0
157	Diethylene glycol dinitrate	10 t.	693-21-0
158	Dinitrophenol, salts	50 t.	
159	Ethylene glycol dinitrate	10 t.	628-96-6
160	1-Guanyl-4-nitrosaminoguanyl-1-tetrazene	10 t.	109-27-3
161	2,2,4,4,6,6-Hexanitrostibene	50 t.	20062-22-0
162	Hydrazine nitrate	50 t.	13464-97-6
163	Lead azide	50 t.	13424-46-9
164	Lead styphnate (Lead 2,4,6-trinitroresorcinoxide)	50 t.	15424-40-9

165	Mercury fulminate	10 t.	628-86-4
166	N-Methyl-N,2,4,6-tetranitroaniline	50 t.	479-45-8
167	Nitroglycerine	10 t.	55-63-0
168	Pentaerythritol tetranitrate	50 t.	78-11-5
169	Picric acid (2,4,6-trinitro phenol)	50 t.	88-89-1
170	Sodium picramate	50 t.	831-52-7
171	Styphnic acid (2,4,6-trinitroresorcinol)	50 t.	82-71-3
172	1,3,5,Triamino-2,4,6-trinitrobenzene	50 t.	3058-38
173	Trinitroaniline --	50 t.	26952-42-1
174	2,4,6-Trinitroanisole	50 t.	606-95-9
175	Trinitrobenzene	50 t.	9935-42-6
176	Trinitrobenzoic acid	50 t.	129-66-8
177	Trinitrocresol	50 t.	602-99-3
178	2,4,6-Trinitrophenitole	50 t.	4732-14-3
179	2,4,6-Trinitrotoluene	50 t.	118-96-7

Foot Notes:

This applies to ammonium nitrate and mixtures of ammonium nitrate where the nitrogen content derived from the ammonium nitrate is greater than 28% by weight and aqueous solutions of ammonium nitrate where the concentration of ammonium nitrate is greater than 90% by weight.

This applies to straight ammonium fertilisers and to compound fertilisers .where the nitrogen content derived from the ammonium nitrate is greater than 28% by weight (a compound fertiliser contains ammonium nitrate together with phosphate and/or potash).

GAS Number (Chemical Abstracts Service Number) means the number assigned to the chemical by the Chemical Abstracts Service.

Schedule - 4

[See Rule (SB) D 2 (b) (i)]

Industrial installation within the meaning of Rules (SB) D (2) (b) (i)

Installations for the production, processing or treatment of organic or inorganic chemicals using for this purpose, among others:

a. alkylation
b. amination by ammonolysis
c. carbonylation
d. condensation
e. dehydrogenation
f. esterification
g. halogenation and manufacture of halogens
h. hydrogenation
i. hydrolysis
j. oxidation
k. polymerization
l. sulphonation
m. desulphurization, manufacture and transformation of sulphur containing compounds
n. nitration and manufacture of nitrogen-containing compounds
o. manufacture of phosphorous-containing compounds
p. formulation of pesticides and of pharmaceutical products
q. distillation
r. extraction
s. solvation
t. mixing

2. Installations for distillation, refining or other processing of petroleum or petroleum products.

3. Installations for the total or partial disposal of solid or liquid substances by incineration or chemical decomposition.

4. Installations for production, processing treatment of energy gases for eg: LPG, LNG & SNG etc.

5. Installations for the dry distillation of coal or lignite.

6. Installations for the production off metals or non-metal by a wet process or by means of electrical energy.

Schedule - 6

[See Rule (SB) D 5 (1)]

Information to be furnished regarding notification of major accident.

Report Number.....
of the Particular Accident.

General Data:

(a) Name of the site

(b) Name and Address of the Occupier (also state the Telephone/ Telex Number)

(c) (i) Registration Number.

(ii) Licence Number (As may have been allotted under any statute applicable to the site, e.g., the Factories Act).

(d) (1) Nature of industrial activity
(Mention what is actually manufactured, stored etc.).

(ii) National industrial Classification 1987 at the four digit level.

2. Type of Major Accident

Explosion Fire Emission of hazardous Chemical

3. Description of the major accident:

(a) Date, shift and hour of the accident.

(b) Department/Section and exact place where the accident took place.

(c) The process/operation undertaken in the Department/Section where the accident took lace (Attach a flow chart if necessary)

(d) The circumstances of the accident and the hazardous chemical involved.

4. Emergency measures taken and measures envisaged to be taken to alleviate short-terms effects of the accidents.

5. Causes of the major accident known (to be specified)

Not known

Information will be supplied as soon as possible

6. Nature and extent of damage

(a) Within the establishment Casualities. Killed Injured. Poisoned.

Persons exposed to the major accident

Material damage

damage is still present

danger no longer exists

(b) Outside the establishment causalities

- Persons exposed to the major accident Killed Injured. Poisoned.

- Material Damage

- Damage to environment

- danger no longer exists

7. Data available for assessing the effects of the accident on persons and environment.

8. Steps already taken or envisaged:

(a) to alleviate medium or long term effects of the accident.

(b) to prevent recurrence of similar major accident.

(c) any other relevant information

Schedule - 7

[See Rule (SB) D 7 and (SB) D9]

Information to be furnished for the notification of activities/sites

Particulars to be included in a notification of site:

1. The name and address of the occupier making the notification.

2. The full postal address of the site where the notifiable industrial activity will be carried on;

3. The area of the site covered by the notification and of any adjacent site which is required to be taken into account by virtue of Schedule 2(b) and Schedule 3(b).

4. The date on which it is anticipated that the notifiable industrial activity will commence or if it has already commenced statement to that effect.

5. The name and maximum quantity liable to be on the site of each hazardous chemical for which notification is being made.

6. Organisation structure, namely organisation diagram for the proposed industrial activity and set-up for ensuring safety and health.

7. Information relating to the potential for major accidents, namely:--

(a) Identification of major accident hazards;

(b) the condition of events which could be significant in bringing one about;

(c) a brief description of the measures taken.

8. Information relating to the site namely:--

(a) a map of the site and its surrounding area to a scale large enough to show any features that may be significant in the assessment of the hazard or risk associated with the site.

(b) system elements or foreseen events that can lead to a major accident.

(c) hazards

(d) safety-relevant components.

6. Description of safety-relevant units, among others:

(a) Special design criteria

(b) controls and alarms

(c) pressure relief, systems,

(d) quick acting valves,

(e) collecting tanks/dump tanks,

(f) sprinkler systems

(g) fire protection.

7. Information on the hazard assessment, namely:-

(a) Identification of hazards,

(b) the causes of major accidents,

(c) assessment of hazards according to their occurrence frequency.

(d) assessment of accident consequences

(e) safety systems

(f) known accident history.

8. Description of information on organisational systems used to carry on industrial activity safety namely :-

(a) maintain and inspection schedules,

(b) guidelines for the training of personnel,

(c) allocation and delegation of responsibility for plant safety,

(d) implementation of safety procedures.

9. Information on assessment of the consequences of major accidents, namely:-

(a) assessment of the possible release of hazardous chemicals or of energy.

(b) possible despersion of released chemicals :

(c) assessment of the effects of the release (size of the affected area, health effects, property damaged.)

10. Information on the mitigation of major accidents, namely:-

a. fire brigade;

b. alarm systems;

c. emergency plan containing systems of organisation used to fight the emergency, the alaram and the communication routes, guidelines for fighting the emergency, examples of possible accident sequences.

d. co-ordination with the District Collector or the District Emergency Authority and its off-site emergency plan;

e. notification of the nature and scope of the hazard in the event of an accident.

f. antidotes in the event of a release of a hazardous chemical.]

61 (SB)(E). Disclosure of information to the Chief Inspector

(1) The occupier of every factory carrying on 'hazardous process' shall furnish, in writing, to the Chief inspector a copy of all the information furnished to the workers.

(2) A copy of compilation of Material Safety Data Sheets in respect of hazardous substances used produced or stored in the factory shall be furnished to the Chief Inspector, and the local Inspector.

(3) The occupier shall also furnish any other information asked for by the Chief Inspector from time to time for the purpose of this Act and Rules made thereunder.

61(SB)(F). Information of industrial Wastes

(1) The information furnished under Rules 61 (SB)C, and (SB)G shall include the quantity of the solid and liquid wastes generated per day, their characteristics and method of treatment such as incineration of solid wastes, chemical and biological treatment of liquid wastes, and arrangements for their final disposal.

(2) It shall also include information on the quality and quantity of a gaseous waste discharged through the stacks or other openings and arrangements such as provision of scrubbers, cyclone separators, electrostatic precipitators or similar such arrangements made for controlling pollution of the environment.

(3) The occupier shall also furnish the information prescribed in the sub-rules (1) and (2) to the State Pollution Control Board.

61(SB)(G). Review of the information furnished to workers etc

(1) The occupier shall review once in every calendar year and modify, if necessary, the information furnished under Rule 61 (SB)C and 61 (SB)E to the workers and to the Chief Inspector.

(2) In the event of any change in the process or operations or methods of work or when any new substance is introduced in the process or in the event of a serious accident taking place, the information so furnished shall be reviewed and modified to the extent necessary.

61(SB)(H). Confidentiality of information

The occupier of a factory carrying on 'hazardous process' shall disclose all information needed for protecting safety and health of the workers to-

(a) his workers

(b) the Chief Inspector

as required under Rules 61 (SB) F and 61 (SB)G If the occupier is of the opinion that the disclosure of details regarding the process and formulations will adversely affect his business interests, he may make a representation to the Chief Inspector stating the reasons for withholding such information. The Chief Inspector shall give an opportunity to the occupier of being heard and pass an order on the representation.

An occupier aggrieved by an order of Chief Inspector may prefer an appeal before the State

Government within a period of 30 days. The State Government shall give an opportunity to the occupier of being heard and pass an order. The order of the State Government shall be final

RULES FRAMED UNDER SECTIONS 41 -B, 41 -C AND 112 ON SPECIFIC RESPONSIBILITY OF THE OCCUPIER IN RELATION TO HAZARDOUS PROCESS.

61(SC)A. Medical Examination

(1) Workers employed in a 'hazardous process' shall be medically examined b a qualified medical practitioner hereinafter referred to as Factory Medical Officer, in the following manner.-

(a) Once before employment, to ascertain physical fitness of the person to do the particular job

(b) Once in a period of 6 months, to ascertain the health status of all the workers in respect of occupational health hazards to which they are exposed; and in cases where in the opinion of the Factory Medical Officer it is necessary to do so at a shorter interval in respect of any worker.

(c) The details of pre-employment and periodical medical examinations carried out as aforesaid shall be received in the Health Register in Form 17.

(2) No person shall be employed for the first time without a certificate of fitness in Form 17A granted by the Factory Medical Officer. If the Factory Medical Officer declares a person unfit for being employed in any process covered under sub-rule (1), such a person shall have the right to appeal to the inspector who shall refer the matter to the certifying surgeon whose opinion shall be final in this regard. If the Inspector himself is also a certifying surgeon, he may dispose of the application himself

(3) Any findings of the Factory Medical Officer revealing any abnormality or unsuitability of any person employed in the process shall immediately be reported to the certifying surgeon who shall in turn, examine the concerned worker and communicate his findings to the occupier within 30 days. If the certifying surgeon is of the opinion that the worker so examined is required to be taken away from the process for health protection, he will direct the occupier accordingly, who shall employ the said worker in the same process, However, the worker so taken away be provided with alternate placement unless he is fully incapacitated, in the opinion of the certifying surgeon, in which case the worker affected shall be suitably rehabilitated.

(4) A certifying surgeon on his own motion or on a reference from an Inspector may conduct medical examination of a worker to ascertain the suitability of his employment in a hazardous process or for ascertaining his health status. The opinion of the Certifying Surgeon in such a case shall be final. The fee required for this medical examination shall be paid by the occupier.

(5) The worker taken away from employment in any process under sub-rule (2) may be employed again in the same process only after obtaining the fitness certificate from the certifying surgeon and after making entries to that effect in the Health Register.

(6) The worker required to undergo medical examination under these rules and for any medical survey conducted by or on behalf of the Central or the State Government shall not refuse to undergo such medical examination.

61(SC)B. Occupational Health Centres

(1) In respect of any Factory carrying on' hazardous process' there shall be provided and maintained in good order an Occupational Health Centre with the services and facilities as per scale laid down hereunder:-

(a) For factories employing upto 50 workers-.

(i) the services of a Factory Medical Officer on retainership basis, in his clinic to be notified by the occupier. He will carry out the pre-employment and periodical medical examination as stipulated in rules. 61 (SC) A and render medical assistance during any emergency

(ii) a minimum of 5 persons trained in first-aid procedures amongst whom at least one shall always be available during the working period;

(iii) a fully equipped first-aid box.

(b) For factories employing 51 to 200 workers-

(i) An occupational Health Centre having a room with a minimum floor area of 1 5 sq. M. with floors and wall made of smooth and impervious surface and within adequate illumination and ventilation as well as equipment as per the schedule annexed to this Rule;

(ii) a part-time Factory Medical Officer shall be in over all charge of the Centre who shall visit the factory at least twice in a week and whose services shall be readily available during medical emergencies;

(iii) One qualified and trained dresser-cum-compounder on duty throughout the working period;

(iv) a fully equipped first aid box in all the departments.

(c) For factories employing above 200 workers-

(i) one full time Factory Medical Officer for factories employing upto 500 workers and one more Medical Officer for every additional 1000 workers on part thereof,

(ii) An occupational Health Centre having at least 2 rooms each with a minimum floor area of 15 Sq.m. with floors and walls made of smooth and impervious surface and adequate illuminations and ventilation as well as equipment as per the schedule annexed to this Rule

(iii) there shall be one nurse, and dresser-cum-compounder and one sweeper-cum-ward boy throughout the working period;

(iv) the Occupational Health Centre shall be suitably equipped to manage medical emergencies.

(2) The factory Medical Officer required to be appointed under sub-rule(1) shall have qualifications included in Schedules to the Indian Medical Degrees Act of 1916 or in the Schedules

to the Indian Medical Council Act, 1956 and possess a Certificate of Training in Industrial Health of Minimum three months duration recognised by the State Government.

Provided that-

(i) a person possessing a Diploma in Industrial Health or equivalent shall not be required to possess the certificate of training as aforesaid

(ii) the Chief Inspector may, subject to such conditions as he may specify, grant exemption from the requirement of this sub rule, if in his opinion a suitable person possessing the necessary qualification
is not available for appointment

(iii) in case of a person who has been working as a Factory Medical Officer for a period of not less than 3 years on the date of commencement of this rule, the Chief Inspector may, subject to the condition that the said person shall obtain the aforesaid certificate of training within, a period of three years, relax the qualification.

(3) the syllabus of the course leading to the above certificate, and the organisations conducting the State course shall be approved by the DG FASLI or the Government in accordance with the guidelines issued by the DG FASLI.

(4) Within one month of the appointment of a Factory Medical Officer, the occupier of the factory shall furnish to the Chief Inspector the following particulars:

(a) Name and address of the Factory Medical Officer

(b) Qualifications;

(c) Experience, if any ; and

(d) the sub-rule under which appointed.

Equipment for occupational Health Centre in Factories

1 .A glazed sink with hot and cold water always available.

2. A table with a smooth top at least 180 cm X 105 cm.

3. Means for sterilizing instruments.

4. A couch.

5. Two buckets or containers with close fitting lids.

6. A kettle and spirit stove or other suitable means of boiling water.

7. One bottle of spiritus ammonia aromatious (120ml.).
8. Two medium size sponges.
9. Two 'kidney' trays.
10. Four cakes of toilet, preferably antiseptic soap.
11. Two glass tumblers and two wine glasses.
12. Two clinical thermometers.
13. Two tea spoons.
14. Two graduated (120ml) measuring glasses.
15. One wash bottle (1000 cc) for washing eyes.
16. One bottle (one litre) carbolic lotion 1 in 20.
17. Three Chairs.
18. One Screen.
19. One electric hand torch
20. An adequate supply of tetanus toxide.
21. Coramine liquid (60 ml).
22. Tablets - antihistaminic, antispasmodic (25 each).
23. Syringes with needles - 2 cc, 5 cc and 10 cc.
24. Two needle holders, big and small.
25. Suturing needles and materials.
26. One dissecting forceps.
27. One dressing forceps.
28. One scalpels.
29. One stethoscope.

30. Rubber bandage - pressure bandage.

31. Oxygen cylinder with necessary attachments.

32. One blood pressure apparatus .

33. One patellar Hammer.

34. One peak-flow meter for lung function measurement.

35. One stomach wash set.

36. Any other equipment recommended by the Factory Medical Officer according to specific need relating to manufacturing process.

37. In addition :

1. For factories employing 51 to 200 workers-

1. Four plain wooden splints 900mm X 100mm X 6mm.

2. Two plain wooden splints 250mm X 50mm X 12mm

3. One paid artery forceps

4. Injections - Morphia, Pethidine, atropine, adrenaline, coramine, Novocan (2 each)

5. One surgical scissors

(2) For factories employing above 200 workers-

1. Eight Plain wooden splints 900mm x 100mm x 6mm

2. Eight Plain wooden splints 350mm x 75mm x 6mm

3. Four Plain wooden splints 250mm x 50mm x 12mm

4. Two pairs artery forceps

5. Injections - morphia, pethadine, atropine, adrenaline ceramine, movacan (4 each)

6. Two surgical scissors.

61 (SC)C. Ambulance Van

(1) In any factory carrying on 'hazardous process' there shall be provided and maintained in good condition, a suitably constructed ambulance van equipped with items as per sub-rule (2) and manned by a full time Driver - cum - Mechanic and Helper trained in first aid for the purpose of transportation of serious cases of accidents or sickness. The ambulance van shall not be used for any purpose other than the purpose stipulated herein and will normally be stationed at or near to the Occupational Health Centre :

Provided that a factory employing less than 200 workers, may make arrangements for procuring such facility at short notice from nearby hospital or other places, to meet any emergency.

(2) The Ambulance should have the following equipment:

(a) General

- A wheeled stretcher with folding and adjusting devices, with the head of the stretcher capable of being fitted upward-
- Fixed suction unit with equipment.
- Fixed oxygen supply with equipment.
- Pillow with case - Sheets - Blankets; Towels.
- Emesis bag; Bed pan; - Urinal - Glass

(b) Safety Equipment

- Flares with life of 30 minutes - Flood lights
- Flash lights - Fire extinguisher dry powder type;
- Insulated gauntlets.

(c) Emergency care equipment

(i) Resusciation

- portable suction unit, portable oxygen units
- Bag-valve-mask, hand operated artificial units
- Airways, Mouth gaga - Trachoestomy adaptors
- Short spine board, I V Fluids with administration units
- B.P. Manometer,Cugg,- Stethoscope

(ii) Immobolisation,

- Long and short boards, wire ladder splints
- Triangular bandage, long and short spine boards

(iii) Dressings

- Gauge pads 4" x 4", Universal dressing 19" x 36"

- Roll of Aluminium foils, soft roller bandages 6" x 5 yards adhesive tape in 3" roll, safety pins
- Bandage sheets-burn sheets

(iv) Poisoning

Syrup of Ipecac, Activated charcoal pre-packed in doses, snake bite kit, drinking water-pre-packed in doses

(v) Emergency medicines

As per requirement (under the advice of medical officer only)

61 (SC) D : Decontamination facilities

In every factory, carrying out 'hazardous process', the following provisions shall be made to meet emergency -

(a) full equipped first aid box,

(b) readily accessible means of drenching water for workers, parts of body of workers and, clothing of workers who have been contaminated with hazardous and corrosive substance; and such means shall be as per the scale shown in the Table below:

TABLE

No. of persons employed at any time	No. of drenching showers
(i) Upto 50 workers	2
(ii) Between 51 to 200 workers	2+1for every additional 50 or part thereafter
(iii) between 201 to 500 workers	5 + for every additional 100 or part thereafter
(iv) 501 workers and above	2 +1for every additional 200 or part thereafter

(c) a sufficient number of eye wash bottles filled with distilled water or suitable liquid, kept in boxes or cupboards conveniently situated and clearly indicated by a distinctive sign which shall be visible at all times.

61(SC)E. Making available Health Records to workers

(1) The occupier of every factory carrying out 'hazardous process' shall make accessible the health records including the record of workers exposure to hazardous process or, as the case may be, the medical records of any worker for his perusal under the following conditions-

(a) Once in every six months or immediately after the medical examination whichever is earlier;

(b) If the factory Medical Officer or the Certifying Surgeon as the case may be, is of the opinion that the worker has manifested signs and symptoms of any notifiable disease as specified in the Third Schedule of the Act

(c) If the worker leaves the employment

(d) If any one of the following authorities so direct;
- the Chief Inspector of Factories ;
- Health Authority of Central or State Government
- Commissioner of Workmen's Compensation;
- The Director General, Employees State Insurance Corporation,
- The Director, Employees State Insurance Corporation
(Medical Benefits); and
- The Director General, Factory Advice Service and Labour Institutes.

(2) A copy of the upto date health records including the record of worker's exposure to hazardous process or, as the case may be, the medical records shall be supplied to the worker on receipt of an application from him.
X-ray plates and other medical diagnostic reports may also be made available for reference to his medical practitioner.

61 (SC)F. Qualifications, etc. of Supervisors

(1) All persons who are required to supervise the handling or hazardous substances shall possess the, following qualifications and experience

(a) (i) A degree in Chemistry or Diploma in Chemical Engineering or Technology with 5 years experience; or

(ii) A Master's Degree in Chemistry or a Degree in Chemical Engineering or Technology with 2 years experience. The experience stipulated above shall be in process operation and maintenance in the Chemical Industry.

(b) The Chief Inspector may require the supervisor to undergo training in Health and Safety.

(2) The syllabus and duration of the above training the organisations conducting the training shall be approved by the DG FASLI or the State Government in accordance with guidelines issued by the DG FASLI.

61(SC)G.

For the purpose of compliance with the requirements of sub-sections (1) and (4) and (7) of Section 41 -B or 41 -C the Chief Inspector may, if deemed necessary, issue guidelines from time to time to the occupiers of factories carrying on 'hazardous process'. Such guidelines may be based on National Standards, Codes of Practice, or recommendations of International Bodies such as ILO and HO.

CHAPTER V

RULE PRESCRIBED UNDER SUB-SECTION (2) OF SECTION 42

62. Washing facilities

(1) Omitted by

(2) There shall be provided and maintained in every factory for the use of employed persons adequate and suitable facilities for washing which shall include soap and nail brushes or other suitable means of cleaning and the facilities shall be conveniently accessible and shall be kept in a clean orderly condition.

(3) Without prejudice to the generality of the foregoing provisions, washing facilities shall include-

(a) trough with taps or jets at intervals of not less than two feet; or

(b) wash basins with taps attached thereto, or

(c) taps on stand-pipes or

(d) showers controlled by taps or

(e) circular troughs of the fountain type, provided that the Inspector may, having regard to the needs and habits of the workers, fix the proportion in which the aforementioned types of facilities shall be installed.

(4)

(a) Every trough and basin shall have a smooth, impervious surface and shall be fitted with a waste-pipe and plug.

(b) The floor or ground under and in the immediate vicinity of every trough, tap, jet, wash-basin, stand-pipe and shower shall be so laid or finished as to provide smooth impervious surface and shall be adequately drained.

(5) For persons whose work involves contact with any injurious or noxious substance there shall be at least one tap for every fifteen persons; and for persons whose work does not involve such contact the number of taps shall be as follows:-

Number of workers		Number of taps
up to 20	.....	1
21 to 35	.....	2
36 to 50	.....	3
51 to 150	.....	4
151 to 200	.....	5
Exceeding 200 but not exceeding 500	.....	5 +1 tap for every 50 or fraction of 50
exceeding 500	.....	11 + 1 tap for every 100 or fraction of 100

(6) If female workers are employed, separate washing facilities shall be provided and so enclosed or screened that the interiors are not visible from any place where persons of the other sex work or pass. The entrance to such facilities shall bear conspicuous notice in the language understood by the workers "For Women Only" and shall also be indicated pictorially.

(7) The water supply to the washing facilities shall be capable of yielding at least ten litres for each person employed and shall be from such source as yields clean water suitable for the purpose.

Provided that in the case of factories carrying on hazardous processes specified in the First Schedule to the Act, the quantity of water to be available for persons employed in such manufacturing process shall be at least thirty litres for each such person.

Provided further that the Chief Inspector may, in the case of any particular factory having regard to the nature of the operations carried out therein and also the practicable availability of such quantity of water, permit a smaller quantity or require a larger quantity not exceeding thirty litres per person employed, to be made available.

Provided also that the Inspector may, by order in writing, require the occupier, at such time orat such intervals as he may direct, to have samples of water tested for fitness for washing purposes at any laboratory recognized by the Chief Inspector or Health Officer.

RULE PRESCRIBED UNDER SECTION 43

62-A. Drying of wet clothing

In the classes of factories mentioned in the schedule annexed hereto, facilities for safe keeping of clothing not worn during working hours and for the drying of wet clothing used in the course of work shall be provided .

SCHEDULE

Glass Works	Engineering Workshops

Oil mills	Automobile Workshops
Sugar Factories	Iron and Steel Works
Chemical Works	Dying Works
Thermal Power Generating Stations	Leather Tanneries

RULE PRESCRIBED UNDER SUB-SECTION (1) OF SECTION 45

63. First-aid appliance

The First-aid boxes or cupboards shall be distinctly marked with a red cross on white back-ground and shall contain the following equipment-

A. For factories in which the number of persons employed does not exceed ten or (in the case of factories in which mechanical power is not used) does not exceed fifty persons :

(i) Six small size sterlized dressings.

(ii) Three medium size sterilized dressings.

(iii) Three large size sterilized dressings.

(iv) Three large size sterilized burn dressings.

(v) One (60 ml.) bottle of cetrimide solution (1%) or a suitable antiseptic solution.

(vi) One (60 ml.) bottle of mercurochrome solution (2%) in water.

(vii) One (30 ml.) bottle containing sal-volatile having the dose and mode of administration indicated on the label.

(viii) One pair scissors.

(ix) One roll of adhesive plaster (2cm X 1 metre).

(x) Six pieces of sterilized eye pads in separate sealed packets.

(xi) A bottle containing 100 tablets (each of 5 grains) of aspirin or any other analgesic.

(xii) Polythene Wash bottle (1/2 litre, i.e., 500 c.c) for washing eyes.

(xiii) A snake-bite lancet.

(xiv) One (30 ml.) bottle containing Potassium Permanganate Crystals.

(xv) One copy of first-aid leaflet issued by the Directorate General of Factory Advice Service and Labour Institutes, Government of India, Bombay.

B. For Factories in which mechanical power is used and in which the number of persons employed exceeds ten but does not exceed fifty.

(i) Twelve small size sterilised dressings.

(ii) Six medium size sterilised dressings.

(iii) Six medium size sterilized dressings.

(iv) Six large size sterilized burn dressings.

(v) Six (1 5 gm) packets of sterilized cotton wool.

(vi) One (120 ml.) bottle of cetrirmide solution (1%) or a suitable antiseptic solution.

(vii) One (120 ml.) bottle of mercurochrome solution (2%) in water.

(viii) One (60 ml.) bottle containing sal-volatile having the dose and mode of administration indicated on the label.

(ix) One pair scissors.

(x) Two rolls of adhesives plaster (2 cm X 1 metre).

(xi) Eight pieces of sterilized eye pads in separate sealed packets.

(xii) One tourniquet.

(xiii) One dozen safety pins.

(xiv) A bottle containing 100 tablets (each of 5 grains) of aspirin or any other analgesic.

(xv) One polythene wash bottle (1/2 litre i.e.,500 cc) for washing eyes.

(xvi) A snake-bite lancet.

(xvii) One (30 ml.) bottle containing potassium permanganate crystals.

(xviii) One copy of the first-aid leaflet issued by the Directorate General of Factory Advice Service and Labour, Government of India, Bombay.

C. For factories employing more than fifty persons.

(i) Twenty-four small sterilized dressings.

(ii) Twelve medium size sterilized dressings.

(iii) Twelve large size sterilized dressings.

(iv) Twelve large size sterilized burn dressings.

(v) Twelve (15 gm.) packets of sterilized cotton wool.

(vi) One (200 ml.) bottle of mercurochrome (2%) solution in water.

(vii) One (200 ml.) bottle of cetrimide solution (1 %) or a suitable antiseptic solution.

(viii) One (200 ml.) bottle of sal-volatile having the dose and mode of administration indicated on the label.

(ix) One pair scissors.

(x) One roll of adhesive plaster (6 cms X 1 metre).

(xi) Two rolls of adhesive plaster (2 cms. X 1 metre).

(xii) Twelve pieces of sterilized eye pads in separate sealed packets.

(xiii) A bottle containing 100 tablets (each of 5 grains) of aspirin or any other analgesic.

(xiv) One polythene wash bottle (500 c.c) for washing eyes.

(xv) Twelve roller bandages 10 cms. wide.

(xvi) Twelve roller bandages 5 cms. wide.

(xvii) Six Triangular bandages.

(xviii) One tourniquet.

(xix) A supply of suitable splints.

(xx) Two packets of safety pins.

(xxi) Kidney tray.

(xxii) A snake-bite lancet.

(xxiii) One 30 ml. bottle containing Potassium Permanganate crystals.

(xxiv) first-aid leaflet issued by the Directorate General of Factory Advice Service and Labour Institutes, Bombay :

Provided that items (xiv) to (xxi) need not be maintained in the standard first-aid box or cup-board (a) where is a properly equipped ambulance room, or (b) if at least one box containing such items and placed and maintained in accordance with the requirements of Section 45 is separately provided.

D. The dressing required under items (i) and (ii), may be substituted by, adhesive wound dressings approved by the Chief Inspector of Factories and other equipment or medicines that may be considered essential and recommended by the Chief-inspector of Factories from time to time.

63 A. Notice regarding First-aid

A notice containing the names of the persons working within the precincts of the Factory who are trained in first aid treatment and who are in charge of the First-aid boxes or cup-boards shall be posted in every factory at a conspicuous place and near each such box or cup-board. The notice shall also indicate the workroom, where the said person shall be available. The name of the nearest hospital and its telephone number shall also be mentioned prominently in the said notice.

RULE PRESCRIBED UNDER SUB-SECTION (4) OF SECTION 45

64. Ambulance room

(1) Every ambulance room shall be under the charge of at least one whole-time qualified medical officer assisted by at least one qualified nurse or dresser-cum-compounder, subject to condition that the Medical Officer is readily available on call during the working hours of the factory.

(2) There shall be displayed in the ambulance room a notice giving the name, address and telephone number of the Medical Practitioner in charge. The name of the nearest hospital and its telephone number shall also be mentioned prominently in the said notice.

(3) The ambulance room shall be separate from the rest of the factory and shall be used only for the purpose of first-aid treatment and rest. It shall have a floor area of at least 24 sq. metres with smooth, hard and impervious walls and shall be adequately ventilated and lighted by both natural and artificial means There shall be attached to it at least one latrine and urinal of sanitary type. An adequate supply of whole-some drinking water shall be provided and the following articles shall always be kept in the ambulance room or dispensary:--

1. A glazed sink with hot and cold water.
2. A table with a smooth top of at least 180 cms x 105 cms. dimensions.
3. Means for sterilizing instruments.
4. A couch.
5. Two stretchers.
6. Two buckets or containers with close fitting lids.

7. Two rubber hot water bags.
8. A kettle and a spirit stove or other suitable means of boiling water.
9. Twelve plain wooden splints 90 mm x 100 mm. X 6 mm.
10. Twelve plain wooden splints 350 mm. X 75 mm. X 6 mm.
11. Six plain wooden splints 250 mm. X 50 mm. X 12 mm.
12. Six woolen blankets.
13. Three pairs of artery forceps.
14. One bottle of spiritus Ammonia Aromatics(120 ml.)
15. Smelling salts(60 gms.).
16. Two medium size sponges.
17. Six hand towels.
18. "Four kidney" trays.
19. Four cakes of toilet, preferably antiseptic soap.
20. Two glass tumblers and two wine glasses.
21. Two clinical thermometers.
22. Tea spoons-two
23. Graduated (120 ml.) measuring glass-two
24. Minimum Measuring glass-two.
25. One wash bottle (100 cc.) for washing eyes.
26. One bottle (one litre) carbolic lotion 1 in 20
27. Three chairs.
28. One screen.
29. One electric hand torch.
30. Four first-aid boxes or cup-boards stocked to standards prescribed under clause of Rule 63.
31. An adequate supply of anti-tetanus toxide
32. Injections-Morphia, Pethiadine, Atropine, Adrenaline, Corarnine, Novocam-6 each.
33. Coramine liquid (60 ml.)
34. Tablets-antihistaminies, antispasmodic (25 each).
35. Syringes with needles-2 cc, 10 cc., 50 cc
36. Surgical scissors-three.
37. Needle holder.
38. Suturing needles and materials
39. Dissecting forceps-three
40. Dressing forceps-three.
41. Scalpels-three
42. Stethoscope-one.
43. Rubber bandage pressure bandage.
44. Oxygen cylinder with necessary attachments.

(4) The occupier of every factory to which these rules apply, shall for the purpose of removing serious cases of accident sickness, provide in the premises and maintain in good condition a suitable conveyance unless he has made arrangements of or obtaining such a conveyance from a hospital.

Explanation..- For the purposes of this rule, "qualified medical practitioner" means a person holding a qualification granted by an Authority specified in the Schedule to the Indian Medical Degree Act, 1916, or in the Schedules to the Indian Medical Council Act, 1956.

(5) The Chief Inspector of factories may, by an order in writing, exempt any factory from the requirements of this rule, subject to such conditions as he may specify in that order, if a hospital, ambulance room or dispensary is maintained at or within two kilometers of the precincts of the factory and such arrangements are made so as to ensure the immediate treatment of all injuries sustained by workers within the factory and for providing rest to the workers so injured.

RULES 65 TO 71 PRESCRIBED UNDER SECTION 46

65. Canteens

(1) Rules 65 to 71 shall come into force in respect of any factory or factories on such dates as the State Government may, by notification in the official Gazette, appoint in this behalf.

(2) The occupier of every factory notified by the State Government, and wherein more than two hundred and fifty workers are ordinarily employed shall provide in or near the factory an adequate canteen according to the standards prescribed in these rules.

(3) The occupier of factory notified by the State Government under Section 46 shall submit for the approval of the Chief Inspector, plans and site plan in triplicate, of the building to be constructed or adopted for use as a canteen and such a building shall be in accordance with the plans approved by the Chief Inspector and shall satisfy such condition or conditions as may be imposed, if any, by the Chief Inspector to ensure conformity with these rules or the Act.

(4) The canteen building shall be situated not less than fifty feet from any latrine, urinal, boiler house, coal stocks, ash pumps and any other source of dust, smoke or obnoxious fumes,

Provided that the Chief Inspector may in any particular factory relax the provisions of this sub-rule such extent as may be reasonable in the circumstances and may require measures to be adopted to secure the essential purposes of this sub-rule.

(5) The canteen building shall be constructed in accordance with the plans approved by the Chief Inspector and shall accommodate at least a dining hall, kitchen, store room, pantry and washing place separately for workers and for utensils. The minimum height of the building shall be not less than 12 feet and all the walls and roof shall be of suitable heat resisting materials and shall be waterproof.

(6) In a canteen the floor and inside walls up to a height of four feet from the floor shall be made of smooth and impervious material; the remaining portion of the inside walls shall be made smooth by cement plaster or in any other manner approved by the Chief Inspector.

(7) The doors and windows of a canteen building shall be of fly-proof construction and shall allow adequate ventilation.

(8) The canteen shall be sufficiently lighted at all times when any person have access to it.

(9) (a) In every canteen-

(i) all inside walls of rooms and all ceilings and passages and staircases shall be lime-washed or colour washed at least once in every year or painted once in three years dating from the period when last lime-washed or painted as the case may be

(ii) all wood work shall be varnished or painted once in three years dating from the period when last varnished or painted

(iii) all internal structural iron or steel work be varnished or painted once in three years dating from the period when last varnished or painted, Provided that, inside-walls-of the kitchen shall be lime washed once in every four months.

(10) The precincts of the canteen shall be maintained in a clean and sanitary condition. Waste water shall be carried away in suitable covered drains and shall not be allowed to accumulate so as to cause a nuisance. Suitable arrangements shall be made for the collection and disposal of garbage.

66. Dining Hall

(1) The dining hall shall accommodate at a time at least 30 per cent of the workers working at a time;

Provided that, in any particular factory or in any particular class of factories, the Inspector of Factories may by an order in writing in this behalf alter the percentage of workers to be accommodated.

(2) The floor area of the dining hall, excluding the area occupied by the service counter andany furniture except tables and chairs, shall be not less than 10 square feet per diner to be accommodated as prescribed in sub-rule (1).

(3) A portion of the dining hall and service counter shall be partitioned of and reserved for women workers in proportion to their number. Washing places for women shall be separated and screened to secure privacy.

(4) Sufficient tables, chairs, or benches shall be available for the number of diners to be accommodated as prescribed in sub-rule(l), Provided that where the Chief Inspector is satisfied that satisfactory alternate arrangements are made, he may exempt any particular factory or class of factories from the provisions of this sub rule.

(5) Soaps and towels should be provided at the washing places in the canteen for the use of the workers.

67. Equipment

(1) There shall be provided and maintained sufficient utensils, crockery, cutlery, furniture and any other equipment necessary for the efficient running of the canteen. Suitable clean clothes for the employees serving in the canteen shall be provided and maintained.

(2) The furniture, utensils and other equipment shall be maintained in a clean and hygienic condition. A service counter, if provided, shall have a top of smooth and impervious material. Suitable facilities including an adequate supply of hot water shall be provided for the cleaning of utensils and equipment.

(3) Food and food materials should be stored in fly-proof safes and handled with the help of wooden ladles or suitable metal forceps whichever is convenient. Vessels once used should be scaled before being used again.

68. Prices to he charged

(1) Food, drinks and other items served in the canteen shall be served on a non-profit basis and the prices charged shall be subject to the approval of the Canteen Managing Committee.

Provided that, where the canteen is managed by a Worker's Co-operative Society in accordance with the provisions of sub-rule(6) of Rule 70, such society may be allowed to include in the working charges to be incurred for the food, the food stuff served, a profit up to five per cent on its working capital employed in running the canteen.

(2) In computing the prices referred to in sub-rule (1) the following items of expenditure shallnot be taken into consideration, but will be borne by the occupier -

(a) the rent for the land and building

(b) the depreciation and maintenance charges of the building and equipment provided for the canteen ;

(c) the cost of purchase, repairs and replacement of equipment including furniture, crockery, cutlery, and utensils ;

(d) the water charges and expenses for providing lighting and ventilation

(e) the interest for the amount spent on the provision and maintenance of the building, furniture and equipment provided for the canteen;

(f) the cost of fuel required for cooking or for heating stuffs or water; and

(g) the wages to the employees servicing of the canteen and the cost of uniforms, if any provided to them.

(3) The charges per quantity of foods stuffs, beverages and any other item served in the canteen shall be conspicuously displayed in the language understood by the majority of workers.

69. Accounts

(1) All books of accounts, registers and any other documents used in connection with the running of the canteen shall be produced on demand to an inspector of Factories.

(2) The accounts pertaining to the canteen shall be audited, once in every twelve months, by registered accountants and auditors. The balance sheet prepared by the said auditors shall be submitted to the canteen managing committee not later than two months after the closing of the audited accounts :

Provided that the accounts pertaining to the canteen in a Government Factory having its own accounts Department may be audited by such Department.

70. Managing Committee

The manager shall appoint a Canteen Managing Committee which shall be consulted from time to time; as to -

(a) the quality and quantity of food stuffs to be served in the canteen

(b) the arrangement of the menus

(c) times of meals in the canteen ; and

(d) any other matter as may be directed by the committee.

(2) The Canteen Managing Committee shall consist of an equal number of persons nominated by the occupier and elected by the workers. The number of elected workers shall be in the proportions of one for every 1,000 workers employed in the factory, provided that in no case shall there be more than five or less than two workers on the committee and in case where the workers refuse to elect their representatives, the occupier shall himself nominate the workers representatives.

(3) The occupier shall appoint from among the persons nominated by him, a Chairman to the Canteen Managing Committee.

(4) The manager shall determine and supervise the procedure for elections to the Canteen Managing Committee.

(5) A Canteen Managing Committee shall be dissolved by the manager two years after the election, no account being taken of a by-election or its constitution, as the case may be.

(6) Where the workers of a factory in which a canteen has been provided by the occupier in accordance with Rules 65 to 67 for the use of the workers, desire to run the canteen by themselves, on a co-operative basis with share capital contributed by themselves, the management may permit them to run the canteen in accordance with the bye-laws of the co-operative canteen, the Madras Co-operative Societies Act, 1932, or the Hyderabad Co-operative Societies Act 1952 and the rules framed thereunder, subject to such conditions as the Chief Inspectors may, in consultation with the Registrar of Co-operative Societies, Andhra Pradesh, impose.

(7) The provisions of sub-rule (1) of Rule 68, sub-rule (2) of Rule 69 and sub-rules (1) to (5) of Rule 70 shall not apply to canteens which are run on co-operative basis by the workers themselves and which are recognized by the Chief Inspector.

71. Annual medical examination of canteen staff

Annual medical examination of fitness of each member of the Canteen staff who handles food stuffs shall be carried out by the factory medical officer or the certifying surgeon which should include the following:-

(i) routine blood examination;

(ii) routine and bacteriological testing of faeces and urine for germs, dysentery and typhoid fever;

(iii) any other examination including chest X-Ray that may be considered necessary by the factory medical officer or the Certifying Surgeon.

Any person who, in the opinion of the Factory Medical Officer or Certifying Surgeon, is unsuitable for employment on account of possible risk to the Health of other shall not be employed as canteen staff.

71 -A. Relaxation of Rules 65 to 70 in certain cases

The provisions of Rules 65 to 70 may be relaxed by the Chief Inspector, subject to such conditions as he may deem fit in the case of factories belonging to the same business group as amalgamation where centralized cooking in an approved industrial canteen is arranged for. Adequate arrangements to the satisfaction of the Chief Inspector shall, however, be made in such cases for the conveyance and proper distribution of the food so cooked to the workers concerned as if separate canteens had actually been provided at site, in the factories covered by this relaxation.

RULE PRESCRIBED UNDER SECTION 47

72. Shelters, rest rooms and lunch rooms

(I) Omitted

(2) The occupier of factory who is required to provide shelters, rest rooms and lunch rooms shall submit, for the approval of the Chief Inspector, detailed plans in triplicate of the building to be constructed or adapted. Such buildings shall be in accordance with the plans approved by the Chief Inspector and shall satisfy such condition or conditions as may be imposed by the Chief inspector to ensure conformity with this rule or the Act.

(a) The building shall be soundly constructed and all the walls and roof shall be of suitable heat-resisting materials and shall be water-proof. The floor and walls to a height of 90 cms shall be so laid or finished as to provide a smooth, hard and impervious surface.

(b) The height of every room in the building shall be not less than 3.65 metres from floor level to the lowest part of the roof and there shall be at least 12 square feet of floor area for every person employed,

Provided that

(i) workers who habitually go home for their meals during the rest periods may be excluded in calculating the number of workers to be accommodated and

(ii) in the case of factories in existence at the date of commencement of the Act, where it is impracticable, owing to lack of space to provide 1/2 sq. metre of floor area for each person, such reduced floor area per person shall be provided as may be approved in writing by the Chief Inspector.

(c) Effective and suitable provision shall be made in every room for securing and maintaining adequate ventilation by the circulation of fresh air and there shall also be provided and maintained sufficient and suitable natural or artificial lighting.

(d) Every room shall be adequately furnished with chairs or benches with back-rests.

(e) Sweepers shall be employed whose primary duty it is to keep the rooms, building and precincts thereof in a clean and tidy condition

(ee) Suitable provision shall be made in every room for supply of drinking water and facilities for washing

(f) The chief Inspector may, for reasons to be recorded in writing, relax the provisions of this rule subject to such conditions as he may deem fit to impose.

(3) The lunch rooms shall:-

(a) comply with the requirements laid down in clauses (a) to (f) of sub-rule (2) ; and

(b) be provided with adequate number of tables with impervious tops for the use of workers for taking food.

RULES PRESCRIBED UNDER SUB-SECTION (3) OF SECTION 48

73. Crèches

(1) The occupier of a factory who is required to provide a crèche under Section 48 shall submit for the approval of the Chief Inspector, detailed plans in triplicate of the crèche building to be constructed and such a building shall 'be in accordance with the plans approved by the Chief Inspector and satisfy such condition or conditions as may be imposed by the Chief Inspector.

(2) The crèche shall be conveniently accessible to the mothers of the children accommodated therein and so far as is reasonably practicable it shall not be situated in close proximity to any part of the factory where obnoxious fumes, dust or odours are given off or in which excessively noisy processes are carried on.

(3) The building in which the crèche is situated shall be soundly constructed and all the walls and roof shall be of suitable heat-resisting materials and shall be water-proof. The floor and internal walls of the crèche to a height of 1.20 metres around shall be so laid or finished as to provide a smooth impervious surface.

(4) The height of the rooms in the building shall be not less than 3.65 metres from the floor to the lowest part of the roof and there shall be not less than 1.86 metres of floor area for each child to be accommodated.

5) Effective and suitable provision shall be made in every part of the crèche for securing and maintaining adequate ventilation by the circulation of fresh air.

(6) The crèche shall be adequately furnished and equipped and in particular there shall be one suitable cot or cradle with the necessary bedding for each child (provided that for children over two years of age it will be sufficient if suitable bedding is made available) at least one chair or equivalent seating accommodation for the use of each mother while she is feeding or attending to her child and a sufficient supply of suitable toys for the older children.

(7) The crèche shall be ordinarily provided with one cradle for every 30 women workers employed in the factory subject to a minimum number of six cradles.

(8) A suitably fenced and shady open air playground shall be provided for the old children:

Provided that the Chief Inspector may by order in writing exempt any factory from compliance with this sub-rule if he is satisfied that there is not sufficient space available for the provision of such playground.

74. Wash room

There shall be in or adjoining the crèche a suitable wash room for the washing and their clothing. The wash room shall conform to the following standards:-

(a) The floor and internal walls of the room to a height of 3 feet shall be so laid or finished as to provide a smooth impervious surface. The room shall be adequately lighted and ventilated and the floor shall be effectively drained and maintained in a clean and tidy condition.

(b) There shall be at least one basin or similar vessel for every four children accommodated in the crèche at any one time together with supply of water provided, if practicable, through taps from a source approved by the Health Officer. Such source shall be capable of yielding for each child a supply of at least five gallons of water a day.

(c) An adequate supply of clean clothes, soap and clean towels shall be made available for each child while it is in the crèche.

(d) Adjoining the washing room referred to above, a septic type latrine shall be provided for the sole use of the children in the crèche. The design of this latrine and the scale of accommodation to be provided shall be determined by the Health Officer. The crèche latrine shall always be kept clean and in a sanitary condition by a sweeper specially employed for the purpose.

75. Supply of milk and refreshment

At least half a pint of clean pure milk shall be available for each child on every day it is accommodated in the crèche and the mother of such a child shall be allowed in the course of her daily work-intervals of at least 15 minutes to feed the child. For children above two years of age there shall be provided in addition an adequate supply of wholesome refreshment.

76. Clothes for crèche staff

The crèche staff be provided with suitable clean clothes for use while on duty in the crèche.

76-A. Exemption from the provisions of crèche

(1) In factories where the number of married women workers or widows employed does not exceed 15 or where the factory works for less than 180 days in a calendar year, the Chief Inspector may exempt such factories from the provisions of Section 48 and Rules 73 to 76 if he is satisfied that alternate arrangements as stipulated under sub-rule (2) are provided by the Factory.

(2) (a) The alternate arrangements required in sub-rule (1) shall include a crèche building which has a minimum accommodation at the rate of 2 sq.m. per child and constructed in accordance with the plan approved by the Chief Inspector.

(b) The crèche building shall have-

(i) a suitable wash room for washing of the children and their clothing;

(ii) adequate supply of and soap clean clothes and towels; and

(iii) adequate number of female attendants who are provided with suitable clean clothes for use while on duty to look after the children in the crèche.

(3) The exemption granted under sub-rule (1) may at any time be withdrawn by the Chief Inspector if he finds, after such enquiry as he may deem fit, that the factory has committed a breach of this rule.

RULE PRESCRIBED UNDER SECTION 49

76-B. Welfare Officers

(1) Number of Welfare Officers:- The occupier of every factory where 500 or more workers, are employed, shall appoint at least one Welfare Officer:

Provided that where a group of factories in close proximity belong to the same management, the Chief Inspector may exempt the said factories from this rule in so far as it requires the appointment of a separate Welfare Officer in respect of each such factory subject to such conditions as he may impose:

Provided further that where the number of workers exceeds, 2,000 one additional Welfare Officer shall be appointed for every additional 2,000 workers or fraction thereof over 500; and where there are more than one Welfare Officer, one of them shall be called the Chief Welfare Officer and the others Assistant Welfare Officers.

[(2) *Qualifications:*-- A person shall not be eligible for appointment as Welfare Officer unless he possesses--

(a) a Degree in Arts/Science/Commerce or in Law of any University;

[2][(b) A Post Graduate Degree or Diploma covering Labour Legislations with case law, Industrial relations, Personnel Management, Human Resource Management and other allied subjects with Labour Welfare as a Special subject, of not less than two years duration conducted by a University of the State of [6]**Telangana** or recognised by the Government of Andhra Pradesh.]

[3][Provided that the one year Post Graduate Diploma Course in Industrial Relations and Personnel Management awarded by the Osmania University, Hyderabad upto the academic year 1991-92 shall be treated as recognised and equivalent qualification to the Diploma in Industrial Relations and Personnel Management covering Labour Welfare.]

and

[6] The words, "**Andhra Pradesh**" substituted by **"Telangana"** by G.O.Ms.No. 39 of Labour, Employment, Training and Factories Department, dated 30-12-2015.

(c) adequate knowledge of Telugu Language.

Provided that the State Government may grant exemption in suitable cases from the condition of possessing the qualification of a Degree or a Diploma in Social Science from a recognised Institution.

(3) Recruitment of Welfare Officers

(i) The post of Welfare Officer shall be advertised in two newspapers having a wide circulation in the State, one of which should be an English newspaper.

(ii) Selection for appointment of the post of Welfare Officer shall be made from among the candidates applying for the post by a committee appointed by the occupier of the factory.

(iii) The appointment when made shall be notified by the occupier to the Chief Inspector giving the details of the qualifications, age, pay, previous experience and other relevant particulars of the Officer appointed and the terms and conditions of his service.

(iv) The required number of Welfare Officers shall be appointed within 120 days from the date on which such appointments are due to be made under sub-rule (1) of Rule 76-B or from the date of resignation/ dismissal /termination of services of any Welfare Officer.

(4) Conditions of service of Welfare Officers

(i) Welfare Officers shall be given appropriate status corresponding to the status of amember of the Executive Staff of the Factory and shall be fixed in a scale of pay which shall not be less than,-

(a) Rs. 4400-8700-Revised Scale of 1993 (Plus such allowances as applicable to similar pay scale) obtaining in the concerned factory/ establishment in the case of Chief Welfare Officer; and

(b) Rs.3110-6380-Revised scale of 1993 (Plus such allowances as applicable to similar pay scale) obtaining in the concerned factory/ establishment in the case of Welfare Officer.

(ii) The conditions of service of Welfare Officer shall be the same as those of the other members of the executive staff of corresponding status in the factory.

(iii) The services of a Welfare Officer shall not be dispensed with, nor he shall be reverted, without the written concurrence of the Director of Factories, Hyderabad who shall record reasons therefor.

(iv) No punishment such as withholding of increments, including stoppage at any efficiency bar, reduction to a lower stage in the time scale, suspension dismissal or termination of service, except

censure shall be imposed by the management on a Welfare Officer, except with the previous concurrence of the Director of Factories.

(v) A Welfare Officer, who has been dismissed from service or whose services have been terminated in any other manner than as provided in clause (iv) above may within 30 days from the date of receipt of the order by him, appeal to the State Government against the order of punishment made by the management with the concurrence of the Director of Factories and the decision of the State Government thereon shall be final :

Provided that when the management terminates the service or probation of a Welfare Officer the reasons for such a termination of service or probation shall be reported to the State Government or such authority, as may be, empowered by them in this behalf.

(5) Duties of Welfare Officers:- The duties of a Welfare Officer sing be-

(i) to establish contacts and hold consultations with a view to maintaining harmonious relations between the factory management and workers

(ii) to bring to the notice of factory management, the grievances of workers, individual as well as collective, with a view to securing their expeditious redress and to act as a Liaison Officer between the management and labour

(iii) to study and understand the point of view of labour in order to help the factory management to shape and formulate labour policies and to interpret these policies to the workers in language they can understand

(iv) to advise on the fulfilment by the concerned departments of the factory management of obligations statutory or otherwise concerning the application of the provisions of the Factories Act, 1948 and the rules made thereunder and to establish liaison with the Inspector of Factories, and the medical services concerning medical examination of employees, health records, supervision of hazardous jobs, sick visiting and convalescence, accident prevention and supervision of safety committees, systematic plant inspection, safety education, investigation of accidents, maternity benefits and workmen's compensation;

(v) to advise on fulfilment by the management and the concerned departments of the factory of their obligations, statutory or otherwise, concerning regulation of working hours, maternity benefit, compensation for injuries and sickness and other welfare and social benefit measures;

(vi) to advise and assist the management in the fulfillment of its obligations, statutory or otherwise concerning prevention of personal injuries and maintaining a safe work environment, in such factories where a Safety Officer is not required to be appointed under the enabling provisions under Section 40-B

(vii) to encourage the fonnation of works and joint production committees, co-operative societies, and welfare committees and to supervise their work

(viii) to encourage provision of amenities such as canteens, shelters for rest, creches, adequate latrine facilities, ~rig water, sickness and benevolent scheme payments, pension and superannuation funds, gratuity, payments, granting of loans and legal advice to workers

(ix) to help the factory management in regulating the grant of leave with wages and explain to workers the provisions relating to leave with wages and other leave privileges and to guide the workers in the matter of submission of applications for regulating authorised absence;

(x) to advise on provision of welfare facilities such as housing facilities food-stuffs, social and recreational facilities and sanitation and on individual personal problems and on the education of children;

(xi) to advise the factory management on questions relating to training of new starters, apprentices, workers on transfer and promotion, instructors and supervisors; supervision and control of notice board and information bulletins; to further the education of workers and encourage their attendance at technical institutes;

(xii) to suggest measures which will serve to raise the standard of living of workers and in general, promote their well being;

(xiii) Welfare Officers not to deal with disciplinary cases or appear on behalf of the management against workers.,- No Welfare Officer shall deal with any disciplinary case against a worker or appear before a conciliation office, or in a Court or Tribunal on behalf of the Factory management against any worker or workers.

(6) Powers of exemption:- The State Government may by notification in the Official Gazette exempt any factory or class or description of factories from the operation of all or any of the provisions of this Rule subject to compliance with such alternative arrangements, as may be approved by the State Government.

CHAPTER VI
WORKING HOURS OF ADULTS

RULES PRESCRIBED UNDER SUB-SECTION (2) OF SECTION 53

77. Compensatory holidays,

(1) Except in the case of workers engaged in any work which for technical reasons must be carried on continuously throughout the day, the compensatory holidays to be allowed under sub-section (1) of Section 52 of the Act, shall be so spaced that not more than two holidays are given in one week.

(2) The manager of the factory shall display, on or before the end of the month in which holidays are lost, a notice in respect of workers allowed compensatory holidays during the following month and of the dates thereof, at the place at which the Notice of Periods of Work prescribed under Section 61 is displayed. Any subsequent change in the notice in respect of any compensatory holiday shall be made not less than three days in advance of the date of holiday.

(3) Any compensatory holiday or holidays to which a worker is entitled shall be given to him before he is discharged or dismissed and shall not be reckoned as part of any period of notice required to be given before discharge or dismissal.

(4) The manager shall, in any prescribed muster roll or record of attendance, indicates the days on which the worker was required to work and the days on which he was allowed compensatory holidays.

77-A. Adult workers engaged in certain factories exempted from section 58.

Adult workers working in factories specified in the Schedule annexed hereto hall be exempted from the provisions of Section 5

SCHEDULE

(1) All workers in Newspaper Presses.

(2) All workers in Iron and Steel, Aluminum, Copper and Brass Rolling Mills.

(3) All workers in Hotels and Restaurants.

(4) All workers in Tea Factories.

(5) Workers in public utility transport workshops (where this exemption is considered necessary by the Chief Inspector).

(6) Any other classes of workers in the auxiliary sections of large factories where steam or electricity is generated or transformed for use in the factory, who may be declared to be so exempted in writing by the Chief Inspector on application by the Manager, in consideration of the essential or continuous nature of the duties involved.

(7) Any special class of workers in any other factory where overlapping shifts are considered necessary by the Chief Inspector.

(8) All workers in all factories to the extent of thirty minutes where the overlapping of shifts is intended to facilitate the smooth change-over of shifts without interruption of work provided that

both the groups of workers do not carry out the same work at the same time and subject to provisions of Section 54.

MUSTER ROLL PRESCRIBED UNDER SUB-SECTION (5) OF SECTION 59

78. Omitted

RULE PRESCRIBED UNDER SUB-SECTION (5) OF SECTION 59

78-A. Cash Equivalent Of Concessional Sale

The cash equivalent of the advantage accruing through the concessional sale to a worker of food grains and other articles shall be computed at the end of every wage period fixed under provisions of the Payment of Wages Act, 1936 (Central Act NO.IV of 1936). For the purpose of computing the cash equivalent of the advantage accruing through the concessional sale to a worker of food grains and other articles, the difference between the value of food grains and other articles at the average market rates prevailing during the wage period in which there was overtime work, and the value of food grains and other articles supplied at concessional rates shall be calculated and allowed for the overtime hours worked ;

Provided that, in the case of factories which are already following a different procedure for calculating the cash equivalent of the advantage accruing through the concessional sale of food grains and other articles at the time of commencement of this rule the Chief Inspector may by order in writing permit them to adopt such different procedure if it is not less favourable than the one prescribed in this Rule.

RULES UNDER SECTION 60

78-B. Exemption for Double Employment

An adult worker may be employed in more than one factory on the same day if,-

(a) he is employed or engaged on a part-time basis to do any work; or

(b) he is employed or engaged to carry out any particular work of an occasional nature otherwise than as a full-time employee ; or

(c) the occupier or owner is unaware that the worker is employed on a full-time basis in any other factory.

78-C. Overtime slips.

Period of overtime work shall be entered in overtime slips in duplicate, a copy of which duly signed by the manager or by a person duly authorised by him shall be given to the worker immediately after completion of the overtime work.

NOTICE PRESCRIBED UNDER SECTION 61 (8) AND SECTION 72 (1)

79. Notice of periods of work

The notice of periods of work for adults required by Sec.61 (1) and the notices of periods ofwork for the children required by Sec. 72 (1) shall be in Form No. 11 and shall be exhibited in a prominent place at or near the entrance to the factory both in English and Telugu.

Provided that in case of factories working only in a single shift, the said notice may be in such other form as is sufficient to clearly set out the particulars required by the said sections.

REGISTER PRESCRIBED UNDER SUB-SECTION (2) OF SECTION 62

80. Register of Adult workers

Every factory shall maintain a muster roll in such form and in such manner as is convenient for the factory so that the name of the adult worker, the nature of his work, the group (if any) in which he is included and the relay to which he is assigned where his group works in shifts shall be contained in the muster roll together with any other particulars that the manager may include and such record shall be preserved for a period of three years after last entry.

RULES 81 to 84-A PRESCRIBED UNDER SECTION 64

81. Persons defined to hold positions of supervision or management and confidential positions

The following persons, by whatever designation called, are defined for the purposes of Section 64(1) exempting them from the provisions of Chapter VI of the Act, namely:-

(a) Managers and persons of managerial cadre, secretaries, administrative officers, accountants, personnel officers

(b) Engineers, Technologists, Chemists, Metallurgists;

(c) Technical and Scientific personnel engaged in design, research or development;

(d) Stenographers, personnel clerks, private secretaries, cashiers or persons discharging similar functions;

(e) Any other person declared by the Chief Inspector, upon an application by the occupier or manager, to be holding a position of supervision or management or confidential positions, provided that the person shall be deemed to have been so declared if the Chief Inspector has not communicated a refusal to the applicant within thirty days of the application beingsent.

82. Omitted

83. Omitted

84. Exemption of certain adult workers

(a) All adult workers engaged in the factories specified in Column (I) of the Schedule hereunder on the work specified in Column (3) shall be exempted from the provisions of Sections specified in Column (4) subject to the special conditions, if any, specified in Column (5) thereof.

(b) Except in the case of urgent repairs, the exemptions shall be subject to the following general conditions, namely:-

(i) the total number of hours of work in any day, shall not exceed ten

(ii) the spread over, inclusive of intervals for rest, shall not exceed twelve hours in any one day

(iii) the total number of hours of work in a week including over-time, shall not exceed sixty ;

(iv) the total number of hours of over-time shall not exceed fifty in any one quarter of a calendar year ;

(v) the total number of hours of work without an interval does not exceed six ;

(vi) In case of exemption from Sec. 55, sufficient time, though not a fixed period to the satisfaction of the Inspector shall be allowed to enable the workers to have their meals

(vii) Exemption from Sec. 61 wherever specified, shall apply in so far as it relates to the specification of the periods of rest-interval in Form 11 of the [2]**Telangana** Factories Rules, 1950.

84-A- Savings

Nothing in these rules shall render any person liable to any punishment or penalty whatsoever, by reason of anything done or omitted to be done by him contrary to the provisions of these rules between the 15th March, 1984 and the date of publication of the rules in the [2]**Telangana** Gazette.

CHAPTER - VII
EMPLOYMENT OF YOUNG PERSONS

NOTICE PRESCRIBED UNDER SUB-SECTION (3) OF SECTION 72

2. For the words " Andhra Pradesh", the word "Telangana" substituted by G.O.Ms.No. 39 of Labour, Employment, Training and Factories Department, dated 30-12-2015.

85. Notice of periods of work for children

Omitted .

REGISTER PRESCRIBED UNDER SUB-SECTION (2) OF SECTION 73

86. Register of child workers

The register of child workers shall be in Form No. 14.

CHAPTER - VIII
LEAVE WITH WAGES

RULES 87-94 PRESCRIBED UNDER SECTIONS 84 AND 112

87. Record of leave with wages

The manager of every factory shall maintain such muster roll or other record showing the particular of the leave with wages allowed to the worker and such record shall be preserved for a period of three years after last entry.

88. Account of leave with wages

The manager shall on a request from any worker, forthwith provide him with an abstract of his account of leave earned, leave allowed and the balance of leave standing to his credit for the period not exceeding one year period to the date of such request.

89. Medical Certificate

If any worker is absent from work due to his illness and he wants to avail himself of the leave with wages due to him to cover the period of illness as far as possible under the provisions of sub-section (7) of See. 76 of the Act, he shall, if so required by his manager by a notice in writing, submit a medical certificate signed by a registered Medical practitioner, or by a registered or recognised Vaid or Hakim stating the cause of the absence and the period for which the worker is in the opinion of such medical practitioner, Vaid or Hakim, unable to attend to his work or other reliable evidence to prove that, he was actually sick during the period for which the leave is to be

availed of.

90. Notice to Inspector of involuntary unemployment

Omitted

91. Notice by worker

Before or at the end of the calendar year, a worker may give notice to the Manager of his intention not to avail himself of the leave with wages falling due during the following calendar year. The manager shall make an entry to that effect in the Leave with Wages Register and in the leave book of the worker concerned.

92. Grant of leave with wages

(1) Whenever leave with wages is given to any worker, necessary entries shall be made in the leave with wages register and the Leave Book of the worker concerned.

(2) As far as circumstances permit, members of the same family shall be allowed leave at the same time.

(3) A worker may exchange the period of his leave with another worker subject to the approval of the Manager.

92-A. Mode of computation of cash value of wages

(1) The cash equivalent of the advantage accruing through the concessional sale of food grains and other articles payable to workers proceeding on leave shall be the difference between the value of the average market rate prevailing, during the month immediately preceding his leave and the value at the concessional rates allowed of food grains and other article, he is entitled to.

(2) For purpose of the cash equivalent, monthly average market rate of food grains and other articles shall be computed at the end of every month.

Note:- This rule shall not apply to any Federal Railway Factory whose alternative method of computation has been approved by the State Government.

93. Payment of wages if the worker dies

If a worker dies before he resumes work, the balance of his pay, due for the period of leave, shall he paid to his nominee within one week of the receipt of intimation of death of the worker.

94. Factories exempted under Section 84

(1) Where an exemption is granted to any factory under Section 84, the manager, shall display at the main entrance of the factory a notice, giving full details of the system established in the factory for leave with wages and shall send a copy of it to the Inspector.

(2) No alteration, shall be made in the scheme approved by the State Government at the time of granting exemption under Section 84 without their previous sanction.

94-A. Exemption of certain factories

The Chief Inspector may grant exemption from all or any of the provisions of Rules 87 to 93 in respect of all or any of the workers in any factory subject to such conditions as he may impose.

CHAPTER IX
SPECIAL PROVISIONS

RULES PRESCRIBED UNDER SECTION 87

95. Dangerous operations

(1) The following operations when carried on in any factory are declared to be dangerous operations under Section 87.

1 . Manufacture of aerated water and processes incidental thereto.

2. Electrolytic plating or oxidation of metal articles by use of an electrolyte containing chromic acid or other chromium compounds.

3. Manufacture and repair of electric accumulators.

4. Glass manufacture.

5. Grinding or glazing of metals.

6. Manufacture and treatment of lead and certain compounds of lead.

7. Generation of gas from the dangerous petroleum.

8. Cleaning or smoothing of articles by a jet of stand, metal shot or grit or other abrasive propelled by a blast of compressed air or steam.

9. Liming and tanning of raw hides and skins and process incidental thereto.

10. Cellulose spraying.

11. Graphite powdering and incidental processes.

12. Certain lead process carried on in printing presses and type foundries.

13. Cashew nut manufacturing operations.

14. Manufacture of Pottery.

15. Chemical Works.

16. Compression of Oxygen and Hydrogen produced by the electrolysis of water.

17. Manufacture of articles from refractory materials including manufacture of refractory bricks.

18. Handling and processing of asbestos, manufacture of any article of asbestos and any other process manufacture or otherwise in which asbestos is used in any form.

19. Cleaning or smoothing, roughening etc., of articles by a jet of sand, metal short or grit or other propelled by a blast of compressed air or steam.

20. Handling and manipulation of corrosive substances.

21. Manufacture or manipulation of Carcinogenic Dye Intermediates.

22. Process of extracting vegetable oil from oil cakes in solvent extraction plant.

23. Carbon Disulphide Plants.

24. Manufacture and Manipulation of dangerous pesticides.

25. Manufacture, handling and use of Benzene.

26. Manufacture or manipulation of manganese and its compounds.

27. Operations involving High Noise Levels.

28. Manufacture of Rayon Viscose Process.

29. Highly Flammable Liquids and Flammable Compressed Gases.

30. Operations in Foundries.

(1 -A) First employment means employment for the first time in a hazardous process or operation so notified under Section 87 or re-employment therein after cessation of employment in such process or operation for a period exceeding three calendar months.

(2) The provisions specified in the schedules annexed hereto shall apply to any class or description of factories wherein dangerous operations specified in each schedule are carried out.

(3) (Omitted by G.O.Ms.No.978, dated 4-5-1960].

(4) Notwithstanding the provisions specified in the schedules annexed to this rule, the Inspector may issue of orders in writing to the manager or occupier or both, direct them to carry out such measures, within such time as may be specified in such order with a view to removing conditions dangerous to the health of the workers, or to suspend any process, where such process constitutes, in the opinion of the Inspector, imminent danger of poisoning or toxicity.

(5) Any register or record of medical examinations and texts connected therewith required to be carried out under any of the schedules annexed thereto in respect of any worker shall be kept readily available to the Inspector and shall be preserved till the expiry of one year after the worker ceases to be in employment of the factory

RULE PRESCRIBED UNDER SECTIONS 88 AND 88-A

96. Notification of accidents and dangerous occurrences

(1) When any accident which results in the death of any person or which results in such bodily injury to any person as likely to cause his death, or any dangerous occurrence specified in the Schedule takes place in a factory, the manager of the factory shall forthwith send a notice thereof by telephone, special messenger or telegram to the Inspector, and Deputy Chief Inspector.

(2) Any notice given as required under sub-rule (I) shall be confirmed by the manager of the factory to the authorities mentioned in these sub-rules within 12 hours of the accident or the dangerous occurrence by sending them a written report by way of a copy of the accident report prescribed under Employees State Insurance Regulations or Form No. 18 in the case of an accident or dangerous occurrence causing death or bodily injury to any person and in Form No. 18-A in the case of a dangerous occurrence which has not resulted in injuries to any person.

(3) When any accident or dangerous occurrence specified in the Schedule takes place in a factory and it causes such bodily injury to any person as prevents the person injured from working for a period of 48 hours or more immediately following the accident or the dangerous occurrence, as the case may be, the manager of the factory shall send a report thereof to the Inspector by way of a copy of the accident report prescribed under Employees State Insurance Regulations or Form

No. 18 within 24 hours after the expiry of 48 hours from the time of the accident or the dangerous occurrence,

Provided that if in the case of an accident or dangerous occurrence, death occurs of any person injured by such accident or dangerous occurrence after the notices and reports referred to in the foregoing sub-rules have been sent, the Manager of the factory shall forthwith send a notice thereof by telephone, special messenger or telegram to the authorities and person mentioned in sub-rule (I) and also have this information confirmed in writing within 12 hours of the death,

Provided further that, if the period of disability from working for a period of 48 hours or more referred to in sub-rule (4) does not occur immediately following the accident, or the dangerous occurrence, but later, or occurs in more than one spell the report referred to shall be sent to the Inspector by way of a copy of the accident report prescribed under Employees State Insurance Regulations or Form No. 181 within 24 hours immediately following the hour when the actual total period of disability from working resulting from the accident or the dangerous occurrence becomes 48 hours.

RULE PRESCRIBED UNDER SECTION 89

97. Notice of poisoning or disease

A notice in Form No. 19 should be sent forthwith both to the Chief Inspector and to the certifying Surgeon, by the manager of factory in which there occurs a case of lead, phosphorus, mercury, manganese, arsenic, carbon di-sulphide or benzene poisoning; or poisoning by nitrous fumes, or by halogens derivatives of the hydrocarbons of the aliphatic series or of chrome ulceration, anthrax, silicosis, toxic anaemic, toxic jaundice, primary opitheliomatous cancer of the skin, or pathological manifestations due to radium or other radio-actives substance or X-rays.

CHAPTER X
SUPPLEMENTAL

RULE PRESCRIBED UNDER SECTION 107

98. Procedure in appeals

(1) An appeal presented under Section 107 shall lie to the Chief Inspector or in cases where the order appealed against is an order passed by that officer, to the State Government or to such authority as the State Government may appoint in this behalf and shall be in the form of a memorandum setting forth concisely the grounds of objection to the order and bearing court-fee stamp in accordance with Article 3 of Schedule 11 to the Andhra Court Fees and Suits Valuation Act, 1956 (Andhra Act VII of 1956) and shall be accompanied by a copy of the order appealed against certified correct and attested by the Inspector concerned and duly stamped under the same Act.

Note..- Under Articles 3 and 9 of Schedule 11 to the Andhra Court Fees and Suits Valuation Act, 1956 (Andhra Act VII of 1956), the scale of Court- Fees stamps to be affixed to an appeal is Rs.5 and in respect of certified copy of the order, Re. 1 for every 360 words or fraction of 360 words.

(2) Appointment of assessors On receipt of the memorandum of appeal, the appellate authority, shall if it thinks fir or if the appellant has requested that the appeal should be heard with the aid of assessors, call upon the body declared under sub-rule (3) to be representative of an industry concerned, to appoint an assessor within a period of 14 days. If an assessor is nominated by such body, the appellate authority shall appoint a second assessor itself. It shall then fix a date for the hearing of the appeal and shall give due notice of such date to the appellant and to the Inspector whose order is appealed against and shall call upon the two assessors to appear upon such date to assist in the hearing of the appeal.

(3) The appellant shall state in the memorandum presented under sub-rule (1) whether he is a member of one or more of the following bodies. The body empowered to appoint the assessor shall:-

(a) if the appellant is a member of one such bodies, be that body;

(b) if he is a member of such bodies, be the body which the appellant desires should appoint such assessor; and

(c) if the appellant is not a member of any of the aforesaid bodies or if he does not state in the memorandum which of such bodies he desires should appoint the assessor, be the body which the appellate authority considers as the best fitted to represent the industry concerned.

(1) The Southern India Chamber of Commerce

(2) The Kakinada Chamber of Commerce

(3) The Andhra Chamber of Commerce

(4) The Adoni Factory Owners Association

(5) The South India Mill Owners Association

(6) The South Indian Tanners and Dealers Association

(7) Employers Federation of Southern India, Madras

(8) The Hindustan Chamber of Commerce, Madras

(9) The South Indian Sugar Mills Association

(10) Institution of Plant Engineers

(11) Federation of [2]**Telangana** Chambers of Commerce and Industry

(12) All India Manufacturers Organisation.

(4) Remuneration of assessors:- An assessor appointed in accordance with provisions of sub-rules (2) and (3) shall receive for the hearing of the appeal, a fee to be fixed by the appellate authority, subject to a maximum of fifty rupees per diem. He shall also receive the actual travelling expenses. The fees and travelling expenses shall be paid to the assessor by Government; but where assessors have been appointed at the request of the appellant and the appeal has been decided wholly or partly against him, the appellate authority may direct that the fees and travelling expenses of the assessor shall be paid, whole or in part by the appellant.

RULE PRESCRIBED UNDER SECTION 108

99. Omitted

RULE PRESCRIBED UNDER SECTION 110

100. Returns

The manager of every factory shall furnish to the Inspector having jurisdiction over the area where the factory is located, the annual return in the prescribed Form AR on or before the 31st January of the year subsequent to that to which the return relates,

Provided that such return shall be deemed to have furnished to the Inspector if sent by registered post or otherwise acknowledged by the Inspector in writing.

100-A.

Omitted

RULE PRESCRIBED UNDER SECTION 109

101. Service of notices

The dispatch by post under registered cover of any notice or order shall be deemed sufficient service on the occupier, owner or manager of a factory of such notice or order.

TOP

RULES 102 TO 105 PRESCRIBED UNDER SECTION 112

102. Information required by the Inspector

The occupier, owner or manager of factory shall furnish any information that an Inspector may require for the purpose of satisfying himself whether any provision of the Act has been complied with or whether any order of an Inspector has been duly carried out. Any demand by an Inspector for any such information, if made during the course of an inspection, shall be complied with forthwith if the information is available in the factory, or, if made in writing, shall be complied with within seven days of receipt thereof.

102-A

The registers, records and notices maintained and exhibited under the provisions of these rules shall always be available at or as near as practicable to the site of employment and shall be produced or caused to be produced for inspection at all reasonable hours by any Inspector having jurisdiction over the factory.

102-B Permissible levels of certain chemical substances in work environment

Without prejudice to the requirements in any other provisions in the Act or the rules, the requirements specified in the following Schedule shall apply to all factories.

Schedule

103. Muster roll

(1) The manager of every factory shall maintain a muster roll of all the workers employed in a factory in the prescribed Form No. 25 or an attendance record showing the following information.

(a) The name of the worker

(b) The ticket number or token of the worker, if any

(c) The group if any, in which he is included and the relay to which he is allotted

(d) The record of his attendance for each working day indicating the days of annual leave, National and festival holidays allowed, compensatory holidays, leave on Medical grounds and any other

leave with wages that he may be allowed;

(2) The attendance record may be in the form of an attendance sheet or a register or a card for each worker or any monthly abstract obtained from any electronic or other acquisition of relevant data.

(3) In any factory where workers below the age of 18 years are employed, a separate attendance record of such workers shall be maintained showing additionally the age of the person and indicating whether or not a certificate of fitness has been obtained in respect of that particular worker.

103-A Omitted
104 Omitted
105 Omitted
106 Omitted

107. Maximum number of persons that may be employed in work rooms

(1) The maximum number of workers who may be employed in each workroom or work-hall shall be posted prominently by means of a notice painted on the internal wall in each such room or hall. When determining the maximum number of persons permissible in addition to the breathing space required to be provided by Section 16(2), floor space of 25 square feet in the case of existing factories and 36 square feet in factories built after the commencement of the Act, shall also be provided for each worker working at any one time in the room, but such floor space shall be exclusive of the space occupied by machinery, fixtures and materials in the room.

(2) The Chief Inspector may for reasons to be recorded in writing, relax the provisions of this rule to such extent as he may consider necessary, wherein in his opinion, such relaxation can be made having regarding to the health of the persons employed in any room.

108. Intimation of intended closure of factory

The occupier or manager of every factory shall report to the Inspector, any intended closure of the factory or any Section or Department thereof immediately it is decided to do so, intimating:-

(i) the reason for the closure;

(ii) the number of workers on the register on the date of the report;

(iii) the number of workers likely to be affected by the closure; and,

(iv) the probable period of the closure.

(v) the information as to the particulars and quantity of stored chemicals and action taken or proposed to be taken to ensure safety from those chemicals while in storage during such closure shall also be furnished along with the report of intended closures.

An intimation shall also be sent to the Inspector before the factory or section or Department thereof, as the case may be, starts working again.

109. Language in the registers and records

The registers and records maintained in a factory under the provisions of the Act and Rules shall be either in English language or any language understood by the majority of the workers in the factory.