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GOVERNMENT OF TELANGANA
ABSTRACT

RULES – Labour Employment Training & Factories Department – The Occupational Safety, Health and Working Conditions Code, 2020 (Central Act No. 37 of 2020) – The Occupational Safety, Health and Working Conditions (Telangana) Rules, 2026 – Preliminary Notification – Orders – Issued

LABOUR EMPLOYMENT TRAINING & FACTORIES (LAB-I) DEPARTMENT

G.O. Rt No.

Dated: -01-2026

Read the following:-

1. The Occupational Safety, Health and Working Conditions Code, 2020 (Central Act No. 37 of 2020) notified by the Ministry of Labour & Employment, GOI, New Delhi in Gazette No.62, dt. 29.09.2020.
2. S.O. 5321 (E), dated 21st November, 2025 of Ministry of Labour & Employment, GOI, New Delhi in Gazette No.5145, dt. 21.11.2025
3. From the Commissioner of Labour, Telangana, Hyderabad, Lr.No F1/5034/2019, dated 02.11.2021.

ORDER:-

The Ministry of Labour & Employment, Government of India, New Delhi has notified the Occupational Safety, Health and Working Conditions Code, 2020 (Central Act No. 37 of 2020), an Act to amend and consolidate the laws relating to the Occupational Safety, Health and Working Conditions of the persons employed in an establishment and for matters connected therewith or incidental thereto vide Gazette in the first read above and it has come into force with effect from 21.11.2025 vide Gazette second cited.

2. The Commissioner of Labour, Telangana, Hyderabad, in his letter third read above, has furnished draft State rules on the Occupational Safety, Health and Working Conditions (Telangana) Rules, 2026 under the Occupational Safety, Health and Working Conditions Code, 2020 (Central Act No. 37 of 2020) with a request to issue notification calling for objections and suggestions from general public and stakeholders in the matter.

3. Government, after careful examination of the matter, hereby decided to issue draft rules namely the Occupational Safety, Health and Working Conditions (Telangana) Rules, 2026, which the State Government proposes to make, in exercise of the powers conferred under sections 133 and 135 of the Occupational Safety, Health and Working Conditions Code, 2020 (Central Act No.37 of 2020) read with section 24 of the General Clauses Act, 1897 (Central Act No.10 of 1897) by inviting objections and suggestions from general public and stakeholders in the matter.

4. Accordingly, the following notification shall be published in an extraordinary issue of Telangana Gazette, dated: 31.01.2026.

PRELIMINARY NOTIFICATION

The following draft rules, which the State Government proposes to make in exercise of the powers under sections 133 and 135 of the Occupational Safety, Health and Working Conditions Code, 2020 (Central Act No.37 of 2020) read with section 24 of the General Clauses Act, 1897 (Central Act No.10 of 1897) and in supersession of the rules made by the State Government in exercise of the powers conferred by the Contract Labour (Regulation and Abolition) Act, 1970 (Central Act No.37 of 1970), the Inter-State Migrant Workmen (Regulation of Employment and Conditions of Service) Act, 1979 (Central Act No.30 of 1979), the Beedi and Cigar Workers (Conditions of Employment) Act, 1966 (Central Act No.32 of 1966), the Factories Act, 1948 (Central Act No. 63 of 1948), the Plantation Labour Act, 1951 (Central Act No. 68 of 1951), the Working Journalists and other Newspaper Employees (Conditions of Service) and Miscellaneous Provisions Act, 1955 (Central Act No.45 of 1955), the Working Journalists (Fixation of Rates of Wages) Act, 1958 (Central Act No.29 of 1958), the Motor Transport Workers Act, 1961 (Central Act No.27 of 1961), the Sales Promotion Employees (Conditions of Services) Act, 1976 (Central Act No. 11 of 1976), the

Cine-Workers and Cinema Theatre Workers (Regulation of Employment) Act, 1981 (Central Act No. 50 of 1981), the Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996 (Central Act No.27 of 1996), the Mines Act, 1952 (Central Act No.35 of 1952), the Dock Workers (Safety, Health and Welfare) Act, 1986 (Central Act No 54 of 1986) as the case may be which are repealed by section 143 of the Occupational Safety, Health and Working Conditions Code, 2020 (Central Act No 37 of 2020) except as respects things done or omitted to be done before such supersession, are hereby notified as required by section 137 for information of all persons likely to be affected thereby and the notice is hereby given that the said draft notification will be taken into consideration after the expiry of a period of forty-five days from the date on which the copies of the Official Gazette in which this notification is published are made available to the public.

The objections and suggestions, if any, should be addressed to the Commissioner of Labour, T.Anjaiah Bhavan, RTC 'X' Roads, Hyderabad, Telangana by post or through email: col_labour.telangana@gmail.com & jd.ts.hgl@gmail.com. The objections and suggestions should be sent in a proforma containing column (1) specifying the name and address of the person/organization and column (2) specifying the chapter and rule or sub-rule which is proposed to be modified and column (3) specifying the revised rule or sub-rule proposed to be substituted and column (4) reasons therefor.

Objections and suggestions, which may be received from any person with respect to the said draft notification before expiry of the period specified above, will be considered by the State Government.

OCCUPATIONAL SAFETY, HEALTH AND WORKING CONDITIONS (TELANGANA) RULES, 2026

CHAPTER - I

Preliminary

1. Short title, extent and commencement:-

- (1) These rules may be called the Occupational Safety, Health and Working Conditions (Telangana) Rules, 2026;
- (2) They shall extend to and be in force in the whole of the State of Telangana;
- (3) They shall come into force on such date as the Government, may by notification in Telangana Gazette appoint;
- (4) They shall apply to all establishments in relation to which appropriate Government is State Government under the code.

2. Definitions:-

- (1) In these rules, unless the context otherwise requires:
 - (a) "Appellate Authority" means an authority prescribed by the Government of Telangana under sub section (6) of section 119;
 - (b) "Appellate Officer" means the Officer as notified by the Government of Telangana under subsection (1) of section 4 of the Code;
 - (c) "approved" means approved in writing by the Chief Inspector-cum- Facilitator or the officer notified by the State Government in this regard as the case may be;
 - (d) "Board" means the Telangana Occupational, Safety and Health Advisory Board constituted under section 17 of the Code;
 - (e) "Calendar Year" means the period of twelve months beginning with the first day of January in any year;
 - (f) "Casual Leave" means leave to cover casual absence of the employees from duty for personal reasons;
 - (g) "Chief Inspector-cum-Facilitator" means Chief Inspector-cum-Facilitator appointed by the

Government of Telangana under sub section (5) of section 34.

- (h) "Child" shall have the same meaning assigned to it in clause (i) of section 2 of Child and Adolescent (Prohibition and Regulation) Act, 1986 (Central Act No.61 of 1986).
- (i) "Code" means the Occupational Safety, Health and Working Conditions Code, 2020.
- (j) "Competent person" means a person or an institution recognized as such by the Chief Inspector-cum-Facilitator for the purposes of carrying out tests, examinations and inspections required to be done in an establishment having regard to—
 (i) the qualifications and experience of the person and facilities available at his disposal, or
 (ii) the qualifications and experience of the persons employed in such institution and facilities available therein.
- (k) "Compounding Officer" means an officer notified by the Government of Telangana under section 114 of the Code.
- (l) "District Magistrate", in relation to any establishment, means the District Magistrate who is vested with the executive powers of maintaining law and order in the revenue district in which the establishment is situated.
- (m) "Enquiry Officer" means an Officer appointed by the Government of Telangana for holding enquiry under section 111 of the Code.
- (n) "Form" means a Form annexed to these rules.
- (o) "hazardous substance" means a substance as defined under Section 2(zb) of the Code and includes
 (i) any chemical which satisfies any of the criteria laid down in part 1 of Schedule 1 or listed in column 2 of part II of Schedule 1 of Manufacture, Storage and Hazardous Chemical Rules, 1989
 (ii) The State Government may add or delete any substance from the materials specified in the sub-rule (1).
- (p) "Inspector-cum-Facilitator" means Inspector-cum-Facilitator appointed by the Government of Telangana under sub section (1) of section 34 of the Code.
- (q) "Licensing Authority" means an Authority designated by Telangana Government under sub section (1) of section 119 of the Code.
- (r) "Manager" means a person nominated or appointed as such by the Occupier of the factory.
- (s) "National Standards" means standards as approved by the Bureau of Indian Standards and in the absence of such standards, the standards approved by the State Government for a specific purpose.
- (t) "Plant or Equipment" includes any plant, equipment, gear, machinery apparatus or appliance, or any part thereof.
- (u) "Power" means electrical energy or any other form of energy which is mechanically transmitted and is not generated by human or animal agency.
- (v) "Pressure" means air pressure in bars above atmospheric pressure.
- (w) "Pressure Plant" Means the pressure vessel along with its piping and other fittings operated at a pressure greater than the atmospheric pressure.
- (x) "Prime mover" means any engine, motor or other appliance which generated or otherwise provides power.
- (y) "Public health authority" means the local health officer having jurisdiction over the area.
- (z) "Qualified Nurse" means a person who possess a qualification in nursing recognized under the Indian Nursing Council Code, 1947 or a similar registered body of any state in India.
- (aa) "Registering Officer" means the registering officer appointed by the State Government for

purpose of these Rules under subsection (2) of section 3:

- (ab) "Responsible Person" Means a person appointed by the employer to be responsible for the performance specific duty or duties and who has sufficient knowledge and experience and the requisite authority for the proper performance of such duty or duties.
 - (ac) "Schedule" means a schedule annexed to these Rules;
 - (ad) "Section" means the Section of the Code;
 - (ae) "Social Security Fund" – means Telangana Social Security Fund established under Social Security Code, 2020;
 - (af) "Workplace" means all places where workers are required to be present or to go for work and which are under the control of an employer;
- (2) The words and expressions used in these rules and are not defined therein, but are defined in the Code, shall have meanings respectively assigned to them in the Code
- (3) Income from the sources under explanation to clause (x) of sub-section (1) of section 2: A member of the family having income upto rupees five thousand per month from all sources or any other income notified by the Employees State Insurance Corporation (ESIC) for the purpose of availing medical benefit under the scheme, shall be included as dependent for the purpose of these Rules.

CHAPTER-II

Registration:-

3. The manner of submitting application under sub-section (2) of section 3 and the form of such application and the particulars to be contained therein and the fees to be accompanied and late fee under sub-section (1) of Section 3

(1) (a) The employer / occupier seeking registration for an establishment not already registered, shall apply electronically in Form-I annexed to these rules, on official portal notified by Telangana Government, along with Fee / Late Fee as may be notified by Government of Telangana from time to time, by giving details about the establishment and upload documents related to Registration of the establishment along with proof of Identity and address of the employer(s) as specified in the Form. The Form shall be signed digitally or in any other manner as may be required on the portal within (60) days from the date of such applicability of this code. The applicant shall be responsible for veracity of all information submitted in the application. No establishment shall function without holding a valid certificate of registration granted by the Registering Officer.

- (b) The Permanent Account Number (PAN) of the applicant or the establishment allotted under Income Tax Act, 1961(43 of 1961) or any other Unique Identity number allotted to the establishment under any other Act for the time being in force or any other particular furnished in the said form, may be verified online.
- (c) The Certificate of Registration shall be issued in Form-II for all the establishments electronically immediately, if the application is complete in all respect but not later than seven (7) working days from the date of submission of complete application, failing which such establishment shall be deemed to have been registered and the certificate of registration shall be auto generated.

Provided that in exceptional circumstances the State Government may, for such period, by notification, dispense with requirement of electronic registration, in respect of establishment or class of establishment, for part or whole of the State of Telangana, and submission of application in the form so provided, may be allowed.

- (d) The certificate of registration shall be non-transferable and a copy of the certificate of registration shall be displayed in the premises of the establishment at the conspicuous place in hard copy or electronically.
- (2) The registering officer as notified by the State Government under the Code may direct the employer who fails to comply with the requirements of sub-rule (1) (a), to do so within the time stated therein and such employer shall, thereupon comply with the instructions issued by the officer in this behalf.

(3) The employer in respect of an establishment which commences its work in Telangana already registered under any other Central/State labour law for the time being in force shall, update the registration particulars on the Portal notified by the State Government, within six months from the date on which these rules come into force.

(4) Any registration obtained by providing wrong information shall be liable to be cancelled provided that establishment has been given an opportunity to show cause within a period of (30) days, electronically or by registered post, or by speed post as to why the certificate of registration should not be cancelled.

(5) The employer shall quote the Registration Number on all documents prepared or completed by him in connection with the Code or the Rules or the Regulations or the Scheme, as the case may be, made thereunder and in all correspondence with the office concerned.

(6) Any change in the ownership, management or any particular furnished in Registration Form submitted on the specified portal, shall be updated on the portal by the employer within thirty (30) days of such change electronically in **Form-I** by paying the requisite fee as notified by the Government of Telangana.

(7) The employer of an establishment to which the provisions of the Code apply and whose business activities are in process of closure, may apply for cancellation of registration through online on the Portal notified by the Government of Telangana after giving complete details of the dues payable under the Central Labour Codes and rules made there under as well as related State rules.

Provided that no such application for cancellation of registration shall be entertained unless the employer has furnished all statutory returns, paid all statutory dues under the Central Labour Codes and Rules and any other Central or State Labour Law in force in accordance with the law applicable for the time being and submitted a self-certification to that effect along with the application.

(8) The registering officer shall maintain a register of establishment electronically in **Form-II** showing the particulars of establishment in relation to which certificates of registration have been issued by him. Further, any amendments approved to the registration certificate by the Registering Officer shall also be updated in **Form-II** under this rule.

(9) Every employer of The Motor Transport undertaking shall within (60) days from the date of receipt of such permit from the Road Transport Authority submit a Copy of such Permit to the Registering Officer along with registration form in **Form-I**.

- 4. Appeal under Section 4:-** (1) The employer / occupier aggrieved by the order of Registering Officer made under Section 3, may appeal against such order before the Appellate Officer notified by the State Government for such purpose within thirty (30) days from the date of receipt by him of such order, electronically, registered post or by speed post or otherwise.

Register of Appeals

S. No	Name and Address of the applicant	Date of appeal	Date of Presentation of appeals	Date of hearing	Date of final order	Whether allowed or rejected
(1)	(2)	(3)	(4)	(5)	(6)	(7)

- (2) Where the Memorandum of Appeal is in order, the Appellate Officer shall admit the appeal, acknowledge it and intimate admission of such appeal, and shall register the appeal in electronic form to be kept for the purpose called the register of appeals.
- (3) When the appeal has been admitted, the appellate officer shall send the notice of the appeal to the registering officer, against whose order the appeal has been preferred and the registering officer shall thereupon send the records of the case to the appellate officer online electronically or by registered post or by speed post or otherwise).

- (4) On receipt of the appeal, the appellate officer shall send a notice electronically or by registered post or speed post to the appellant to appear before him on such date and time as may be specified in the notice for the hearing of the appeal. If the appellant is present when the appeal is posted for hearing, the Appellate officer shall proceed to hear the appellant or his authorized agent and any other person summoned by him for this purpose, and pronounce judgment on the appeal confirming, reversing or varying the order against which the appeal is preferred.
- (5) If on the date fixed for hearing, the appellant fails to appear, the appellate officer may dismiss the appeal for default of appearance of the appellant and send the copy of the order of dismissal to the appellant electronically or by registered post or speed post.
- (6) Where an appeal has been dismissed for default of non-appearance, the appellant may apply electronically or by registered post or speed post to the appellate officer with justification for the restoration of the appeal within thirty (30) days from the date of receipt of the order of dismissal under sub-rule (5) and if the appellate officer is satisfied that the appellant was prevented by sufficient cause from appearing, the appellate officer shall restore the appeal.
- (7) The order of the Appellate Officer under sub-rule (6) shall be communicated electronically or by registered post or speed post to the appellant and copy thereof shall be sent to the registering officer against whose order the appeal has been preferred.
- (8) An appeal under this rule shall be disposed of within thirty (30) days from the date on which the appeal is received under sub-rule (4).
- 5. The form and manner of sending notice and the authority to whom the notice shall be sent and the manner of intimating the authority under sub-section (1) of Section 5:-** The employer of every establishment shall within thirty days of the commencement or cessation of operation of establishment, submit to the Registering Officer, a notice of commencement or cessation of operation in Form-IV electronically and the notice of cessation of operation shall be enclosed with a certificate stating that payment of all dues to the workers employed in the establishment have been made and the premises are kept free from storage of hazardous chemicals and substances.

CHAPTER-III

Duties of Employer and Employee: -

- 6. Annual Health Examination of employees under clause (c) of sub-section (1) of Section 6: -**

Every employer of establishment shall arrange to conduct free of cost, annual medical examination for every employee who has completed forty (40) years of age, at the time of joining for the first time and thereafter annually i.e., within one hundred and twenty (120) days from the commencement of every calendar year. The medical examination shall be conducted by a qualified medical practitioner covering all the aspects as per the format in Form-V. The medical certificate shall be submitted by the said medical practitioner to the concerned employer and employee. Form-V can be maintained either in physical form or digital form or both.

Provided that an employer may avail facility for medical examination of the employee(s) under relevant rule of Social Security Code Rule-2025 through Employee's State Insurance Corporation (ESIC).

Provided that the State Government by notification can exempt any establishment or class of establishments from this rule subject to conditions specified, if any.

- 7. Letter of appointment to employee under clause (f) of sub-section (1) of Section 6:-** No employee shall be employed in any establishment unless he has been issued a letter of appointment in the format given below:

Provided that, an employee who has not been issued an appointment letter containing the required particulars, shall be issued an appointment letter within three months of this rule coming into force in the format given below.

APPOINTMENT LETTER

- (i) Name of employee
- (ii) Date of Birth
- (iii) Father's name / Husband name
- (iv) Aadhar number
- (v) Bank Account Number of the employee
- (vi) Labour Identification Number (LIN) of the establishment or Registration number issued under the Labour code or Central or State Act and Rules
- (vii) Name & address of the Establishment
- (viii) Name & address of the Employer
- (ix) Universal Account Number (UAN) or Insurance Number (ESIC) (if available)
- (x) Designation
- (xi) Category of skill
- (xii) Date of joining
- (xiii) Wages, Basic Pay and Dearness Allowance
- (xiv) Other allowances including accommodation whichever is/ are applicable
- (xv) Avenue for achieving higher wages or higher position
- (xvi) Applicability of Social Security of Employees' Provident Fund Organization (EPFO) and Employees' State Insurance Corporation (ESIC) benefits etc.
- (xvii) Health check-up
- (xviii) Broad Nature of duties to be performed
- (xix) Any other information

Signature

Occupier or employer or owner or manager with stamp

8. Notice of accidents and dangerous occurrences under sub-section (1) of Section 10 and Section 11:-

(1) Where at any place in an establishment, an accident occurs which results in the death of any person, the employer or occupier or manager of the establishment shall forthwith inform by telephone to the Inspector-cum-Facilitator of Factories department and Inspector-cum-Facilitator of Labour department concerned (as applicable), Chief Inspector-cum-Facilitator of Factories department, Commissioner of Labour & Chief Inspector-cum-Facilitator of Labour department (as applicable) and District Magistrate or Sub-divisional Officer, the officer-in-charge of the nearest police station, and the family members or kin of the injured or deceased person and send a notice thereof in **Form-V** electronically within twelve (12) hours from such incident.

(2) Where at any place, in an establishment, an accident occurs which results in bodily injury by reason of which the person injured is prevented from working for a period of forty eight (48) hours or more immediately following the accident, the employer or occupier or manager of the establishment shall send a notice in **Form-VI** within twelve (12) hours after the completion of forty eight (48) hours, electronically to the Inspector-cum-Facilitator of Factories department or Inspector-cum-Facilitator of Labour department concerned (as applicable)

(3) Wherein an establishment there is any dangerous occurrence as specified in the schedule annexed hereto, whether causing any bodily injury or disability or not, a notice in **Form-VI** shall within twelve hours be sent to the following officials

For Factories:

- (a) District Magistrate or Sub-Divisional Officer,
- (b) The Inspector-cum-Facilitator of Factories department,
- (c) The Inspector-cum-Facilitator of Labour department.

Establishments other than Factories

- (a) District Magistrate or Sub-Divisional Officer,
- (b) The Inspector-cum-Facilitator of Labour department.

Provided that if in the case of an accident or dangerous occurrence, death occurs to 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 employer or occupier or manager of the establishment shall forthwith send a notice thereof by telephone and electronically to the authorities and persons mentioned in sub-rules (1) and (2) and also this information shall be confirmed in writing within twelve (12) hours of the death.

Provided further that, if the period of disability or absence due to injury from working for forty eight (48) hours or more referred to in sub-rule (2) 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-cum-Facilitator as mentioned in sub rule (1) and (2) in the **Form-VI** within twenty four (24) hours, following the hours where the actual total period of disability or absence due to injury, resulting from the accident or the dangerous occurrence becomes forty eight (48) hours.

Schedule:

The following are the classes of dangerous occurrences, whether or not resulted in personal injury or disablement, namely:-

- (i) Bursting, of any plant or pipeline or equipment containing petroleum, steam, compressed air or other substance at a pressure greater than the atmospheric pressure;
- (ii) Collapse or failure of a crane, derrick, winch, hoist or other appliances used in raising or lowering persons or goods, or any part thereof, or the overturning of a crane;
- (iii) Explosion, explosion due to explosives, fire, leakage or release of harmful toxic gases, bursting out, leakage or escape of any molten metal, or hot liquid or gas causing bodily injury to any person or damage to any room or place in which persons are employed;
- (iv) Explosion of a receiver or container used for the storage at pressure greater than atmospheric pressure of any gas or gases (including air) or any liquid or solid resulting from the compression of gas;
- (v) Collapse or failure of lifting appliances or hoist or conveyors or other similar equipment for handling building or construction material or breakage or failure of rope, chain or loose gears, overturning of cranes used in building or other construction work, falling of objects from height;
- (vi) Collapse of any wall, floor, gallery, roof bridge, tunnel, chimney, wall, building or subsidence of soil or any other structure, platform, staging, scaffolding or any means of access including formwork, contract work, excavation and collapse of transmission;
- (vii) Spillage or leakage of hazardous substances and damage to their containers;
- (viii) A failure of any structure or installation whereby the safety of persons may be endangered, or spark generated due to electrical flash-over causing burn injury to any person;
- (ix) A major uncontrolled emission of petroleum or chemical spillage;
- (x) Any other occurrence which may be notified as 'Dangerous Occurrence' by the State Government.

9. **Notice of disease under sub-section (1) and (2) of Section 12:-** (1) A notice in the following format shall be sent forthwith electronically, to the Inspector-Cum-Facilitator concerned or Chief Inspector-cum-Facilitator of Factories (as applicable) and Inspector-Cum-Facilitator concerned or Chief Inspector-cum-Facilitator of Labour department (Commissioner of Labour), by the employer or occupier or manager of an establishment in which there occurs any disease as notified under the Third Schedule of the Code.

Notice of Disease

- (i) Name and address of the employer or Occupier or Manager ;
- (ii) Name and address of establishment ;
- (iii) Nature of establishment ;
- (iv) Details of Patient :
 - Name of Patient ;
 - Worker number of Patient ;
 - Address of Patient ;
 - Precise occupation of patient ;
- (v) Nature of disease from which patient is suffering ;
- (vi) Date of Detection of Disease ;
- (vii) Details of Medical Practitioner ;

- (vii) Has the case been reported to the Medical Officer, if so when .
 (ix) Whether the patient is covered under ESK:

Signature of employer or occupier or manager

Date:

- (2) If any qualified medical practitioner attends on a person, who is or has been employed in an establishment and who is or is believed by the qualified medical practitioner to be suffering from any disease specified in the third Schedule of the Code, the qualified medical practitioner shall without delay send a report in writing to the office of the Chief Inspector-cum-Facilitator of Factories (as applicable) and Chief Inspector-cum-Facilitator of Labour department (Commissioner of Labour) stating that:-
- (i) the name and full postal address of the patient;
 - (ii) the disease from which he believes the patient is or was suffering; and
 - (iii) the name and address of the establishment in which the patient is or was last employed
10. **Duties of employees under clause (d) and other duties under clause (g) of Section 13:-** Every employee who comes to know about existence of any of unsafe or unhealthy conditions in the establishment shall report to the employer or health and safety representative or safety officer or concerned Supervisor or Manager as soon as practicable, electronically or in writing or telephonically and such representative or safety officer Supervisor or Manager as the case may be, report to the employer electronically or by registered post or speed post.
11. **Rights of employees under sub-section (3) of Section 14:-** On receipt of information from the employee relating to the existence of an imminent danger to their safety and health, the employer shall take immediate remedial action in this regard. The employer whether satisfied or not, shall send a report forthwith of such actions taken, to the Inspector-cum- Facilitator of Factories Department (as applicable) and Inspector-cum-Facilitator of Labour Department electronically or by registered post or speed post.

CHAPTER-IV

Occupational Safety and Health

12. **Constitution, Procedure and other matters relating to State Occupational Safety and Health Advisory Board under sub-sections (1), (2) and (3) of section 17:-**
- (1) The Government may constitute a State Board to be called as Telangana Occupational, Safety and Health Advisory Board and the members of the Board shall be nominated and approved by the State Government.
 - (2) The State Board has to discharge the functions conferred on it by or under this Code and to advise the State Government on the matters relating to:
 - (a) Standards, rules and regulations to be declared or framed under this Code;
 - (b) Implementation of the provisions of this Code and the standards, rules and regulations relating thereto;
 - (c) The issues of policy and programme relating to occupational safety and health referred to it from time to time by the State Government;
 - (d) Any other matter in respect of this Code referred to it, from time to time, by the State Government.

(3) The State Board shall consist of:

- | | |
|--|---|
| (a) Hon'ble Minister for Labour, Employment, Training and Factories | Chair-person
<i>ex-officio</i> |
| (b) Additional Chief Secretary / Special Chief Secretary/ Principal Secretary/ Secretary Labour, Employment, Training and Factories, Government of Telangana | Member - Secretary
<i>ex-officio</i> |
| (c) Commissioner, Industries & Commerce Department | Member <i>ex-officio</i> |
| (d) Chief Inspector-cum-Facilitator of Labour Department (Commissioner of Labour), Telangana | Member <i>ex-officio</i> |
| (e) Chief Inspector-cum-Facilitator of Factories Department (Director of Factories), Telangana | Member <i>ex-officio</i> |
| (f) Director of Boilers, Telangana | Member <i>ex-officio</i> |
| (g) Regional Director, Employees State Insurance Corporation (ESIC) | Member <i>ex-officio</i> |
| (h) Commissioner, Medical & Health Department, Telangana | Member <i>ex-officio</i> |

- (i) Member Secretary, Telangana Pollution Control Board : Member ex-officio
- (j) Three representatives of employers : Members
- (k) Three representatives of employees : Members
- (l) Three eminent persons connected with the field of occupational safety and health-members
- (m) Any other officer nominated by the State Government. Member

- (4) **Term of office:-** The term of office of members referred at (j), (k), (l), (m) of sub-rule (3) shall be three years
- (5) Procedure for nomination of members and discharge of their functions shall be prescribed by the State Government.
- (6) **Meeting of the Board and Quorum:-** The Board may meet as often as necessary but atleast once in every quarter to discharge the functions as specified in section 17 of the Code and as specified in rule 12(2).

Provided that the Chairperson shall, within fifteen (15) days of the receipt of a requisition in writing from not less than one third of the members of the board, call a special meeting thereof.

No business shall be transacted at any meeting unless at least six (6) members are present, provided that if at any meeting less than six (6) members are present the Chairperson may adjourn the meeting to another date informing the members present and giving notice to the other members that he proposes to dispose of the business at the adjourned meeting whether there is a prescribed quorum or not, and it shall thereupon be lawful for him to dispose of the business at the adjourned meeting irrespective of the number of members attending.

Provided that when the chairperson calls a meeting for considering any matter which in his opinion is of urgent nature, notice of not less than three days shall be deemed sufficient.

- (7) **Chairperson to preside at meetings:-** The chairperson shall preside over all meetings of the board, and if the Chairperson is, for any reason, unable to attend a meeting of the board, any member of such nomination, any other member elected by the members present from amongst themselves at the meeting, shall preside at the meeting.
- (8) **Minutes of Meeting:-** The proceedings of each meeting of the board shall be recorded and circulated to all members after approval by the Chairperson as soon after the meeting as possible, subject to confirmation in the next meeting of the Board. After such confirmation, they shall be recorded in a Minute Book, which shall be kept for permanent record.
- (9) **Appointment of Secretary, other Officers and Staff:-** The board may, with the prior concurrence of the State Government, appoint an officer not below the rank of a Joint Commissioner of Labour / Deputy Chief Inspector-cum-facilitator of Factories Department as Secretary of the Board. The Board may, with approval of State Government, appoint such other officers and employees as it may consider necessary for the efficient discharge

of its functions.

13. Resignation:- (1) A member of the State Board, not being an ex-officio member, may resign his office by a letter in writing addressed to the Chairperson of the State Board.

(2) The seat of such a member shall fall vacant from the date on which his resignation is accepted by the State Government, or on the expiry of thirty days from the date of receipt of the letter of resignation by the State Government whichever is earlier.

14. Cessation of membership:- If any member of the State Board, not being an ex-officio member, fails to attend three consecutive meetings of the State Board, without obtaining the leave sanctioned by the Chairperson of such State Board for such absence, he/ she shall cease to be a member of the State Board.

Provided that the State Government may, if it is satisfied that such member was prevented by sufficient cause from attending three consecutive meetings, direct that such cessation shall not take place and on such direction being made, such member shall continue to be a member of State Board.

15. Disqualification for membership:- A person shall be disqualified for being a member of the State Board;

(i) if he / she is of unsound mind and stands so declared by a competent authority; or

(ii) if he / she is an un-discharged insolvent; or

(iii) if he / she has been convicted for an offence, having a penalty of imprisonment of three months or more.

16. Removal from membership:- The State Government may remove any member of the State Board, if in its opinion such member has ceased to represent the interest which he/ she purports to represent on such State Board.

Provided that no such member shall be removed unless a reasonable opportunity is given to him/ her of making a representation against the proposed action under this rule.

17. Travelling Allowance for members:- (i) The travelling allowance of an official member shall be governed by the rules applicable to him for journey performed by him on official duties and shall be paid by the authority paying his salary.

(ii) The non-official members of the State Board shall be paid travelling allowance for attending the meeting of the State Board at such places as per the instructions issued by Department of Finance, Government of Telangana from time to time.

18. Collection of statistics and portal for Inter-State migrant workers under sub-sections (1) and (2) of Section 21:-

(a) The employer shall submit the details of occupational safety and health statistics electronically on web portal designated for the purpose.

(b) The employer shall submit the details of statistics of inter-state migrant workers and of their occupational safety and health electronically on web portal designed for the purpose by the Central Government or such member or workers as may be specified by general or special order under force.

19. The manner of constituting a Safety Committee and the manner and purpose of choosing the representative of the workers in Safety Committee under sub-section (1) of Section 2:-

- (1) A safety committee consisting of equal number of representatives of employer and employees shall be constituted in -
 - (a) every establishment other than factory employing two hundred and fifty (250) or more workers;
 - (b) (i) in every factory wherein one hundred or more employees are ordinarily employed, or
 - (ii) a factory carrying on "hazardous process" as defined under section 2 (za) of the Code, or
 - (iii) a factory carries on any process or operations declared to be "dangerous operations" under section 82 of the Code.
- (2) The tenure of the Safety Committee shall be for three (3) years. The Safety Committee shall meet at least once in every quarter.
- (3) 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 employees, conducted at such establishments;
- (4) The owner, employer, occupier or manager shall, within a period of fifteen (15) days from the date of receipt of their recommendations of the Safety Committee shall take action to implement the recommendations.

20. Composition of Safety Committee under sub-section (1) of section 22:-

- (1) The representatives of the management on Safety Committee shall consist of,-
 - (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 Medical Officer wherever available and the Safety Officer in such a case shall be the Secretary of the Committee; and
 - (c) a representative each from the production, maintenance and purchase departments;
- (2) (i) The Safety Committee shall consist of equal number of members representing the employer and the workers, which shall not exceed twenty;
 - (ii) The representatives of employer in the Safety Committee shall be nominated by the employer and shall, as far as possible, be officials in direct touch with or associated with the working of the establishment, preferably the heads of the major departments of the establishment;
 - (iii) The representative of the workers in the Safety Committee shall be chosen in the following

manner, namely, -

- (a) where there is sole negotiating union or negotiating unions under sub-section (2) or sub-section (3) of section 14 or a negotiating council under sub-section (4) of that section 14 of the Industrial Relations Code, 2020 (Central Act No 35 of 2020) or negotiating union or under said sub-section (3) negotiating council, as the case may be, shall nominate the worker's representatives on the Safety Committee and in the case of negotiating council, the nomination shall be in the manner that every registered Trade Union representing in the negotiating council shall be represented in the Safety Committee in the proportion to the number of workers of the establishment who are members of such Trade Union.
- (b) Where there is no such sole negotiating union or negotiating council as referred to the clause(a), the workers of the establishment shall choose amongst themselves the worker's representatives on the Safety Committee.

Provided that, the employer may, deploy an electronic process of conducting the process of choosing representative of workers over an information technology application, online platform or like other platform under:

Provided further that there shall be adequate representation of women workers on the Safety Committee and such representation shall not be less than the proportion of women workers to the total number of workers employed in the establishment.

Provided also that in case there is no recognized both negotiating union or negotiating council and where any dispute arises regarding choosing of the worker's representative to the Safety Committee, the matter may be referred to the Chief-Inspector-cum-Facilitator of Labour department (Commissioner of Labour) who shall after hearing the parties decide the matter and his / her decision shall be final.

- (3) The minutes of the meeting of the Safety Committee referred to in sub-rule (1) shall be recorded.
- (4) Functions and duties of the Safety Committee in an Establishment shall include
 - (a) assisting and cooperating with the management in achieving the aims and objectives outlined in the Safety and Health Policy of the Establishment;
 - (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) looking into the matters likely to cause danger to the safety and health of the workers and suggest corrective measures; and
 - (g) Reviewing the implementation of the recommendations made by it.

21. Qualifications, duties and number of Safety Officers under sub-section (2) of Section 22:-

(1) Qualification of Safety Officer:-

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

Provided that the practical experience for the purpose of this sub rule shall necessarily be in manufacturing or maintenance or Safety Department of concerned establishments.

- (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 or Government of India.
- (iii) has adequate knowledge of Telugu and the language spoken by majority of the employees in the region in which the factory, where he/ she 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 five (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 Labourers Act, 1934, or Occupational Safety, Health and Working Conditions Code, 2020 or Possesses a recognized degree or diploma in engineering or technology and has had experience of not less than five (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-cum-Facilitator (as applicable) may subject to such conditions as he / she may specify, grant exemption from the requirements of this sub-rule, if in his/ her opinion, a suitable person possessing the necessary qualifications and experience is not available for appointment.

22. Duties of Safety Officer:-

- (a) The duties of a Safety Officer shall be to advise and assist the management in the fulfilment of its obligations, statutory otherwise concerning prevention of personal injuries and maintaining a safe working environment. These duties shall include the following namely:-
- (i) to advise the concerned departments in planning and organizing measures necessary for the effective control of personal injuries;
- (ii) to advise on safety aspects in all job studies and to carry out detailed job safety analysis of selected jobs;

- (iii) to check and evaluate the effectiveness of the action taken or proposed to be taken by concerned department(s) to prevent personal injuries;
 - (iv) to advise the purchase and stores departments in ensuring high quality and availability of personal protective equipment;
 - (v) to advise 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 practice and procedures followed by workers and to render advice on measure to be adopted for removing the unsafe physical conditions and preventing unsafe actions by workers;
 - (vii) to render advise on matters related to reporting and investigation of industrial accidents, diseases,
 - (viii) to investigate selected accidents;
 - (ix) to investigate the cases of notifiable diseases listed in the Third Schedule to the Code;
 - (x) to advise on the maintenance of work place such records as are necessary relating to accidents, dangerous occurrences and industrial diseases;
 - (xi) to promote setting up of Safety Committees and act as advisor to such Committees;
 - (xii) to organize in association with the concerned departments, campaigns, contests and other activities that develop and maintain the interest of the employees in establishing and maintaining safe conditions of work and procedures; and
 - (xiii) to design and conduct either independently or in collaboration with the training department suitable training and educational programmes for the prevention of personal injuries, dangerous occurrences and occupational diseases.
- (b) The employer of the establishment shall provide each Safety Officer with such facilities, equipment and information as are necessary to enable him/ her to discharge his/ her duties effectively.
- (c) 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 (a).

23. Number of Safety Officers:- (1) Number of Safety Officers to be appointed shall be as per the following Scale:

(a) Factories carrying on Hazardous Process:

S. No.	Number of employees ordinarily employed	Number of Safety Officers
1.	250 to 500 employees	One Safety Officer
2.	501 to 1000 employees	Two Safety Officers
3.	1001 to 2000 employees	Three Safety Officers
4.	2001 to 5000 employees	Four Safety Officers
5.	5001 to 10000 employees	Five Safety Officers

6	Above 10000 employees	Five Safety Officers + one Safety Officer for every 5000 employees or part thereof above 10000 employees
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(b) Factories other than the mentioned above:

S No	Number of employees ordinarily employed	Number of Safety Officers
1.	500 to 1000 employees	One Safety Officer
2.	1001 to 2000 employees	Two Safety Officers
3.	2001 to 5000 employees	Three Safety Officers
4.	5001 to 10000 employees	Four Safety Officers
5.	Above 10000 employees	Four Safety Officers + one Safety Officer for every 5000 employees or part thereof above 10000 employees

(c) In building or other construction work wherein 250 or more workers are ordinarily employed, the employer shall employ Safety officer as per the scale mentioned below:

Sl No	Number of employees ordinarily employed	Number of Safety Officers
1.	Up to 500 building workers	One Safety Officer
2.	Up to 1000 building workers	Two Safety Officers
3.	Up to 2000 building workers	Three Safety Officers
4.	Up to 5000 building workers	Four Safety Officers
5.	Above 5000 building workers	Four Safety Officers + one Safety Officer for every 2000 employees or part thereof above 5000 employees

- (2) Wherever more than one Safety Officer is to be appointed in a factory / establishment as required by this rule, one of them shall be designated as the Chief Safety Officer. The Chief Safety Officer shall be the overall in-charge of the safety functions and other Safety Officers work under his control.
- (3) The Chief Safety Officer or the Safety Officer in the case of factories / establishment where only one Safety Officer is required to be appointed shall be given the status of a senior executive and he/ she shall work directly under the control of the Chief Executive Officer of the factory / Employer of the establishment. All other Safety Officers shall be given appropriate status to enable them to discharge their duties and function effectively.

CHAPTER-V**Hours of Work and Annual Leave with Wages****24. Daily and weekly hours with intervals and spread over under clause (b) of sub-section (1) of Section 25:**

(1) No employee shall be required or allowed to work in an establishment for more than forty-eight hours in any week.

(2) The period of work in each day under sub-rule (1), with intervals and spread overs, shall be as notified by the State Government.

25. Interruption period allowed in running time under Explanation (a) of sub-section (1) of Section 25:- A maximum of fifteen minutes interruption shall be allowed any time during which the running of the transport vehicles interrupted.**26. Working hours of working journalist under sub-section (2) of Section (25):-**

(1) The provisions under this rule shall apply to working journalist but not apply to editors, or to correspondents, reporters or news photographers.

(2) Notwithstanding anything contained in sub-rule (1) the following provisions shall apply to every correspondent, reporter or news photographer stationed at the place at which the newspaper establishment (in relation to which any such person is employed) is situated, namely -

(a) Subject to such agreement as may be arrived at either collectively or individually between the parties concerned, every such correspondent, reporter or news photographer shall, once he enters upon duty on any day, be deemed to be on duty throughout that day till he finishes all the work assigned to him during that day.

Provided that if such correspondent, reporter or news photographer has had at his disposal for rest any interval or intervals for a total period of two hours or less between any two or more assignments of work, he shall not be deemed to be on duty during such period.

Provided further that where the total period of such interval or intervals exceeds two hours, he shall be deemed to be on duty during the period which is in excess of the said period of two hours.

(b) Any period of working in excess of thirty-six hours during any week, which shall be considered as a unit of work for the purposes of this sub-rule, shall be compensated by rest during the succeeding week and shall be given in one or more spells of not less than three hours each.

Provided that where the aggregate of the excess hours worked falls short of three hours, the duration of rest shall be limited only to such excess.

27. Normal working day for working journalist:- The number of hours which shall constitute a normal working day for a working journalist exclusive of the time for meals shall exceed six hours per day in the case of a day shift and five and a half hours per day in the case of a night shift and no working journalist shall ordinarily be required or allowed to work for longer than the number of hours constituting a normal working day.

- 28. Interval for rest for working journalist:-** Subject to such agreement as may be arrived at between a newspaper establishment and working journalists employed in that establishment, the periods of work for working journalist shall be so fixed that no working journalist shall work for more than four hours in the case of a day shift and three hours in the case of a night shift before he had an interval of rest, in the case of the day shift for one hour, and in the case of the night shift for half an hour.
- 29. Compensation for overtime work:-** When a working journalist work for more than six hours on any day in the case of a day shift and more than five and a half-hours in the case of a night shift, he shall, in respect of that overtime work, be compensated in the form of hours of rest equal in number to the hours for which he has worked overtime or compensated by wages, which shall be twice the rate of wages.
- 30. Conditions governing night shifts:-** No working journalist shall be employed on a night shift continuously for more than one week at a time or for more than one week in any period of fourteen days.
- 31. Interval preceding change of shift:-** In the case of change of shift from night to day shift or vice versa, there shall be an interval of not less than twenty-four consecutive hours between the two shifts and in the case of a change from one day shift to another day shift or from one night shift to another night shift there shall be interval of not less than twelve consecutive hours.
- Provided that no such interval may be allowed if such interval either coincides with or falls within, the interval enjoyed by a working journalist under sub-section (2) of section 25.
- 32. Number of holidays in a year for sales promotion employee or working journalist:-** A working journalist or Sales promotion employee shall be entitled to ten holidays in a calendar year.
- 33. Compensatory holidays for sales promotion employee or working journalist:-** If a working journalist or Sales promotion employee is required to attend on a holiday, a compensatory holiday shall be given to him, within thirty days immediately following the holiday, on a day mutually agreed upon by him and his employer.
- 34. Wages for holidays:-** A working journalist or Sales promotion employee shall be entitled to wages on all holidays as if he was on duty.
- 35. Wages for weekly day of rest:-** A working journalist and Sales promotion shall be entitled to wages for the weekly day of rest as if he was on duty.
- 36. Competent officers:-** Every establishment may designate one or more officers in that establishment as competent officers for the purposes of rules under this Chapter.
- 37. Procedure for availing leave by working journalist or sales promotion employee:-**
- (1) A working journalist or sales promotion employee who desire to obtain leave shall apply in writing to the competent officer of the establishment.
 - (2) Application for leave under sub-rule (1), other than casual leave, leave on medical certificate and quarantine leave, shall be made not less than one month before the date of commencement of leave, except in urgent or unforeseen circumstances.
 - (3) If leave is refused or postponed, the competent officer of the establishment shall record the reasons for such refusal or postponement, as the case may be, and send a copy of the

order to the working journalist or sales promotion employee as the case may be

- (4) Holidays, other than weekly days of rest, shall not be prefixed or suffixed to any leave without the prior sanction of the competent officer of the establishment.
- (5) A holiday including a weekly rest day, intervening during any leave granted under these rules, shall form part of the period of leave.

38. Recall a working journalist or sales promotion employee before expiry of leave:-

(1) An establishment may recall a working journalist or sales promotion employee on leave, if that establishment considers it necessary to do so. In the event of such recall, such working journalist or sales promotion employee shall be entitled to travelling allowance, if at the time of recall he is spending his leave at a place other than his headquarters.

(2) The travelling allowance, which shall be paid to a working journalist or sales promotion employee under sub-rule (1) shall be determined in accordance with the rules of the establishment governing travelling allowance for journeys undertaken by the working journalists or sales promotion employee in the course of their duties.

39. Production of medical certificate of fitness before resumption of duty:- A working journalist or sales promotion employee who has availed himself of leave for reasons of health may, before he resumes duty, be required by his employer to produce a medical certificate of fitness from the qualified medical practitioner or medical officer who issued the medical certificate.

40. Designation of Medical Officer:- Every establishment employing working journalist or sales promotion employee may designate one or more qualified medical practitioners in conformance with section 42.

41. Earned leave:- (1) A working journalist or sales promotion employee shall be entitled to earned leave on full wages for a period not less than one month for every eleven months spent on duty.

Provided that he shall cease to earn further such leave when the earned leave due amounts to one hundred and twenty days.

(2) The period spent on duty shall include the weekly holiday, holidays, casual leave and quarantine leave.

42. Wages during earned leave:- A working journalist or sales promotion employee on earned leave shall draw wages equal to his average monthly wages earned during the period of twelve complete months spent on duty, or if the period is less than twelve complete months, during the entire such period, immediately preceding the month in which the leave commences.

43. Cash compensation for earned leave not availed of:- (1) When a working journalist or sales promotion employee voluntarily relinquishes his post or retires from service on reaching the age of superannuation, he shall be entitled to cash compensation for earned leave not availed of up to a maximum of one hundred and twenty days.

Provided that a working journalist or sales promotion employee who has been refused earned leave due to him shall be entitled to get cash compensation for the earned leave so refused.

Provided further that in the case of a working journalist or sales promotion employee who

dies while in service and who has not availed himself of the earned leave due to him immediately preceding the date of his death, his heirs shall be entitled to cash Compensation for the leave not so availed of.

- (2) When a working journalist's or sales promotion employee's services are terminated for any reason whatsoever, other than as punishment inflicted by way of disciplinary action, he shall be entitled to cash compensation for earned leave not availed of up to a maximum of one hundred and twenty days.
- (3) Such cash compensation shall not be less than the amount of wages due to a working journalist or sales promotion employee for the period of leave not availed of, the relevant wage being that which would have been payable to him had he actually proceeded on leave on the day immediately preceding the occurrence of any of the events specified in sub-rule (1) or (2), as the case may be.

44. Leave on medical certificate:—

- (1) A working journalist or sales promotion employee shall be entitled to leave on medical certificate on one-half of the wages at the rate of not less than one month for every eighteen months of service:

Provided that he shall cease to earn such leave when the leave on medical certificate amounts to ninety days.

- (2) Such medical certificate shall be from a medical officer:

Provided that when a working journalist has proceeded to a place other than his headquarters with the permission of his employer and falls ill, he may produce a medical certificate from any registered medical officer;

Provided further that the employer may, when the qualified medical practitioner is not in the service of the Government, arrange at his own expense, the medical examination of the working journalist or sales promotion employee concerned by any Medical Officer.

- (3) Leave on medical certificate may be taken in continuation with earned leave provided that the total of duration earned leave and leave on medical certificate taken together shall not exceed a hundred and twenty days at any one time:

Provided that the Medical Board may recommend for leave beyond one hundred and twenty days.

- (4) A working journalist or sales promotion employee shall be entitled at his option to convert leave on medical certificate on one-half of the wages to half the amount of leave of full wages.
- (5) The ceiling laid down in the provision to sub-rule (1) and sub-rule (3) on the accumulation and total duration of leave may be relaxed by the competent officer in the cases of working journalists or sales promotion employees suffering from lingering illness such as tuberculosis.
- (6) Leave on medical certificate or converted leave on medical certificate referred to in sub-rules (1) and (4) may be granted to a working journalist or sales promotion employee at his request notwithstanding that earned leave is due to him.

- 45. Quarantine leave:-** Quarantine leave on full wage shall be granted by the establishment on the certificate of the authorized medical practitioner designated as such under section 42, for a period not exceeding twenty-one days or, in exceptional circumstances, thirty (30) days. Any leave necessary for quarantine purposes in excess of that period shall be adjusted against any other leave that may be due to the working journalist or sales promotion employee.
- 46. Extraordinary leave:-** A working journalist or sales promotion employee who has no leave to his credit may be granted extraordinary leave without wages at the discretion of the establishment in which such working journalist or sales promotion employee is employed.
- 47. Leave not due:-** A working journalist or sales promotion employee who has no leave to his credit may be granted leave at the discretion of the establishment in which such working journalist or sales promotion employee is employed.
- 48. Study leave:-** A working journalist or sales promotion employee may be granted study leave with or without wages at the discretion of the establishment in which such working journalist or sales promotion employee is employed.
- 49. Casual leave:-** (1) A working journalist or sales promotion employee shall be eligible for casual leave at the discretion of the newspaper establishment for fifteen days in a calendar year.

Provided that not more than five days casual leave shall be taken at any one time and such leave shall not be combined with any other leave.

- (2) Casual leave not availed of during a calendar year will not be carried forward to the following year.

50. Weekly day of rest and compensatory holidays under sub-section (2) of Section 26:

- (1) For the purpose of Section 26, there shall be posted up in a conspicuous place outside the office of every establishment a notice showing the weekly holiday. Where the weekly holiday is not the same day for all persons employed in the establishment, the notice shall show the holiday allowed to each relay, or set of persons or individual in Telugu, English or any other language known to majority of the people.
- (2) The State Government may, by notification, exempt employees or class of employees of any establishment or class of establishments from the operation of sub-section (1) of Section 26 of the Code subject to the condition given in the notification.

- 51. Compensatory holidays:-** (1) Except in the case of worker 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 (3) of Section 26 of the Code shall be so spaced that not more than two compensatory holidays are given in one week.
- (2) The manager of the establishment 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 works prescribed under Section 26 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 that holiday.

- (2) 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.

52. Extra Wages for overtime under Section 27:-

- (1) In pursuance of Section 27 of Code, where an employee in establishment works for more than eight hours in any day or for more than forty-eight hours in any week, as the case may be, he / she shall in respect of such overtime work be entitled to wages at the rate of twice his / her ordinary rate of wages and shall be paid at the end of each wage period.
- (2) In calculating overtime on any day, a fraction of an hour between 15 to 30 minutes shall be counted as 30 minutes and in case of more than 30 minutes it shall be rounded and shall be counted as an hour on actual basis.
- (3) In calculating the wages or earnings in the case of a employee wages are paid on the monthly basis, the daily wages shall be $1/26^{\text{th}}$ of his monthly wages, and in the case of any other employee, it shall be the daily wages or earnings as the case may be.
- (4) The spread over for the workers shall exceed period of work notified under sub rule (2) of rule 24 in any one day under the following works and circumstances in respect of factories, motor transport undertaking, plantation, beedi and cigar establishments and building or other construction, namely -
 - (a) Urgent repairs;
 - (b) Work in the nature of preparatory or complimentary work;
 - (c) Work which is necessarily so intermittent that the intervals during which they do not work while on duty ordinarily amount to more than the intervals for rest;
 - (d) Work which for technical reasons must be carried on continuously;
 - (e) Engaged in making or supplying articles of prime necessity which must be made or supplied every day;
 - (f) Engaged in a process which cannot be carried on except during fixed seasons;
 - (g) Engaged in a process which cannot be carried on except at times dependent on the irregular action of natural forces;
 - (h) Engaged in an engine-rooms or boiler-houses or in attending to power- plant or transmission machinery;
 - (i) Engaged in process on account of the break-down of machinery;
 - (j) Engaged in the loading or unloading of railway wagons or lorries or trucks;
 - (k) Exceptional pressure of work; and
 - (l) Engaged in any work, which is notified by the Central Government or State Government in the Official Gazette as a work of national or local importance as the case may be.

- (5) Period of overtime work shall be entered in overtime slips in duplicate with the below particulars, a copy of which duly signed by the manager or by a person duly authorized by him shall be given to the worker immediately after completion of the overtime work.

Overtime Slip

Name & Address of the Establishment	
Name & Designation of the Worker	
Date of Work & Normal Period of work	
Overtime period and duration in Hours	
Work performed on Overtime	
Signature of Manager/Person Authorized	

- (6) No employee shall be allowed to overtime exceeding one hundred and fifty six hours in any quarter of a year.

53. Exemption for overlapping of shifts: Employees working in establishments specified in the Schedule annexed hereto shall be exempted from the provisions of Section 29(1) of the code.

SCHEDULE

1. All employees in Newspaper Printing Presses
2. All employees in Process factories, Iron and Steel, Aluminium, Copper and Brass Rolling Mills
3. All employees in Tea Factories
4. Employees in public utility transport workshops (where there exemption is considered necessary by the Chief Inspector-cum-Facilitator)
5. Any other classes of employees in the auxiliary sections of large factories where steam or electricity is generated or transmitted for use in the factory, may be declared to be so exempted in writing by the Chief Inspector-cum-Facilitator on application by the Manager through online or electronically, in consideration of the essential or continuous nature of the duties involved.
6. Any special class of employees in any other factory where overlapping of shifts are considered necessary by the Chief Inspector-cum-Facilitator.
7. All employees in all factories to the extent of thirty minutes where the overlapping of shifts is indented to facilitate the smooth change-over of shifts without interruption of work provided that both the groups of employees do not carry out the same work at the same time.

54. Exemption for Double Employment under section 30:- Employees may be employed in more than one factory on the same day if:-

- a. he/she is employed or engaged on a part time basis to do any work, or
- b. he/she is employed or engaged to carry out any particular work of an occasional nature or otherwise than as a full time employee.
- c. the total number of working hours in a day shall not exceed eight hours.

55. The Form of Notice and manner of display of such notice and the manner in which such notice shall be sent to the Inspector-cum- Facilitator under sub-section (2) of Section 31:-

- (1) The notice referred to in sub-section (2) of section 31 shall be displayed at conspicuous places on a notice board or electronic board of the establishment and maintained in **Form-VII** giving shift timings, rest intervals, weekly holiday by the manager and copy of such notice shall be sent to Inspector-cum-Facilitator electronically or otherwise

(by registered post or speed post)

- (2) Any proposed change in the system of work in any establishment which will necessitate a change in the notice referred in sub rule (1) shall be displayed at conspicuous places on a notice board or electronic board and sent to the Inspector-cum-Facilitator electronically or registered post.

CHAPTER-VI

Maintenance of Registers, Records and Returns

56. The Form of registers and particulars of workers under clause (a) of Section 33:-

(1) Every employer of establishment shall maintain,-

- (i) Register of employees in **Form-VIII**.
- (ii) Register of attendance-cum-muster roll in **Form-VIIIA**.
- (iii) (a) Register of wages, overtime and deduction in **Form-VIIIB**.

(b) Period of overtime work shall be entered in overtime slips in duplicate with the below particulars, a copy of which duly signed by the manager or by a person duly authorized by him shall be given to the worker immediately after completion of the overtime work.

Overtime Slip

Name & Address of the Establishment	
Name & Designation of the Worker	
Date of Work & Normal Period of work	
Overtime period and duration in Hours	
Work performed on Overtime	
Signature of Manager/Person Authorized	

- (iv) For Home workers engaged in Manufacturing of Beedi & Cigar Home workers Log book in **Form-VIIIC**.
 - (v) Registers under this chapter shall be maintained electronically or otherwise.
 - (vi) Entries in the registers shall be made in English, Telugu or the language understood by a majority of persons employed.
 - (vii) Every employer shall produce records and registers, on demand before the Inspector-cum-facilitator or any person authorized in this behalf of the State Government.
 - (viii) All the registers and other records shall be preserved in original for a period of five calendar years from the date of the last entry made therein.
- (2) Every employer shall issue wage slips, electronically or manually to the employees in **Form-VIIID** as prescribed under rule 52 of Code on Wages (Central) Rules, 2025 and sub-section (3) of Section 50 of the Code on Wages, 2019 before one day of payment of wages to the employee.
- (3) In respect of establishment which are required to maintain registers under the rules framed under the Code on Wages, 2019, Code on Social Security Code, 2020, the following

registers and wage slips required to be maintained by the employer of the establishment under those Codes and rules made there under shall be deemed to be maintained by the employer under these rules, namely:-

- (a) Register of employees
 - (b) Register of Attendance-cum-Muster Roll
 - (c) Register of Wages, overtime and deductions
 - (d) Wage slip
- (4) All registers and other records required to be maintained under the Code and Rules made there under shall be maintained complete and up-to-date and unless otherwise provided for, shall be kept at an office or the nearest convenient building within the precincts of the work place or at a place within the radius of three (3) kilometers.
- (5) In case of manual registers and other records, be legibly entered in ink in English or Telugu:
- (i) Be preserved in original for a period of five years after the date of the last report or entry;

Provided that when the original record is lost or destroyed before the expiry of five years period, true copies thereof, shall be preserved for the prescribed period,
 - (ii) Be produced, electronically or otherwise (by registered post or speed post), on demand before the Chief Inspector-cum-Facilitator (Commissioner of Labour) or an Inspector-cum-facilitator or any person authorized in that behalf of the State Government.

57. Register of leave with wages under clause (a) of Section 33:-

(1) The owner or manager of every establishment shall maintain in respect of every employee thereof a record of leave with wages electronically or manually in **Form-VIII E**.

(2) The register mentioned in sub-rule (1) shall be preserved for a period of five years after the last entry in them has been made and shall not be destroyed even after the expiry of that period unless it has been properly transferred to the new register.

58. The manner and form of displaying notices under clause (b) of Section 33:- Every employer shall display or cause to display at the conspicuous place of the workplace of the establishment, a notice showing the name and address of the establishment, hours of work, wage period, date of payment of such wages, details of accident and dangerous occurrence in the establishment for the last five years, name and address of the Inspector-cum-facilitator having jurisdiction to such establishment and date of payment of unpaid wages to such workers in English, Telugu or any other language understood by the majority of workers.

59. Return, manner of filing the return and period of filing return to the Inspector-cum-Facilitator under clause (d) of Section 33:- (i) Every employer of an establishment shall send annually a return relating to such establishment electronically on the web portal notified by the State Government in **Form-IX** to the Inspector-cum-Facilitator having jurisdiction so as to reach him not later than 1st February following the end of each calendar year.

60. Register of accident and dangerous occurrences:- The registers of accident and dangerous occurrences required by sub-clause (v) of clause (a) of Section 33 of the Code shall be maintained in Form-X.

CHAPTER -VII

Inspector-cum-Facilitator and Other Authority

- 61. The qualification and experience of Chief Inspector-Cum-Facilitator and Inspector-cum-Facilitator under sub-section (5) of Section 34:-** The qualification of Chief Inspector-cum-facilitator shall be as prescribed in Telangana Factories Service Rules for the post of Director of Factories in case of factories. In case of establishments other than factories, the qualification for the post of Chief Inspector-cum-Facilitator shall be as notified by the Government of Telangana.
- 62. Manner of taking samples of any article or substance found in any premises and air of atmosphere under clause (x) of sub-section (1) of Section 35:-** (1) An Inspector-cum-Facilitator shall take samples or substances in an establishment as per the inspection scheme mandated by the Government of Telangana after informing the employer or manager of the establishment or any other responsible person present in the establishment, in the manner hereinafter provided a sufficient sample of any substance used or intended to be used in the establishment, such use being -
- (a) in the belief of the Inspector-cum-Facilitator in contravention of any of the provisions of this Code or the rules made thereunder, or
 - (b) in the opinion of the Inspector-cum-Facilitator likely to cause bodily injury to any person or injuries to the health of employee in the establishment.
- (2) Where the Inspector-cum-Facilitator takes a sample under sub-rule (1), he/ she shall, in the presence of the person informed under that sub-section unless such person willfully absents himself / herself, divide the sample into three portions and effectively seal and suitably mark them, and shall permit such person to add his own seal and mark thereto.
- (3) The person informed as aforesaid shall, if the Inspector-cum-Facilitator so requires, provide the appliances for dividing, sealing and marking the samples taken under this rule.
- (4) The Inspector-cum-facilitator shall,-
- (a) forthwith give one portion of the sample to the person informed under sub-rule (1);
 - (b) forthwith send the second portion to a Government Analyst or National Accreditation Board for Testing and Calibration Laboratories (NABL) for analysis and report thereon;
 - (c) retain the third portion for production to the Court before which proceedings, if any, are instituted in respect of the substance.
- (5) Any document purporting to be a report under the hand of any Government Analyst or NABL accredited laboratory upon any substance submitted to him for analysis and report under this section, may be used as evidence in any proceeding instituted in respect of the substance.

- 63. Other Powers and duties of Inspector-cum-Facilitator under clause (xiv) of sub-section (1) of Section 35:-** The Inspector-cum-Facilitator shall exercise such other power and perform such other duties as may be required by general or special order of the State Government.
- 64. Specialized qualification and experience, duties and responsibilities of experts to be empaneled under Section 37:-** The Government by notification may prescribe qualification and experience, duties and responsibilities of experts for third party audit and certification.
- 65. The manner of providing alternative employment under sub-clause (d) of clause (A) of sub section (1) of Section 38:-** Occupier or manager of the factory / establishments shall send a notice to Chief Inspector-cum-Facilitator as applicable) electronically indicating the nature of work assigned to the employees as alternate employment and the wages shall not be less than that were drawing by employee before providing of alternate employment.
- 66. The qualification for the appointment of Medical Practitioner and other establishment under sub-section (1) of Section 42:-** The Medical Officer shall be a medical practitioner who possesses any recognized medical qualification as defined in the National Medical Commission Act, 2019 (Central Act No.30 of 2019) and who is enrolled on a Indian Medical Register as defined in clause (e) and on a State Medical Register as defined in clause (l) of section 35, 36, 37 and 40 of the said Act.
- 67. Duties of Medical Officer under sub-section (2) of Section 42:-**
- a. On receipt of a reference under clause (a) (b) & (c) of sub-section (2) of Section 42 of the code, the Medical Officer shall, after giving prior notice regarding date, time and place for medical examination and upon examining the person sent for such examination, prepare the age and fitness certificate and deliver the same to the manager of the establishment and the worker concerned after retaining a copy thereof.
 - b. The medical officer may seek opinion of specialists like radiologist, dentist and orthopedic surgeon as the case may be, for the purpose of determination of age.
 - c. Medical Officer shall carry out such examination and furnish such report as State government may direct.
 - i. for examination and certification of workers in an establishment in such dangerous occupation or processes as specified in First Schedule to the Code;
 - ii. for medical supervision of any establishment or class of establishment where cases of chronic occupational illness have occurred due to hazardous nature of any process carried on or hazardous condition of work;
 - iii. in respect of any establishment or class of establishment or description of establishment in which operations involve any risk of injury to the health of any person or class of persons employed therein;
 - iv. to undertake occupational health survey for any establishment or class of an establishment, where cases of illness have occurred or there is prevalence of diseases as prescribed in Third Schedule of the code.
 - v. to assess the age and issue fitness of adolescent for employment in an establishment or class of establishment.

CHAPTER VIII**Special provisions related to employment of women****68. Conditions relating to safety, holidays and working hours or other conditions to be observed by the employer employing Women in establishment under section 43:-**

The following conditions shall be met for employment of women during night or before 6.00 a.m. and beyond 7.00 pm in any day, namely: -

- (a) The consent of women employee shall be taken in writing;
- (b) No women shall be employed against the maternity benefit provisions laid down under the Social Security Code, 2020 (Central Act No.36 of 2020);
- (c) Adequate transportation facilities shall be provided to women employee to pick-up and drop such employee at her residence;
- (d) The workplace including passage towards conveniences or facilities concerning toilet, washrooms, drinking water, dining and rest room entry and exit of women employee should be well-lit;
- (e) The toilet, washroom, drinking, dining and rest room facilities should be near the workplace where such women employee are employed and suitable provisions of Closed-circuit television (CCTV) surveillance on the way to these facilities shall be provided;
- (f) Provide safe, secure and healthy working condition such that no women employee is disadvantaged in connection with her employment;
- (g) Dedicated telephone numbers of the establishment shall be displayed at conspicuous places both at the establishment as well as inside the vehicles, so that any woman employee can utilize them, in case of any exigency or emergency;
- (h) The provisions of the Sexual Harassment of Women at workplace (Prevention, Prohibition and Redressal) Act, 2013 (Central Act No.14 of 2013), as applicable to the establishments, shall be complied with;
- (i) State Government, by notification, may add or delete any of the above conditions.

69. The manner of requiring the employer to provide the adequate safeguards for employment of women in dangerous operations under Section 44:- The State Government may declare by notification the class of establishments and the scheme, and standards of safeguarding of women in hazardous and dangerous processes.

CHAPTER-IX**Special Provision for Contract Labour, Inter-State Migrant Worker and Audio-Visual Workers etc.,****CONTRACT LABOUR:**

- 70. Qualification and Criteria of the Contractor under sub-section (1) of Section 47:** - For the purposes of obtaining license, the contractor as an entity or as an individual should not be an un-discharged insolvent or convicted any time during the last two years of an offence which is criminal in nature involving offences which are liable for punishment for more than three months of imprisonment.
- 71. Conditions as to hours of work, fixation of wages and other essential amenities in respect of contract labour under sub-section (3) of Section 47:** -
- a. The contractor shall ensure that, -
 - (i) the hours of work shall conform to the rules relating to Section 25 of the Code;
 - (ii) the wages shall be paid in accordance with the Code on Wages, 2019 (Central Act No.29 of 2019)
 - (iii) if the contract labour of the contractor is working at the premises of the principal employer, then it shall be the responsibility of the principal employer to provide the facilities or amenities such as toilet, washroom, drinking water, bathing facilities if required, changing room, first aid box, Canteen and Crèche
 - (iv) all other facilities and entitlements shall be provided by the contractor.
 - b. In case the contractor fails to make payment of minimum wages to the contract worker, then the authority notified under sub-section (1) Section 45 of the Code on Wages, 2019, who shall cause such payment to be made to the contract workers. In case of the employer fails to pay claim determined then Chief Inspector-cum-Facilitator of labour department (Commissioner of Labour) or his representative, shall cause such a payment to be made to the contract labourers who have not been paid, out of the security deposit maintained under Rule 75 including and by invoking the bank guarantee,
 - c. In case of contractor fails to make payment of Minimum wages within the prescribed period or makes short payment, then the principal employer shall be liable to make payment of wages in full or the unpaid balance due, as the case may be, to the contract labour employed by the contractor and recover the amount so paid deduction from any amount payable to the contractor under any contract or as a debt payable by the contractor.
 - d. He shall intimate within fifteen days of the receipt of a contract work order about the details, the contract work order and in the manner as laid down under Rule 79.
- 72. The form and manner of application and the particulars which such application shall contain regarding the number of contract labour, nature of work for which contract labour is to be employed and other particulars including the information relating to the employment of Inter-State migrant workers under sub-section (1) of Section 48:**- Every application by a contractor for the grant of a license within the state of Telangana shall be made on-line electronically through the portal notified by the Government in **Form-XII** to the licensing authority referred to in Section 119. The security deposit and fees to be paid for grant of license shall be as specified in Rule 75.

73. Single License for Contractor in more than one States or for whole of India under Section 47(3): -

(1) If a contractor desirous of obtaining license for:-

- (i) Supplying or engaging contract labour; or
- (ii) Undertaking or executing the contract works under sub-section (1) or sub-section (2) of Section 47 in more than one States or for the whole of India, then he shall apply electronically on the *Shram Suvidha portal* or designated portal of Ministry of Labour and Employment in **Form-XII** to the licensing authority for more than one State or for the whole of India

(2) Application for single License under this rule shall be submitted electronically to the authority.

(3) The concerned State Governments shall be consulted by the authority electronically. If no response is received within thirty days from the date of issue of such communication the consultation process is deemed to have been complied with.

(4) All applications under this rule shall either approved or disapproved within a period of forty five (45) days, from the date of application by the contractor, beyond which it shall be deemed that there are no objections and the license shall be auto-generated on the Portal referred to in sub- rule (1).

(5) License issued under this rule shall be valid for five years or until completion of the contract work whichever is earlier.

(6) Copy or copies of the License so issued shall be sent to the State Government in whose jurisdiction, the contract work or works for which license is issued, falls.

74. Forms, terms and conditions of license: -

a. Every license granted shall be in **Form-XIII**

b. Every license granted or renewed is subject to the following conditions, namely: -

(i) The license shall be non-transferable;

(ii) The number of workers employed as contract labour including inter-state migrant workers by the contractor shall not, on any day, exceed the maximum number specified in the license

(iii) Save as provided in these rules, the fees paid for the grant, or as the case may be, for renewal of the license shall be non-refundable;

(iv) The rates of wages payable to the workers by the contractor shall not be less than the rates prescribed under Code on Wages, 2019 (Central Act No.29 of 2019) and where the rates have been fixed by agreement, settlement or award, not less than the rates so fixed.

(v) The license issued shall be valid for a period of five (5) years from the date of issue of the license or until completion of contract work whichever is earlier.

75. Procedure for issue of license under sub-section (2) of Section 48:- (1) Before a license is issued under any of these rules, bank guarantee for an amount calculated at the rate of rupees 1000 for each of the contract labour including inter-state migrant worker to be employed as contract labour, in respect of which the application for license has been made, shall be deposited by the contractor with the authority for performance of the conditions of the license and compliance with the provisions of the Code or the rules made there under.

If contractor proposes to engage one lakh or more but less than one lakh fifty thousand contract labours an amount of security shall be Rs. 10 Crores, engages one lakh fifty thousand but less than two lakhs contract labours an amount of security shall be Rs. 15 Crores, engage two lakh or more contract labours an amount of security shall be Rs. 20 Crores.

- (2) Wherein the contract had expired, based on the request of the applicant in **Form-XII**, the authority may adjust the security deposit under sub-rule (1) in respect of his application for new license.
- (3) The fees to be paid for the grant of a license shall be as specified in the table below, namely:-

a	No license is required up to 49 contract labour	Nil
b	50 and above but not exceeding 100 contract labour	Rs. 1000
c	101 and above but not exceeding 300 contract labour	Rs. 2000
d	301 and above but not exceeding 500 contract labour	Rs. 3000
e	501 and above but not exceeding 1000 contract labour	Rs. 5000
f	1001 and above but not exceeding 5000 contract labour	Rs. 10000
g	5001 and above but not exceeding 100000 contract labour	Rs. 20000
h	10001 and above but not exceeding 20000 contract labour	Rs. 30000
i	Exceeding 20001 contract labour	Rs. 40000

76. The manner of applying for the renewal of license and the manner of Renewal of license under sub-section (3) of Section 48:-

- a. Every contractor shall apply electronically for renewal of the license in **Form-XII**.
- b. Every such application shall be submitted on the said portal referred in sub rule (1) atleast thirty (30) days prior to expiry of license period but not before ninety (90) days of such expiry of license.
- c. The security deposit and the fee chargeable for renewal of the license shall be the same as for the grant of license under rule 75.

Provided that if the application for renewal is not received within the time specified in sub-rule (2), an additional fee of twenty five per cent, shall be payable for such renewal.

d. It shall be the responsibility of the authority concerned to renew license within seven (7) days electronically failing which the license shall be deemed to be issued and auto generated.

77. Refund of security deposit:- (1) On expiry of the period of license, the contractor may, if he does not intend to have his license renewed further, make an application electronically to the licensing authority for the refund of the security deposited by him (in form of bank guarantee) and along with copy of License so expired, no objections from the principal employer, notice of completion of work and bank details in which amount is required to be refunded.

(2) If the authority is satisfied that there is no breach of the conditions of license or there is no order for the forfeiture of security deposit or any portion thereof, he shall direct the refund of the security deposit to the applicant.

(3) If there is any order directing the forfeiture of any portion of contractor's security deposit, the amount to be forfeited shall be deducted from the security deposit, and balance, if any, shall be refunded to the contractor within thirty (30) days from making of application under sub-rule (1).

(4) Any application for refund shall, as far as possible, be disposed of within thirty (30) days of the receipt of the application.

78. Responsibility of contractor under sub-section (4) of Section 48:-

(1) The rates of wages payable to the workers by the contractor shall not be less than the rates prescribed under the Code on Wages, 2019 (Central Act No.29 of 2019) and where the rates have been fixed by agreement, settlement or award, not less than the rates so fixed.

(2) In case where the worker employed by the contractor perform the same or similar kind of work as the worker directly employed by the principal employer of the establishment, the wage rates, holidays, hours of work and other conditions of service of the workers of the contractor shall be the same as applicable to the workers directly employed by the principal employer of the establishment on the same or similar kind of work. In case of any dispute whether the work is of similar kind, the matter be referred to the Inspector-Cum-Facilitator of Labour Department (Deputy Commissioner of Labour) whose decision shall be final.

(3) In other cases, the wage rates, holidays, hours of work and conditions of service of the labour of the contractor shall be such as specified under the Code and rules made thereunder.

(4) All contract labour shall be made member of the Employees' Provident Fund Organization (EPFO) and Employees' State Insurance Corporation (ESIC) subject to applicability as under respective provisions of the Code on Social Security, 2020 (Central Act No.36 of 2020).

(5) Every contractor shall apply electronically to the appropriate licensing authority for the amendment of license in **Form-XII** along with slab difference fees and security deposit for such amendment.

Every such application shall be submitted on the online portal within fifteen (15) days from the date of such amendment required in the license. The authority concerned shall amend the license within (7) days electronically.

The additional amount of security deposit shall be at the rate of Rs.1000/- (one thousand rupees only) for every worker.

79. Manner of intimation of work order and time limit for intimation under sub-section (1) of Section 50:-

- (1) Every contractor shall within fifteen days of the receipt of a contract work order shall intimate about the contract work order containing the details such as the name of the principal employer, address of the premises where work is being undertaken, date of commencement of the contract work, the number of contract labour employed including inter-state migrant workmen under that work order, duration of work orders to the licensing authority concerned.
- (2) The details of work order shall be sent under sub rule (1) by the contractor or his authorized representative.
- (3) The intimation under sub rule (1) shall also be sent electronically on the Web portal notified by the Government and Email of Labour Commissioner or his representative.

80. Manner of revocation or suspension or cancellation of license under sub-section (1) of Section 51:-

- (1) If the Licensing Authority is satisfied that the License has been obtained by misrepresentation or suppression of any material fact or if the contractor has failed to comply with the conditions subject to which License was granted or the contractor has contravened any provision of the Part-I, Chapter-XI of the Code or rules made thereunder, the Authority shall issue a show cause notice of fifteen (15) days to the contractor electronically. On receipt of the reply if any, from the contractor within 15 days of the receipt of the notice, the Licensing Authority shall examine the same and in case the licensing authority feels that the continuation of contract business by the contractor is going to lead to grave harm to the contract labours, he may pass a Speaking Order recording the reasons for revocation or suspension or otherwise and communicate to the contractor electronically or by registered post or speed post. A copy of the Order shall also be endorsed to the Chief Inspector-cum-Facilitator, Inspector-cum-Facilitator concerned and principal employer.
- (2) If the contractor has complied with the said provisions of the code and rules made thereunder within the stipulated time period, the Licensing Authority shall revoke the suspension giving a Speaking Order or else the suspension may be continued.
- (3) If the contractor fails to comply with the orders as in sub-rule (1), the Authority may forthwith pass an order of revocation of license, recording the reasons thereof and communicate to the contractor electronically or by registered post or speed post. A copy of the Order shall also be endorsed to the Chief Inspector-cum-Facilitator, Inspector-cum-Facilitator concerned and principal employer.

81. Appeal under sub-section (1) of Section 52:- The appellate authority under sub-section (1) of section 52 of the Code shall be as notified by the State Government in this behalf

82. Responsibility of Payment of Wages under sub-section (1) & (2) of Section 55:-

- (1) The contractor shall fix the wage periods in respect of which wages shall be payable and no wage period shall exceed one month.
- (2) The wages of every person employed as contract labour in an establishment or by a contractor shall be paid before the expiry of seventh day after the last day of the wage period in respect of which the wages are payable.
- (3) The wages shall be disbursed through bank transfer or electronic mode only.
- (4) The wages of contract labours shall be paid without any deductions of any kind, except those specified by the Central Government or State Government by general or special order in this behalf or permissible under the Code on Wages, 2019 (Central Act No.29 of 2019), by the contractors to the contract labour.
- (5) A notice showing wage period and date and time of disbursement of wages of contract labour shall be displayed at the place of work and a copy sent by the contractor to the principal employer electronically or in person under acknowledgement.
- (6) Every contractor (including the contractors employing less than fifty (50) contract labour) shall send half-yearly return in **Form-XI** so as to reach the concerned licensing authority not later than thirty (30) days from the close of the half year, electronically, i.e. for the period from January to June, July to December.
- (7) In case contractor fails to make payment of wages to the contract labour within seven (7) days of completion of wage period, then the principal employer shall take necessary action and make payment of wages in full or the unpaid balance dues, as the case may be, to the concerned contract labour employed by the contractor within fifteen (15) days and recover the amount so paid from the contractor either by deduction from any amount payable to the contractor under any contract or as debt payable by the contractor or from the Security deposit lying with the Principal Employer.
- (8) Every Principal employer of an establishment shall submit annual return in **FORM-IX (Part-II)** so as to reach the registering authority not later than 1st February following the end of each calendar year electronically, except in cases of contract which undertakes to produce given result.

83. Manner of payment of wages from the security deposit amount under sub-section (4) of Section 55:- If the contractor or principal employer does not pay the wages to the contract labour employed by him, and Chief Inspector-cum-Facilitator (Commissioner of Labour) or his representative or the competent officer as may be notified by the State Government shall conduct or cause to conduct, an inquiry and after giving an opportunity to be heard to the contractor shall pass an order to make payment if any, of such wages from the amount deposited by the contractor as security deposit. The contractor shall re-furnish the security deposit within a period of fifteen days or else his license will be liable to be suspended.

84. Form of issuing Experience Certificate under Section 56:- Every concerned contractor shall issue on demand, experience certificate in **Form-XIV** to the contract labour giving details of the period, work performed, experience gained in various fields performed by such contract labour.

85. Form and manner of making application under clause (b) of sub-section

(2) of Section 57: - If a question arises as to whether any activity of an establishment is a core activity or otherwise, the aggrieved party may make an application, to the Commissioner of Labour & Chief Inspector-Cum-Facilitator of Labour Department giving reasons along with supporting documents and the Chief Inspector-Cum-Facilitator shall pass order after hearing the concerned parties.

86. Period of making report and the period of deciding the question under clause (c) of sub-section (2) of Section 57:-

On receiving the application under clause (b) of sub-section (2) of Section 57, the and Chief Inspector-Cum-Facilitator of Labour Department (Commissioner of labour) shall if deem proper, refer the application to the Inspector-Cum-Facilitator (Joint Commissioner of Labour) concerned for making such enquiry as may be required and who shall submit the report/ recommendation to the Chief Inspector-Cum-Facilitator (Commissioner of Labour) within thirty days for taking appropriate action under these rules who shall decide the matter within one month from the date of receipt of such report / recommendation and communicate the said decision to the parties through electronically or otherwise for implementation of the said order.

87. Grievance redressal mechanism for contract labour: -

- (1) The contract labour may submit grievances relating to health, working conditions and wages, at the level of principal employer, who shall look into the matter and redress grievances if any.
- (2) A committee may be constituted consisting of a Chairman, who shall be authorized representative of the principal employer. The committee shall have representatives of the principal employer and contractors. The aforesaid committee shall hear and dispose off the grievance(s) of the contract labour within a period of one month.
- (3) In case, the grievance(s) is not redressed within one month of raising of such grievance(s), the principal employer shall forward the grievance(s) to the concerned Inspector-cum-Facilitator electronically or through registered post or speed post.

88. Annual increment of regular worker of a contractor: - A worker who is regularly employed by the contractor for any activity and his employment is governed by mutually accepted standards of the condition of employment shall be such that he gets an annual increment of not less than two percent of his wages.

INTER-STATE MIGRANT WORKERS:-**89. Minimum service for entitlement, class of travel and other matters to Inter-State Migrant Worker under Section 61:-**

The employer shall pay a lump sum amount on account of fare for to & fro journey to inter-state migrant worker by train (not less than II Class Sleeper) or by bus or any other mode of passenger transport from the place of employment to the place of residence in the home state in the event if he has worked for a period of not less than one hundred and eighty (180) days in the concerned establishments in preceding twelve months;

Provided that the journey allowance shall be given to an inter-state migrant worker once in twelve months. In the event of change of employer by the inter-state migrant worker during the middle of the employment period and has not availed the journey allowance from his previous employer, then on the basis of a certificate to be given by inter-state migrant worker, the employer where the inter-state migrant worker is presently working and the such worker has completed one hundred and eighty days in preceding

twelve months including the period spent with the previous employer, then the present employer shall give journey allowance

90. **Scheme for availing benefits of public distribution system and building and other construction welfare fund:** - The inter-state migrant workers shall have option to avail benefit of the public distribution system either in his native state or in the destination state where he is employed and to avail the benefits from Building and other Construction Workers fund in the state where he is employed as Building and other Construction worker under Section 62.
91. **Setting up of a Toll-Free helpline number to the inter-state migrant worker under Section 63:** - Government may notify toll-free help line number.
92. **Manner of providing for Study on inter-state migrant workers under Section 64:** - whenever Central Government proposes to conduct studies to promote safety, health and welfare of inter-state Migrate Workers, State Government may supplement such efforts on requisition being made on this behalf.

AUDIO-VISUAL WORKER

93. **Agreement for audio-visual worker under clause (a) of sub-section (2) of section 66:** - The Form of Agreement for the audio-visual workers with the producer is given in **Form- (XV)**. The agreement shall be registered with the competent authority as may be notified by the State Government.
94. **Procedure for reference of disputes to a Conciliation Officer or a Tribunal under sub-section (1) section 66:-** The procedure for reference of dispute to a conciliation officer or a tribunal shall be in conformity with the Industrial Relations Code, 2020 (Central Act No.35 of 2020) and rules framed thereunder.
95. **Authority to whom a copy of the agreement shall be forwarded by the producer under sub-section (3) of section 66:-** The State Government may notify an officer as Authority for the purpose of these rules. The form of agreement for the audio visual workers with the producer shall be given in **FORM-XV**.
96. **Details under clause (vii) of sub-section (4) of section 66:-** The Procedure for reference of dispute to the Conciliation Officer or an Industrial Tribunal shall be in conformity with Industrial Relations Code, 2020 (Central Act No.35 of 2020) and Rules framed thereunder.

BEEDI AND CIGAR WORKERS:

97. **Rules relating to Beedi and Cigar industrial premises under section 74:**
- (1) The employer seeking license and renewal of license for an industrial premises connected with making of Beedi and Cigar

The application for license in **Form XVI** along with fee / late fee as may be notified by the Government of Telangana from time to time, shall specify the maximum number of employees proposed to be employed at any time of the day in the place or premises and shall be accompanied by

a) Plans in triplicate drawn to the scale showing

(i) The site of such place or premises, the areas therein to be used for manufacturing

processes and the immediate surroundings of such place or premises including adjacent buildings, structures, roads, drains, and the like, and

- (ii) The plan elevation and necessary cross-sections of the details relating to natural lighting, ventilation, means of escape in the case of fire, position of the plant and machinery, if any, used aisles and passage ways in or in relation to, the various buildings which are intended to be used for manufacturing processes.

Every License granted and may be renewed thereafter.

The license shall be issued in **Form XVII** which shall be valid for five (5) years, on verifying of the documents and if the application is complete in all respect grant licence within seven (7) working days from the date of submission of complete application, failing which such establishment shall be deemed to have been registered and the certificate of registration shall be auto generated.

- (2) The Licensing Authority as notified by the State Government under the code in deciding whether to grant or refuse to grant a license or renewal the license shall have regard to the following matters:
 - (a) The suitability of the place or premises which is proposed to be used for manufacture of beedi or cigar or both;
 - (b) Previous experience of the applicant or employment of experienced person or entering into agreement with the experienced person for employment for the period of license;
 - (c) The financial resources of the applicant including its financial capacity to meet the demands arising out of the provisions of the Laws for the time being in force relating to welfare of labour;
 - (d) Whether the application is made bonafide on behalf of the applicant itself or in the name of benami of any other person;
 - (e) Welfare of the labour in the locality, the interest of the public generally and such other matters as may be prescribed by the State Government.
- (3) An application for renewal of license under sub section 5 of section 74 shall be made in form XVI electronically along with fee as notified by Government of Telangana, thirty (30) days before the expiry of the period thereof and where such application had been made, the license shall be deemed to continue notwithstanding the expiry of the period thereof until the renewal of license or the rejection of the application for renewal thereof. If the application for renewal is not made thirty (30) days before the expiry of license, penalty shall be levied in excess of fee ordinarily payable for renewal of license as notified by the Government of Telangana.
- (4) The Licensing Authority, after giving the holder of a license an opportunity of being heard, cancel or suspend any license granted or renew if it appears that such license has been obtained by misrepresentation or fraud or that the license has contravened or failed to comply with any of the provisions of the section 119 of the code.
- (5) If the application is complete in all respect renew the licence within seven (7) working days from the date of submission of complete application, failing which the license shall be deemed to have been renewed and the certificate of renewal shall be auto generated.

- (6) The Licensing Authority may grant or renew license on such terms and conditions as it may deem fit and if such authority refuses to grant or renew any license, it shall do so by an order communicated to the applicant giving the reasons for such refusal electronically or by register post or speed post within (30) days.
- (7) Every application for amendment of license shall be submitted in form XVI electronically along with details of amendment sought along with the difference of fee as notified by Government of Telangana and shall amend the license within seven (7) working days from the date of submission of complete application, failing which the license shall be deemed to have been amended and the certificate shall be auto generated.

98. Form and terms and conditions of license:- (1) A license granted under section 74 shall be in **Form XVII**

2) Every license granted or renewed section 74 shall be subject to the following conditions namely:

- (i) the manufacturing process shall be carried on only in that part of the industrial premises specified for the purpose in the license.
- (ii) the maximum number of employees employed in the industrial premises on any day shall not exceed the number specified in the license.
- (iii) power-driven machinery not specified in the license shall not be used in the manufacturing process in the premises.
- (iv) except with the prior permission in writing of the competent authority, the industrial premises in writing of the competent authority, the industrial premises shall not be extended and except with the like permission, no structural alterations shall be made in any building or such premises.
- (v) the license shall not be transferable.

99. Appeals under section 75:- An appeal under section 75 of the code shall

- (a) be made in writing with in a period of 30 days from the date of receipt of the order sought to be appealed against.
- (b) be accompanied by fee paid electronically as notified by Government of Telangana.

100. Refund of fees:-

(1) If the licensing authority refuses to grant or renew any license under section 74, it shall order the refund of the fees paid thereof.

(2) If no industry or manufacturing process connected with the making of beedi or cigar is carried on in an industrial premises at any time during the period validity of the license in respect thereof, the licensee may within a period of three months from the last date of financial year for which the license was granted or renewed, applied to the competent authority for the refund of the fee paid by him for such license and the competent authority shall, after making such enquiry as he may deemed necessary and after satisfying himself about the correctness of the statements made in the application, order refund of such fee.

101. Permission to work by employees outside industrial premises under Section 76:-

- (1) The employer on behalf of the employees, engaged in wetting or cutting of beedi or tobacco leaves outside the industrial premises shall apply to the licensing authority in the labour department web portal in form **No.XVIII**

The licensing authority on receipt of the application through online by considering the following may issue permission through online within seven (7) days from the

date of receipt of application

(i) The employer who applies for the above permission shall have valid license issued under section 74 for such premises.

(ii) The suitability of the place where it is proposed to be used for wetting or cutting of beedi or tobacco leaves.

(iii) Wetting or cutting of beedi or tobacco leaves shall be carried on only in that place where permission is granted.

(iv) The total number of employees employed by the employer for wetting or cutting of beedi or tobacco leaves outside the industrial premises shall not exceed the total number of workers for which issued under section 74.

(v) The licensing authority may, in addition to the foregoing terms and conditions, determine and specify in the permission such other terms and conditions, in individual cases as it may deem necessary.

(2) The record to be maintained by the employer of the work permitted under sub-section (1) of section 76 to be carried on outside the industrial premises shall be in **Form-XIX**

102. Disputes relating to raw materials by the employer:-

a. Any dispute between an employer and an employee or employees in relation to,-

- i. the issue by the employer of raw materials to the employee;
- ii. the rejection by the employer of beedi or cigar or both made by an employee; or
- iii. the payment of wages for the beedi or cigar or both rejected by the employer;

may be referred in writing by the employer or the employee or employees to the Inspector-cum-Facilitator who shall, after making such enquiry as he may consider necessary and after giving the parties an opportunity to represent their respective cases decide the dispute and record the proceedings in **Form-XX**

b. Any party to the dispute aggrieved by the decision hereunder sub-rule (1) may prefer an appeal within a period of thirty days from the date of the decision to the Appellate authority and Inspector-cum-Facilitator notified.

c. Provided that the Appellate authority and Inspector-cum-Facilitator notified may admit the appeal after the said period if the appellant satisfies such authority that he had sufficient cause for not preferring the appeal within that period.

103. Supervision of distribution of raw materials:- No employer shall if, he is required so to do by an Inspector-cum-Facilitator, by an order in writing, distribute, except under the supervision of the Inspector-cum-Facilitator making the order or the supervision of another Inspector-cum-Facilitator, raw materials to such employee or employees and during such period as may be specified in the order.

104. Limit with regard to the rejection of beedis or cigar:-

(1) No employer or contractor shall ordinarily reject as sub-standard or chat or otherwise more than five per cent of the beedis or cigars, or both received from a worker including a

home-work.

- (2) where any beedi or cigar is rejected a sub-standard or chat or otherwise on any ground other than the ground of willful negligence of the workers, the worker shall be paid wages for beedis or cigars so rejected at one half of the rate at which wages are payable to him for the beedis or cigars, or both, which have not been so rejected.

105. Payment of wages to a home-worker:- Where raw materials are supplied to a home-worker at his home, the wages due to him shall be paid at his home:

Provided that an Inspector may, if he considers it expedient so to do in the circumstances of any case, specify in respect of any home-workers any other place or places at which wages shall be paid.

CHAPTER - X FACTORIES

106. Submission and Approval of plans under sub-section 1 (a) & (b) under section 79: -

(1) In the case of any factory where, -

- (a) any hazardous process of the nature specified in the First Schedule of the Code is proposed to be carried on whether or not with the aid of power,
(b) the installed power is proposed to be or extended to more than 30HP;

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 approving the plans from the Chief Inspector-cum-Facilitator through online.

- (2) The owner or occupier of every factory falling under sub-rule (1) shall apply through online for approval of plans of the factory in the prescribed application **Form-XXI** by remitting the plans scrutiny fee at the following rates:

Factories wherein the Maximum installed/ connected or generated load in Horse Power is upto 100	Rs. 1,000/-
Factories wherein the Maximum installed/ connected or generated load in Horse Power is between 101 to 500	Rs. 3,000/-
Factories wherein the Maximum installed/connected or generated load in Horse Power is between 501 to 1500	Rs. 5000/-
Factories wherein the Maximum installed/ connected or generated load in Horse Power is between 1501 to 10000	Rs. 10,000/-
Factories wherein the Maximum installed/ connected or generated load in Horse Power above 10000	Rs. 15,000/-

- (3) If the Chief Inspector-cum-Facilitator is satisfied that the plans of the factory uploaded under sub-rule (2) are in accordance with the requirements of the Occupational Safety, Health and Working Conditions Code, 2020 (Central Act No 37 of 2020), the Telangana Occupational Safety, Health and Working Conditions Rules, 2020 and guidelines notified in the portal, he/ she shall by an order approve the plans of the factory uploaded through online subject to conditions, if any;
- (4) If the Chief Inspector-cum-Facilitator is of the opinion that the plans uploaded under sub-rule (2) are not in accordance with the requirements of the Code and Rules, guidelines

notified in the portal, or if he/ she finds it fit or expedient to specify any conditions of approval, including conditions relating to cancellation or modifications of prior approvals, he/ she shall, after giving the applicant a reasonable opportunity, send to the applicant a speaking order through online either approving the plans subject to such conditions as may be specified therein or refuse the permission applied for.

(5) If no order is communicated to the applicant within thirty (30) working days from the date on which the application has been uploaded through online, the permission applied for shall be deemed to have been approved.

(6) the approval accorded under these rules may be cancelled or revoked by the Chief Inspector-cum-Facilitator of Factories if

- (a) it is established that the approval was obtained through misrepresentation or suppression of material facts, or
- (b) fraudulent or forged documents were submitted along with the application, or
- (c) the construction is being executed in deviation from, or not in conformity with, the approved plans or conditions.

(7) No manufacturing process shall be carried on in the premises of a factory which is not in accordance with the plans approved by the Chief Inspector-cum-Facilitator and does not satisfy the conditions subject to which the plans have been approved.

(8) For the purposes of this rule, for computing the quantity of Horse power, the Horse power connected to the plant, machinery and all equipment installed for carrying out used in the manufacturing process, or the installed horse power of any captive generation of power or generation of power or transmission of power whichever is higher, shall be taken into account and no account shall be taken of the power for lighting in the factory premises, or for any office equipment or appliances or any stand by captive generation of power.

(9) In the case of any factory not covered by sub-rule (1), the Government or the Chief Inspector-cum-Facilitator 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 within thirty days of the service of the order.

107. Grant of license under sub-section 1 (c) of section 79:-

(1) The Occupier of every factory, shall at least fifteen days before commencing any manufacturing process in any factory upload the particulars through online for grant of licence to the factory in the prescribed application Form-XXII and remit the annual licence fees online up to ten times prescribed in the schedule appended to this rule.

(2) The premises shall be deemed to be licenced from the date of intimation of commencement of manufacturing process until such date the Inspector-cum-Facilitator refuses to grant the licence and informs to the applicant through online.

(3) The Inspector-cum-Facilitator on noticing any defect in the license application or violation of any provision may by a speaking order and after giving the applicant a reasonable opportunity of being heard, refuse to grant a licence to the factory.

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

(4) If the grant of license has not been refused in accordance with sub-rule (3), the Inspector-cum-Facilitator shall grant the license to the factory in **Form-XXIII** through online

(5) No manufacturing process shall be carried on in any factory unless a licence is valid for the time being

(6) (a) **Payment of Annual Licence Fee or for a block period of ten calendar years:-**
Every Licensee or Occupier shall, before the commencement of any calendar year, remit the annual licence fee as prescribed in the schedule under this rule through online portal as notified by the State Government either for one calendar year or more but does not exceed ten (10) calendar years, in case the licensee 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 Horse Power connected to the plant and machinery, equipment installed carrying out 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, appliances. The total installed Horse Power of plant, machinery and equipment or the captive generation of power or the generation of power or transmission of power whichever is higher shall be taken into consideration.

Provided further that in case of power generating units, the total capacity of power generating units shall be taken as installed power for the purpose of calculation of annual licence fee.

(b) If the prescribed annual licence fee is not fully paid within the prescribed period in sub-rule(6)(a), simple interest of 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-cum-Facilitator may, if satisfied that there is sufficient reason for the non-payment of the annual licence fees within the time prescribed in sub-rule (6)(a), by order in writing, waive the interest specified:

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

(c) No manufacturing process shall be carried on in any premises of the factory until and unless the requisite annual licence fee is remitted through online before commencement of the licensing year.

(7) Amendment of the Factory Licence:-

(a) The occupier of a factory shall, within fifteen days of occurrence of any change in the name of the factory or address of the factory or in particulars of the maximum Horse Power installed or maximum number of persons employed, apply through online in the prescribed **Form-XXII** for amendment of the licence of the factory stating the nature of amendment to be made and the reasons there for together with online payment of prescribed fees.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Part of Annual License fee to be paid in Rupees														
Nil	400	1000	1800	3600	4800	9600	12000	18000	24000	30000	36000	42000	51000	60000
20/15	1000	1800	3600	4800	9600	12000	18000	24000	30000	36000	42000	51000	60000	72000
50/37	1500	3600	4800	9600	12000	18000	24000	30000	36000	42000	51000	60000	72000	81000
100/75	3000	4800	9600	12000	18000	24000	30000	36000	42000	51000	60000	72000	81000	90000
150/112	4000	9600	12000	18000	24000	30000	36000	42000	51000	60000	72000	81000	90000	105000
250/186	5000	12000	18000	24000	30000	36000	42000	51000	60000	72000	81000	90000	105000	120000
500/373	6000	18000	24000	30000	36000	42000	51000	60000	72000	81000	90000	105000	120000	135000
1000/746	8000	24000	30000	36000	42000	51000	60000	72000	81000	90000	105000	120000	135000	150000
1500/1118	0	30000	36000	42000	51000	60000	72000	81000	90000	105000	120000	135000	150000	165000
2000/1492	0	36000	42000	51000	60000	72000	81000	90000	105000	120000	135000	150000	165000	180000
3000/2239	0	42000	51000	60000	72000	81000	90000	105000	120000	135000	150000	165000	180000	200000
5000/730	0	51000	60000	72000	81000	90000	105000	120000	135000	150000	165000	180000	200000	225000
10000/7460	0	63000	72000	81000	90000	105000	120000	135000	150000	165000	180000	200000	225000	240000
Above 10000	0	72000	81000	90000	105000	120000	135000	150000	165000	180000	200000	225000	240000	250000

108. Common facilities and liability of owner of premises in certain circumstances under section 80:-

- (1) Where in any premises separate buildings are leased to different occupiers for use as separate factories, the owner of the premises shall be responsible for the provision and maintenance of common facilities and services such as approach roads, drainage, water supply, lighting and sanitation.
- (2) Where in any premises, independent or self-contained, floors or flats are leased to different occupiers for use as separate factories, the owner of the premises shall be liable, as if he/ she was the occupier or manager or occupier cum manager of all factories for any contravention of the provisions of this Code in respect of,-
 - (i) latrines, urinals and washing facilities in so far as the maintenance of the common supply of water for these purposes is concerned;
 - (ii) fencing of machinery and plant belonging to the owner and not specifically entrusted to the custody or use of an occupier;
 - (iii) safe means of access to the floors of flats, and maintenance and cleanliness of staircases and common passages;
 - (iv) precautions in case of fire;
 - (v) maintenance of hoists and lifts; and
 - (vi) maintenance of any other common facilities provided in the premises.
- (3) The provisions of sub-rule(2) relating to the liability of the owner shall apply where in any premises independent rooms with common latrines, urinals and washing facilities are leased to different occupiers for use as separate factories.

Provided that the owner shall also be responsible for complying with the requirements relating to the provision and maintenance of latrines, urinals and washing facilities.

- (4) Where in any premises or portions or room or a shed is leased to different occupiers for use as separate factories, the owner of the premises shall be liable for any contravention of the provisions of above rule
- (5) The Chief Inspector-cum-Facilitator shall have, subject to the control of the State Government power to issue orders to the owner of the premises in this respect for carrying out the provisions of this rule

109. Dangerous Operations as per section 82:-

- (1) The following operations when carried on in any factory are declared to be dangerous operations under Section 82
- (i) Manufacture of aerated water and Processes incidental thereto;
 - (ii) Electrolytic plating or oxidation of metal articles by use of an electrolyte containing acids, bases or salts or metals such as chromium, nickel, cadmium, zinc, copper, silver, gold etc;
 - (iii) Manufacture and repair of Electric Accumulators;
 - (iv) Glass Manufacture;
 - (v) Grinding or Glazing of Materials and Processes incidental thereto;
 - (vi) Generation of gas from the dangerous petroleum as defined in the Petroleum Act, 1934 (Central Act No.30 of 1934);
 - (vii) Cleaning or Smoothing of Articles by a Jet of Sand, Metal Shot or Grit or other Abrasive Propelled by a blast of compressed air or steam (Blasting regulations);
 - (viii) Liming and Tanning of raw hides and skins and Processes incidental thereto;
 - (ix) Cellulose Spraying;
 - (x) Graphite Powdering and incidental processes;
 - (xi) Manufacture and Treatment of Lead and Certain compounds of Lead, Certain Lead Processes carried on in Printing Presses and Type Foundries;
 - (xii) Cashew nut manufacturing operations;
 - (xiii) Manufacture of Pottery;
 - (xiv) Chemical Works;
 - (xv) Compression of Oxygen and Hydrogen Produced by the Electrolysis of Water;
 - (xvi) Manipulation of Stone or any other Material containing Free Silica;
 - (xvii) Handling and Processing of Asbestos, Manufacture of any article of Asbestos and any other Process of Manufacture otherwise in which Asbestos is used in any form;
 - (xviii) Handling and Manipulation of Corrosive Substances;
 - (xix) Manufacture or Manipulation of Carcinogenic Dye Intermediates;
 - (xx) Process of Extracting Oils and Fats from Vegetable and Animal Sources in Solvent Extraction Plants;

- (x) Carbon Disulphide Plants;
- (xxii) Manufacture and Manipulation of Dangerous Pesticides;
- (xxiii) Manufacture, Handling and Use of Benzene;
- (xxiv) Manufacture or Manipulation of Manganese and its Compounds;
- (xxv) Operations involving High Noise and Vibration Levels;
- (xxvi) Manufacture of Rayon Viscose Process;
- (xxvii) Highly Flammable Liquids and Flammable Compressed Gases;
- (xxviii) Operations in Foundries;
- (xxix) Fire Works Manufactories and Match Works;
- (xxx) Handling and Processing of Coir Fiber;
- (xxxi) Handling and Processing of Cotton;
- (xxxii) Dust Hazard Control in Factories

- (2) First employment means employment for the first time in a hazardous process or operation so notified under section 82 or re-employment therein after cessation of employment in such process or operation for a period exceeding three calendar months.
- (3) The provisions specified in the **Schedules I to XXXII** annexed to these rules shall apply to any class or description of factories wherein DANGEROUS OPERATIONS specified in each of the schedule are carried out.
- (4) Notwithstanding the provisions specified in the schedules annexed to this rule, the Inspector-cum-Facilitator may issue of orders in writing to the manager or occupier or both, directing 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 safety and health of the employees, or to suspend any process, where such process constitutes, in the opinion of the Inspector-cum-Facilitator, imminent danger of poisoning or toxicity.
- (5) Any register or record of medical examinations and tests connected therewith required to be carried out under any of the schedules annexed thereto in respect of any employee shall be kept readily available to the Inspector-cum-Facilitator and shall be preserved till the expiry of one year after the employee ceases to be in employment of the factory.

110. Constitution of Site Appraisal Committees under sub-section (1) of Section 83 and Form of application under sub-section (2) of Section 83:-

- (1) The State Government may, for purposes of advising it to consider applications for grant of permission for the initial location of a factory involving a hazardous process or for the expansion of any such factory, may constitute a Site Appraisal Committee consisting of such members by notification.
- (2) The method of receiving the applications and disposal of the same shall be as notified by the State Government.

111. (1) Disclosure of information by occupier of a factory involving hazardous process under sub-section 1 and 5 of Section 84:-

- (a) The occupier of every factory involving hazardous process shall identify all the hazards involved both from actual operations and the chemical reactions. The properties of the raw materials, final products to be made and any by-products derived during the process shall be carefully studied and provisions shall be made for dealing with any hazards including effects on employees, which may occur during manufacture.
- (b) Information in the following format giving details of the process, its hazards and steps taken or proposed to be taken from the design stage to disposal stage for ensuring the safety as mentioned in sub-rule(1) should be sent to Chief Inspector-cum-Facilitator and local authority through online at the earliest and in no case less than 30 days before commencing manufacture, handling or storage involving hazardous process. Existing factories shall send the information within 60 days of commencement of these Rules.

Information to be furnished by Occupier of Hazardous Process Industry

- (i) Name of Factory
- (ii) Address
- (iii) Manufacturing process details(in case of chemical factory material balance of all the reactions shall be enclosed)
- (iv) Raw Materials used(Name, Mode of storage, Maximum storage Capacity)
- (v) Finished Products(Name& Maximum storage Capacity)
- (vi) Intermediate Products(Name& Maximum storage Capacity)
- (vii) Hazards identified(process hazards, storage and handling of chemicals based on HAZOP/any other study shall be enclosed in respect of all the products)
- (viii) Remedial measures(inbuilt safety systems for equipment, process control, engineering controls and administrative controls)
- (ix) Details for disposal of hazardous waste

Signature of Occupier with name

- (c) The above information shall be revised and updated immediately after change of any of the above information, technological advancement or once in 3 years through online. Any further information sought by the Chief Inspector-cum-Facilitator for compliance of the above provisions shall be furnished.

(2) Disclosure of information to employees:-

- (a) The occupier of a factory carrying on a 'hazardous processes' shall supply to all employees the following information in relation to handling of hazardous materials or substances in the manufacture, transportation, storage and other processes:-
- (i) A list of 'hazardous process' carried on in the factory;
- (ii) Location and availability of all Material Safety Data Sheets;
- (iii) Physical and health hazards arising from the exposure to or handling of substances;

- (i) Measures taken by the occupier to ensure safety and control of physical and health hazards;
 - (v) Measures to be taken by the employees to ensure safe handling, storage and transportation of hazardous substances;
 - (vi) Personal protective equipment required to be used by employees employed in 'hazardous process' or 'dangerous' operations;
 - (vii) Meaning of various labels and markings used on the containers of hazardous substances as provided;
 - (viii) Signs and symptoms likely to be manifested on exposure to hazardous substances and to whom to report;
 - (ix) Measures to be taken by the employees in case of any spillage or leakage of hazardous substance;
 - (x) Role of employees vis-a-vis the emergency plan of the factory in particular evacuation procedures; and
 - (xi) Any other information considered necessary by the occupier to ensure safety and health of employees.
- (b) the information required under sub-rule (1) shall be compiled with and made known to employees individually, through supply of manuals or booklets or leaflets and display of cautionary notices at the work places.
- (c) The manuals/ booklets, leaflets and the cautionary notices displayed in the factory shall be in the language understood by the majority of the employees, and also explain to them.
- (d) The Chief Inspector-cum-Facilitator may direct the occupier to supply or provide further information to the employees if he/ she deem necessary.

112. Health and Safety Policy as provided under sub-section (2) of section 84:-

- (1) Occupier of every factory involving hazardous process shall prepare a written statement of his/ her policy in respect of health and safety of employees at work.
- (2) 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; and
 - (b) arrangements, for making the policy effective.
- (3) In particular, the policy should specify the following,-
 - (a) arrangements for involving the employees;
 - (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; and
 - (g) arrangements for informing, educating, training and retraining his/ her own employees at different levels and the public, wherever required.
- (4) Health and Safety policy signed by the occupier shall be sent to the Inspector-cum-Facilitator, the Chief Inspector-cum-Facilitator and the local authority through electronically or registered post.
- (5) The policy shall be made widely known by :-
- (a) making copies available to all employees including contract employees, apprentices, transport employees, 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 employees.
- (6) The Occupier shall revise 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.

113. Information to be given to persons liable to be affected by a major accident under sub-section 4 of section 84:-

- (1) The occupier of every factory involving hazardous process 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/ her control is carried on to which this Rule applies either directly or through the District Collector, about
 - (a) the nature of the major accident hazard;
 - (b) the safety measures and the correct behaviour which should be adopted in the event of a major accident; and
 - (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 the occupier shall comply with the requirements of sub-rule (1) within 3 months of coming into operation of these Rules.

114. Information on storage and handling of chemicals under sub-section (7) of section 84:-

- (a) The measures taken for handling, usage, transportation and storage of hazardous substances inside the factory premises and the disposal of such substances outside the factory premises shall be publicized among the employees through training manuals or booklets or information sheets and to the public living in the vicinity of the factory through local authorities.
- (b) For the purpose of compliance with the requirements of provisions of section 84 and 85 of the Code, the Chief Inspector-cum-Facilitator, if deemed necessary, issue guidelines from time to time to the occupiers and managers of factories carrying on "hazardous process" which shall be complied by the occupiers and managers.

115. Medical Examination under section 85:-

- (1) Employees employed in a 'hazardous process' and working with hazardous substance or exposed to any chemical, toxic or any other harmful substances shall be medically examined by a qualified medical practitioner:-
- (a) Once before employment, to ascertain physical fitness of the person to do the particular job, and
 - (b) Once in a period of six (6) months, to ascertain the health status of all the employees in respect of occupational health hazards to which they are exposed; and in cases where in the opinion of the qualified medical practitioner it is necessary to do so at a shorter interval in respect of any employee.
- (2) No person shall be employed for the first time without a certificate of fitness is granted by the qualified medical practitioner. If the qualified medical practitioner 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-cum-Facilitator who shall refer the matter to the Medical Officer whose opinion shall be final in this regard.
- (3) Any findings of the qualified medical practitioner revealing any abnormality or unsuitability of any person employed in the process shall immediately be reported to the Medical Officer who shall in turn, examine the concerned employee and communicate his/ her findings to the occupier within thirty (30) days. If the medical officer is of the opinion that the employee so examined is required to be taken away from the process for health protection, he/ she will direct the occupier accordingly, who shall employ the said employee in the same process. However, the employee so taken away be provided with alternate placement unless he/ she is fully incapacitated, in the opinion of the Medical Officer, in which case the affected employee shall be suitably rehabilitated.
- (4) A Medical Officer on his own motion or on a reference from an Inspector-cum-Facilitator may conduct medical examination of a employee to ascertain the suitability of his employment in a hazardous process or for ascertaining his/ her health status. The opinion of the Medical Officer in such a case shall be final. The fee required for this medical examination shall be paid by the Occupier.
- (5) The employee taken away from employment in any process under sub-paragraph (2) may be employed again in the same process only after obtaining the fitness certificate from the medical officer and after making entries to that effect in the Health Register.
- (6) The employee 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.
- (7) The record of medical examination conducted as per sub-paragraph (1) shall be maintained in a register or digital/electronic form. Copy of the record of medical examination shall be communicated to the employee through hardcopy or electronic mode like email etc. as requested by the employee.

116. Occupational Health Centres under Section 85: -

- (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 employees, -
 - (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 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 employees,-

- (i) An occupational Health Centre having a room with a minimum floor area of 15 Sq. M. with floor and walls made of smooth and impervious surface and 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 overall 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 employees-

- (i) one full time Factory Medical Officer for factories employing upto 500 employees and one more Medical Officer for every additional 1000 employees or 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, a trained 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 as per National Medical Commission Act, 2019(30 of 2019) and who is enrolled on a Indian Medical Register as defined in clause (e) and on a State Medical Register as defined in clause (l) of section 35, 36, 37 and 40 of the Act and possess a Certificate of Training in Industrial Health of Minimum three months duration issued by and Institute 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-cum-Facilitator may, subject to such conditions as he/ she may specify, grant exemption from the requirement of this sub rule, if in his/ her 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 three (3) years on the date of commencement of this rule, the Chief Inspector-cum-Facilitator 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 Director General-Factory Advice Service and Labour Institutes or the State Government in accordance with the guidelines issued by the Director General-Factory Advice Service and Labour Institutes.
- (4) Within one month of the appointment of a Factory Medical Officer, the occupier of the factory shall

furnish to the Chief Inspector-cum-Facilitator 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 aromaticus (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 toxoid.
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 employees-
 - i. Four plain wooden splints 900mm X 100mm X 6mm.
 - ii. Two plain wooden splints 250mm X 50mm X 12mm.
 - iii. One pair artery forceps.
 - iv. Injections - Morphia, Pethidine, atropine, adrenaline, coramine, Novocain (2 each)
 - v. One surgical scissors.
 - (2) For factories employing above 200 employees
 - (i) Eight Plain wooden splints 900mm x 100mm x 6mm.
 - (ii) Eight Plain wooden splints 350mm x 75mm x 6mm.
 - (iii) Four Plain wooden splints 250mm x 50mm x 12mm.
 - (iv) Two pairs artery forceps.
 - (v) injections - morphia, pethadine, atropine, adrenaline, ceramine, movacan (4 each)
 - (vi) Two surgical scissors.
 - (vii) Automated External Defibrillator (AED)

117. 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 employees, may make arrangements for procuring such facility at short notice from nearby hospital or other places, to meet any emergency.

- (3) 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) Resuscitation

- portable suction unit, portable oxygen units.
- Bag-valve-mask, hand operated artificial units.
- Airways, Mouth gaga - Trachostomy adaptors.
- Short spine board, I V Fluids with administration units.
- B.P. Manometer, Cugg, - Stethoscope.

(ii) Immobilization,

- 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)

118. Qualifications and Experience of Supervisors under sub-section (b) of section 85:-

(1) All persons who are required to supervise the handling of 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-cum-Facilitator 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 Director General-Factory Advice Service and Labour Institutes or the State Government.

119. Permissible levels of certain chemical substances in work environment under section 88: Without prejudice to the requirements in any other provisions in the Code or the rules, the requirements specified in the following Schedule shall apply to all factories involving hazardous process.

**Schedule:
Permissible Levels of Chemical and toxic Substances**

S No	Substance	Permissible limits of exposure			
		Time-weighted average Concentration (8hrs)M		Short-term exposure limit (15min)*	
		Ppm	mg/m ³ **	Ppm	mg/m ³ **
1	2	3	4	5	6
1.	Acetaldehyde	100	180	150	270
2.	Acetic acid	10	25	15	37
3.	Acetone	750	1780	1000	2375
4.	Acrolein	0.1	0.25	0.3	0.8
5.	Acrylonitrile -Skin	2	4.5	-	-
6.	Aldrin -skin	-	0.25	-	-
7.	Allylchloride	1	3	2	6
8.	Ammonia	25	18	35	27

9	Aniline-Skin	2	10	-	-
10	Anisidine (o-p-isomers) Skin	0.1	0.5	-	-
11	Arsenic and Soluble compounds (as)	-	0.2	-	-
12	Benzene(S.C.)	10	30	-	-
13	Beryllium and Compound (as Be) (S.C.)	-	0.002	-	-
14	Boron trifluoride -C	1	3	-	-
15	Bromine	0.1	0.7	0.3	2
16	Butane	800	1900	-	-
17	2-Butane (methylene Ketone -MEK)	200	590	300	835
18	n-Butyl acetate	150	710	200	950
19	n-Butyl alcohol-Skin-C	50	150	-	-
20	Sec./ tert. Butyl acetate	200	950	-	-
21	Butyl mercaptan	0.5	1.5	-	-
22	Cadmium dusts and salts (as Cd)	-	0.05	-	-
23	Calcium oxide	-	2	-	-
24	Carbaryl (Sevin)	-	5	-	-
25	Carbofuran (Furadan)	-	0.1	-	-
26	Carbon disulphide-Skin	10	30	-	-
27	Carbon monoxide	50	55	400	440
28	Carbon tetrachloride - Skin (S.C.)	5	30	-	-
29	Chlordane -Skin	-	0.5	-	2
30	Chlorine	1	3	3	9
31	Chlorobenzene (Monochloro benzene)	75	350	-	-
32	Chloroform (S.C.)	10	50	-	-
33	bis (Chloromethyl) ether (H.C.)	0.001	0.005	-	-
34	Chromic acid and chromates (as Cr.)	-	0.05	-	-
35	Chromous salts (as Cr)	-	0.5	-	-

36.	Copper Fume	-	0.2	-	-
37.	Cotton dust, raw*	-	0.2*	-	-
38.	Creosol, all isomers - Skin	5	22	-	-
39.	Cyanides (as CN)- Skin	-	5	-	-
40.	Cyanogen	-	10	20	-
41.	DDT (Dichlorodiphenyl trichloroethane)	-	1	-	-
42.	Demeton -Skin	0.01	0.1	-	-
43.	Diazinon-Skin	-	0.1	-	-
44.	Dibutyl phthalate	-	5	-	-
45.	Dichlorvos (DDVP)-Skin	0.1	1	-	-
46.	Dieldrin-Skin	-	0.25	-	-
47.	Dinitrobenzene (all isomers)-Skin	0.15	1	-	-
48.	Dinitrotoluene-Skin	-	1.5	-	-
49.	Diphenyl-(Biphenyl)	0.2	1.5	-	-
50.	Endosulfan (Thiodan)-Skin	-	0.1	-	-
51.	Endrin -Skin	-	0.1	-	-
52.	Ethylacetate	400	1400	-	-
53.	Ethyl alcohol	1000	1900	-	-
54.	Ethylamine	10	18	-	-
55.	Fluorides (as F)	-	2.5	-	-
56.	Fluorine	1	2	2	4
57.	Formaldehyde (S.C.)	1.0	1.5	2	3
58.	Formic acid	5	9	-	-
59.	Gasoline	300	900	500	1500
60.	Hydrazine-Skin (S.C.)	0.1	0.1	-	-
61.	Hydrogen Chloride- C	5	7	-	-
62.	Hydrogen Cyanide- Skin-C	10	10	-	-
63.	Hydrogen fluoride (as F)-C	3	2.5	-	-
64.	Hydrogen peroxide	1	1.5	-	-
65.	Hydrogen sulphide	10	14	15	21

66	Iodine -C	0.1	1	-	-
67	Iron oxide fume (Fe ₂ O ₃)(as Fe)	-	5	-	-
68	Isoamyl acetate	100	525	-	-
69	Isomyl alcohol	100	350	125	4500
70	Isobutyl alcohol	50	150	-	-
71	Lead, inorg Dusts; dusts and fumes (as Pb)	-	0.15	-	-
72	Lindane -Skin	-	0.5	-	-
73	Malathion Skin	-	10	-	-
74	Manganese (as Mn) dust and compounds-C	-	5	-	-
75	Manganese fume (as Mn)	-	1	-	3
76	Mercury (as Hg)- Skin- (i) Alkyl compounds (ii) All forms except alkyl vapor	-	0.01 0.05	-	0.03 -
77	Aryl and inorganic compounds	-	0.1	-	-
78	Methyl alcohol (Methanol)-Skin	200	260	250	310
79	Methyl Cellosolve (2-Methoxy ethanol)- Skin	5	16	-	-
80	Methyl isobutyl ketone	50	205	75	300
81	Methyl isocyanate ketone	0.02	0.05	-	-
82	Naphthalene	10	50	15	75
83	Nickel carbonyl (as Ni)	0.05	0.35	-	-
84	Nitric acid	2	5	4	10
85	Nitric oxide	25	30	-	-
86	Nitrobenzene-Skin	1	5	-	-
87	Nitrogen dioxide	3	6	5	10
88	Oil mist-mineral	-	5	-	10
89	Ozone	0.1	0.2	0.3	0.6
90	Parathion-Skin	-	0.1	-	-
91	Phenol-Skin	5	19	-	-

92	Phorate (Thimet)- Skin	-	0.05	-	0.2
93	Phosgene (Carbonyl chloride)	0.1	0.4	-	-
94	Phosphine	0.3	0.4	1	1
95	Phosphoric acid	-	1	-	3
96	Phosphorus (yellow)	-	0.1	-	-
97	Phosphorus pentachloride	0.1	1	-	-
98	Phosphorus trichloride	0.2	1.5	0.5	3
99	Picric acid – Skin	-	0.1	-	0.3
100	Pyridine	5	15	-	-
101	Silane (Silicon tetrahydride)	5	7	-	-
102	Sodium Hydroxide-C	-	2	-	-
103	Styrene, monomer (Phenyl-ethylene)	50	215	100	425
104	Sulphur dioxide	2	5	5	10
105	Sulphur hexafluoride	1000	6000	-	-
106	Sulphuric acid	-	1	-	-
107	Tetraethyl lead (as Pb)-Skin	-	0.1	-	-
108	Toluene (Toluol)	100	375	150	560
109	o- Toluidine - Skin(S.C)	2	9	-	-
110	Tributyl phosphate	0.2	2.5	-	-
111	Trichloro –ethylene	50	270	200	1080
112	Uranium, natural (as U)	-	0.2	-	0.6
113	Vinyl chloride (H.C.)	5	10	-	-
114	Welding fumes	-	5	-	-
115	Xylene (o,m,p - isomers)	100	435	160	655
116	Zinc oxide (i) Fume	-	5	-	10
	(ii) Dust (Total dust)	-	10	-	-
117	Zirconium compounds (as Zr)	-	5	-	10

Ppm: Parts of vapor or gas per million parts of contaminated air by volume at 25°C and 760 mm of mercury

mg/m^3 : milligrams of substance per cubic meter of air.

* : Not more than 4 times a day with at least 60 min. interval between successive exposures.

** $\text{mg/m}^3 = \frac{\text{Molecular weight}}{24.45} \times \text{ppm}$

C : Denotes ceiling limit.

Skin: denotes potential contribution to the overall exposure by the cutaneous route including mucous membranes and eye

S.C. : denotes suspected human carcinogens

H.C. : denotes confirmed human carcinogens.

Substances	Permissible time-weighted average concentration (TWA) (8 hours)
Silica, SiO_2	
(a) Crystalline	
(i) Quartz	
(1) In terms of dusts count	10600 mppcm % Quartz +10
(2) In terms of respirable dust	10 mg/m^3 Respirable Quartz +2
(3) In terms of total dust	30 mg/m^3 % Quartz +3
(ii) Cristobalite	Half the limits given against quartz.
(iii) Tridymite	Half the limits given against quartz.
(iv) Silica, fused	Same limits as for quartz.
(v) Tripoli	Same limit as in formula in item (2) given against quartz.
(b) Amorphous silicate	10 mg/m^3 , total dust
Asbestos (H.C.)	*2 fibers/ ml, greater than 5 μm in length and less than 3 μm in breadth.
Portland cement	10 mg/m^3 , total dust containing less than 1% quartz.
Coal dust	2 mg/m^3 , respirable dust fraction containing less than 5% quartz.

mppcm = Million particles per cubic meter of air, based on impinge samples counted by light-field techniques. *As determined by the membrane filter method at 400 -

450 x magnification (4 mm objective) phase contrast illumination.
Respirable Dust:

Fraction passing a size-selector with the following characteristics:

Aerodynamic Diameter (μm) (Unit density sphere)	% passing selector:
< 2	90
2.5	75
3.5	50
5.0	25

120. **Appeal Provisions under Section 90:** -The occupier or manager of any factory can appeal against the order of Inspector-cum-Facilitator to Chief Inspector-cum-Facilitator and on the order of Chief Inspector-cum-Facilitator to Government within fifteen (15) days from the date on which the order is communicated to him. The appellate authority shall dispose such appeal within thirty (30) days, by giving opportunity to the occupier being heard.

Provided that the appellate authority may entertain the appeal after the expiry of the said period of fifteen (15) days if he/ she is satisfied that there is a reasonable cause for the delay in the appeal

121. Persons defined to hold positions of supervision or management and confidential positions under Section 91:

The following persons, by whatever designation called, are defined as persons to hold positions of supervision or management and confidential positions and provisions of Chapter VII of the Code except section 32 are not applicable to them; -

- (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-cum-Facilitator, upon an application by the Occupier or Manager through online, 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-cum-Facilitator has not communicated a refusal to the applicant within thirty (30) days of the application being received.

CHAPTER-XI

PLANTATION

Housing facilities for plantation workers under sub-section (1) (a) of section 92

122. Housing accommodation for plantation workers-

Every employer shall provide for every worker and his family residing in a plantation, housing accommodation as near as possible to the place of work. It shall be open to an employer to provide such accommodation in the course of several years provided that houses shall be built for atleast eight percent of the resident workers every year.

123. Standard and specification of housing accommodation-

Every plantation employer shall provide every worker and his family residing in a plantation, housing accommodation as near as possible to the place of work. It shall be open to an employer to provide such accommodation in the course of several years provided that houses shall be built for atleast eight percent of the resident workers every year.

124. Sites for housing accommodation -

- (i) The housing accommodation shall be provided on dry well drained land which, consistent with the requirement regarding distance from the plantation, has supplies of wholesome drinking water within a reasonable distance. In malarial tracts, the house shall be provided at a safe distance from the swamps and marshes and above the highest flood level.

- (ii) Adequate electric lighting shall be provided by the employer in the houses provided for the workers and also in and around the area in which housing accommodation is provided.
- (iii) The employer shall maintain in good condition the approach roads and parts to the area where houses are located as also the sewers and drains in that area.
- (iv) The employer shall not deny the public free access to those parts of the plantation where the workers are housed.
- (v) The employer shall cause the vicinity of all houses to be kept clear of refuse and excreta and the latrines and drains to be cleaned out daily and all refuse in or near them to be collected, removed and disposed of hygienically.

125. Maintenance of houses –

- (i) The employer shall, at his own expense, execute such repairs to the houses as may be required from time to time and maintain the houses in fit and safe condition for occupation.
- (ii) A worker occupying a house may, and Inspector-cum-Facilitator appointed under this Code shall bring to the notice of the employer any defects in the condition of a house which make it dangerous to the health and safety of the worker. Where an Inspector-cum-Facilitator so brings any such defects to notice, it shall be the duty of the employer to rectify them with the least possible delay.
- (iii) The employer shall get all the houses lime-washed at least once every year and all the doors, windows and other wooden structure varnished or painted once in three years.

126. Accommodation to be rent free–

No rent shall be charged by an employer for the housing accommodation provided to workers and their families residing in his plantation.

127. Occupation of Houses –

- (i) Houses shall be allotted on the basis of one house for a worker and his family:
 Provided that if there are two or more workers in a family, only one house shall be allotted in respect of any such family in the name of any worker in the family:
 Provided further that in the case of termination of services of a worker, in whose name a house is allotted under the preceding proviso, the said house or any other standard house shall be re allotted in the name of any other member of his family, who is a worker:
 Provided also, that it shall be open to the employer to allot houses to workers not having families at the rate of one house for not more than four such workers.
- (ii) The occupant of a house shall not make any unauthorized additions to or alterations in the house.
- (iii) The occupant shall not exchange the house with the occupant of another house except with the written permission of the employer.
- (iv) The occupant shall not let the house or any portion thereof to any person.
- (v) All workers and members of their families occupying the houses shall use the latrines provided and shall not pollute the soil and shall keep the houses and the precincts thereof clean and tidy and shall not waste drinking water.
- (vi) No cattle or goats shall be kept in the living rooms or verandahs and no windows or

air spaces shall be blocked up.

- (vii) The employer shall bring to the notice of each worker to whom housing accommodation has been provided, the conditions governing the occupation of such accommodation, in writing, in a language which the latter can understand.

128. Occupation of accommodation after termination of employment -

- (1) When a worker dies in the service of the employer, or retires or goes on transfer, or resigns, or goes on leave or when his services are terminated he or his family may retain the house up to the period as detailed below:-
- (i) in the case of death, a period not exceeding three months, and in the case of transfer or termination of service, a period not exceeding two months ;
 - (ii) in the case of retirement or resignation, a period not exceeding one month ;
 - (iii) in the case of leave, for the period of leave ; and
 - (iv) in the case where discharge or dismissal of a worker results in an industrial dispute, for so long as the same is not finally disposed of.
- (2) If the employer makes an application to the Industrial Tribunal having jurisdiction over the area and if the Industrial Tribunal is satisfied that a worker or any member of his family refuses to vacate the house allotted to such workers, after the expiry of the period specified in sub-rule (1), the Industrial Tribunal may, notwithstanding anything contained in any other law for the time being in force, by notice served -
- (a) by post, or any form of electronic mode
 - (b) by affixing a copy of it on the outer door or some other conspicuous part of such house, or require such worker or a member of his family or any other person who may be in occupation of the whole or any part of the house to vacate in within one month of the date of service of such notice.
- (3) In the event of the failure of the worker or a member of the family or any other person who is in occupation of the house to comply with the notice under sub-rule (2) the Industrial Tribunal may, by order, evict such worker, member of the family or other person and take possession of the house and may, for that purpose, use such force as may be necessary.

Provided that before taking such possession, a copy of the order of eviction shall be served on the worker or a member of the family or other any other person in occupation of the said house.

129. Drinking water:-

An adequate supply of wholesome drinking water shall be made available in every plantation at worksites or at a place or places to be approved by the Inspector-cum-Facilitator at all times, during working hours.

130. Source of supply:-

The water provided for drinking shall be supplied:-

- (a) from the taps connected with a public water supply system, or

- (vi) from any other source approved by the Chief Inspector-cum-Facilitator of Plantations/
Public Health Authorities.

131. Storage of water:-

If drinking water is not supplied from taps connected with a public water supply system, it shall be kept in suitable vessels and renewed atleast daily. All practicable steps shall be taken to preserve the water and vessels from contamination and keep the vessels scrupulously clean.

132. Cleanliness of well or reservoir:-

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.

Where drinking water is supplied from such well or reservoir, the water in it shall be sterilized periodically, at least once in a period of every three months 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 if the water therein is filtered and treated before it is supplied for consumption.

Report on Fitness for Human Consumption:- The Inspector-cum-Facilitator may, by an order in writing, direct the employer to obtain at such time or at such intervals, (i.e., once in six months) as he may direct, a report from water supplying Authorities State of Telangana or any of the laboratory approved by the Government for this purpose, as to the fitness for human consumption of the water supplied to workers, and in every case to submit to the Inspector-cum-Facilitator a copy of such report as soon as it is received.

133. Toilet facilities -

- a. Toilet facilities shall be provided in every plantation on the scale of one toilet for every fifty hectares of the area under cultivation or part thereof in addition to the toilet provided to the houses of workers.

Provided that there shall be atleast one toilet for each genders.

- b. The toilet shall be conveniently situated and shall have exclusive access for all genders.

134. Toilets to conform to public health requirements:-

The toilet should conform to public health requirements and toilets other than those connected with an efficient water-borne sewage system, shall comply with the requirements of the Public Health authorities.

- (i) **Privacy of Toilets:-** Every toilet shall be under cover and so partitioned off as to secure privacy and shall have a proper door and fastenings.

- (ii) **Sign Boards to be displayed:-** Where workers of both sexes are employed, there shall be displayed outside each toilet each toilet or toilet block, a notice in the language understood by the majority of 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.

- (iii) **Water taps in toilet:-**

- a. Where piped water supply is available, a sufficient number of water taps, conveniently

accessible, shall be provided in or near such toilet accommodation.

- b. If piped water-supply is not available, sufficient quantity of water shall be kept stored in suitable receptacles near the toilet.

135. Urinal Facilities:-

Urinal facility shall be provided on the scale of one urinal for every twenty hectares of the area under cultivation or part thereof. The urinals shall be conveniently situated for all genders.

136. Urinals to conform to public health requirements:-

Urinals should conform to public health requirements. Urinals other than those connected with an efficient water-borne sewage system shall comply with the requirements of the Public Health authorities.

137. Construction and maintenance of drains:-

All drains carrying waste of sullage water shall be constructed in masonry or other impermeable materials and shall be regularly flushed and the 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 of in a suitable manner to the satisfaction of the Health Officer.

Creche facilities under sub-section (1) (b) of Section 92

138. Creches –

(1) In every plantation wherein fifty or more workers (including workers employed by any contractor) are employed or were employed on any day of the preceding twelve months, the employer shall provide and maintain a crèche or creches for the use of their children who are below the age of six years according to the standards laid down in these rules.

(2) Every crèche shall be conveniently accessible to the mothers of the children accommodated therein.

(3) There shall be not less than 1.5 square meters of the floor area for each child to be accommodated in a crèche but the floor area shall not be less than 12 sq. mts.

(4) The building in which the crèche is situated shall be of sound construction with a good plinth.

(5) The plan of the crèche building shall be in accordance with the standard plan or plans laid down by the Chief Inspector-cum-Facilitator.

Provided that where no standard plan has been laid down or where it is proposed to deviate from a standard plan, the Chief Inspector-cum-Facilitator's approval shall be obtained.

(6) The crèche shall be furnished with suitable furniture and a cradle for each child below the age of two and provided with playing materials such as sliding chutes, see-saws, dummy horses, toys etc.

- (7) A Suitable fenced and shady open air playground shall be provided for the older children.
- (8) The employer shall appoint (i) a woman trained in the care of children and infants as crèche-in-charge to look after children during the absence of their mothers, and (ii) other staff on scale approved by the State Government.

139. Wash room:-

- (1) There shall be in or adjoining crèche a suitable wash room for the washing of the children and their clothes.
- (2) There shall be provided a toilet for the use of the children in the crèche.

140. Supply of milk and refreshment:-

At least 400 ml of clean pure milk if possible, otherwise, powdered milk approved by the Medical Officer shall be made available for each child on every day it is accommodated in the crèche and the mother of such child shall be allowed in the course of her daily work, two intervals of sufficient time to visit the crèche and feed the child. For children above two years of age, there shall be provided in addition an adequate supply of wholesome refreshment.

141. Supply of clothes, soaps and oils:-

- (1) The creche staff shall be provided with suitable clean clothes for use while on duty in the crèche.
- (2) (a) Two (2) sets of clothing once a year shall be made available for each child while it is in the crèche. The clothing for boys will consist of a shirt and a half-trouser and for girls a blouse and a skirt or a frock or gown. Measurement should be taken and the clothing must be stitched accordingly to suit every child in the crèche. The cost of the cloth and stitching thereof including washing charges for washing the clothes once in a week shall be borne by the employer.
- (b) One cake of soap weighing 100 gms. and 100 ml. oil shall be made available for the use of each child per month while it is in the crèche.

Provided that:-

- (i) an establishment may avail common crèche facility of the Central, State Government, Municipality, Town Panchayath, Village Panchayath or private entity or provided by Non-Governmental Organization or by any other organization; or
- (ii) a group of establishments may agree to pool their resources for establishing a common crèche.

Education facility for children under sub-section (1)(c) of section 92

142. Educational facilities for worker's children:

Every employer shall, if the number of workers' children between the ages of 6 and 12, in his plantation exceeds 25, provide and maintain a primary school or schools for imparting primary education to the children:

Provided that an employer may not provide and maintain a primary school if there is one under the direct management of the State Government or of any local

body for imparting free education to the children up to the primary or higher standard, with enough seats to admit the children between the ages of six and twelve of the workers in his plantation and within a distance of 2 kilo meters from the place where workers reside in his plantation; or if under any other law, he is required to pay a cess or tax for primary education;

Provided further that subject to the provisions of sub-rule(1) of rule 137, a group of employers may jointly provide and maintain a primary school and share its expenses.

143.

(1) Every school to be provided and maintained under rule 128 shall be conveniently situated and within a distance of 2 kilo metres from the workers' quarters.

(2) The school building shall be constructed in accordance with the standard plan or plans which may be laid down by the State Government.

Provided that where there is no standard plan or where it is proposed to deviate from a standard plan, the State Government's approval of the plan of the school building shall be obtained

(3) Where adequate space is available, an open air playground with suitable accessories shall also be provided for the children attending the school

144. The employer or employers, as the case may be, shall provide for every primary school maintained under rule 136 such educational and other equipment as may be considered necessary by the State Government.

145. Appointment of Teachers:-

(1) The employer or employers concerned shall appoint one teacher for every forty children attending the primary school.

(2) The teacher shall possess the qualifications prescribed by the State Government for teachers in Government primary schools.

Provided that in the case of any person who is working as a school teacher in a plantation at the commencement of these rules the State Government may, subject to such conditions as it may specify, relax any of the qualifications.

(3) The curriculum, duration, standard and syllabus of the course of instruction to be imparted in the primary school shall be such as may be approved by the State Government.

(4) No fees shall be charged from the worker's children attending the primary school.

146. Medical facilities under sub-section (1) (d) of section 91.

Every employer shall provide health facilities to every worker employed in the plantation (including his family) or provide coverage under the Employees State Insurance Scheme of Social Security Code.

If health facilities not provided under Employees State Insurance Scheme of

Social Security Code the following health facilities shall be provided by the employer.

147. Type of Hospitals -

There shall be two types of hospitals in plantations namely, garden hospitals and group hospitals.

(1) Garden hospitals will deal with out-patients, in-patience not requiring any elaborate diagnosis and treatment, infectious cases midwifery, simple pre-natal and postnatal care, care of infants and children and periodical inspection of workers.

(2) Group hospitals shall be capable of dealing efficiently, with all types of cases normally encountered but will not be used for routine treatment. Admission to group hospitals except in emergency shall be only on the recommendation of a garden hospital doctor.

148. Garden hospitals -

(1) Every employer of plantations specified in column(1) of the Table below shall provide the medical facilities specified in the corresponding entries in column (2) thereof.

THE TABLE

Sl.No	Class of plantations	Nature of medical facilities to be provided
(1)	(2)	(3)
1	Plantations which employ 1,000 or more workers	Own garden hospital.
2	Plantations employing more than 200 workers but less than 1,000 workers	Combined garden hospital and own dispensary
3	Plantations employing 200 or less workers.	Dispensary either individually or in groups with necessary equipment and arrangements for visiting doctors (The employers shall ensure that the doctor visits the dispensary at least twice a week)

(1) Each garden hospital shall be under a qualified Medical Practitioner as assisted by at least one trained nurse, one trained maternity assistant, a qualified pharmacist, one man and one woman Nursing Orderly, one scavenger and one sweeper. The services of the staff shall be readily available during all hours:

Provided that in the case of doctors, nurses, maternity assistants and pharmacists employed in plantation at the commencement of these rules, the Chief Inspector-cum-Facilitators of plantations may in consultation with the Director of Medical Services grant exemption from possessing the qualifications prescribed for them.

(2) Medical and auxiliary personnel shall be appointed according to the following scale:-

- (i) one qualified medical practitioner for every 1750 workers or part thereof.
- (ii) nurse/number of workers not less than 1/1750

- (iii) maternity assistants/number of workers not less than 1/1750
- (iv) pharmacist / number of workers not less than 1/1750
- (v) men nursing orderly /number of workers not less than 1/1750
- (vi) women nursing orderly /number of workers not less than 1/1750
- (vii) scavenger /number of workers not less than 1/1750
- (viii) sweeper /number of workers not less than 1/1750

Provided that where the number of workers does not exceed 2000, no additional practitioner need to be appointed.

Provided further that where the number of women workers employed in any plantation is not less than 750, a woman medical practitioner also shall be appointed.

- (3) (a) A minimum of 15 beds shall be provided in every garden hospital per 1,000 workers served and each bed shall be allowed at least six square metres of floor space.
- (b) Every hospital shall be of sound permanent construction with impermeable washable walls to a height of at least 1.5 metres on the inside with proper water supply and efficient sanitary arrangements.
- (c) Every hospital shall have pure piped water supply and the wards, consulting room, operation theatre and dispensary shall each have a water point over a suitable glazed sink.
- (d) The following departments shall be provided:-
- (i) general ward for male
 - (ii) general ward for female
 - (iii) maternity with separate labour room,
 - (iv) family planning centre
 - (v) infectious ward with separate sanitary arrangements.
 - (vi) out-patient department (with sufficient waiting space for patients to wait under cover) preferably situated in a separate block from general wards.
 - (vii) consulting room so arranged that patients can be examined in privacy.
- (i) minor operation in dressing room
- (ii) dispensary and drug store
- (iii) general store
- (iv) kitchen for cooking
- (c) In every hospital, transport facilities shall be provided for carrying patients to and from group hospitals.

149. Group hospitals –

- (1) Group hospitals shall be established.
- (2) Plans for the establishment of group hospitals containing details as regards their location and size, areas of plantations served, the number of workers employed thereon, etc., shall be approved by the State Government.
- (3) Every group hospital shall have a minimum of 100 beds and there shall

be at least three beds per 700 workers, every bed having 7.5 square metres of floor space.

Provided that the State Government may fix a lesser number of beds to be provided in a group hospital and exempt a group of plantation from providing a group hospital, if it is satisfied that adequate alternative arrangements exist for treatment of patients intended to be treated at a group hospital:

Provided further that no exemption shall be allowed without the previous approval of the Central Government.

(4) The hospital shall be built according to such specifications as may be approved by the State Government.

(5) There shall be provision for piped supply of pure water, electricity, modern methods of sanitation and water flushed closets. Each ward, labour room, surgical dressing room, consulting room and dispensary, shall have a water point over a suitable glazed sink:

Provided that with the approval of the State Government suitable alternative arrangements may be made in regard to supply of pure water, electricity and other modern methods of sanitation:

(5) Each hospital shall have provision for:

- (i) Operating theatre block,
- (ii) X-ray block,
- (iii) Physical treatment block,
- (iv) Dental treatment block,
- (v) Labour room,
- (vi) T.B. and V.D. clinics,
- (vii) Consulting and examination rooms
- (viii) Clinical Laboratory fully equipped,
- (ix) Dispensary,
- (x) Administrative and office block,
- (xi) Kitchen and Laundry blocks,
- (xii) Lavatories and bath-rooms,
- (xiii) Stores,
- (xiv) Mortuary and post-mortem room

Out-patient block which should preferably be at some little distance from the wards.

Separate wards shall be provided for male, female, maternity cases and small isolated wards for infectious diseases:

Provided that X-ray and physical Therapy blocks may not be provided if satisfactory arrangements are made by employers to provide these facilities with some hospital approved by the chief Inspector-cum-Facilitator.

(6) (a) Every group hospital shall have such medical and other staff as may be specified by the State Government. All doctors in a group hospital shall be qualified medical practitioners.

(6) There shall be 15 nurses for a 100 bedded hospital of whom one shall be senior trained, 5 junior trained and 9 assistant nurses. Such classification may be made according to their qualifications and experience.

(7) A properly equipped ambulance shall be maintained every group hospital.

150. Equipment and drugs –

- (a) Every dispensary/garden hospital and group hospital shall maintain such equipment and drugs, etc., as may be specified by the State Government.
- (b) The District Medical Officer concerned or (an Assistant surgeon nominated by District Medical Officer or a Medical Officer appointed by the State Government) shall visit the dispensaries, garden hospitals and group hospitals at least once a year to see whether they are sufficiently equipped and stocked with drugs, and send a report to the management and to the chief Inspector-cum-Facilitators of plantations.

151. Medical records –

The medical officer in charge of each dispensary, garden or group hospital shall maintained

- (a) such registers, books, accounts and a medical record in respect of every patient, as may be prescribed by the State Government for the purpose ; and
- (b) comply with such regulations as may be made by the State Government in respect of medical stores.

152. Standard of medical facilities –

- (i) Out-patients, treatment It shall include
 - (i) detention for observation and treatment
 - (ii) preventive treatment such as vaccination and inoculation,
 - (iii) free provision of all drugs including those needed for injections and dressings and appliances that may be considered necessary,
 - (iv) ante-natal and post-natal advice,
 - (v) provision of certificates, free of cost in respect of maternity and sickness benefit claims.
- (b) In patients' Treatment –
 - (i) The hospital treatment shall include maintenance, food and medicines including treatment at confinement as may be available at the hospital and the said facilities shall subject to the provisions of clause (i) be free of cost to workers and shall be paid for by the plantations.
 - (ii) notwithstanding anything contained in clause (i), workers and their families admitted as in-patients in the hospital shall be entitled to the supply of free diet, only where any award, agreement or contract of service provides for the supply of free diet or where they were already enjoying the benefit of free diet under any custom usage and past practice and such supply shall be in accordance with the terms of the said award, agreement, contract, custom, usage and last practice, but where there is no such award, agreement, contract, custom, usage and past practice the diet charges shall be paid for by the workers at such rate as the State Government may, from

time to time, fix.

- (iii) workers and members of their families undergoing treatment as in-patients in the Garden or Group hospitals in plantations shall be required during their period of stay in the hospitals to wear only the uniforms supplied by the Garden or Group hospitals free of cost.

153. Failure to provide and maintain medical facilities as required in these rules - If any employer does not provide and maintain medical facilities as required in these rules to the satisfaction of the Chief Inspector-cum-Facilitator, State Government upon request by the Chief Inspector-cum-Facilitator will cause to be provided and maintained these facilities in the nearest garden hospital or dispensary or in a Primary Health Centre or other similar hospital or dispensary.

154.

The defaulting employer shall be liable to pay the cost such medical facilities including charges, if any, in respect of -

- (a) a medical officer's visit to the plantations for the purpose of attendance on any sick worker or workers and his or their families respectively;
- (b) The maintenance of sick workers or a member of his family in a hospital/dispensary for each day's maintenance ; and
- (c) Transport to and fro provided to the sick worker or a member of his family.

155. Recovery of sum due under rule 148 -

When any sum of money is due from any employer under rule 148, the Chief Inspector-cum-Facilitator shall give him notice in writing requiring the payment of the amount to the District Collector, who may recover the same as an arrear of land revenue

Recreation facilities under sub-section (1)(e) of section 92

156. Recreational Facilities:-

Every employer shall provide and maintain.

- (i) a recreation centre or centres for workers with provision for indoor games suitable for adult workers and child ; and
- (ii) where adequate flat open space is available within a reasonable distance, a playground or playgrounds for adult workers and child with necessary sports equipment for outdoor games:

Provided that subject to the provisions of rule 151 a group of employers may, with the approval of the Chief Inspector-cum-Facilitators, provide and maintain joint recreation centers and playgrounds and share their expenses.

157. Every recreation center to be provided and maintained under rule 150 shall be conveniently situated as near as possible to the worker's quarters.

158. An employer of a plantation shall be responsible to provide and maintain welfare facilities for which the workers in the plantation are entitled under this Code either from his own resources or through the schemes of the Central Government or State Government, Municipality or Panchayat for the locality in which the plantation is

situated.

Safety under sub-section (2) of Section 93

159. Restriction on employment of women and adolescent worker in handling insecticides, chemicals and toxic substances:-

Women worker or adolescent worker shall be permitted to be engaged in handling or storage or transport of insecticides, chemicals and toxic substances by following the standard operating procedures as notified by the State Government.

160. Appointment and qualification of Supervisors:-

The use, handling, storage and transportation of insecticides, chemicals and toxic substances shall be supervised by a competent person who should possess the following qualifications:-

- (i) He shall a graduate in Agriculture or in science or he shall possess a Certificate Course on handling of chemicals and toxic substances conducted by the United Planters' Association of Southern India (UPASI)
- (ii) He should be given training from a designated Training Institute and
- (iii) He should also possess valid certificate from Red Cross Society / St. Johns Ambulance institute for giving first aid treatment to workers.

161. Training:-

(1) The persons involved in handling insecticides, chemicals and toxic substances shall be arranged for suitable training in observing safety precautions and handling safety equipment provided to them in the institutes notified by the State Government from time to time.

(2) All the workers who apply, handle, transport or come into contact with agro-chemicals or other chemical substances must be trained in at least in the following subjects:-

General occupational health;

Formulations, names, and the bin code action of the substances used
in the case of pesticides

Correct use of personal protective clothing and equipment Preventive measures and measures for reducing damage to health and the environment, caused by the chemical substances, equipment, techniques, signage, medical examination etc.,

- I. Emergency procedures, first aid and medical attention for cases involving poisoning or undue contact with chemical substances.
- II. Techniques for handling chemical substances and for the correct application of agro-chemicals;
- III. Secure handling and transportation of agro-chemicals for drivers and other necessary training suitable for the plantation

Safety under sub-section (5) of section 93

162. Medical examination to the workers:-

(1) Without prejudices to section 6 (c) of this code Rule 9 every worker who is engaged in the work of handling, dealing, or spraying or mixing insecticides, chemical and toxic substances shall be medically examined initially at the time of employment and thereafter once in year in Group Hospital or Garden or any other hospitals notified in this regard.

(2) The medical examination and tests shall be in **Form: V**

(3) Any person showing symptoms of poisoning shall be immediately examined and given proper treatment.

(4) Every employer shall maintain health record of every worker such as annual medical examination or any other examination when required, shall be kept in plantation and every such worker shall have access to such record.

Safety under sub-section (7)(a) and (b) of section 93

163. Washing, bathing, cloak room, protective clothing and equipment facilities :-

(1) Every employer shall provide washing bathing and cloak room facilities to the workmen, who are employed in handling insecticides, chemicals and toxic substances:

(2) Protective clothing and equipment :-

- (a) persons handling insecticides, chemicals and toxic substances during its operation, distribution, mixing, spraying shall be adequately protected with appropriate clothing.
- (b) The protective clothing shall be made of materials which prevent or resist the penetration of any form of insecticide, chemical and toxic formulations. The materials shall also be washable so that the toxic elements may be removed after each use.
- (c) A complete suit of protective clothing shall consists of the following dresses, namely:-
 - (i) Protective outer garment with hat
 - (ii) Rubber gloves or such other protective gloves extending of way upto the fore arm made of materials impermeable to liquids.
 - (iii) Dust proof goggles
 - (iv) Boots
 - (v) Reusable cloth masks

Safety under sub-section (9) of section 93

164. Precautionary notices:-

Every employer in the plantations shall display the following precautionary notices at or near the place where the insecticides chemicals and toxic substances are handled:-

- (i) Use protective clothing's like overalls, gloves, goggles, rubber gum-boots and wide-rimmed hats.
- (ii) Do not wear clothes contaminated with insecticides and pesticides
- (iii) Clean the protective clothing by washing with soap and water
- (iv) Do not allow children, sick persons and pregnant women and nursing mothers to handle insecticides and pesticides
- (v) Do not eat, drink, smoke or chew while handling insecticides and pesticides
- (vi) Never blow out clogged nozzles with mouth
- (vii) Do not use leaking sprayers. Avoid contamination of the skin, mouth and eyes
- (viii) Do not inhale the insecticides unattended in the fields
- (ix) Never spray insecticides and pesticides against the wind.
- (x) Do not leave insecticides and pesticides unattended in the fields
- (xi) Do not allow humans and livestock to enter the insecticides and pesticides sprayed fields for a period of time, suggested by the manufacturers.
- (xii) Do not wash insecticides and pesticides containers near a well or running stream
- (xiii) Keep clean water, soaps and towels ready for use
- (xiv) Wash hands and exposed skin thoroughly with soap and water before eating, drinking, smoking or, chewing and after work.
- (xv) Keep the insecticides and pesticides locked in store room and out of reach of children and other unauthorized persons
- (xvi) Do not enter sprayed field. Follow the re-entry periods for all insecticides and pesticides including herbicides, suggested by the manufactures
- (xvii) Keep insecticides and pesticides in their original, labelled containers.
- (xviii) Do not decant insecticides and pesticides into unlabelled containers except for immediate use.
- (xix) Dispose the containers safely after thoroughly emptying and washing. They may be buried in a place away from water source.
- (xx) Never reuse the container for any other purposes if it is impossible to remove the traces and pesticides from the containers.

Such other matters prescribed by State Government as per sub section (4) of section 93

165. Transport and storage of insecticides within the plantation -

(1) No insecticides, chemicals and toxic substances shall be transported or stored in such a way as to come into direct contact with food stuffs or animal feeds or drinking water.

(2) If any insecticides, chemicals and toxic substances are found to be leaked out in transport or storage, it shall be the responsibility of the employer to take such measures urgently to prevent poisoning and pollution of soil or water, if any.

(3) The packages containing insecticides, chemicals and toxic substances shall be stored in separate rooms or premises away from the rooms or premises used for storing such articles or shall be kept in separate almirahs under lock and key depending upon the quantify and nature of the insecticides.

(4) The rooms or premises meant for storing insecticides, chemical and toxic substances shall be well built, dry, well-lit and ventilated with sufficient dimension.

166. List of insecticides, chemicals and toxic substances:-

Every employer shall display in plantations the list of insecticides, chemicals and toxic substances as notified by the State Government, from time to time under the Insecticides Act, 1968.

CHAPTER-XII
OFFENCES AND PENALTIES

167. Form and manner of preferring appeal and the fee to accompany such appeal under sub-section (3) of Section 111:-

1. The employer aggrieved by the order of Enquiry Officer, may appeal against such order before the appellate officer appointed by the state Government for such purpose within thirty days from the date of receipt by him of such order, electronically or otherwise along with fee notified by the Government to be deposited in the official account of the Appellate Authority electronically or otherwise.
2. Where the memorandum of appeal is in order, the appellate authority shall admit the appeal, acknowledge it and intimate admission of such appeal, and shall register the appeal in electronic form to be kept for the purpose called the register of appeals.
3. When the appeal has been admitted, the appellate authority shall send the notice of the appeal to the enquiry officer, against whose order the appeal has been preferred and the enquiry officer shall thereupon send the records of the case to the appellate authority online electronically or otherwise.
4. On receipt of the appeal, the appellate authority shall send a notice to the appellant to appear before him on such date and time as may be specified in the notice for the hearing of the appeal electronically or by registered post.
5. If on the date fixed for hearing, the appellant does not appear, the appellate authority may dismiss the appeal for default of appearance of the appellants by sending the copy of the order to the applicant electronically or otherwise.
6. Where an appeal has been dismissed, the appellant may apply electronically to the appellate authority for the restoration of the appeal within thirty days from the date of receipt of the order and if the appellate authority is satisfied that the appellant was prevented by sufficient cause from appearing, the appellate authority shall restore the appeal subject to costs at the discretion of the authority.
7. The order of the Appellate Authority shall be communicated electronically or by registered post to the appellant and copy thereof shall be sent to the registering officer against whose order the appeal has been preferred and shall be disposed of within a period of thirty (30) days from the date of receipt of appeal.

168. Manner of compounding of offences by the authorized officer specified under sub-section (1) of Section 114: -

- (1) The officer notified by the State Government for the purposes of compounding of offences under sub-section (1) of Section 114 shall issue electronically a compounding notice to the concerned alleged accused person for the offences for which are compoundable under section sub-section (1) of Section 114.
- (2) The person so noticed may apply to the officer electronically and deposit the entire compounding amount by electronic transfer or otherwise, within fifteen days of the receipt of the notice.
- (3) The Officer referred to in sub-paragraph (1) shall issue a compounding certificate within ten days of receipt of the compounding amount, to such person from whom such amount has been received in satisfaction of the compounding notice.
- (4) If a person so noticed fails to deposit the compounding amount within the one month, the prosecution shall be initiated in the competent Court.

- (5) No prosecution shall be instituted without giving an opportunity to the employer to comply with such provisions subject to proviso of sub-section (1) of Section 110 and compounding as under Section 114.

CHAPTER-XIII

Social Security Fund

169. **Sources of fund under sub-section (2) of Section 115:** - The Telangana Government may by notification decide rules for generating sources of Telangana Social Security Fund.
170. **The manner of administering and expending the Fund under sub-section (3) of Section 115:** The Government in consultation with the Telangana social security board for unorganized workers may take steps required for the manner of administering the expenditure of the fund.

CHAPTER-XIV

Miscellaneous

171. **Common license for contractor, factories and to industrial premises, etc under Section 115-**
1. Notwithstanding anything contained in these rules, any person desirous of obtaining common license for an Establishment in respect of a factory, industrial premises for beedi and cigar work and for engaging contract workers or any combination thereof under the Code shall make an application to the authority designated by notification for the said purpose by the Government.
 2. The application for common license under sub-rule (1), shall be filed in **Form XII** and accompanied by required fees as notified by Government of Telangana.
 3. On receipt of an application under sub-rule (1), the authority referred to in sub-rule (1) shall make such inquiry.
 4. Where the authority referred to in sub-rule (1) is satisfied that the common license may be issued in respect of a factory, industrial premises for beedi and cigar work and for engaging contract workers or any combination thereof under the Code, such authority shall issue a license within 30 days of the receipt of application and validity of such common license in **Form XIII** shall be for one calendar year.
 5. In case of rejection of license, aggrieved person may appeal to Chief Inspector-cum-Facilitator within thirty days from the date of rejection.
172. **Inbuilt Safety Systems for certain equipment prescribed under under sub Section(1) and (2)(za) of Section 135**
Part A: 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 be 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]

Part B: 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-resistor 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 snifing 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 conform 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 good 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.

Part C: 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 valve 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.

(5) 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) Polymersing 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 polymersing machines.

(b) Infrared ray heaters of polymersing machines shall be cut off while running the prints.

Part D: Centrifuges.

Interlocking

Arrangements:

(a) Every centrifuge shall be provided with a lid-opening interlock to ensure that the lid cannot be opened while the basket is in motion.

(b) Charging and discharging operations shall be effectively interlocked with complete stoppage of the motor and rotation.

Dynamic Balancing and Vibration Control: Each centrifuge shall be equipped with suitable dynamic balancing arrangements and continuous vibration monitoring devices to prevent mechanical failure.

Over-speed Protection: All centrifuges shall be fitted with approved over-speed protection systems, including speed governors and automatic trip mechanisms, to stop the equipment in the event of excess speed.

Alarm and Warning Systems: Adequate audible and visible alarm systems shall be provided to indicate:
 (i) Over-speed condition,
 (ii) Excessive vibration,
 (iii) Abnormal bearing temperature rise,
 (iv) Failure of nitrogen supply or inerting system.

Access Control:
 (a) Not more than one person shall be permitted inside the centrifuge room at any time.

(b) After loading of material, no person shall remain in the vicinity of the centrifuge during operation.

Remote Operation: All centrifuges shall be operated, including starting and stopping, only from outside the centrifuge room, with suitable control panels provided for the purpose.

Daily Examination: Every centrifuge shall be examined by a competent person at the beginning of each working day, and the equipment shall not be operated until it is certified safe for use.

Mother Liquor (ML) Storage: ML tanks shall be installed outside the centrifuge room in a fully closed condition, and their vent lines shall be extended and fitted with certified flame arrestors.

Protective Clothing: Workers employed in centrifuge operations shall be issued suitable cotton clothing free from synthetic fibres to minimize static electricity hazards.

Anti-static Equipment: Centrifuges shall be fitted with anti-static V-belts, brake shoes, and other components vulnerable to static generation.

Bonding and Earthing: All joints, flanges, and connections associated with centrifuge operations shall be provided with suitable crocodile clips or bonding arrangements to ensure proper earthing and dissipation of static charges.

173. Safety Audit in Factories prescribed under sub section(1) and (2)(za) of Section 135:

a) Internal and external safety audit shall be conducted in such factories or class of such factories at a frequency as notified by State Government

b) All safety audits shall be carried out in accordance with the relevant Indian Standard on Occupational Health and Safety Audit, or any standard recognised/notified by the State Government.

c) Safety Audit Report shall be submitted by the occupier to Inspector of Factories-cum-Facilitator before such date as notified by State Government

d) Compliance Report of observations in the Safety Audit shall be submitted to Inspector-cum-facilitator within 30 days of Safety Audit.

e) Qualification, experience and method of empanelment of External Safety Auditors shall be as notified by State Government.

174. Mandatory safety training for hazardous process, dangerous operations and notified factories prescribed under sub section (1) and (2)(za) of Section 135:

(1) Applicability

This rule shall apply to—

1. All establishments involving hazardous process as defined under the Occupational Safety, Health and Working Conditions Code, 2030;
2. All establishments carrying on dangerous operations as specified under these rules; and

3. Any other factory or class of factories or establishments notified by the State Government, having regard to the nature of operations, materials handled, processes employed, or risk to safety and health of workers.

(2) Prohibition of employment without training

No employer shall—

1. Employ, engage or permit any employee, including a contract employee, to work in any hazardous process or dangerous operation; or
2. Assign any worker to any operation notified under sub-rule (1),

unless such employee has undergone mandatory safety training in accordance with the provisions of this rule.

(3) Types of mandatory safety training

Every employer to whom this rule applies shall ensure the following training for employees, namely—

(a) **Induction Safety Training**, to be completed prior to commencement of work, covering—

- General hazards of the establishment
- Use of personal protective equipment
- Emergency exits, alarms and evacuation procedures
- Fire prevention and first aid

(b) **Process-specific or job-specific safety training**, relating to—

- Hazards inherent to the specific process or operation
- Standard operating procedures
- Safe handling, storage and transfer of materials
- Permit-to-work systems and emergency shutdown

(c) **Hazard-specific training**, wherever applicable, including—

- Chemical, toxic, flammable or explosive hazards
- Combustible dust hazards
- Confined space, work at height, electrical or pressure hazards

(d) **Emergency preparedness and response training**, including—

- On-site emergency plan
- Mock drills and evacuation procedures

(e) **Refresher training**,—

- At least once every year, and
- Whenever there is a change in process, machinery, material, or after any accident, dangerous occurrence, or prolonged absence of the worker.

(4) Training duration and contents

The minimum duration, contents and mode of training for different sectors or classes of establishments shall be such as specified or notified by the State Government or as issued by the Chief Inspector-cum-Facilitator

(5) Trainers and supervision

Safety training shall be—

1. Conducted or supervised by a qualified Safety Officer or any other person who is qualified to be a safety officer as prescribed in these rules
2. Delivered through institutions, agencies or experts approved by the Chief Inspector-cum-Facilitator

(6) Training records and certification

1. The employer shall—
 - Maintain **records of safety training**, attendance and assessment;
 - Issue **training certificates** to workers upon completion of training.
2. Such records shall be—
 - Preserved for a minimum period of **five years**; and
 - Produced on demand to the Inspector-cum-Facilitator.

(7) Powers of Inspector-cum-Facilitator

Where it is found that—

- Any employee is engaged in hazardous process or dangerous operation **without mandatory safety training**,

the Inspector-cum-Facilitator may—

1. Prohibit such employment or operation until compliance is ensured; and
2. Initiate action under the relevant provisions of the Code.

175. Recognition of Competent Persons prescribed under sub section(1) and (2)(za) of Section 135

(1) **Recognition** The Chief Inspector-cum-Facilitator may, on an application made in the prescribed form, recognize any person or institution of repute as a Competent Person under the Occupational Safety, Health and Working Conditions Code, 2020, for such area, purpose and period as may be specified, to carry out tests, examinations, inspections and certification in respect of buildings, dangerous machinery, hoists and lifts, lifting machinery and lifting tackle, pressure plants, confined spaces, ventilation systems, solvent extraction plants, chemical works and such other plant, process or equipment as stipulated under the Code and the rules made thereunder.

(2) **Qualifications and facilities** No person or institution shall be recognized as a Competent Person unless such person or institution possesses the qualifications, experience, facilities and equipment specified in the Schedules annexed to this rule. Age of the competent person shall be less than 62 years.

(3) **Institutions where recognition is granted to an institution**, such institution shall be staffed with persons possessing the prescribed qualifications and experience and shall maintain the required facilities and equipment for carrying out the assigned functions.

(4) **Grant or rejection** The Chief Inspector-cum-Facilitator may grant a Certificate of Competency in the prescribed form or reject the application for reasons to be recorded in writing.

(5) **Validity and renewal**

A Certificate of Competency shall be valid for a period of one year and may be renewed on application made not less than thirty days before its expiry.

(6) **Fee** every application for recognition or renewal shall be accompanied by proof of payment of the prescribed fee as specified in the Schedules annexed to this rule. The fee once paid shall not be refundable.

(7) **Revocation**

The Chief Inspector-cum-Facilitator may, after giving an opportunity of being heard, revoke the Certificate of Competency for violation of conditions or misuse of certification.

(8) **Re-certification**

The Chief Inspector-cum-Facilitator may require re-certification of any equipment or system certified earlier.

(9) **Duties** Every Competent Person shall act impartially, avoid conflict of interest, maintain records for five years and shall be liable for false certification.

Schedule – Qualifications of Competent Persons

S. No	Nature of Certification	Qualification	Experience	Facilities at Command	Registration Fee (₹)	Renewal Fee (₹)
1	Certificate of Stability of Buildings	Degree in Civil / Structural Engineering	(i) A minimum of 10 years of experience to the design of construction or testing or repairs of structures. (ii) Knowledge of non-destructive testing various codes of practices that are current and the effect of the vibrations and natural forces on the stability of the building; corrosion test of metallic structure and (iii) Ability to arrive at a reliable conclusion with regard to the safety of the structure of the building.	Ultrasonic pulse velocity test Distortion test Chloride content Sulphate content pH content core sampling and testing for compressive strength filling the hole by non shrink grout material injection grouting	5,500	5,000
2	Power Presses	Degree in Mechanical or Electrical Engineering or equivalent	(i) A minimum of 7 years of 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 (c) have ability to arrive at a reliable conclusion with regard to the proper functioning of safety device and appliance and machine guard.	Speed gauges, safety testing devices	5,500	5,000
3	Lifts, Hoists, 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	Load and tensile testing equipment, micrometer or vernier calipers	5,000	5,000
4	Pressure Plants	Degree in Mechanical or Electrical or Chemical or Metallurgical 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	Hydraulic test pumps, NDT tools, Master Pressure Gauge	5,500	5,000
5	Confined Spaces and Dangerous Fumes	Degree in Chemical / Mechanical Engineering or M.Sc Chemistry	Minimum 7 years in environmental monitoring	Multi gas detectors, oxygen meters	5,500	5,000

6	Thermic Fluid Heaters	Degree in Mechanical / Chemical Engineering	Minimum 7 years in thermic fluid systems	Oil testing kits, temperature and pressure gauges	5,500	5,000
7	Ventilation Systems	Degree in Mechanical / Electrical / Chemical Engineering	Minimum 7 years in ventilation systems design and testing	Anemometers, dust samplers (personal sampler)	5,500	5,000
8	Chemical Works and Solvent Extraction Plants	Degree in Chemical Engineering	Minimum 5 years relevant industrial experience	Vapour detectors, JT testers, gauge calibrators, earthing testing equipment	5,500	5,000

Application for Recognition as Competent Person

To
The Chief Inspector-cum-Facilitator of Factories,
Government of Telangana

Sir / Madam,

I / We hereby apply for recognition as a Competent Person under Rule 2A. The required particulars are furnished below:

Particulars:	Details
1. Name of Applicant (Individual / Institution)	
2. Address (with PIN code)	
3. Contact Details (Mobile, Email)	
4. Nature of Certification Applied For	
5. Qualifications (attach copies)	
6. Professional Experience (years & details)	
7. Details of Facilities and Equipment Available	
8. Details of Technical Staff (if Institution)	
9. Previous Recognition as Competent Person (if any)	
10. Medical fitness certificate issued by Medical Officer	
11. Fee Details (Challan No., Date, Amount)	
12. Declaration of No Conflict of Interest	

Declaration

I/We hereby declare that the information furnished above is true and correct to the best of my/our knowledge. We undertake to comply with the provisions of the OSH Code and the rules made thereunder. We further declare that we shall act impartially and shall not certify any plant, machinery or system in which we have a direct or indirect interest.

Place:

Date:

Signature of Applicant

Name:

Seal (if Institution)

176. **Manner of survey on situation relating safety and health as prescribed under sub-section(2) of Section 121:**-The Chief Inspector-cum-Facilitator, Officer or the Committee so appointed by the State Government to undertake survey in accordance with the provisions of sub-section (2) of section 121 of the Code, may, at any time during the normal working hours of an establishment, or at any other time as is found by him/her or the committee to be necessary, after giving notice in writing to the employer or Manager of the establishment or to any other person, who is for the time being purports to be in charge of the establishment, undertake survey relating to safety and health in the establishment and outside.
- (1) Employer or Manager or other person shall afford all facilities for such survey, including facilities for the examination and testing of plant and machinery and collection of samples and other data relevant to the survey.
 - (2) For the purpose of facilitating surveys every employee and person in near vicinity, if so required by the person or persons conducting the survey, present himself / herself to undergo such medical examination as may be considered necessary by such person and furnish all information in his/ her possession and relevant to the survey.
 - (3) Any time spent by a employee for undergoing medical examination or for furnishing information under sub-paragraph (2) shall be, for the purpose of calculating wages and extra wages for overtime work, deemed to be time during which such employee worked in the establishment.

(BY ORDER AND IN THE NAME OF THE GOVERNOR OF TELANGANA)

PRINCIPAL SECRETARY TO GOVERNMENT

To

The Commissioner of Printing, Stationery and
Stores purchases (PW), Chanchalaguda, Hyderabad
(for publication in the Gazette and supply of 50 copies
to the Commissioner of Labour, Telangana, Hyderabad
and 10 copies to Government and intimate the date on which the
copies of the Gazette are made available to the public).

The Commissioner of Labour, Telangana, Hyderabad

Copy to:

The Under Secretary to the Government of India,
Ministry of Labour & Employment,
Shram Shakti Bhawan, Rafi Marg, New Delhi-110001.

The Secretary to Chief Minister

The P.S. to Minister (Labour & Employment)

The Law (B) Department

SF/SC

// FORWARDED - BY ORDER //

SECTION OFFICER

Annexure to G.O.Rt.No. .LET&F (Lab-I) Department, dated: 28.01.2022**FORM-I****(See Rule-3(1) (a))****Application for Registration and Amendment of Establishments:**

1. LIN / Reg. Number of Establishment.
2. Name and permanent address of the Establishment.
3. Location and Address of the Establishment where work is to be carried on.
4. PAN Number of the establishment.
5. Nature of work carried out in the establishment.
6. Activity as per National Industrial Classification (NIC).
7. NIC code.
8. Others details of Establishment:
 - i. Total Number of employees engaged directly in the establishment:
 - Male
 - Female
 - Transgender
 - ii. Total Number of the contract employees engaged -
 - Male
 - Female
 - Transgender
 - iii. Total Number of Inter-State Migrant workers employed:
 - Male
 - Female
 - Transgender
 - iv. Total Number of fixed term employees engaged:
 - Male
 - Female
 - Transgender
 - v. Total Number of any other category of employees engaged:
 - Male
 - Female
 - Transgender
 - vi. Total number of home workers
 - Male
 - Female
 - Transgender
9. No. of shifts and details thereof.
10. Fees remitted.
11. **(a) For factories:**

Details of the manufacturing process	
Full postal address and situation of the factory along with plan approval details.	
Name and address of the occupier and manager.	
Maximum number of workers to be employed on any day	
Maximum Horsepower installed regular / standby	

11 (b) For building and other construction work:

Type of Construction work	
Probable period/date of commencement of work.	
Expected period/date of completion of work.	
Details of approval of the local authority	

11 (c) Motor Transport Establishments

Nature of Motor Transport Services (e.g., City Services, Long Distance, Passenger or Freight)	
Total No. of Routes and Route Mileages	
Total No. of Motor Transport Vehicles	
Registration numbers under MV Act	

11 (d) Plantation

Nature of plantation e.g. Tea, Coffee, Rubber or cinchona	
Area of plantation	

11(e) Any other establishment

Nature of work	
----------------	--

12. Ownership type / Sector
13. Identification of the establishment

B. Details of Employer having control over the establishment:-

1. Name & Address of Employer / Occupier / Owner / Chief executive
2. Designation :
3. (i) Father's / Husband's Name of the Employer:
(ii) Age
4. Email Address, Telephone & Mobile No :

C. Details of other Partners / Directors

1. Name & Address of Partner(s) / Director(s)
2. Designation
3. (i) Father's / Husband's Name of the Partner(s) / Director(s)
(ii) Age
4. E-mail Address, Telephone & Mobile No:

D. Details of Manager / Agent

1. Full name of Manager / Agent or person responsible for supervision and control of the Establishment
2. Address of Manager / Agent
3. Email Address :

4. Telephone & Mobile No :

E. Details of Contractors employed under Principal Employer

Name and Address of Contractors	Nature of work	Maximum No. of Contract Labour engaged	Date of Commencement	Probable date of completion of work	E-mail	Mobile number
1	2	3	4	5	6	7

F. Details of Contractors employing ISMW

Name and Address of Contractors	Nature of work	Maximum No. of Contract Labour engaged	Date of Commencement	Probable date of completion of work	E-mail	Mobile number
1	2	3	4	5	6	7

G. Others Details:-

I/we hereby declare that the particulars given above are true to the best of my knowledge and belief.

Signature/ E-sign/digital sign of employer

Dated:-

Place:-

(See Rule-3(1)(c))

Certificate of Registration of Establishment

Registration No: _____

Date: _____

A Certificate of registration containing the following particulars is hereby granted under sub section (2) of section 3of the Occupational Safety, Health and Working Conditions Code, 2020 (37 of 2020)to _____ (Name of the establishment) with permanent address and location of the work (if they differ)

1. Nature of work carried on in the establishment (Please tick mark)

- (a) Factory
- (b) Building and Other Construction Works
- (c) Motor Transport Establishment
- (d) Plantation
- (e) Beedi and Cigar Establishment
- (f) Contract labour under Principal Employer
- (g) Contractors employing ISMW
- (h) any other work(not covered above)

2. Details of the establishment

- a. Total Number of employees engaged directly in the establishment
- b. Total Number of the employees engaged through contractor
- c. Total Number of Contractors and their details
- d. Number of inter-state migrant workers engaged

3(a) For factories

Details of the manufacturing process	Full postal address and situation of the factory along with plan approval details	Name and address of the occupier	Maximum number of workers to be employed on any day	Maximum Horsepower to installed regular / standby	Date of validity
1	2	3	4		5

3(b) For building and other construction work

Type of Construction work	Probable period/date of commencement of work	Expected period/date of completion of work	Details of approval of the local authority	Date of validity
1	2	3	4	5

3(c) Motor Transport Workers Act.

Nature of Motor Transport Services (e.g., City Service, Long Distance, Passenger or Freight)	Total No. of Routes and Route Mileages.	Total No. of Motor Transport Vehicles	Registration numbers under MV Act	Date of validity
1	2	3	4	

3(d) Plantation

Nature of plantation e.g. Tea, Coffee, Rubber or cinchona	
Area of	

plantation	
Date of validity	

3(e) Details of Contractors employed under Principal Employer

Name and Address of Contractor	Nature of work	Maximum No. of Contract Labour engaged	Date of Commencement	Probable date of completion of work	E-mail	Mobile number
1	2	3	4	5	6	7

3(f) Details of Contractors employing ISMW

Name and Address of Contractor	Nature of work	Maximum No. of Contract Labour engaged	Date of Commencement	Probable date of completion of work	E-mail	Mobile number
1	2	3	4	5	6	7

4. Amount of registration fee paid Rs. _____

Transaction Id _____

5. Remarks of registering officers

Place: _____ Signature E-Sign/DSC of Registering Officer along with designation

Date: _____

Conditions of Registration

- (1) Every certificate of registration issued under rule 3 shall be subject to the following conditions, namely:
 - (a) The certificate of registration shall be non-transferable.
 - (b) The number of workers employed in an establishment directly and contract employees, interstate migrant employees shall not, on any day, exceed the maximum number specified in the certificate of registration; and
 - (c) Save as provided in these rules, the fees paid for the grant of registration certificate shall be non-refundable.
- (2) The employer shall intimate the change, if any, in the number of workers or the conditions of work to the registering officer within the time frame as specified in the rules.
- (3) The employer shall, within thirty days of the commencement and completion of any work, intimate to the Inspector-cum-Facilitator, having jurisdiction in the area where the proposed establishment or as the case may be work is to be executed, intimating the actual date of the commencement or, as the case may be, completion of establishment such work in Form-IV annexed to these rules electronically.
- (4) The employer shall adhere to the rules specified under this code.
- (5) A copy of the certificate of registration shall be displayed at the conspicuous places at the premises where the work is being carried on.

FORM-III
(See Rule-3(8))

Register of Establishment

S. No	Nature of work carried on in the establishment	Registration No. and Date	Name and Address, location of the establishment registered	Name, Address and Contact Details of Employer	Total number of Workers	Total Horsepower (if any)	Remarks
1	2	3	4	5	6	7	8
	a. Factory b. Building and Other Construction Works c. Motor Transport Establishment d. Plantation e. Beedi & Cigar establishments f. Contractors under Principal Employer g. Contractors employing ISMW h. any other work(not covered above)						

Signature of the Employer

FORM-IV
(See Rule- 5)

A- Notice of Commencement / cessation of Establishment:

1. Registration No:
2. Name and Address of Establishment -
3. Name & Designation of employer -
4. Full address to which communication relating to the establishment to be sent -
5. Nature of work of the establishment -
6. In case of the notice is for commencement of work the approximate duration of work -
7. In case of completion of work / cessation, the date of completion / cessation;

I/We hereby intimate that the work of establishment having registration No. _____ dated _____ is likely to commence/cessation is likely to be completed with effect from _____ (Date)/ On _____ (Date)

In case of cessation of work:

I/We hereby certify that the payment of all dues to the workers employed in the establishment have been made and the premises are kept free from storage of hazardous chemicals, and substances.

Signature of the Employer
To
The Inspector-cum-Facilitator

FORM-V
(Rule-6)

The medical examination shall be conducted by a qualified medical practitioner as per following proforma:

A. Demographics:

Question	Answer	Remarks
Date:		
Name of the Employee		
Age:		
Permanent Address:		
Gender:		
Total Number of family Members		
Total monthly family Income:		
Is the employee under ESI (Employees State Insurance) Scheme? If yes, provide IP Number.	Yes/No	
Is the employee under any other health scheme apart from ESI-Scheme? (If yes, provide the name of the scheme)	Yes / No	

B. Occupational History :

Question	Answer	Remarks
Present Designation:		
Work Profile		
Duration of service in the present work profile:		
Working Hours per shift		
Night Shift Per Week:		
Night Shift per Month:		

C. Brief Review of Medical History: Diagnosed previously or currently under treatment or Currently suffering from

Question	Answer (Yes/No)	Remarks
Anaemia:		
Jaundice		
Asthma		
COPD		
History of Any other Lung Disease (If Yes, Please Specify)		
Vertigo/Dizziness		
Diabetes Mellitus		
Hypertension		
Any Cancer (If Yes, Please Specify the Cancer)		
Chronic Low Back Pain		
Chronic Pain in hand or Elbow		
Hernia		
Hydrocele		
Varicose Vein		
Haemorrhoids		

History of amputation/fracture/dislocation injury during work (If Yes, please specify)		
Dermatitis (If Yes, specify Site)		
Hearing Impairment		
Visual Impairment		
Any Major Illness requiring hospitalization in last 1 year (If Yes, Name of the Disease)		
Occupational Injury in Last 1 year: If yes Specify the Location of injury and frequency		

D. Current Symptoms-Diseases Module

Question	Answer (Yes/No)	Remarks
Smoking habit		
Chewing Tobacco or Pan Masala or Gutkha		
Alcohol Addiction		
Dermatosis (Irritant Contact Dermatitis/Eczema/ Chloracne/ Allergic Contact Dermatitis)		
Mucosal Irritation of eyes/Nose/Throat with response to chemical agent or biological agent		
Symptoms like Respiratory Difficulty/ Chest Tightness/ Dry Cough at beginning of shift		
Currently suffering from TB		
Jaundice or Hepatitis		
Currently suffering from Low Back Pain		
Currently suffering from Pain in hand or Elbow		
Currently suffering from Visual Problems		
Currently suffering from Hearing Problems		
Any current injury (amputation/ fracture/ dislocation)		
Any current musculoskeletal sprains/ strains		

E. Physical Examination Date of Examination:

Question	Answer (Yes/No) or as appropriate	Remarks
General Skin Condition: (If Any Dermatitis, please mention its location)		
Weight (in Kg)		
Height (in Meter)		
Temperature (°F)		
BP		
Pulse		
SpO ₂		
Respiratory Rate		
Examination of Breast of female-employee		

F. Investigation Report

- Routine Blood Investigation: Attach the photocopy of there port
- Blood Grouping & Rh Typing and HB Electrophoresis Once in a lifetime

Parameter	Answer (Normal/Increase/Decrease)	Value
Hb%		
Total WBC Count and Differential Count		
Platelet Count		

ESR		
FBS		
PPBS:		
HBA1C level		
BUN		
Creatinine		
Total Protein		
Albumin		
Globulin		
SGOT		
SGPT		
Bilirubin		
Urine RE		
Urine ME		
Prostate Specific Antigen (PSA)		

G. Standard Chest X Ray (PA) View: attach the photocopy of the report Date:

Parameter	Answer (Normal/Abnormal)	Value (if any importance)
Report		

Report

H. Spirometry: attach the photocopy of the report (For mine employee) Date:

Parameter	Answer (Normal/Increase/Decrease)	Value
PEFR:		
FEV ₁		
Observed:		
Predicted:		
FVC:		
Observed:		
Predicted:		
FEV ₁ /FVC:		
Final Report: Normal / Obstructive Lung Disease/ Restrictive Lung Disease/ Mixed Lung Diseases		

I. Audiometry (Pure Tone / BERA): attach the photocopy of the report (For Mine Employee) Date:

Parameter	Value/Result/Interpretation
Visual inspection of Eye for any abnormality like wax in external ear, infection etc.	
Right Ear Hearing Threshold:	
Left Ear Hearing Threshold:	
Final Report preferable based on BERA:	
Right Ear:	
Left Ear:	

J. Eye Examination: attach the photocopy of the report Date:

Parameter	Value/Result/Interpretation
Visual inspection of Eye for any abnormality like corneal opacity/scarring, cataract etc.	
Visual Acuity: Right	
Visual Acuity: Left	
Colour Vision	

Field of Vision	
Bivocularity	
Lateral Phoria	
Vertical Phoria	
Stereoscopic Vision and Depth Perception Testing	
Fundus (Retina) examination	

K. 12 lead ECG and Echocardiography:
Final Report:

L. MEDICAL FITNESS TESTS FOR PERSONS WORKING AT HEIGHT (as may be applicable):

1. Detailed Medical History and in-Depth General Medical Examination including tests for Vision, Hearing, Musculoskeletal System, Respiratory System, Cardiovascular System etc. as applicable to all employees
2. Special Examination
 - a) Cardiovascular
Uncontrolled hypertension or ischemic heart disease will be a contraindication. In the presence of hypertension and abnormal ECG findings, the employee should be referred to a Cardiologist for fitness.
 - b) Tests for Labyrinthine functions and for sense of position Eye Examination for Bilateral Nystagmus, Romberg sign. The presence of bilateral nystagmus and a positive Romberg sign will be an absolute contra-indication.
 - c) Neurological examination Evaluate seizure disorders: CT Scan of Brain and E E G if indicated
 - d) Assessment of Diabetic Control Status:
(in case of employees suffering from Diabetes Mellitus)
 - e) Assessment of Phobia (Acrophobia) and any other Mental Health Disorder like Anxiety or Depression
 - f) Evaluation for Vertigo and Dizziness

For use of Industrial Safety Section:

Walking freely over a horizontal bar at 1 ft. height: PASS / FAIL
wearing a safety belt and tying the rope knot: PASS/ FAIL
Walking over a horizontal structure at 9 ft. height wearing a belt: PASS/ FAIL
General physique (O.K./NOT O.K.): PASS/ FAIL

M. Any other information/examination/biological investigation/test as mutually agreed by the employer and qualified medical practitioner.

FORM-VI
(See Rule-8)

NOTICE OF ACCIDENT OR DANGEROUS OCCURRENCE

- E.S.I.C. Employer's Code number _____
- E.S.I.C. Insurance number of the injured person _____
1. Name of the Factory _____
 - i. Name of the Occupier _____
 - ii. Name of the Manager _____
 2. Address of works / premises where the accident or Dangerous occurrence took place _____
 3. Nature of industry and LIN of establishment _____

4. Branch or department and exact place where the accident or dangerous occurrence took place :
5. Name and address of the injured person :
(i) Employees State Insurance Number (if covered) :
6. (a) Sex :
(b) Age (at the last birthday) :
(c) Occupation of the injured person :
(d) Monthly wages of the injured person :
7. Local E.S.I.C. Office to which the injured person is attached :
8. Date, shift and hour of accident or dangerous occurrence :
9. (a) Hour at which the injured person started work on the day of accident or dangerous occurrence :
(b) Whether wages in full or part are payable to him for the day of the accident or dangerous occurrence :
10. (a) Cause or nature of accident or dangerous occurrence :
(b) If caused by machinery- :
(i) Give the name of machine and the part causing the Accident or dangerous occurrence :
(ii) state whether it was moved by mechanical power at the time of accident or dangerous occurrence :
(iii) State exactly what the injured person was doing at the time of accident or dangerous occurrence :

- (c) In your opinion, was the injured person at the time of accident or dangerous occurrence —
- (i) acting in contravention of provisions of any law applicable to him, or
 - (ii) acting in contravention of any orders given by or on behalf of his employer, or
 - (iii) acting without instructions from his employer?
- (d) In case reply to (d) (i), (ii) or (iii) is in the affirmative, state whether the act was done for the purpose of and in connection with the employer's
11. In case the accident or dangerous occurrence took place while travelling in the employer's transport, state whether
- (a) the injured person was travelling as a passenger to or from his place of works;
 - (b) the injured person was travelling with the express or implied permission of his employer;
 - (c) the transport is being operated by or on behalf of the employer or some other person by whom it is provided in pursuance of arrangements made with the employer, and
 - (d) the vehicle is being/not being operated in the ordinary course of public transport service.
12. In case the accident or dangerous occurrence took place while meeting emergency, state—
- (a) its nature; and
 - (b) whether the injured person at the time of accident or dangerous occurrence was employed for the purpose of his employer's trade or business in or about the premises at which the accident or dangerous occurrence took place.
13. Describe briefly how the accident or dangerous occurrence took place:
14. Names and addresses of the witnesses
- (1)
 - (2)
15. (a) Nature and extent of injury (e.g. fatal, loss of scald, scratch followed by sepsis, etc.) : finger, fracture of leg.
- (b) Location of injury (e.g. right leg, left hand, left eye, etc.)
16. (a) If the accident or dangerous occurrence was not fatal, state whether the injured person was disabled for more than 48 hours : fatal, state whether the
- (b) date and hour of return of work :
17. (a) Physician, dispensary or hospital from whom or which the Injured Person received or is receiving treatment
- (b) Name of dispensary/panel doctor elected by the injured person
18. (a) Has the injured person died? :

(b)

If so, date of death

I certify that to the best of my knowledge and belief the above particulars are correct in every respect.

Date of dispatch of report

Place

Signature and Name and Designation of Occupier / Employer / Manager

FORM-VII

[See Rule-55(1)]

NOTICE OF PERIODS OF WORK

Name of the Establishment _____ Place _____ District _____

Periods of work Groups Relays	Men												Women												Description of Groups, Nature of work	Remarks						
	Total no. of men employed												Total no. of women employed																			
	A			B			C			D			E			F			G			H										
1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3						

On working days From ...

To ...

From ...

To ...

From ...

To ...

On Partial Working days From ...

To ...

From ...

To ...

Date on which this notice is first exhibited ...

Signature of Manager ...

Date ...

FORM-VIII

(See Rule-56) EMPLOYEE REGISTER

(The register can also be maintained in electronically capturing, inter-alia the following details)

Name of Establishment	
Name of the Employer/owner	
Labour Identification Number (LIN)/Registration Number of Establishment	
To be maintained for all employees of the establishments	
1 Employee Code	
2 Name	
3 Surname	
4 Gender	
5 Father's/Spouse's Name	
6 Date of Birth	
7 Place of Birth	
8 Nationality	
9 Education level	
10 Date of Joining	
11 Designation	
12 Category (unskilled, semi-skilled, skilled or highly skilled)	
13 Type of employees / worker	
14 Mobile Number	
15 Universal Account Number (UAN)	
16 PAN	
17 PPF No	
18 Nominee	
19 EPS/NPS	
20 Details of Family	
21 Details of Posting	
22 Scale of Pay	
23 Promotion	
24 ESIC/EP Insurance No	
25 Aadhaar number	
26 Bank A/c No	
27 Bank	
28 Branch(IFSC)	
29 Present address	
30 Permanent address	
31 Service Book No	
32 Date of Exit	
33 Reason for Exit	
34 Mark of Identification	
35 Photo	
36 Specimen Signature/Thumb Impression	
37 Remarks	

FORM-VIII (A)

[(See rule 56)]

ATTENDANCE REGISTER-CUM-MUSTER ROLL

(The attendance register-cum-muster roll can also be maintained in electronically capturing, inter-alia the following details)

														For the Month of .									
														year 20.									
Name of Establishment:																							
Name of the Employer/owner:																							
Labour Identification Number																							
(LIN)/Registration Number of Establishment																							
1.	Serial Number																						
2.	Employee Code																						
3.	Name																						
4.	Designation																						
5.	Shift or relay																						
6.	Place of work/department/section																						
7.	Date and timings of In and Out																						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15								
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31							
8.	Total number of days worked																						
9.	Total number of extra hours worked																						
10.	In case of tour or assignments outside the work place suitable entries may be made																						
11.	Signature of Register keeper																						

FORM – VIII (B)
[(See Rule 56)]

REGISTER FOR WAGES, OVERTIME AND DEDUCTIONS

(The register can also be maintained in electronically capturing, inter-alia the following details)

Name of Establishment		
Name of the Employer/owner		
Labour Identification Number (LIN)/Registration Number of Establishment		
Wage Period from dd/mm/yyyy to dd/mm/yyyy (Monthly/Fortnightly/Weekly/Daily/Piece Rated)		
1	Serial Number	
2	Employee Code Number	
3	Name	
4	Designation	
5	Rate of Wage	
	a)Basic	
	b)DA	
	c)Other allowance	
	d)Total	
6	No. of days worked	
7	Overtime hours worked	
8	Amount of Wages Earned	
	a)Basic	
	b)DA	
	c)Other allowance	
	d)Payment of overtime	
	e)Total wages earned	
9	Deductions	
	a)EPF	
	b)ESI/C	
	c)Society	
	d)Income Tax	
	e)Insurance	
	f)Others	
	g)Recovery of Fine	
	h)Recovery of Damaged/Losses	
	Total Deductions	
10	Net Payment	
11	Receipt by Employees/Bank Transaction ID	
12	Date of Payment	
13	Initials of Employer/Representative	
14	Remarks	

FORM – VIII (C)

Log-book for Home Workers of Beedi & Cigar
[(See rule 56)]

1. Name of the Home-Worker
2. Address of the home where manufacturing process is carried on
3. Name and address of the employer for whom the work is executed
4. Month

Account of work done at Homes

Date	Whether work was done	No. of Beedi & Cigar Manufactured	Wages received
1	2	3	4

Total Number of days worked in the month

Date & Signature or thumb impression of the home worker

Date & Signature of the employer

FORM – VIII (D)

Wage slip

[(See rule 56)]

Name of the Establishment		Period		
Address				
1.	Name of the Employee:			
2.	Father's/Spouse's Name			
3.	Designation:			
4.	UAN:			
5.	Bank Account Number:			
6.	Wage period:			
7.	Rate of wages payable	a) Basic	b) D.A.	c) other allowances
8.	Total attendance/unit of work done:			
9.	Overtime wages			
10.	Gross wages payable			
11.	Total deductions	a) PF	b) ESI	c) Others
12.	Net wages paid			

Signature of the Employer / Manager / Contractor

FORM-VIII (U)

[See Rule-57]

REGISTER FOR LEAVE WITH WAGES

Part I - Adults

Part II - Adolescents

Establishment:

Name of worker:

Department:

Father's Name:

Sl. No.	Sl. no. in the register of workers.	Date of entry into service.	Interruptions:					Leave due with effect from	Whether leave not desired during the next 12 months	Date from which the worker is allowed leave	Wages for Leave Paid in:	Discharged worker		Remarks
			Sickness and accidents	Authorized Leave	Lock Out or Legal Strike	Involuntary unemployment	Others					Date of Discharge	Date & amount of payment made in lieu of leave due	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

Note:- Separate page shall be allotted to each worker

(iii) Maximum number of Migrant Worker during the year (Section 59 of OSH Code)	M/F/T	M/F/T	M/F/T	M/F/T	M/F/T	M/F/T	M/F/T	M/F/T	
(iv) Number of fixed term employees engaged	M/F/T	M/F/T	M/F/T	M/F/T	M/F/T	M/F/T	M/F/T	M/F/T	

Note : M/F/T is Male, Female and Transgender.

D. Details of contractors engaged in the Establishment:

Sl. No.	Name with LIN / License Number of the Contractor	No. of Contract Labour Engaged

E. Details of various Health and Welfare Amenities provided.

Sl. No.	Nature of various welfare amenities provided	Statutory (specify the statute)	Instructions for filling
1.	Whether facility of Canteen provided (as per section 24(v) of OSH Code, 2020)	Tick yes or no in the box.	Applicable to all establishments where in hundred or more worker including contract labour were ordinarily employed
2.	Creches (as per section 67 of Code on Social Security Code, 2020 and Section 24 of the OSH Code 2020)	Tick yes or no in the Box.	Applicable to all establishments where fifty or more workers are employed
2a	If 2 above is not given then whether Creches allowance under Rule, of Social Security Code given	Tick yes or no in the Box.	Reference Rule, on Social Security
3.	Ambulance Room (as per section 24(2)(i) of OSH Code, 2020)	Tick yes or no in the box	Applicable to Building and Other Construction Work wherein more than 500 workers are ordinarily employed
4.	Safety Committee (as per Section 22(1) of OSH Code, 2020)	Tick yes or no in the box	Applicable to Establishment and Factories employing 500 workers or more, Factory carrying on Hazardous process and Building and Other Construction Work wherein more than 250 workers are employed
5.	Safety Officer (as per section 22(2) of OSH Code, 2020)	No. of safety officers appointed	In case of BOCW 250 or more workers are ordinarily employed.
6.	Qualified Medical Practitioner (as per Section 12 (2) of OSH Code 2020.	No. of Qualified Medical Practitioner Appointed	There is no specification for minimum number of Qualified Medical Practitioner employed in establishment. However, this detail is required to have data on occupational health.
7.	Whether Garden Hospitals/ Group Hospitals/ Dispensaries facility provided	Garden Hospitals/ Group Hospitals/ Dispensaries	

F. The Industrial Relations:			Instructions for filling
1.	Is the Works Committee has been functioning. (section 3 of IR Code, 2020)	Yes/No	Industrial establishment in which 100 or more workers are employed
(a)	Date of its constitution.		
2.	Whether the Grievance Redressal Committee constituted (section 4 of IR Code, 2020)	Yes/No	Industrial establishment employing 20 or more workers
3.	Number of Unions in the establishments.		
4.	Whether any negotiation union exist (Section 14 of IR Code, 2020)	Yes/No	
5.	Whether any negotiating council is constituted (Section 14 of IR Code, 2020)	Yes/No	
6.	Number of workers discharged / dismissed, retrenched or whose services were terminated during the year.		

Dismissed	Retrenched	Discharged / Terminated or Removed	Grand Total

7. Man-days lost during the year on account of

Sl. No.	Reasons	Period /Date	No. of man days lost	Loss in terms of money
(a)	Strike			
(b)	Lockout			

8. Details of retrenchment / lay off

Sl. No.	No. of persons retrenched during the period	Details of payment paid to retrenched	No. of workers laid off during the period	No. of man-days lost due to lay-off	Applies on Industrial Establishments Employing 300 or more workers

G. Details pertaining to maternity benefit:

No. of female employees	No. of female employees availed maternity leave	No. of female employees paid medical bonus	No. of deduction of wages, if any made from female employees

H. Details of payment of bonus:

Sl. No.	No. of employees covered under the Bonus provision	Total amount of bonus actually paid	Date on which the Bonus paid

I. Details of accidents, dangerous occurrence and notifiable diseases:

Sl. No.	Total number of accidents by which a person injured is prevented from working for a period of 48 hours or more as per Section 10 of the OSH Code, 2020.	Total number of fatal accidents and names of the deceased as per Section 10 of the OSH Code, 2020.	Total number of Dangerous Occurrences as defined under Section 11 of the OSH Code, 2020.	Total number of cases of Notifiable diseases specified in Third Schedule of the OSH Code, 2020 along with the details of affected persons.

J. Man-days and Production Lost due to accidents / dangerous occurrence

Sl No	Accident/Dangerous Occurrence	Man-days lost	Production Lost

K. Details of Interstate Migrant Workers

No. of Interstate Migrant Workmen				No. of Interstate Migrant Workmen availed Journey Allowance				Total Amount Paid				Grand Total
Male	Female	Trans gender	Total	Male	Female	Trans gender	Total	Male	Female	Trans gender	Total	

L. Details Of Beedi and Cigar workers

Sl. No.	Average No of home workers worked during the year				Total No of Beedis rolled	Wages Paid			
	Male	Female	Trans gender	Total		Male	Female	Trans gender	Total
1									

Sl. No.	Average No of Beedi workers worked during the year				Total No of Beedis rolled	Wages Paid			
	Male	Female	Trans gender	Total		Male	Female	Trans gender	Total
1									

M. Details of Audio Visual Establishments

Sl No	Description	Numbers	Remuneration paid in Rs
1.	No of written Agreements Entered		
2.	No of Artists Engaged		
3.	No of Technicians Engaged		

N. Motor Transport Undertaking

Total No of Workers Employed	No of Routes Operated	Total No of Kilometers covered	Total Wages paid

O. Leave Details

Leave Details/ Earned Leave				
Category of Employees	Total no. of Employees	Total Eligible for Leave	Total No. of Employees available leave	Total No. of Employees got encashment
Male				
Female				
Transgender				
Total				

Leave Details/ Medical and other Leave				
Category of Employees	Total no. of Employees	Total Eligible for Leave	Total No. of Employees available leave	Total No. of Employees got encashment
Male				
Female				
Transgender				
Total				

P. Wages paid

Category of Employees	Total mandays worked in year	Total Man hours including O.T during the year	Total Wages / Salary including O.T. paid
Male			
Female			
Transgender			
Total			

Signature of Occupier / Manager / Contractor as applicable

FORM-X
(See Rule-60)

REGISTER OF ACCIDENTS AND DANGEROUS OCCURRENCES

Name of Injured person (if any)	Date of Accident or dangerous occurrence	Date of report to Inspector cum-Facilitator	Nature of accident or dangerous occurrence	Date of return of injured Person to work	Number of days the injured Person was absent from work
1	2	3	4	5	6

FORM-XI

(See rule 82 (6))

(Half Yearly Return (January to June / July to December) to be submitted by Contractor to be filed electronically to the Deputy / Assistant Commissioner concerned under Rule 76)

1. Name and address of the contractor
2. Name and address of the principal employer and LIN
3. LIN of the contractor
4. License number of the contractor (if applicable)
5. Name of the contract work with location/station
5. Details of the number of Contract Workers, Wages Paid etc.

Sl. No.	Months	Number of Contract Labour employed	Total amount of wages paid in a month	Overtime	Bonus	Date and amount of Wage bill received by contractor from Principal Employer	ECR number of ESIC	ECR number of EPF	Wages paid by 7th of the month or due date as applicable Yes/No	Remark
	January									
	February									
	March									
	April									
	May									
	June									

Signature of the contractor:

FORM-XII

(Under Rule – 75(2), 76 and 97) APPLICATION FOR LICENSE

On Line Application for License / Renewal of License / Amendment of License
(including Common / single license)**ESTABLISHMENT PROFILE:**

Labour Identification Number / Registration No. Date
Acknowledgement Number: Date of Application:
I. Particulars of Contract Establishment for which license required:
1. Name of Establishment :
2. Address of Establishment :
(a) Head Office address along with email Id :
(b) Corporate office address along with email Id :
3. Telephone Number :
4. Activity as per National Industrial Classification : (Select all applicable activities given)
5. Details of selected NIC Code:
6. Nature of work carried on in main establishment :
7. Identifier / Name of the Contractor of the Establishment :
8. Mobile Number of the Contractor :
(Select) : e-sign/digital sign
II. Details of Employer / Principal Employer :
1. Full Name of employer: relationship with establishment.
2. Full Address of employer:
3. Email Id of employer:
4. Mobile No. of employer:
5. Certificate of the Registration of the Principal Employer :

III. Particulars of the Contract Labour to be employed / is employed (if license is required work wise)

Locations of worksites	N	Activity as per national industrial classification	Date of commencement	Date of completion	Name of Establishments in which contract labour is/proposed to be employed	Name- Address, email Id of the Site In-charge
1	2	3	4	5	6	7

5. Maximum number of workmen proposed to be employed on the Establishment on any date including Inter State Migrant workmen _____

6. Amount of License Fee: INR _____ (Transaction Id :)

7. Amount of Security Deposit: INR (Transaction Id :)

IV. DETAILS OF ESTABLISHMENTS FOR WHICH COMMON
LICENSEREQUIRED, (IF APPLYINGFOR)

Type of Establishments	Name & Address of establishment	(i) Nature of Work carried out in the establishment (ii) Activity as per National Industrial classification	Date of commencement	Permanent establishment or probable date of completion	Maximum number of Contract employees including Inter State Migrant Workmen employed/proposed to be employed
1	2	3	4	5	6
Factory	Beedi & Cigar				

FORM-XIII
(Under Rule – 74, 97(1))

PROFORMA OF LICENSE

License No. _____ Reg. No. _____ Date of Reg. _____

1. License is hereby granted to for the premises known as Situated at nature of work _____ for use as a establishment within the limits stated herein after, subject to provisions of the Occupational Safety, Health and Working Conditions Code, 2020, and the rules made there under.

The _____ 20 _____ Issuing Authority

1.

Sl. No.	Period of issue		Valid For Maximum number of Contract labour including ISM workers on any one day	Fee	Date of Payment	Excess fee for late payment	Date of payment	Signature of the Issuing Authority
	From	To						

2. AMENDMENTS:

Year when Amended	Maximum number of Contract labour including ISM workers on any one day	Date of payment of amendment fee	Date of Payment	Signature of the Issuing Authority

FORM-XIV
(Under Rule-84)

EXPERIENCE CERTIFICATE OF CONTRACT EMPLOYEE

To whom so ever concerned

1. Name of contractor/employer*
2. LIN/PAN No. of the contractor/employer *
3. Email Id of the contractor /employer *
4. Mobile No. of the contractor/employer *
5. Nature and location of work:
6. Name of Principal Employer*
7. LIN/PAN No. of the Principal Employer *
8. Email Id of the Principal Employer *
9. Mobile No. of the Principal Employer *
10. Name of the worker*
11. UAN / Aadhaar No.
12. Mobile No.
13. Serial Number in the Employee Register
14. Registration number, date and name of the Board if the building and other construction worker is registered as a beneficiary.
15. Period of Employment:
16. Designation.

Seal and Signature of Contractor:

*Please strike off whichever is not applicable.

FORM-XV
(Under Rule- 93 & 95)

Agreement between Producer and Audio-visual worker

This agreement is made on this day _____ month _____ year _____ between Messengers _____ having office at _____ (hereinafter referred to as the "Producer") on the first part and Shri/ Smt/ Kurn _____ son/daughter/wife of Shri _____ residing at _____ (hereinafter referred to as the "audio-visual worker") on the second part. The terms "Producer" and "audio-visual worker" shall include their heirs, successors, administrators and legal representatives.

Now, therefore, this agreement is made as follows:

1. That both the parties agree that the duration of this agreement shall be from the date hereof till the completion of the audio-visual and this period shall not exceed consecutive months.
2. That the audio-visual worker agrees to attend studio, location or work place, as the case may be, subject to the requirement of his previous engagement and on his confirmation, to his respective job punctually as and when he shall be required by a written intimation by the Producer or the person duly authorized by him in writing.
3. That in consideration of the audio-visual worker services, as aforesaid, the Producer agrees to pay and the audio-visual worker agrees to receive a sum of Rs. _____ (Rupees _____) payable as advance on signing of this agreement and the balance of Rs. _____ payable in _____ equal instalments.
4. That in the event of the audio-visual production being not complete within the stipulated period and the Producer still needing the services of the audio-visual worker to complete the audio-visual production, the producer agrees to pay and the audio-visual worker agrees to receive additional remuneration on pro-rata basis, payable in the same manner as stated in Clause 3 above, till the completion of the production.
5. That in case the assignment of the audio-visual worker is completed earlier than the period stipulated in Clauses 1 and 4 above, the producer shall settle the account of the audio-visual worker and pay the remaining balance of the agreement amount in full before the commencement of re-recording work/censor of the production, whichever is earlier.
6. That the audio-visual worker shall, if so required,
 - (a) attend the studios, location or work-place, as the case may be, earlier than the a scheduled time of the shift, for preparatory work, and in that case, he/she shall be paid by the Producer extra wages at the rate of Rs. _____ per hour or part thereof for such early attendance.
 - (b) continue to work beyond the working day, with one hour break and in that case, he/she shall be paid by the Producer extra wages at the rate of Rs. _____ for the work during the extended hours and refreshments, and transport facilities.
7. That the Producer shall provide transport and food or pay travelling allowances to and fro to report to duty and food allowance while on duty as are customary or fixed by bilateral arrangements between the Producer's and audio-visual worker's representative organizations.
8. That the Producer shall also pay for all travelling and accommodation expenses, fares, cost of food and such other allowances as are customary when the audio-visual worker is required to work on location outdoors.

9. That the Producer shall get the audio-visual worker insured for any injury or damage to his/her person including death caused by accident arising out of or in the course of his/her employment and/or during the period of his/her assignment under this agreement.
10. That where the Producer is prevented from proceeding with the production of the audio-visual by reason of fire, riot, natural calamity, order of the public authority or any other reason beyond his control:-
- (a) He shall be entitled to suspend the operation of this agreement during the period of suspension of production in case the production is suspended. The producer shall serve notice in writing of such suspension on the audio-visual worker and shall pay all his/her dues up to the date of service of such notice. Upon resumption of work on the film, this agreement shall revive and shall remain valid for the period stipulated in Clause 1 excluding the period of suspension therefrom; or
- (b) He shall be entitled to terminate this agreement as from the cessation of production, in case the production ceases completely. The producer shall serve a notice in writing of such cessation on the audio-visual worker and make payment of all the amount due to the audio-visual worker at the time of termination.
11. That in case if the Producer desires to terminate this agreement before the expiry of its term for reasons other than misconduct in relation to performance of the audio-visual worker's duties or of his/her unwillingness to perform the services required under this agreement, the producer shall be entitled to do so only upon payment of the balance of the stipulated amount of the agreement. Only after such payment to the audio-visual worker, the Producer shall be titled to employ another audio-visual worker in his/her place.
12. That the Producer shall have the right to terminate this agreement on ground of misconduct on the part of the audio-visual worker in relation to performance of his/her duties or his/her unwillingness to perform the service required under the agreement, upon payment to the audio-visual worker of the amount due at the time of termination, calculated taking into consideration the audio-visual worker's total work in the audio-visual and the work he/she has completed till the date of termination of this agreement. Termination under this clause shall not be made unless the charges of the Producer against the audio-visual worker are proved before a forum comprising equal number of representatives of the Producers Organization and the audio-visual worker's Organization to which the Producer and the audio-visual worker respectively may belong. The decision of the forum shall be binding on both the parties. The producer can engage another audio-visual worker for the job towards this agreement only after the forum has given a decision in favour of such termination and the audio-visual worker has been paid all his dues.
13. That in case of premature termination of this agreement, it shall be the option of the Producer whether or not to retain the work of the audio-visual worker in the audio-visual and at the same time, it shall be option of the audio visual worker whether or not to allow his/her name to go on the credit titles of the film.
14. That the Producer shall have the right to decide the manner of representing the audio-visual worker's personality on the screen, his/her clothes, make-up and hair-style and the audio-visual worker shall fully and willingly comply with the direction of the Producer in this regard, provided that the requirements of the Producer in this respect have been notified to the audio-visual worker and accepted by him/her.
15. That the audio-visual worker agrees that he/she shall render his/her services to the best of his/her ability in such manner as the Producer or, at his instance, the Director of the audio-visual may direct and shall comply with all reasonable instructions that he may give for the production of the film.

16. That the Producer shall also pay for all travelling and accommodation expenses, fares, cost of food and such other allowances as are customary when the audio-visual worker is required to work on location outdoors.
17. That the Producer shall get the audio-visual worker insured for any injury or damage to his/her person including death caused by accident arising out of or in the course of his/her employment and/or during the period of his/her assignment under this agreement.
18. That where the Producer is prevented from proceeding with the production of the audio-visual by reason of fire, not natural calamity, order of the public authority or any other reason beyond his control -
- (a) he shall be entitled to suspend the operation of this agreement during the period of suspension of production in case the production is suspended. The producer shall serve notice in writing of such suspension on the audio visual worker and shall pay all his/her dues up to the date of service of such notice. Upon resumption of work on the film, this agreement shall revive and shall remain valid for the period stipulated in Clause I excluding the period of suspension there from, or
- (b) He shall be entitled to terminate this agreement as from the cessation of production, in case the production ceases completely. The producer shall serve a notice in writing of such cessation on the audio-visual worker and make payment of all the amount due to the audio-visual worker at the time of termination.
19. That in case if the Producer desires to terminate this agreement before the expiry of its term for reasons other than misconduct in relation to performance of the audio-visual worker's duties or of his/her unwillingness to perform the services required under this agreement the producer shall be entitled to do so only upon payment of the balance of the stipulated amount of the agreement. Only after such payment to the audio-visual worker, the Producer shall be free to employ another audio-visual worker in his/her place.
20. That the Producer shall have the right to terminate this agreement on ground of misconduct on the part of them audio-visual worker in relation to performance of his/her duties or his/her unwillingness to perform the service required under the agreement, upon payment to the audio-visual worker of the amount due at the time of termination, calculated taking into consideration the audio-visual worker's total work in the audio-visual and the work he/she has completed till the date of termination of this agreement. Termination under this clause shall not be made unless the charges of the Producer against the audio-visual worker are provide before a forum comprising equal number of representatives of the Producer's Organization and the audio-visual worker's Organization to which the Producer and the audio-visual worker respectively may belong. The decision of the forum shall be binding on both the parties. The producer can engage another audio-visual worker for the job towards this agreement only after the forum has given a decision in favour of such termination and the audio-visual worker has been paid all his dues.
21. That in case of premature termination of this agreement, it shall be the option of the Producer whether or not to retain the work of the audio-visual worker in the audio-visual and at the same time, it shall be option of the audio visual workers whether or not to allow his/her name to go on the credit titles of the film.
22. That the Producer shall have the right to decide the manner of representing the audio-visual worker's personality on the screen, his/her clothes, make-up and hair-style and the audio-visual worker shall fully and willingly comply with the direction of the Producer in this regard, provided that the requirements of the Producer in this respect have been notified to the audio-visual worker and accepted by him/her.

23. That the audio-visual worker agrees that he/she shall render his/her services to the best of his/her ability in such manner as the Producer or, at his instance, the Director of the audio-visual may direct and shall comply with all reasonable instructions that he may give for the production of the film.
24. That the audio-visual worker shall comply with all the regulations of the studio, location or work place as the case may be.
25. That the Producer shall not without the consent in writing of the audio-visual worker assign or transfer the benefit of this agreement to any other person.
26. That the provisions of the Employees Provident Funds and Miscellaneous Provisions Act, 1952 shall be applicable to this agreement.

That the Producer shall not utilize the work of the audio-visual worker in any film, other than the audio-visual under this agreement, without prior permission of the audio-visual worker.

The parties have put their hands to this agreement on the date, month and year said above in the presence of each other and in the presence of the witnesses.

1. Witness Producer Name Address
2. Witness audio-visual worker Name Address

Form-XVI
(See Rules 97)

(Application for the grant or renewal of license for the Beedi and Cigar Establishment for the financial year)

1. Full name of industrial premises
2. (i) Full postal address and situation of the industrial premises
(ii) Full address to which communications relating to the industrial premises should be sent.
(iii) Full name and address of the applicant
3. Whether the power driven machinery is used in the industrial premises for manufacturing process
4. Maximum number of employees proposed to be employed on any one day during the financial year.
5. Full name and residential address of the person who shall be the employer for the purpose of the Act
6. If the employer is a partnership company, etc., full name and residential addresses of other partners or directors, etc.
7. Financial resources of the employer (e.g. particulars and value of movable and immovable properties, bank reference, income tax assessment etc.)
8. Whether the employer is a trade mark holder registered under the Trade and Merchandise Marks Act, 1958
9. Value of beedies or cigars or both manufactured at the industrial premises during the preceding financial year
10. Previous experience of the applicant in the industry
11. Whether the proposed site of the industrial premises amount to the alteration of the site of any existing industrial premises and, if so, the reasons for such alteration.
12. Whether any industrial premises was closed by the applicant during the period of twelve months immediately preceding the date of the application and if so, the reasons therefor.
13. Source of obtaining tobacco.
14. Whether the beedies or cigars or both manufactured by the applicant, will be sold and marketed by himself Or through a proprietor or a registered user of a trade mark registered under the Trade and Merchandise Marks Act, 1958, or any other person.
15. Whether the plans of the premises are closed 170
16. Amount of fee remitted Online Rs. (Rupees...)

I hereby declare that the particulars furnished by me in the form are to the best of my knowledge and belief accurate.

Date:

Signature of applicant

Note: 1. Where an industrial premises is run or proposed to be run by a contractor for or on behalf of another person or persons or company etc., the said other person or persons or company etc., is under the Act, the employer and particulars

to be entered for "employer" in the form should be in regard to such person or persons or company, etc.

2. The application for License may however, be made either by the contractor or the employer.

FORM - XVII
(See Rule - 98)

License for Manufacture of Beedi and Cigar

License No. Fee Rs.

Registration No.

License is hereby granted to Valid only for the premises described below for use as an industrial premises employing not more than _____ employees on any one day during the year _____ subject to the conditions specified in annexure.

The license shall remain in force till the _____

Description:

Name of industrial premises

Situation of the industrial premises

Permission is also granted for the installation of power-driven machinery.

Signature and seal of the competent authority

Date:

ANNEXURE

The license is subject to the following conditions:-

1. The manufacturing process shall be carried on only in the part of the industrial premises specified for the purpose in the license.
2. The maximum number of employees employed in the industrial premises shall not on any day exceed the numbers specified in the license.
3. Power-driven machinery not specified in the license shall not be used in the manufacturing process in the premises.
4. Except with the prior permission in writing of the competent authority the industrial premises shall not be extended and except with the like permission, no structural alterations shall be made in any building on such premises.
5. The license shall not be transferable.

FORM NO. XVIII

(see rule - 101)

APPLICATION FOR THE WORK REQUIRED TO BE CARRIED OUT OUTSIDE THE INDUSTRIAL PREMISES

1. Type of Establishment.
2. Name & Address of establishment.
3. Nature of work.
4. Place or Places where the work required to be carried out outside the industrial premises.
5. Date of commencement of Work.
6. Maximum number of employees employed.
7. Remarks.

FORM - XIX
(Under Rule - 101)Record of outside work
Number and date of Government's order permitting work outside the industrial premises.....

Date	Place or places where outside work was permitted	Nature of work	Nature of Employee	Remarks
1	2	3	4	5

FORM - XX
(Under Rule - 102)

Record of decision or order

1. Serial No.
2. Date of application
3. Name or names, parentage, address or addresses of applicant or some or all of the applicants
4. Name and address of the employer
5. Substance of the dispute
6. Plea of parties and their examination if any
7. Documents seen
8. Substance of the evidence taken
9. Finding and brief statement of the reasons there for
10. Decision

Signature of
Inspector-cum-Facilitator

FORM -XXI
(See rule - 106(2))

APPLICATION FOR APPROVAL OF PLANS OF FACTORY

Hazardous Nature of Factory : Hazardous/ Non Hazardous :

- | | | | |
|--|---|-----------------|-----------|
| 1) Plan Type | : | New / Extension | |
| 2) Name of the Factory | : | | |
| 3) Full Address and location of the site / factory | : | | |
| 4 a) Communication Address | : | | |
| 4 b) Email Address | : | | |
| 5) Number of employees to be employed | : | Men | : Women |
| 6) List of Plant & Machinery | : | | |
| 7) Installed horse power | : | Regular | : Standby |
| 8) Raw Material used in the Manufacturing | : | | |
| 9) Brief Description of Manufacturing process: | : | | |
| 10) Final Products and their outputs | : | | |
| 11) Type and Nature of wastes and effluents, their quantities and Methods of their disposal (Upload) | : | | |
| 12) In case of extensions or additional installation, reference numbers of plans approved earlier: | : | | |
| 13) Signature of Occupier with name & designation: | : | | |
| 14) Type of Industry: | : | | |

Signature of applicant with name

Enclosures:

- Registered Sale Deed / Lease Deed.
- Site Plan.
- Detailed building plan.
- Partnership Deed / Memorandum of Articles of Association.
- Process Flow Chart.
- Inventory of hazardous chemicals (in case of Hazardous factories)
- Hazard identification report (In case of Hazardous factories)
- Copy of PAN Card / Aadhar Card of applicant.

FORM – XXII

(See rule-107(1), 107(7), 107(8), 107(10))

APPLICATION FOR GRANT/AMENDMENT/TRANSFER OF FACTORY LICENSE
AND CHANGE OF MANAGER OF THE FACTORY

1. LIN/Registration No.
2. Full name of the factory.
3. Full Address and location of the site / factory.
4. Nature of Manufacturing Process:
 - a) Main
 - b) Secondary
5. Reference by which plans approved by the Chief Inspector (if applicable).
6. Maximum number of employees to be employed.

	Male	Female	Total
(a) Adults			
(b) Adolescents			
(c) Children (above 14 years)			
Grand Total			

7. Ownership Type/Sector (Public / Private)
8. Activity as per National Industrial Classification
9. NIC Code
10. Identification of the Factory e-sign/ digital sign of Occupier
11. **Details of Occupier:-**
 - a. Name & Address of Occupier
 - b. Father's/ Husband's Name of the Occupier
 - c. Age
 - d. Designation (Occupier shall be proprietor/partner/Director in case of Company)
 - e. Email Address, Telephone & Mobile No.
12. **Manager Details**
 - a. Full name & Address of Manager
 - b. Address of Manager
 - c. Father's/ Husband's Name of the Occupier
 - d. Age
 - e. Designation
 - f. Email Address, Telephone & Mobile No.
13. Maximum amount of horse power to be installed (regular /standby):
 - a) Regular
 - b) Standby
14. Date of occupation of the factory by the occupier * (Note: Date from which manufacturing activities commenced in factories)
 1. Full name and residential address of the owner of the building referred to in section 93 of the Act, "Where separate buildings in the same premises are leased to different occupiers of which the applicant is one".
 2. For how many years you want to pay the license fee: 1 to 10

3 Type of the factory Hazardous/Non hazardous

Signature of Manager:

Signature of Occupier

Enclosures:

1. Proposed Inventories and Hazard Identification Report (in case of Hazardous Factories) of Chemicals Used and Stored as per Schedule 2 & 3 of MSHC Rules 1989.
2. Latest List of Partners / Latest List of Directors.
3. Partnership Deed.
4. Appointment letter as occupier in case of Government Factories.
5. Land Ownership documents (Registered Sale Deed / Lease Deed).
6. Photo ID proof of the Occupier and the Factory Manager.
7. Approval letter of Plans of the factory under the Code.

**FORM -XXIII
FACTORY LICENSE
(See sub-rule (4) of rule-107)**

1. Registration Number :
2. Application Number :
3. Full Name of Factory :
4. Full Address / Location of Factory :
5. Maximum Horse Power installed Regular / Standby :
6. Maximum Number of Employees to be Employed :
7. Full Name and Residential Address of the Occupier and his Position in the Company / Firm /Government factory :
8. Full Name and Residential Address of the Manager :

License is hereby granted to the factory at 3 above for the premises stated at 4 above for use as a factory within the limits stated in 5, and 6 above subject to the provisions of the Occupational Safety Health and Working Conditions code 2020 and Rules made thereunder.

This license shall be valid until it has been duly cancelled provided the requisite annual License fee is remitted through online for that period.

Date :

Signature of Licensing Authority

SCHEDULES ON DANGEROUS OPERATIONS Under Rule 109

SCHEDULE-I

MANUFACTURE OF AERATED WATERS AND PROCESSES INCIDENTAL THERETO

1. Fencing of Machine:- All machines for filling bottles or syphons shall be so constructed, placed or fenced as to prevent, as far as may be practicable, a fragment of a bursting bottle or syphon from striking any person employed in the factory.

2. Face-guards and gauntlets:-

(1) The occupier shall provide and maintain in good condition for the use of all persons engaged in filling bottles or syphons,-

(a) suitable face guards to protect the face, neck and throat; and

(b) suitable gauntlets for both arms to protect the whole hand and arms;

Provided that:-

(i) paragraph 2(1) shall not apply where bottles are filled by means of an automatic machine so constructed that no fragment of a bursting bottle can escape; and

(ii) where a machine is so constructed that only one arm of the bottler at work upon it is exposed to danger, a gauntlet need not be provided for the arm which is not exposed to danger

(2) The occupier shall provide and maintain in good condition for the use of all persons engaged in corking, croning, screwing, wiring, foiling, capsuling, sighting, or labelling bottles or syphons,-

(a) suitable face-guards to protect the face, neck and throat; and

(b) suitable gauntlets for both arms to protect the arm and at least half of the palm and space between the thumb and fore finger

3. Wearing of face-guards and gauntlets:- All persons engaged in any of the processes specified in paragraph (2) shall, while at work in such processes, wear the face-guards and gauntlets provided under the provisions of the said paragraph

SCHEDULE - II

ELECTROLYTIC PLATING OR OXIDATION OF METAL ARTICLES BY USE OF AN ELECTROLYTE CONTAINING ACIDS, BASES OR SALTS OR METALS SUCH AS CHROMIUM, NICKEL, CADMIUM, ZINC, COPPER, SILVER, GOLD ETC.,

1. Definitions:- For the purposes of this schedule

(a) "Electrolytic process" means the electrolytic plating or oxidation of metal articles by the use of an electrolyte containing acids, bases or salts of metals such as chromium, nickel, cadmium, zinc, copper, silver, gold, etc;

(b) "bath" means any vessel used for an electrolytic process or any subsequent process; and

(c) 'employed' means employed in any process involving contact with liquid from a bath.

2. Exhaust draught:- An efficient exhaust draught shall be applied to every vessel in which an electrolyte process is carried on. Such draught shall be provided by mechanical means and shall operate on the vapour or spray given off in the process as near as may be at the point of origin. The exhaust draught appliance shall be so constructed, arranged and maintained as to prevent the vapour or spray entering into any room or place in which work is carried on

3. **Prohibition relating to young persons, pregnant women and lactating women:-**
No young person, pregnant woman and lactating woman shall be allowed to work at a bath.

Women other than those specified above shall be allowed in the above works with provision of appropriate personal protective equipment only.

4. **Floor of work-rooms:-** The floor of every work-room containing a bath shall be impervious to water. The floor shall be maintained in good and level conditions and shall be washed down at least once a day.

5. Protective devices:-

- (1) The occupier shall provide and maintain in good and clean condition the following articles of protective devices for the use of all persons employed on any process at which they are liable to come in contact with liquid from a bath and such devices shall be worn by the persons concerned -

- (a) waterproof aprons and bibs, and
(b) for persons actually working at a bath, loose fitting rubber gloves and rubber boots or other waterproof foot wear, and chemical goggles.

- (2) The Occupier shall provide and maintain for the use of all persons employed suitable accommodation for the storage and drying of protective devices.

6. Water facilities:-

- (1) There shall be provided and maintained in good repairs for the use of all persons employed in electrolytic process and processes incidental to it:

- (a) a wash place under cover, with either-

- (i) a trough with a smooth impervious surface fitted with a waste pipe, and of sufficient length to allow at least 60 cms for every five (5) persons employed at any one time, and having a constant supply of water from taps or jets above the trough the intervals of not more than 60 cms., or

- (ii) at least one wash basin or every five such persons employed at any one time, fitted with a waste pipe and having a constant supply of water laid on.

- (b) a sufficient supply of clean towels renewed daily, and soap or other suitable cleaning material.

- (2) In addition to the facility in sub-paragraph 1, an approved type of emergency shower with eye fountain shall be provided and maintained in good working order whenever necessary, in order to ensure continuous water supply, storage tank of 1500 liters capacity shall be provided as a source of clean water for emergency use.

7. **Cautionary placard:-** A cautionary placard in the form specified below and printed in the language of the majority of the employees employed shall be affixed in a prominent place in the factory where it can be easily and conveniently read by the employees.

CAUTIONARY NOTICE

(Electrolytic plating)

- (1) Chemicals handled in this plant are corrosive and poisonous.
(2) Smoking, chewing tobacco, eating food or drinking in this area is prohibited. No food stuff or drink shall be brought in this area.
(3) Some of these chemicals may be absorbed through the skin and may cause poisoning.
(4) A good wash shall be taken before meals.
(5) Protective devices supplied shall be used while working in this area.
(6) Spillage of the chemicals on any part of the body or on the floor shall be immediately washed away with water.

(7) All employees shall report for the prescribed medical tests regularly to protect their own health.

(8) Medical facilities and records of examinations and tests:-

- (1) The occupier of every factory in which electrolytic processes are carried on shall -
 - (a) employ a qualified Medical Practitioner who shall be known as factory medical officer for medical surveillance of the employees employed therein whose appointment shall be subject to the approval of the Chief Inspector-cum-Facilitator;
 - (b) provide to the said Factory Medical Officer all the necessary facilities for the purpose referred to in clause (a), and
 - (c) maintain a sufficient supply of suitable barrier cream, ointment and impermeable water proof plaster in a separate box readily accessible to the employees and used solely for the purpose of keeping these substances. In case cyanides are used in the bath, the box shall also contain an emergency cyanide kit.
- (2) The Factory Medical Officer shall examine all employees before they are employed in electrolytic processes. Such examination in case of chrome plating shall include inspection of hands, forearms and nose and will be carried out once at least every fortnight.
- (3) The record of the examinations referred to in sub-paragraph (2) shall be maintained in a separate register approved by the Chief Inspector-cum-Facilitator which shall be kept readily available for inspection by the Inspector-cum-Facilitator.

9. Medical examination by a Factory Medical Officer -

- (1) Every employee employed in the electrolytic process shall be examined by a Factory Medical Officer before his first employment. Such examination shall include X-ray of the Chest, -
 - (a) in case of chromium plating include examination for nasal septum perforation and test for chromium in urine;
 - (b) in case of nickel plating, test for nickel in urine; and
 - (c) in case of cadmium plating, test for cadmium in urine and microglobulin in urine;
- (2) No employee shall be employed in any electrolytic process unless certified fit for such employment by a Factory Medical Officer.
- (3) Every employee employed in the electrolytic processes shall be re-examined by a Registered medical practitioner at least once in every year, except in case of the employees employed in cadmium, chromium and nickel-plating processes for whom this examination shall be carried out once in every six months. Such re-examination shall, wherever Factory Medical Officer considers it appropriate, include tests as specified under sub-paragraph (1) excluding the X-ray of the Chest which shall not be required normally to be carried out earlier than once in three years.
- (4) Factory Medical Officer after examining a employee, shall issue a Certificate of fitness. The record of examination and re-examination carried out shall be kept in the custody of the Manager of the factory. The record of each examination carried out under sub-paragraphs (1) and (2) including the nature and the results of the tests, shall also be entered by the medical officer in a health register.
- (5) The Certificate of fitness and the health register shall be kept readily available for inspection by the Inspector-cum-Facilitator.
- (6) If at any time the Factory Medical Officer is of the opinion that a employee is no longer fit for employment in the electrolytic processes on the ground that continuance therein would involve danger to the health of the employee, he shall make a record of his findings in the said certificate and the health register.

The entry of his findings in those documents should also include the period for which he considers that the said person who is unfit in such circumstances shall be provided with alternate placement facility unless he is fully incapacitated in the opinion of the

Factory Medical Officer in which case the person affected shall be suitably rehabilitated.

- (7) No person who has been found unfit to work as said in sub-paragraph (6) shall be re-employed or permitted to work in the said processes unless the Factory Medical Officer, after further examination, again certifies him fit for employment in those process.

SCHEDULE III

MANUFACTURE AND REPAIR OF ELECTRIC ACCUMULATORS

1. Savings:- This schedule shall not apply to the manufacture or repair of electric accumulators or parts thereof not containing lead or any compound of lead, or to the repair on the premises, of any accumulator forming part of a stationary battery.

2. Definitions:-For the purpose of this schedule:

- (a) "Lead Process" means the melting of lead or any materials containing lead, casting, pasting, lead burning or any other work, including trimming, or by other abrading or cutting of pasted plates, involving the use, movement or manipulation of, or contact with any oxide of lead.
- (b) "Manipulation of raw oxide of lead" means any lead process involving any manipulation or movement of raw oxides of lead other than its conveyance in a receptacle or by means of an implement from one operation to another.

3. Prohibition relating to young persons, pregnant women and lactating women:-

- (a) No young person, pregnant woman and lactating woman shall be allowed to work in any lead processes or in any room in which the manipulation of raw oxide lead or pasting is carried on.
- (b) Women other than those specified above shall be allowed in the above works with provision of appropriate personal protective equipment only.

4. Separation of certain processes:- Each of the following processes shall be carried on in such a manner under such conditions as to secure effectual separation from any other process:-

- (a) Manipulation of raw oxide of lead;
- (b) Pasting;
- (c) Drying of pasted plates;
- (d) Formation with lead burning ('lacking') necessarily carried on in connection therewith; and
- (e) Melting down of pasted plates.

5. Airspace:-In every room in which a lead process is carried on there shall be at least 500 cubic feet of airspace for each person employed therein, and in computing this air space no height over 12 feet shall be taken into Account.

6. Ventilation:- Every work-room shall be provided with inlets and outlets of adequate size as to secure and maintain efficient ventilation in all of the rooms.

7. Distance between employees in pasting room:- In every pasting room the distance between the centre of the working position of any paster and that of the paster working nearest to him shall not be less than five feet.

8. Floor of work-rooms:-

- (1) The floor of every room in which a lead process is carried on shall be,-
- (a) of cement or similar material so as to be smooth and impervious to water;
- (b) maintained in sound condition;
- (c) kept free from material, plant, or other obstruction not required for, or produced in, the process carried on in the room.

- (2) In all such rooms other than grid casting shop the floor shall be cleaned daily after being thoroughly sprayed with water at a time when no other work is being carried on in the room.
- (3) In grid casting shops the floor shall be cleaned daily.
- (4) Without prejudice to the requirements of sub-paragraphs (1), (2) and (3) where manipulation of raw oxide of lead or pasting is carried on, the floor shall also be—
- kept constantly moist while work is being done;
 - provided with suitable and adequate arrangements for drainage; and
 - thoroughly washed daily by means of a hose pipe.

9. Work-benches:— The work-benches at which any lead process is carried on shall—

- have a smooth surface and be maintained in sound condition;
- be kept free from all materials or plant not required for or produced in, the process carried on there at, and all such work-benches other than those in grid casting shops;
- be cleaned daily either after being thoroughly damped or by means of a suction cleaning apparatus at a time when no other work is being carried on there at; and, all such work-benches in grid casting shops;
- be cleaned daily and every work-bench used for pasting;
- be covered throughout with sheet lead or other impervious material;
- be provided with raised edges; and
- be kept constantly moist while pasting is being carried on.

10. Exhaust draught:— The following processes shall not be carried on without use of an efficient exhaust draught:

- melting of lead or materials containing lead;
- manipulation of raw oxide of lead, unless done in an enclosed apparatus so as to prevent the escape of dust in to the work-room;
- pasting;
- trimming, brushing, filing or any other abrading or cutting of pasted plates giving rise to dust;
- lead burning, other than—
- "tacking" in the formation room;
- chemical burning for the marking of lead linings for cell cases necessarily carried on in such a manner, that the application of efficient exhaust is impracticable.

Such exhaust draught shall be effected by mechanical means and shall operate on the dust or fume given off as nearly as may be at its point of origin, so as to prevent it entering the air of any room in which persons work.

- 11. Fumes and gases from melting pots:**— The products of combustion produced in the heating of any melting pot shall not be allowed to escape into a room in which persons work.
- 12. Container for dross:**— A suitable receptacle with tightly fitting cover shall be provided and used for dross as it is removed from every melting pot. Such receptacle shall be kept covered while in the work-room, except when dross is being deposited therein.
- 13. Container for lead waste:**— A suitable receptacle shall be provided in every work-room in which, old plates and waste material which may give rise to dust shall be deposited.
- 14. Racks and shelves in drying room:**— The racks or shelves provided in any drying room shall not be more than eight (8) feet from the floor not more than two (2) feet in width, provided that as regards racks or shelves set or drawn from both the sides that total width shall not exceed four (4) feet.

Such racks or shelves shall be cleaned only after being thoroughly damped unless an efficient suction cleaning apparatus is used for this purpose.

15. Medical facilities and records of examination and tests:-

- (1) The occupier of every factory in which manufacture and repair of electric accumulators is carried on shall:
 - (a) employ a qualified Medical Practitioner who shall be known as factory medical officer for medical surveillance of the employees employed therein whose employment shall be subject to the approval of the Chief Inspector-cum-Facilitator; and
 - (b) provide to the said Factory medical officer all the necessary facilities for the purpose referred to in clause (a).
- (2) The record of medical examinations and appropriate tests carried out by the Factory Medical Officer shall be maintained in a separate register approved by the Chief Inspector-cum-Facilitator, which shall be kept readily available for inspection by the Inspector-cum-Facilitator.

15-A: Medical examination by Factory Medical Officer -

- (1) Every employee employed in lead processes shall be examined by a Factory Medical Officer within fifteen (15) days of his first employment. Such examination shall include tests for lead in urine and blood, ALA in urine, hemoglobin content, stippling of coals and steadiness test. No employee shall be allowed to work after fifteen (15) days of his first employment in the factory unless certified fit for such employment by the Factory Medical Officer.
 - (2) Every employee employed in the said processes shall be re-examined by a Factory Medical Officer at least once in every three calendar months. Such re-examination shall, wherever Factory Medical Officer considers appropriate, include tests specified in sub-paragraph (1).
 - (3) Factory Medical Officer after examining a employee, shall issue a certificate of Fitness. The record of examination and re-examinations carried out shall be entered in the Certificate and the Certificate shall be kept in the custody of the manager of the factory. The record of each examination carried out under sub-paragraphs (1) and (2) including the nature and the results of the tests, shall also be entered by the Factory Medical Officer in a health register.
 - (4) The Certificate of Fitness and the health register shall be kept readily available for inspection by the Inspector-cum-Facilitator.
 - (5) If at any time the Factory Medical Officer is of the opinion that a employee is no longer fit for employment in the said processes on the ground that continuance therein would involve special danger to the health of the employee he shall make a record of his finding in the said certificate and the health register. The entry of his findings in those documents should also include the period for which he considers that the said person is unfit for work in the said processes.
 - (6) No person who has been found unfit to work as said in sub-paragraph(5) above shall be re-employed or permitted to work in the said processes unless the Factory Medical Officer, after further examination, again certifies him fit for employment in those processes.
- 15-B:** The person so suspended from the process shall be provided with alternate placement facilities unless he is fully incapacitated in the opinion of the Factory Medical Officer, in which case the person affected shall be suitably rehabilitated.

16. Protective clothing:- Protective clothing shall be provided and maintained in good repair for all persons employed in:-

- (a) manipulation of raw oxide of lead,
- (b) pasting,
- (c) the formation room;

and such clothing shall be worn by the persons concerned. The protective clothing shall consist of a water proof apron and water- proof-foot-wear, and, also as regards persons employed in the manipulation of raw oxide of lead or pasting, head coverings. The head covering shall be washed daily.

- 17. Mess-room:-** There shall be provided and maintained for the use of all persons employed in a lead process and remaining on the premises during the meal intervals, a suitable mess-room which shall be furnished with (a) sufficient tables, benches, (b) adequate means for warming food. The mess-room shall be placed under the charge of a responsible person, and shall be kept clean.
- 18. Cloak-room:-** There shall be provided and maintained for the use of all persons employed in a lead process:-
- (a) A cloak-room for clothing put off during working hours with adequate arrangements for drying the clothing if wet. Such accommodation shall be separate from any mess-room.
 - (b) Separate and suitable arrangements for the storage of protective clothing provided under paragraph 16.
- 19. Washing Facilities:-** There shall be provided and maintained in a cleanly state and in good repair for the use of all persons employed in a lead process:-
- (a) A wash place under cover with either-
 - (i) a trough with a smooth impervious surface fitted with a waste pipe, without plug, and of sufficient length to allow of at least two (2) feet for every five (5) such persons employed at any one time, and having a constant supply of water from taps or jets above the trough at intervals of not more than two (2) feet; or
 - (ii) at least one wash basin for every five such persons employed at any one time, fitted with a waste pipe and plug and having a constant supply of water lead on;
 - (iii) a sufficient supply of clean towels made of suitable materials renewed daily, which supply, in the case of pasters and persons employed in the manipulation of raw oxide of lead, shall include a separate marked towel, for each employee, and
 - (iv) a sufficient supply of soap or other suitable cleaning material and of nail brushes.
 - (b) There shall in addition be provided means of washing close proximity to the rooms in which manipulation of raw oxide of lead or pasting is carried on if required by notice in writing from the Chief Inspector-cum-Facilitator.
- 20. Time to be allowed for washing:-** Before each meal and before the end of the day's work, at least ten minutes, in addition to the regular meal times, shall be allowed for washing to each person who has been employed in the manipulation of raw oxide of lead or in pasting. Provided that if there be one basin or two (2) feet of trough for each such person this rule shall not apply.
- 21. Facilities for bathing:-** Sufficient bath accommodation to the satisfaction of the Chief Inspector-cum-Facilitator shall be provided for all persons engaged in the manipulation of raw oxide of lead on in pasting, and a sufficient supply of soap and clean towels.
- 22. Foods, drinks, etc., prohibited in work rooms:-** No food, drink, pan and supari or tobacco shall be consumed or brought by any employee into any workroom in which any lead process is carried on.

SCHEDULE IV GLASS MANUFACTURE

- 1. Exemption:-** If the Chief Inspector-cum-Facilitator is satisfied in respect of any factory or any class of process that, owing to the special methods of work or the special conditions in a factory or otherwise, any of the requirements of this schedule can be suspended or relaxed without or any part thereof is for any reason impracticable, he may by certificate in writing authorize such suspension or relaxation as may be indicated in the certificate for such period and on such conditions as he may think fit.

2. Definitions:- For the purpose of this schedule -

- (a) "Efficient exhaust draught" means localised ventilation effected by mechanical means, for the removal of gas, vapour, dust or fumes so as to prevent them (as far as practicable under the atmospheric conditions usually prevailing) from escaping into the air of any place in which work is carried on. No draught shall be deemed efficient which fails to remove smoke generated at the point where such gas, vapour, fume, or dust originate.
- (b) "Lead compound" means any compound of lead other than galena which when treated in the manner described below, yield to an aqueous solution of hydrochloric acid a quantity of soluble lead compound exceeding, when calculated as lead monoxide, five (5) per cent of the dry weight of the portion taken for analysis.

The method of treatment shall be as follows:-

A weighed quantity of the material which has been dried at 100 degrees C^o, and thoroughly mixed shall be continuously shaken for one hour, at the common temperature with 1,000 times its Weight of an aqueous solution of hydrochloric acid containing 0.25 per cent by weight of hydrogen chloride. This solution shall thereafter be allowed to stand for one hour and then filtered. The lead salt contained in the clear filtrate shall then be precipitated as lead sulphide and weighed as lead sulphate.

3. Exhaust draught:- The following processes shall not be carried on except under an efficient exhaust draught or under such other conditions as may be approved by the Chief Inspector-cum-Facilitator-

- (a) The mixing of raw-Materials to form a "batch".
- (b) The dry grinding, glazing and polishing of glass or any article of glass.
- (c) All process in which hydrofluoric acid fumes or ammonia vapours are given off.
- (d) All processes in the making of furnace moulds or 'pot' including the grinding or crushing of, used 'pots'.
- (e) All processes involving the use of a dry lead compound.

4. Prohibition relating to young persons, pregnant women and lactating women:-

- (a) No young person, pregnant woman and lactating woman shall be allowed to work in any of the operations specified in paragraph 3 or at any place where such operations are carried on.
- (b) Women other than those specified above shall be allowed in the above works with provision of appropriate personal protective equipment only.

5. Floor and work-benches:- The floor and work-benches of every room in which a dry compound of lead is manipulated or which any process is carried on giving off silica dust shall be kept moist and shall comply with the following requirements:-

The floors shall be:-

- (a) of cement or similar material so as to be smooth and impervious to water.
- (b) maintained in sound condition, and
- (c) cleaned daily after being thoroughly sprayed with water at a time when no other work is being carried on in the room.

The work-benches shall:-

- (a) have smooth surface and be maintained in sound condition, and
- (b) be cleaned daily either after being thoroughly damped or by means of suction cleaning apparatus at a time when no other work is being carried on there at.

6. Use of Hydrofluoric acid:- The following provisions shall apply to rooms in which glass is treated with hydrofluoric acid -

- (a) there shall be inlets and outlets of adequate size so as to secure and maintain efficient ventilation to all parts of the room;

- (b) the floor shall be covered with gutta-percha and be tight and shall slope gently down to a covered drain;
- (c) the work places shall be so enclosed in projecting hoods that openings required for bringing in the objects to be treated shall be as small as practicable; and
- (d) the efficient exhaust draught shall be so contrived that the gases are exhausted downwards.
- 7. Storage and transport of hydrofluoric acid:-** Hydrofluoric acid shall not be stored or transported except in cylinders or receptacles made of lead or rubber.
- 8. Blow-pipes:-** Suitable facilities shall be readily available for sterilizing the blow pipes used by the glass-blowers and such blow-pipes shall be sterilized at the beginning of the operation of blowing, each day.
- 9. Food, drinks, etc., prohibited in work-rooms:-** No food, drink, pan and supari or tobacco shall be brought into or consumed by any employee in any room or work-place wherein any process specified in paragraph 3 is carried on.
- 10. Protective clothing:-** The occupier shall provide, maintain in good repair and keep in a clean condition for the use of all persons employed in the processes specified in paragraph 3 suitable protective clothing, footwear and goggles according to the nature of the work and such clothing, footwear, etc., shall be worn by the persons concerned.
- 11. Washing facilities:-** There shall be provided and maintained in a cleanly state and in good repair for the use of all persons employed in the processes specified in paragraph 3:-
- (a) A wash place with either,-
- (i) a trough with a smooth impervious surface fitted with a waste pipe, without plug, and sufficient length to allow of at least two feet for every five such persons employed at any one time, and having a constant supply of water, from taps or jets above the trough at intervals of not more than two feet; or
 - (ii) at least one wash basin for every five such persons employed at any one time, fitted with a waste pipe and plug and having an adequate supply of water laid on or always readily available, and
 - (iii) a sufficient supply of clean towels made of suitable material renewed daily with a sufficient supply of soap or other suitable cleaning material and of nail brushes.
- (b) a sufficient number of stand pipes with taps the number and location of such stand pipes shall be to the satisfaction of the Chief Inspector-cum-Facilitator.
- 12. Medical facilities and record of examinations and tests:-**
- (1) The occupier of every factory in which glass manufacturing processes are carried out shall,-
 - (a) employ a qualified Medical Practitioner who shall be known as Factory Medical Officer for medical surveillance of the employees employed therein whose appointment shall be subject to the approval of the Chief Inspector-cum-Facilitator; and
 - (b) provide to the said Factory Medical Officer all the necessary facilities for the purpose referred to in clause (a).
 - (2) The records Medical examinations and appropriate tests carried out by the said Factory Medical Officer shall be maintained in a separate register approved by the Chief Inspector-cum-Facilitator, which shall be kept readily available for inspection by the Inspector-cum-Facilitator.
- 12-A. Medical examination by Factory Medical Officer :-**
- (1) Every employee employed in processes specified in Paragraph 2 shall be examined by a Factory Medical Officer within fifteen (15) days of his first employment. Such examination shall include pulmonary function tests and in suspected cases chest X-

may as well as tests for lead and urine. No employee shall be allowed to work after fifteen (15) days of his first employment in the factory unless certified fit for such employment by the Factory Medical Officer.

- (2) Every employee employed in the said processes shall be re-examined by a Factory Medical Officer at least once in every twelve calendar months. Such re-examination shall, wherever the Factory Medical Officer considers appropriate, include tests as specified in sub-paragraph (1).
 - (3) The Factory Medical Officer after examining a employee, shall issue a Certificate of fitness. The record of examination and re-examinations carried out shall be entered in the Certificate and the Certificate shall be kept in the custody of the manager of the factory. The record of each examination carried out under sub-paragraph (1) and (2), including the nature and the results of the tests, shall also be entered by the Factory Medical Officer in a health register.
 - (4) The certificate of fitness and the health register shall be kept readily available for inspection by the Inspector-cum- Facilitator.
 - (5) If at any time the Factory Medical Officer is of the opinion that a employee is no longer fit for employment in the said processes on the ground that continuance therein would involve special danger to the health of the employee, he shall make a record of his findings in the said certificate and the health register. The entry of his findings in those documents should also include the period for which he considers that the said person is unfit for work in the said processes.
 - (6) No person who has been found unfit to work as said in sub-paragraph(5) shall be re-employed or permitted to work in the said processes unless the Factory Medical Officer, after further examination, again certifies him fit for employment in those processes.
- 12-B.** The person suspended from the process shall be provided with alternate placement facilities unless he is fully incapacitated in the opinion of the Factory Medical Officer, in which case the person affected shall be suitably rehabilitated.

SCHEDULE-V

GRINDING OR GLAZING OF MATERIALS AND PROCESSES INCIDENTAL THERETO

1. Definitions:- For the purposes of this schedule:-

- (a) "Grindstone" means a grindstone composed of natural or manufactured sandstone but does not include a metal wheel or cylinder into which blocks of natural or manufactured sandstone are fitted.
- (b) "Abrasive wheel" means a wheel manufactured of bounded emery or similar abrasive.
- (c) "Grinding" means the abrasion, by aid of mechanical power, of metal, by means of a grindstone or abrasive wheel.
- (d) "Glazing" means abrading, polishing or finishing by aid of mechanical power of metal, by means of any wheel, buff, mop or similar appliance to which any abrading or polishing substance is attached or applied.
- (e) "Racing" means turning up, cutting or dressing of a revolving grindstone before it is brought into use for the first time.
- (f) "Hacking" means the chipping of the surface of a grindstone by a Hack or similar tool.
- (g) "Rodding" means the dressing of the surface of a revolving grindstone by the application of a rod bar or string of metal to such surface.

2. Exceptions:- (1) Nothing in this schedule shall apply to any factory in which only repairs are carried out except any part thereof in which one or more persons are wholly or mainly employed in the grinding of metals.

- (2) Nothing in this schedule except paragraph 4 shall apply to any grinding or glazing of metal carried on intermittently and at which no person is employed for more than twelve (12) hours in any week.
- (3) The Chief Inspector-cum- Facilitator may by certificate in writing, subject to such conditions as he may specify therein, relax or suspend any of the provisions of this schedule in respect of any factory if owing to the special methods of work or otherwise such relaxation or suspension is practicable without danger to the health or safety of the persons employed.
- 3. Equipment for removal of dust:-** No facing, dry grinding or glazing shall be performed without,-
- (a) a hood or appliance so constructed, arranged, placed, and maintained substantially to intercept the dust thrown off
- (b) a duct of adequate size, air tight and so arranged as to be capable of carrying away the dust, which duct shall be kept free from obstruction and shall be provided with proper means of access for inspection and cleaning and where practicable, with a connection at the end remote from the fan to enable the Inspector-cum- Facilitator to attach thereto any instrument necessary for ascertaining the pressure of air in the said duct, and
- (b) a fan or other efficient means of producing a draught sufficient to extract the dust
- Provided that the Chief Chief Inspector-cum- Facilitator may accept any other appliance, that is, in his opinion, as effectual for the interception, removal and disposal of dust thrown off as a hood, duct and fan would be.
- 4. Restriction on employment on grinding operations:-** Not more than one person shall at any time perform the actual process of grinding, or glazing upon a grindstone abrasive wheel or glazing appliance.
- Provided that this paragraph shall not prohibit the employment of persons to assist in the manipulation of heavy or bulky articles at any such grindstone, wheel or glazing appliance.
- 5. Glazing:-** Glazing or other processes, except processes incidental to wet grinding upon a grindstone shall not be carried on in any room in which wet grinding upon a grindstone is done.
- 6. Hacking and rodding:-** Hacking or rodding shall not be done unless during the process either (a) an adequate supply of water is laid on at the upper surface of the grindstone or (b) adequate appliances for the interception of dust are provided in accordance with the requirements of paragraph 3.
- 7. Examination of dust equipment:-**
- (a) All equipment for the extraction or suppression of dust shall at least once in every six months be examined and tested by a competent person, and any defect disclosed by such examination and test shall be rectified as soon as practicable.
- (b) A register containing particulars of such examination and tests shall be maintained.
- 8. Medical facilities and record of examinations and tests:-**
- (1) The occupier of every factory in which grinding or glazing of metals are carried out, shall,-
- (a) employ a qualified Medical Practitioner who shall be known as Factory Medical Officer for medical surveillance of the employees employed therein whose appointment shall be subject to the approval of the Chief Inspector-cum- Facilitator, and
- (b) provide to the said Factory Medical Officer all the necessary facilities for the purpose referred to in clause (a).
- (2) The record of medical examinations and appropriate tests carried out by the said Factory Medical Officer shall be maintained in a separate register approved by the

Chief Inspector-cum- Facilitator, which shall be kept readily available for inspection by the Inspector-cum- Facilitator

9. Medical Examination by a Factory Medical Officer -

- (1) Every employee employed in grinding or glazing of metal and processes incidental thereto shall be examined by a Factory Medical Officer within fifteen (15) days of his first employment. Such examinations include pulmonary function tests and in suspected cases chest X-rays. No employee shall be allowed to work after fifteen (15) days of his first employment in the factory unless certified fit for such employment by the Factory Medical Officer
 - (2) Every employee employed in the said processes shall be re-examined by a Factory Medical Officer at least once in every twelve (12) calendar months. Such re-examination shall, wherever the Factory Medical Officer considers appropriate include tests and as specified in sub-paragraph (1).
 - (3) The Factory Medical Officer after examining a employee shall issue a certificate of fitness. The record of examination and re-examinations carried out shall be entered in the certificate and the certificate shall be kept in the custody of the manager of the factory. The record of each examination carried out under sub-paragraphs (1) and (2), including the nature and the results of the tests, shall also be entered by the Factory Medical Officer in a health register.
 - (4) The certificate of fitness and the health register shall be kept readily available for inspection by then Inspector-cum- Facilitator.
 - (5) If at any time the Factory Medical Officer is of the opinion that a employee is no longer fit for employment in the said processes on the ground that continuance therein would involve special danger to the health of the employee, he shall make a record of his findings in the said certificate and the health register. The entry of his findings in those documents should also include the period for which he considers that the said person is unfit for work in the said processes.
 - (6) No person who has been found unfit to work as said in sub-paragraph (5) shall be re-employed or permitted to work in the said processes unless the Factory Medical Officer, after further examination again certifies him fit for employment in those processes.
10. The person so suspended from the process shall be provided with alternate placement facilities unless he is fully incapacitated in the opinion of the Factory Medical Officer, which case the person affected shall be suitably rehabilitated.

SCHEDULE-VI

GENERATION OF GAS FROM DANGEROUS PETROLEUM AS DEFINED IN THE PETROLEUM ACT, 1934 (Central Act No.30 of 1934)

1. Prohibition relating to young persons, pregnant women and lactating women -

- (a) No young person, pregnant woman and lactating woman shall be allowed to work in or shall be allowed to enter any building in which the generation of gas from dangerous petroleum as defined in the Petroleum Act, 1934 is carried on.
- (b) Women other than those specified above shall be allowed in the above works with provision of appropriate personal protective equipment only.

2. Flame traps:- The plant for generation of gas from dangerous petroleum as defined in the Petroleum Act, 1934 and associated piping and fitting shall be fitted with at least two efficient flame traps so designed and maintained as to prevent a flash back from any burner to the plant. One of these traps shall be fitted as close to the plant as possible. The plant and all pipes and valves shall be installed and maintained free from leaks

3. Generating building or room:- All plants for generation of gas from dangerous petroleum as defined in the Petroleum Act, 1934 erected after the coming into force of the provisions specified in this Schedule, shall be erected outside the factory building proper in a separate well-ventilated building (hereinafter referred to as the

"generating building"). In the case of such plant erected before the coming into force of the provisions specified in this Schedule there shall be no direct communication between the room where such plants are erected (hereinafter referred to as "the generating room") and the remainder of the factory building. So far as practicable, all such generating rooms shall be constructed of fire-resisting materials.

4. **Fire extinguishers:-** An efficient means of extinguishing petrol fires shall be maintained in an easily accessible position near the plant for generation of gas from dangerous petroleum as defined in the Petroleum Act, 1934.
5. **Plant to be approved by Chief Inspector-cum-Facilitator:-** Petrol gas shall not be manufactured except in a plant for generating petrol gas, the design and construction of which has been approved by the Chief Inspector-cum-Facilitator.
6. **Escape of petrol:-** Effective steps shall be taken to prevent petrol from escaping into any drain or sewer.
7. **Prohibition relating to smoking, etc:-** No person shall smoke or carry matches, fire or naked light or other means of producing a naked light or spark in the generating room or building or in the vicinity thereof and a warning notice in the language understood by the majority of the employees shall be posted in the factory prohibiting smoking and the carrying of matches fire or naked light or other means of producing a naked light or spark into such room or building.
8. **Access to petrol or container:-** No unauthorized person shall have access to any petrol or to a vessel containing or having actually contained petrol.
9. **Electric fittings:-** All electric fittings shall be of flame proof construction, and all electric conductors shall either be enclosed in metal conductors or be lead-sheathed.
10. **Construction of doors:-** All doors in the generating room of building shall be constructed to open outwards or to slide and no door shall be locked or obstructed or fastened in such manner that it cannot be easily and immediately opened from the inside while gas is being generated and any person is working in the generating room or building.
11. **Repair of containers:-** No vessel that has contained petrol shall be repaired in a generating room or building and no repairs to any such vessel shall be undertaken unless live steam has been blown into the vessel and until the interior is thoroughly steamed out or other equally effective steps have been taken to ensure that it has been rendered free from petrol in inflammable vapour.

SCHEDULE-VII

CLEANING OR SMOOTHING, ROUGHENING etc., OF ARTICLES BY A JET OF SAND, METAL SHOT OR GRIT OR OTHER ABRASIVE PROPELLED BY A BLAST OF COMPRESSED AIR OR STEAM (Blasting Regulations)

1. **Definition:-** For the purposes of this schedule -

"Blasting" or "Sand blasting" means cleaning, smoothing, roughening or removing of any part of the surface of any article by the use as an abrasive of a jet of sand, metal shot or grit or other material propelled by a blast of compressed air or steam.

"Blasting enclosure" means a chamber, barrel, cabinet or any other enclosure designed for the performance of blasting therein.

"Blasting chamber" means a blasting enclosure in which any person may enter at any time in connection with any work or otherwise.

"Cleaning of castings" where done as an incidental or supplemental process in connection with the making of metal castings, means the freeing of the casting from adherent sand or other substance and includes the removal of cores and the general smoothing of a casting, but does not include the free treatment.

2. **Sand blasting to be done in enclosed chamber:-** Sand blasting shall not be done in any room except in an enclosed chamber or cabinet in which no other work is

performed and at which efficient means are provided, arranged and maintained to prevent the escape of dust to the outside of such chamber or cabinet.

3. Prohibition relating to young persons, pregnant women and lactating women:-

- (a) No young person, pregnant woman and lactating woman shall be allowed to work at any operation of sand blasting;
- (b) Women other than those specified above shall be allowed in the above works with provision of appropriate personal protective equipment only.

4. Prohibition of sand blasting:- Sand or any other substance containing free silica shall not be introduced as an abrasive into any blasting apparatus and shall not be used for blasting -

- (i) Provided that this clause shall come into force two years after the coming into operation of this Schedule
- (ii) Provided further that no woman or young person shall be employed or permitted to work on any operation of sand blasting.

5. Precautions in connection with blasting operations:-

(1) Blasting to be done in blasting enclosure:- Blasting shall not be done except in blasting enclosure and no work other than blasting and any work immediately incidental thereto and cleaning and repairing of the enclosure including the plants and appliances situated therein shall be performed in a blasting enclosure. Every door, aperture and joint of blasting enclosure, shall be kept closed and air tight while blasting is being done therein.

(2) Maintenance of blasting enclosure:- Blasting enclosure shall always be maintained in good condition and effective measures shall be taken to prevent dust escaping from such enclosures, and from any apparatus connected therewith into the air of any room.

(3) Provisions of separating apparatus:- There shall provided and maintained for and in connection with every blasting enclosure, efficient apparatus for separating, so far as practicable, abrasive which has been used for blasting and which is to be used again as an abrasive from dust or particles of other materials arising from blasting and no such abrasive shall be introduced into any blasting apparatus and used for blasting until it has been so separated.

Provided that this clause shall not apply, except in the case of blasting chambers, to blasting enclosures constructed or installed before the coming into force of this schedule, if the Chief Inspector-cum- Facilitator is of the opinion that it is not reasonably practicable to provide such separating apparatus.

(4) Provision of ventilating plant:- There shall be provided and maintained in connection with every blasting enclosure efficient ventilating plant to extract, by exhaust draught effected by mechanical means, dust produced in the enclosure. The dust extracted and removed shall be disposed off by such method and in such a manner that it shall not escape into the air of any room, and every other filtering or settling device situated in a room in which persons are employed, other than persons attending to such bag or other filtering or settling device, shall be completely separated from the general air of that room in an enclosure ventilated to the open air.

(5) Operation of ventilating plant:- The ventilating plant provided for the purpose of sub-paragraph (4) shall kept in continuous operation whenever the blasting enclosure, is in use whether or not blasting, is actually taking place, therein, and in the case of a blasting chamber, it shall be in operation even when any person is inside the chamber for the purpose of cleaning.

6. Inspection and examination:-

- (1) Every blasting enclosure shall be specially inspected by a competent person at least once every week in which it is used for blasting. Every blasting enclosure, the apparatus connected therewith and the ventilating plant shall be thoroughly examined and in the case of ventilating plant, tested by a competent person at least once in every month.

- (2) Particulars of the result of every such inspection, examination and test shall forthwith be entered in a register which shall be kept in a form approved by the Chief Inspector-cum-Facilitator and shall be available for inspection by any workman employed in or in connection with blasting, in the factory. Any defect found on any such inspection, examination or test shall be immediately reported by the person carrying out the inspection, examination or test to the occupier manager or other appropriate person and without prejudice to the foregoing requirements of this schedule shall be removed without avoidable delay.

7. Protective equipment-Provision of protective helmets gauntlets and overalls:-

- (1) Unless a worker is wearing a suitable protective helmet and gauntlets,-
- no person shall be employed or permitted to work a blasting in the open air or work within thirty (30) feet of sand blasting apparatus in operation in the open air; and
 - no person shall be employed or permitted to work or allowed in a sand blasting chamber whilst the sand blasting apparatus is in operation.
- (2) The occupier of the factory shall provide and maintain in good condition all helmets, overall and gauntlets that are necessary to comply with the requirements of this Schedule.

There shall be provided and maintained for the use of all persons who are employed in a blasting chamber, whether in blasting or in any work connected therewith or in cleaning such a chamber protective helmets of a type approved by a certificate of the Chief Inspector-cum-Facilitator; and every such person shall wear the helmet provided for his use whilst he is in the chamber and shall not remove it until he is outside the chamber.

- Every protective helmet shall carry the distinguishing mark of the person by whom it is intended to be used and shall be provided with a sufficient supply of pure air for breathing and ventilation, together with suitable arrangements to permit the escape of the expired air. Each protective helmet when in use shall be supplied with clean and not unreasonably cold air at a rate of not less than six cubic feet per minute.
- No person shall wear a protective helmet not carrying his mark or a helmet that has been worn by another person unless such protective helmet shall have been thoroughly disinfected.
- All persons engaged in sand blasting while at work shall wear the protective equipment provided under the provisions of this paragraph.
- Suitable gauntlets and overall shall be provided for the use of all persons while performing blasting or assisting at blasting and every such person shall while so engaged wear the gauntlet and overall provided.

8. Medical facilities and records of examinations and tests:-

- (1) The occupier of every factory to which the schedule applies shall -
- employ a qualified Medical Practitioner who shall be known as Factory Medical Officer for medical surveillance of the employees employed therein whose employment shall be subject to the approval of the Chief Inspector-cum-Facilitator; and
 - provide to the said Factory Medical Officer all the necessary facilities for the purpose referred to in clause (a).
- (2) The record of medical examinations and appropriate tests carried out by the said Factory Medical Officer shall be maintained in a separate register approved by the Chief Inspector-cum-Facilitator, which shall be kept readily available for inspection by the Inspector-cum-Facilitator.

9. Medical Examination by a Factory Medical Officer :-

- (1) Every employee employed in any of the processes to which this schedule applies shall be examined by a Factory Medical Officer within fifteen (15) days of his first employment. Such examination shall include pulmonary function test and chest X-

- ray. No employee shall be allowed to work after fifteen (15) days of his first employment in the factory, unless certified fit for such employment by the Factory Medical Officer.
- (2) Every employee employed in the said processes shall be re-examined by a Factory Medical Officer at least once in every twelve (12) calendar months and such re-examination shall, wherever the Factory Medical Officer considers appropriate, include pulmonary function test and chest X-ray once every three years.
 - (3) The Factory Medical Officer, after examining a employee, shall issue a certificate of Fitness in Form 28, the record of examination and re-examinations carried out shall be entered in the certificate and the certificate shall be kept in the custody of the manager of the Factory. The record of each examination carried under sub-paragraphs (1) and (2), including the nature and the results of the tests, shall also be entered by the Factory Medical Officer in a health register.
 - (4) The certificate of Fitness and the health register shall be kept readily available for inspection by the Inspector-cum-Facilitator.
 - (5) If at any time the Factory Medical Officer is of the opinion that a employee is no longer fit for employment in the said processes on the ground that continuance therein would involve special danger to the health of the employee, he shall make a record of his findings in the said certificate and the health register. The entry of his findings in those documents should also include the period for which he considers that the said person is unfit for work in the said processes.
 - (6) No person who has been found unfit to work in the said processes as said in sub-paragraph (5) above shall be re-employed or permitted to work unless the Medical Officer, after further examination, again certified him fit for employment in those processes.
 - (7) The person suspended from the process shall be provided with alternate placement facilities unless he is fully incapacitated in the opinion of the Medical Officer, in which case the person affected shall be suitably employed.

10. Precautions in connection with cleaning and other works :-

- (1) Where any person is engaged upon cleaning of any blasting apparatus or blasting enclosure or of any apparatus or ventilating plant connected therewith or the surroundings thereof upon any other work in connection with any blasting apparatus or blasting enclosure or with any apparatus or ventilating plant connected therewith so that he is exposed to the risk of inhaling dust which has arisen from blasting, all practicable measures shall be taken to prevent such inhalation.
- (2) In connection with any cleaning operation referred to in sub-paragraph (1) and with the removal of dust from filtering or settling devices all practicable measures shall be taken to dispose of the dust in such a manner that it does not enter the air of any room. Vacuum cleaners shall be provided and used wherever practicable for such cleaning operations.

11. Storage accommodation for protective wear:- Adequate and suitable storage accommodation for the helmets, gauntlets and overalls required to be provided by paragraph 7 shall be provided outside and conveniently near to every blasting enclosure and such accommodation shall be kept clean. Helmets, gauntlets and overalls when not in actual use shall be kept in this accommodation.

12. Maintenance and cleaning of protective wear:- All helmets, gauntlets overalls and other protective devices or clothing provided and worn for the purpose of this schedule shall be kept in good condition and so far as is reasonably practicable shall be cleaned on every weekday in which they are used. Where dust arising from the cleaning of such protective clothing or devices is likely to be inhaled, all practicable measures shall be taken to prevent such inhalation. Vacuum cleaners shall, wherever practicable, be used for removing dust from such clothing and compressed air shall be used for removing dust from any clothing.

13. Maintenance of vacuum-cleaning plant:- Vacuum cleaning plant used for the purpose of this schedule shall be properly maintained.

14. Power to exempt or relax:-

- (1) If the Chief Inspector-cum-Facilitator is satisfied that in any factory or any class of factory, the use of sand or other substance containing free silica as abrasive in blasting is necessary for a particular manufacture or process (other than the process incidental or supplemental to making of metal castings) and that the manufacture or process cannot be carried on without the use of such abrasive or that owing to the special conditions or special method of work or otherwise any requirement of this Schedule can be suspended either temporarily, or permanently, or can be relaxed without endangering the health of the persons employed, or that application of any of such requirements is for any reason impracticable or inappropriate, he may, with the previous sanction of the State Government, by an order in writing exempt the said factory or class of factory from such provisions of this Schedule, to such an extent and subject to the conditions and for such period as may be specified in the said order.
- (2) Where an exemption has been granted under sub-paragraph (1) a copy of the order shall be displayed at a notice board at a prominent place at the main entrance or entrances to the factory and also at the place where the blasting is carried on.

SCHEDULE-VIII

LIMING AND TANNING OF RAW HIDES AND SKINS AND PROCESSES INCIDENTAL THERETO

1. Cautionary notices:-

- (1) Cautionary notices as to anthrax in the form specified by Chief Inspector-cum-Facilitator shall be affixed in prominent positions in the factory where they may be easily and conveniently read by the persons employed.
- (2) A copy of a warning notice as to anthrax in the form specified by the Chief Inspector-cum-Facilitator shall be given to each person employed when he is engaged, and subsequently if still employed, on the first day of each calendar year.
- (3) Cautionary notices as to the effects of chrome on the skin shall be affixed in prominent positions in every factory in which chrome solutions are used and such notices shall be placed as to be easily and conveniently read by the persons employed.
- (4) Notices shall be affixed in prominent places in the factory stating the position of the "First-Aid" box or cupboard and the name of the persons in charge of such box or cupboard.
- (5) If any person employed in the factory is illiterate, effective steps shall be taken to explain carefully to such illiterate persons the contents of the notice specified in sub-paragraphs 1, 2 and 4 and if chrome solutions are used in the factory the contents of the notice specified in sub-paragraph 3.

2. Protective clothing:- The occupier shall provide and maintain in good condition the following articles of protective clothing:-

- (a) waterproof foot wear, leg covering, aprons and gloves for persons employed in processes involving contact with chrome solutions, including the preparation of such solutions;
 - (b) gloves and boots for persons employed in lime yard; and
 - (c) protective footwear, aprons and gloves for persons employed in processes involving the handling of hides or skins, other than in processes specified in clauses (a) and (b)
- Provided that-
- (i) the gloves, aprons, leg coverings or boots may be of rubber or leather, but the gloves and boots to be provided under Clauses (a) and (b) shall be of rubber.

- (ii) the gloves may not be provided to persons fleshing by hand or employed in processes in which there is no risk of contact with lime, sodium sulphide or other caustic liquor.

3. Washing facilities, mess-room and cloak-room:- They shall be provided and maintained in a cleanly state and in good repair for the use of all persons employed:-

- (a) a trough with a smooth impervious surface fitted with a waste pipe without plug, and of sufficient length to allow at least two feet for every ten persons employed at any one time, and having a constant supply of water from taps or jets above the trough at intervals of not more than two feet; or
 - (b) at least one wash basin for every ten such persons, employed at any one time, fitted with a waste pipe and plug and having a constant supply of water together with, in either case, a sufficient supply of nailbrushes, soap or other suitable cleaning material, and clean towels;
 - (c) (i) a suitable mess-room, adequate for the number remaining on the premises during the meal intervals, which shall be furnished with (1) sufficient tables and benches and (2) adequate means for warming food and for boiling water.
 - (ii) The mess-room shall be separated from (1) any room or shed in which hides or skins are stored, treated or manipulated (2) the cloak-room and (3) shall be placed under the charge of a responsible person;
 - (d) suitable accommodation for clothing put off during working hours and another accommodation for protective clothing and shall also make adequate arrangements for drying up the clothing in both the cases, if wet. The accommodation provided shall be kept clean at all times and placed under the charge of a responsible person.
- 4. Food, drinks, etc., prohibited in work-rooms:-** No food, drink, pan and supan or tobacco shall be brought into or consumed by any employee in any workroom or shed in which hides or skins are stored or manipulated.

5. Medical facilities and records of examinations and tests:-

- (1) The occupier of every factory to which the schedule applies shall:-
 - (a) employ a qualified Medical Practitioner who shall be known as Factory Medical Officer for medical surveillance of the employees employed therein;
 - (b) provide to the said Factory Medical Officer all the necessary facilities for the purpose referred to in clause (a);
 - (c) arrange for inspection of the hands of all the persons keeping in contact with chromium substances to be made twice a week; and
 - (d) provide and maintain and supply suitable ointment and plaster in box readily accessible to the employees and solely used for the purpose to the employees and solely used for the purpose of keeping the ointment and the plaster.
- (2) The record of medical examinations and appropriate tests carried out by the said Factory Medical Officer shall be maintained in a separate register.

6. Medical Examination by a Factory Medical Officer :-

- (1) Every employee employed in any of the processes to which the schedule applies shall be examined by a Medical officer within 15 days of his first employment. Such examination shall include skin test for dermatitis and detection of anthrax bacillus from local vision by gram stain. No employee shall be allowed to work after 15 days of his first employment in the factory unless certified fit for such employment by the Factory Medical Officer.
- (2) Every employee employed in the said processes shall be re-examined by a Factory Medical Officer at least once in every twelve calendar months. Such re-examination shall, wherever the Factory Medical Officer considers appropriate, include tests and as specified in sub-paragraph (1).
- (3) The Factory Medical Officer after examining a employee, shall issue a Certificate of fitness. The record of examination and re-examinations carried out shall be entered

in the Certificate and the Certificate shall be kept in the custody of the manager of the factory. The record of each examination carried out under sub-paragraphs (1) and (2), including the nature and the results of the tests, shall also be entered by the Factory Medical Officer in a health register.

- (4) The certificate of fitness and the health register shall be kept readily available for inspection by the Inspector-cum-Facilitator
- (5) If at any time the Factory Medical Officer is of the opinion that a employee is no longer fit for employment in the said processes on the ground that continuance therein would involve special danger to the health of the employee, he shall make a record of his findings in the said certificate and the health register. The entry of his findings in those documents should also include the period for which he considers that the said person is unfit for work in the said processes.
- (6) No person who has been found unfit to work as said in sub-paragraph(5) above shall be re-employed or permitted to work in the said processes unless the Factory Medical Officer, after further examination again certifies him fit for employment in those processes.
- (7) The person so suspended from the process shall be provided with alternate placement facilities unless he is fully incapacitated in the opinion of the Factory Medical Officer, in which case the person shall be suitably rehabilitated.

SCHEDULE-IX

CELLULOSE SPRAYING

1. **Application:-** The provisions of this Schedule shall apply to all factories or parts of factory in which the spraying of cellulose ester paints or lacquers is carried on.
 2. **Prohibition of the employment of children and adolescents:-** No child or adolescent shall be employed in any factory on the operation specified in paragraph 1 above.
 3. **Exhaust draught:-** An efficient exhaust draught shall be provided by mechanical means for the process specified in paragraph 1. The draught shall operate on the vapour given off in the process as near as may be at the point of origin as so to prevent it (as far as practicable under the atmospheric conditions usually prevailing) from escaping into the air of any place in which work is carried on. The draught shall be maintained working for a period of at least five minutes after the cessation of the operation.
- Provided that the Chief Inspector-cum-Facilitator may grant exemption from these provisions if he is satisfied that due to the casual nature of the operation they are not necessary to secure the health of the employees.
4. **Position of spray operators:-** Arrangements shall, as far as practicable, be made so as to render it unnecessary for the person operating the spray to be in a position between a ventilating outfit and the article being sprayed.

SCHEDULE-X

GRAPHITE POWDERING AND INCIDENTAL PROCESSES

1. **Application:-** The provisions of this schedule shall apply to all factories or parts of factories in which grinding and sieving of graphite and the processes incidental thereto are carried on.
2. **Prohibition of employment of pregnant and lactating women, children and adolescents:-**
 - (a) No pregnant and lactating woman, children and adolescents shall be allowed to work in any factory upon any of the operations specified in paragraph 1 above.
 - (b) Women other than those specified above shall be allowed in the above works with provision of appropriate personal protective equipment only.
3. **Medical certificates and examinations:-**

- (1) No person shall be employed in any factory for more than fifteen days in the year upon any of the operations specified in paragraph 1 above unless a special certificate of fitness granted to him by a Medical officer is in the custody of the manager of the factory.
- (2) The Inspector-cum-Facilitator may require that any person in respect of whom a certificate referred to in sub-paragraph (1) has been granted shall carry with him while at work a token giving reference to such certificate.
- (3) Every person so employed shall be medically examined by a Registered medical practitioner at intervals of not more than six months and a record of such examinations shall be entered in the special certificate granted under sub-paragraph (1).
- (4) If at any time a Registered medical practitioner is of opinion that any person is no longer fit for employment upon any of the operations specified in paragraph 1 above he shall cancel the special certificate of fitness granted to that person.
- (5) No person whose special certificate of fitness has been cancelled shall be employed upon any of the operations specified in paragraph 1 above unless Registered medical practitioner again certifies him to be fit.

4. Exhaust draughts:- Provision shall be made for removing the dust produced in any of the operations specified in paragraph 1 above by means of an efficient exhaust draught so contrived as to operate on the dust as closely to the point of origin as possible.

Provided that where the provision of an exhaust draught is not reasonably practicable the Inspector-cum-Facilitator may require,-

- (a) respirators of a type approved by him to be provided and maintained in a clean and efficient condition by the occupier and worn by every person working under such conditions; and
- (b) the damping of floors, apparatus and material to prevent the raising of dust.

5. Floor and work-benches:-

- (1) The floor of every room in which any person is employed upon any of the operations specified in paragraph 1 above shall be of cement or other impervious material.
- (2) The top of every work-bench in every such room shall be of impervious material.
- (3) The said floors and work-benches shall be kept clean and in good condition.
- (4) The Inspector-cum-Facilitator may, by order in writing, require the said floors and work-benches to be kept wet in such manner as he deem suitable, in order to reduce dust.

6. Washing facilities:- The occupier shall provide and maintain in a clean state and good repair for the use of persons employed upon any of the operations specified in paragraph 1 above either (a) a trough with smooth impervious surface fitted with a waste-pipe without plug, and of sufficient length to allow at least two feet for every five such persons employed at any one time, and having a constant supply for water from taps or jets above trough at intervals of not more than two feet, or (b) at least one lavatory basin for every five such persons employed at any one time, fitted with a waste-pipe and plug having a constant supply of water, together with, in either case a sufficient supply of nail brushes, soap or other suitable cleaning material and clean towels.

7. Food, drink and tobacco:- No food drink, pan and supari or tobacco shall be brought into or consumed in any room in which any person is employed upon any of the operations specified in paragraph 1 above.

8. Protective clothing:- Adequate protective clothing such as overalls in a clean condition shall be provided by the occupier to every person employed upon any of the operations specified in paragraph 1 above.

9. **Exemptions:-** The Chief Inspector-cum-Facilitator may exempt any factory or part of factory from the provisions of paragraphs 4 to 7 to the extent he deems suitable, if he is satisfied that their observance is not necessary for safeguarding the health of the operative.

SCHEDULE-XI

MANUFACTURE AND TREATMENT OF LEAD AND CERTAIN COMPOUNDS OF LEAD, CERTAIN LEAD PROCESS IN PRINTING PRESSES AND TYPE FOUNDRIES

1. **Exemptions:-** Where the Inspector-cum-Facilitator is satisfied that all or any of the provisions of this schedule are not necessary for the protection of persons employed he may by certificate in writing exempt any factory from all or any of such provisions subject to such conditions as he may specify therein. Such certificate may at any time be revoked by the Chief Inspector-cum-Facilitator.
2. **Definitions:-** In these regulations -
- "Lead material" means material containing not less than three (3) percent of lead.
- "Lead Process " means -
- the melting of lead or any lead material for casting and mechanical composing;
 - The re-charging of machines with used lead material; or
 - any other work including removal of dross from melting pots, cleaning of plungers, and
 - manipulation movement or other treatment of lead material.
- "Efficient exhaust draught" means localized ventilation effected by heat or mechanical means for the removal of gas, vapour, dust or fumes so as to prevent them from escaping into the air of any place in which work is carried on. No draught shall be deemed efficient which fails to remove gas, vapour fume or dust at the point where they originate.
3. **Exhaust draught:-** None of the following processes shall be carried on except with an efficient exhaust draught:-
- melting lead material or slugs;
 - heating lead material so that vapour containing lead is given off; or unless carried on in such a manner as to prevent free escape of gas, vapour, fumes or dust into any place in which work is carried on, or unless carried on in electrically heated and thermostatically controlled melting pots.
- Such exhaust draught shall be effected by mechanical means and so contrived as to operate on the dust, fume, gas or vapour given off as closely as may be at its point of origin.
4. **Prohibition relating to young persons, pregnant women and lactating women:-**
- No young person, pregnant woman and lactating woman shall be allowed to work in any lead process.
 - Women other than those specified above shall be allowed in the above works with provision of appropriate personal protective equipment only.
5. **Separation of certain processes:-** Each of the following processes shall be carried on in such a manner and under such condition as to secure effectual separation from any other process:-
- melting of lead or any lead material;
 - casting of lead ingots; and
 - mechanical composing;
6. **Container for dross:-** A suitable receptacle with tightly fitting cover shall be provided and used for dross as it is removed from every melting pot. Such receptacle shall be

kept covered while in the work-room near the machine except when the dross is being deposited therein.

7. Floor of work-room:- The floor of every work-room where lead process is carried on shall be -

- (a) of cement or similar material so as to be smooth and impervious to water;
- (b) maintained in such condition; and
- (c) shall be cleansed throughout daily after being thoroughly damped with water at a time when no other work is being carried on at the place.

8. Mess room:- There shall be provided and maintained for the use of all persons employed in a lead process and remaining on the premises during the meal intervals, a suitable mess-room which shall be furnished with sufficient tables and benches.

9. Wash facilities:- There shall be provided and maintained in a cleanly state and in good repair for the use of all persons employed in a lead process,-

- (a) a wash place with either-
 - (i) a trough with smooth impervious surface fitted with a waste pipe without plug, and of sufficient length to allow at least two feet for every five such persons employed at any one time and having a constant supply of water from taps or jets above the trough at intervals of not more than two feet or,
 - (ii) at least one wash basin for every five such persons employed at any one time, fitted with a waste pipe and plug and having an adequate supply of water laid on or always readily available; and
- (b) a sufficient supply and clean towels made of suitable material renewed daily with a sufficient supply of soap or other suitable cleaning material.

10. Medical facilities and records of examinations and tests:-

- (1) The occupier of every factory to which the schedule applies shall-
 - (a) employ a qualified Medical Practitioner who shall be known as Factory Medical Officer for medical surveillance of the employees employed therein and;
 - (b) provide to the said Factory Medical Officer all the necessary facilities for the purpose referred to in clause (a).
- (2) The record of medical examinations and appropriate tests carried out by the said Factory Medical Officer shall be maintained in a separate register, which shall be kept readily available for inspection by the Inspector-cum-Facilitator.

10A. Medical examination by a Factory Medical Officer :-

- (1) Every employee employed in a lead process shall be examined by a Factory Medical Officer within fifteen (15) days of his first employment. Such examination shall include tests for lead in blood and urine, ALA in urine, hemoglobin, stippling of cells and steadiness test. No employee shall be allowed to work after fifteen (15) days of his first employment in the factory unless certified fit for such employment by the Factory Medical Officer.
- (2) Every employee employed in the said processes shall be re-examined by a Factory Medical Officer at least once every six calendar months. Such re-examination shall, wherever the Factory Medical Officer considered appropriate, include tests as specified in sub-paragraph (1).
- (3) The Factory Medical Officer after examining a employee, shall issue a certificate of fitness. The record of examination and re-examination carried out shall be entered in the certificate and the certificate shall be kept in the custody of the manager of the factory. The record of each examination carried out under sub-paragraphs (1) and (2), including the nature and the results of the tests, shall also be entered by the Factory Medical Officer in a health register.
- (4) The Certificate of fitness and the health register shall be kept readily available for inspection by the Inspector-cum-Facilitator.

- (5) If at any time the Factory Medical Officer is of the opinion that a employee is no longer fit for employment in the said process on the ground that continuance therein would involve special danger to the health of the employee, he shall make a record of his findings in the said certificate and the health register. The entry of his findings in those documents should also include the period for which he considers that the said person is unfit for work in the said processes.
- (6) No person who has been found unfit to work as said in sub-paragraph(5) above shall be re-employed or permitted to work in the said processes unless the Factory Medical Officer, after further examination, again certifies him fit for employment in those processes.
- 10B. The person so suspended from the process shall be provided with alternate placement facilities unless he is fully incapacitated in the opinion of the Medical officer, in which case the person affected shall be suitably rehabilitated.
11. **Food, drinks, etc., are prohibited in work-rooms:-** No food, drink, pan and sari or tobacco shall be consumed or brought by any employee into any work-room in which any lead process is carried on.

SCHEDULE-XII

CASHEW NUT MANUFACTURING PROCESS OR OPERATIONS

1. **Application:-** This Schedule shall apply to all factories in which roasting, scrubbing and shelling of Cashew nut or extracting oil from cashew nut or cashew nuts shells is carried on.
2. **Prohibition relating to young persons, pregnant women and lactating women:-**
- (a) No young person, pregnant woman and lactating woman shall be allowed to work in any of the process specified in paragraph 1 except in shelling of roasted cashew nuts.
- (b) Women other than those specified above shall be allowed in the above works with provision of appropriate personal protective equipment only.
3. **Protective clothing and equipment:-** The occupier shall provide and maintain for the use of all persons employed in roasting and scrubbing of cashew nuts or extracting oil from cashew nuts or cashew nut shells.
- (a) suitable rubber or washable leather gloves;
- (b) suitable type of impervious aprons with sleeves to cover body from shoulders down to knees;
- (c) suitable type of footwear to afford protection to feet and legs against cashew nut oil;
- (d) a protective ointment containing 10 per cent of shellac, 55 per cent of alcohol, 10 per cent of sodium perborate, 5 per cent of carbitol and 20 per cent talc;
- (e) sufficient quantity of kaolin and coconut oil;
- (f) any other material or equipment which the Chief Inspector-cum-Facilitator may deem to be necessary for the protection of the employees.
4. **Use of protective clothing and equipment:-** Every person employed in processes specified in paragraph 1 shall make use of protective clothing and equipment supplied and arrangements shall be made by the occupier to supervise its use, maintenance and cleanliness.
5. **Disposal of shells, ashes or oil of cashew nut:-**
- (1) Shells, ashes, or oil of cashew nuts shall not be stored in any room in which employees are employed and shall be removed at least twice a day to any pit or enclosed place in the case of shells and ashes and to closed containers kept in a separate room in the case of oil.
- (2) No employee shall be allowed to handle shells or oil of cashew nuts without using the protective measures provided under paragraph 3 above.

5. **Floors of work-rooms:-** The floor of every work-room in which processes specified in paragraph 1 are carried on, shall be of a hard material so as to be smooth and impervious and of even surface and shall be cleaned daily; and spillage of any cashew nut oil in any work-room shall be washed with soap and cleaned immediately.
7. **Seating accommodation:-** Employees engaged in shelling cashew nuts shall be provided with adequate seats or work benches which shall be cleaned daily.
8. **Rest-rooms:-**
- (a) There shall be provided and maintained for the use of all persons employed in process specified in paragraph 1, a suitable rest room furnished with sufficient tables and chairs or benches.
- (b) Separate lockers shall be provided where food, etc. shall be stored by employees, before it is consumed in the rest room.
9. **Food, drinks, prohibited in work rooms:-** No food, drink, pan, supari or tobacco shall be brought or consumed by any employee in any room in which processes specified in paragraph 1 are carried out and no person shall remain in any such room during intervals for meals or rest.
10. **Washing facilities:-** Where roasting, scrubbing and shelling of cashew nuts or extracting oil from cashew nuts or cashew nut shells is carried on, there shall be provided and maintained in a clean and good repair washing facilities, with a sufficient supply of soap, coconut oil, nail brushes and towels at the scale of one tap or stand pipe for every ten (10) employees and the taps or stand pipes shall be spaced not less than 4 feet apart.
11. **Time allowed for washing:-** Before each meal and before the end of the day's work, at least ten minutes, in addition to the regular meal times, shall be allowed for washing; to such person employed in any of the processes specified in paragraph 1, and a notice to this effect in English and in the regional language shall be affixed in a conspicuous place in each work-room concerned.
12. **Smoke or gas produced by roasting cashew nut:-** Where smoke or gas is produced in the operation of roasting, provision shall be made for removing the smoke or gas through a chimney of sufficient height and capacity or by such other arrangements as may be necessary to prevent the gas or smoke escaping into the air, or any place in which employees are employed.
13. **Storage of protective equipment:-** A suitable room or a portion of the factory suitably partitioned off, shall be provided exclusively for the storage of all the protective equipment supplied to the employees and no such equipment shall be stored in any place other than the room or place so provided.
14. **Medical facilities and records of examinations and tests:-**
- (1) The occupier of every factory to which the schedule applies shall,-
- (a) employ a qualified Medical Practitioner who shall be known as Factory Medical Officer for medical surveillance of the employees employed therein;
- (b) Provide to the said Factory Medical Officer all the necessary facilities for the purpose referred to in clause (a).
- (2) The said Factory Medical Officer shall inspect daily the hands and feet of all the persons employed in the processes specified in paragraph 1.
- (3) The record of such examinations carried out by the qualified Medical Practitioner shall be maintained in a separate register, which shall be kept readily available for inspection by the Inspector-cum-Facilitator.
- (4) The first-aid box maintained shall also contain burrough's Solution (1:20) and aqueous solution of tonic acid (10%) for treatment of cases of dermatitis.
- 14A **Medical examination by a Factory Medical Officer :-**

- (1) Every employee employed in the processes specified in paragraph 1 shall be examined by a Factory Medical Officer within 15 days of his first employment. Such examination shall include skin test for dermatitis, and no employee shall be allowed to work after 15 days of his first employment in the factory unless certified fit for such employment by the Factory Medical Officer.
 - (2) Every employee employed in the said processes shall be re-examined by a Factory Medical Officer at least once in every three calendar months. Such re-examination shall, wherever the Factory Medical Officer considers appropriate, include asking tests for dermatitis.
 - (3) The Factory Medical Officer after examining a employee, shall issue a Certificate of fitness. The record of examination and re-examinations carried out shall be entered in the certificate and the Certificate shall be kept in the custody of the manager of the factory. The record of each examination carried out under sub-paragraphs (1) and (2), including the nature and the results of these tests, shall also be entered by the Factory Medical Officer in a health register.
 - (4) Their certificate of fitness and the health register shall be kept readily available for inspection by the Inspector-cum-Facilitator.
 - (5) If at any time the Factory Medical Officer is of the opinion that a employee is no longer fit for employment in the said processes on the ground that continuance therein would involve special danger to the health of the employee, he shall make a record of his findings in the said certificate and the health register. The entry of his findings in those documents should also include the period for which he considers that the said person is unfit to work in the said processes.
 - (6) No person who has been found unfit to work as said in, sub-paragraph (5) shall be re-employed or permitted to work in the said processes unless the Factory Medical Officer, after further examination again certifies him fit for employment in those processes.
- 14B.** The person so suspended from the process shall be provided with alternate placement facilities unless he is fully incapacitated in the opinion of the Medical Officer, in which case the person affected shall be suitably rehabilitated.
- 15. Power of Chief Inspector-cum-Facilitator:-** The Chief Inspector-cum-Facilitator may grant exemptions from the operation of any of these rules where he is satisfied that their observance is not necessary for safeguarding the health of the employees.

SCHEDULE XIII

MANUFACTURE OF POTTERY

- 1. Definitions:-** For the purposes of this schedule,-
- (a) "Pottery" includes earthenware, stoneware, porcelain China, tiles, and any other articles made from clay or from a mixture containing clay and other materials such as quartz, flint, feldspar and gypsum.
 - (b) "Efficient exhaust draught" means localised ventilation effected by mechanical or other means for the removal of dust or fumes so as to prevent them from escaping into the air of any place in which work is carried on. No draught shall be deemed efficient which fails to remove effectively dust or fume generated at the point where dust or fume originates.
 - (c) "Fettling" includes scalloping, fowing, sand papering, sand sticking, brushing or any other process of cleaning of pottery ware in which dust is given off.
 - (d) "Bedding" means the placing of flatware in powdered flint or quartz for the biscuit firing when the sagger or box containing the ware is filled up with powdered flint or quartz.
 - (e) "Flinting" means the placing of flatware in powdered flints for the biscuit firing when the sagger or box containing the ware is not filled with powdered flint.

2. Efficient exhaust draught:- The following processes shall not be carried on without the use of the efficient exhaust draught,-

- (1) All processes involving the manipulation or use of a dry and unfitted lead compound.
 - (2) The fettling operations of any kind, whether of green ware or biscuit, provided that this shall not apply to the wet fettling and to the occasional finishing of pottery articles without the aid of mechanical power.
 - (3) The shifting of clay dust or any other material for making tiles or other articles by pressure, except where -
 - (a) this is done in a machine so enclosed as effectively to prevent the escape of dust, or
 - (b) the material to be shifted is so damp that no dust can be given off.
 - (4) The pressing of tiles from clay dust, an exhaust opening being connected with each press; this clause shall also apply to the pressing from clay dust of articles other than tiles, unless the material is so damp that no dust is given off.
 - (5) The fettling of tiles made from clay dust by pressure, except where the fettling is done wholly on or with damp material, this clause shall also apply to the fettling of other articles made from clay dust unless the material is so damp that no dust is given off.
 - (6) The processes of bedding and flinting.
 - (7) The brushing of earthen-ware biscuit, unless the process is carried on, in a room provided with efficient general mechanical ventilation or other ventilation, which is certified by the Inspector-cum-Facilitator as adequate, having regard to all the circumstances of the case.
 - (8) Fettling of biscuit-ware which has been fired in powdered flint or quartz except where this is done in machines so enclosed as effectively to prevent the escape of dust.
 - (9) Ware cleaning after the application of glaze by dipping or other process.
 - (10) Crushing any dry grinding of materials for pottery bodies unless carried on in machines so enclosed, as effectively to prevent the escape of dust.
 - (11) Sieving or manipulation of powdered flint unless it is so damp that no dust can be given off.
 - (12) Grinding of tiles on a power driven wheel unless an efficient water spray is used on the wheel.
 - (13) Removal of biscuit-ware from saggars packed with flint.
 - (14) Lifting and conveying of materials by elevators and conveyors unless they are effectively enclosed and so arranged as to prevent escape of dust into the air in or near to any place in which persons are employed.
 - (15) The preparation or weighting out of flow material, lawning of dry colours, colour dusting, colour-blowing and the making of lithographic transfers.
 - (16) In mould making the bins or similar receptacles used for holding Plaster of Paris unless they are provided with suitable covers.
- 3. Each of the following processes shall be carried on in such a manner and under such conditions as to secure effectual separation from one another and from other wet processes;**
- (a) dry grinding or sieving of materials, handling and manipulation of such materials, scouring, loading and unloading of saggars and drying of clay and green-ware.
 - (b) All processes involving the use of a dry lead compound.

4. Prohibition relating to young persons, pregnant women and lactating women:-

- (a) No young person, pregnant woman and lactating woman shall be allowed to work in any of the operations specified in paragraph 2 or at any place where such operations are carried on.

- (b) Women other than those specified above shall be allowed in the above works with provision of appropriate personal protective equipment only.
5. The potter's wheel (jolly and jigger) shall be provided with screens or constructed as to prevent clay scraps being thrown off beyond wheel.
6. (1) All practical means shall be taken by damping or otherwise to prevent dust arising during cleaning of floors.
- (2) Damp saw-dust or other suitable material shall be used to render the moist method effective in preventing dust rising into the air during the cleaning process which shall be carried out after work has ceased for the day and before 3 a.m. next morning.
7. The floors of potters, shop, slip houses, dipping houses and ware cleaning rooms shall be hard and impervious, and shall be thoroughly cleaned daily by a moist method by an adult male after work has ceased for the day, and before 3 a.m. next morning.

8. Medical facilities and records of examinations and tests:-

- (1) The occupier of every factory to which manufacture of pottery is carried on, shall,
- (a) employ a qualified Medical Practitioner who shall be known as Factory Medical Officer for medical surveillance of the employees employed therein,
- (b) provide to the said Factory Medical Officer all the necessary facilities for the purpose referred to in clause (a).
- (2) The record of medical examinations and appropriate tests carried out by the said Factory Medical Officer shall be maintained in a separate register, which shall be kept readily available for inspection by the Inspector-cum-Facilitator.

9. Medical Examination by a Factory Medical Officer :-

- (1) Every employee employed in any process mentioned under paragraph (3) shall be examined by a Factory Medical Officer within 15 days of his first employment. Such examinations include tests for lead in urine and blood, ALA in urine, hemoglobin content, slipping of cells and pulmonary function tests and chest X-ray for the others. No employee shall be allowed to work after 15 days of his first employment in the factory unless certified fit for such employment by the Factory Medical Officer.
- (2) All persons employed in any of the processes, include under sub-paragraphs a and b of paragraph 3 shall be examined by a Factory Medical Officer once in every three (3) calendar months. Those employed in any other processes mentioned in the remaining sub-paragraphs of paragraph 3 shall be examined by a Factory Medical Officer once every twelve months. Such examination in respect of all the employees shall include all the tests as specified in sub-paragraph (1) except chest X-ray which will be once in three (3) years.
- (3) The Factory Medical Officer after examining a employee, shall issue a certificate of fitness, the record of examination and re-examinations carried out shall be entered in the certificate and the certificate shall be kept in the custody of the manager of the Factory. The record of each examination carried out under sub-paragraphs (1) and (2), including the nature and the results of the tests, shall also be entered by the Factory Medical Officer in a health register.
- (4) The certificate of Fitness and the health register shall be kept available for inspection by the Inspector-cum-Facilitator.
- (5) If at any time the Factory Medical Officer is of the opinion that a employee is no longer fit for employment in the said processes on the ground that continuance therein would involve special danger to the health of the employee, he shall make a record of his findings in the said certificate and the health register. The entry of his findings in those documents should also include the period for which he considers that the said person is unfit for work in the said processes.
- (6) No person who has been found unfit to work in the said processes as said in sub-paragraph (5) above shall be re-employed or permitted to work unless the Medical

Officer, after further examination, again certifies him fit for employment in those processes.

- 9A. The person so suspended from the process shall be provided with alternate placement facilities unless he is fully incapacitated in the opinion of the Medical Officer, in which case the person affected shall be suitably rehabilitated.

10. Protective equipment:-

- (1) The occupier shall provide and maintain suitable overalls and head coverings for all persons employed in process included under sub-paragraph 2 of this paragraph.
- (2) The occupier shall provide and maintain suitable aprons of waterproof or similar material which can be sponged daily for the use of the dipper assistants and wore cleaners.
- (3) Aprons provided in pursuance of sub-paragraph (2) shall be thoroughly cleaned daily by the wearers by sponging or other wet processes. All over-all and head coverings shall be washed, cleaned and mended at least once a week, and this washing, cleaning or mending shall be provided for by the occupier.
- (4) No person shall be allowed to work in emptying sacks of dust materials, weighing out and mixing of dusty materials and charging ball mills and blungers without wearing a suitable and efficient respirator.
- (5) A suitable room or a portion of the factory suitably partitioned off shall be provided exclusively for the storage of all protective equipment supplied to the employees and no such equipment shall be stored in any place other than the room or place provided.

11. Washing facilities:- The occupier shall provide and maintain in a cleanly state and in good repair for the use of all persons employed in any of the processes specified in paragraph 2 a wash place under cover with either-

- (a)(i) a trough with a smooth impervious surface fitted with a waste pipe, without plug, and of sufficient length to allow at least two feet for every five such persons employed at any one time and having a constant supply of clean water from taps or jets above the trough at intervals of not more than two feet, or
- (ii) at least one tap or stand pipe for every five such persons employed at any one time, and having a constant supply of clean water, the tap or stand pipe being spaced not less than 4 feet apart, and (b) a sufficient supply of clean towels made of suitable material renewed daily with sufficient supply of nail brushes and soap.

12. Time allowed for washing:- Before each meal and before the end of the day's work, at least ten minutes, in addition to the regular meal time, shall be allowed for washing to each person employed in any of the processes mentioned in paragraph 2.

13. Mess room:-

- (1) There shall be provided and maintained for use of all persons remaining within the premises during the rest intervals, a suitable mess room providing accommodation of 10 square feet per head and furnished with,-
 - (i) a sufficient number of tables and chairs or benches with back rest,
 - (ii) arrangements for washing utensils,
 - (iii) adequate means for warming food,
 - (iv) adequate quantity of drinking water,
- (2) The room shall be adequately ventilated by the circulation of fresh air and placed under the charge of a responsible person and shall be kept clean.

14. Food, drinks, etc., prohibited in the work rooms:- No food, drink, pan and supan or tobacco shall be brought or consumed by any employee into any work room in which any of the processes mentioned in paragraph 2 is carried on and no person shall remain in any such room during intervals for meals or rest.

15. **Cloak room etc. :-** There shall be provided and maintained for the use of all persons employed in any of the processes mentioned in paragraph 2. -
- a cloak-room for clothing put off during working hours and such accommodation shall be separate from any mess-room;
 - separate and suitable arrangements for the storage of protective equipment provided under paragraph 10.
16. These regulations shall not apply to a factory in which any of the following articles but no other pottery is made. -
- unglazed or salt glazed bricks and tiles; and
 - architectural terra cotta made from plastic clay and either unglazed or glazed with a leadless glaze only
17. **Exemptions:-** If in respect of any factory the Chief Inspector-cum-Facilitator is satisfied that all or any of the provisions of this schedule are not necessary for the protection of the persons employed in such factory, he may by certificate in writing exempt such factory from all or any of such provisions subject to such conditions as he may specify therein. Such Certificate may at any time be revoked by the Chief Inspector-cum-Facilitator without assigning any reasons.

SCHEDULE-XIV

CHEMICAL WORKS

PART-I

1. **Application:-** This schedule shall apply to all manufacture and processes incidental thereto carried on in Chemical works.
2. **Definitions:-** For the purpose of this schedule. -
- "Chemical Works " means any factory or such part of any factory as are listed in appendix 'A' to this schedule.
 - "efficient exhaust draughts" means localised ventilation effected by mechanical or other means for the removal of gas, vapour, fume or dust to prevent it from escaping into the air of any place in which work is carried on.
 - "bleaching powder" means the bleaching powder commonly called chloride of lime;
 - "chlorate" means chlorate or perchlorate;
 - "caustic" means the hydroxide potassium or sodium;
 - "chrome process" means the manufacturing of chromate or bichromate of potassium or sodium or the manipulation, movement or other treatment of these substances;
 - "nitro or amino process" means the manufacture of a nitro or amino derivatives of phenol and of benzene or its homologues, and the making of explosives with the use of any of these substances;
 - the term 'permit to work system' means compliance with the procedures laid down under para 20 of part-II;
 - "toxic substances " means all those substances which when they enter into the human body, through inhalation or ingestion or absorption through skin, in sufficient quantities cause facility or exert serious affliction of health, or chronic harmful affects on the health of persons exposed to it due to its inherent chemical or biological effects. In respect of substances whose TLV is specified in **Rule 49**, exceeding the concentration specified therein would make the substance toxic.
 - "emergency" means a situation or condition leading to a circumstances or set of circumstances in which there is danger to the life or health of persons or which could result in big fire or explosion to the work and outside environment affecting the employees or neighbourhood in a serious manner, demanding immediate action;
 - "dangerous chemical reaction" means high speed reactions, run-away reaction, delayed reactions, etc., and are characterised by evolution of large quantities of heat.

intense release or toxic flammable gases or vapours, sudden pressure build-up etc.

- (l) "manipulation" means mixing, blending, filling, emptying, grinding, sieving, drying, packing, sweeping, handling, using etc.
- (m) "approved personal protective equipment" means items of personal protective equipment conforming to the relevant ISI specifications or in the absence of it, personal protective equipment approved by the Chief Inspector-cum-Facilitator
- (n) "appropriate personal protective equipment" means that when the "protective equipment" is used by the employee, he shall have no risk to his life or health or body; and
- (o) "confined space" means any space by reason of its construction shall as well as in relation to the nature of the work carried therein and where hazards to the persons entering into or working inside exist or are likely to develop during working.

PART - II

General Requirements

1. House keeping:-

- (1) Any spillage of materials shall be cleaned up before further processing.
- (2) Floor, platforms, stairways, passages and gangways shall be kept free of any obstructions.
- (3) There shall be provided easy means of access to all parts of the plant to facilitate cleaning.

2. Improper use of chemicals:- No chemicals or solvents or empty containers containing chemicals or solvents shall be permitted to be used by employees for any purposes other than in the processes for which they are supplied.

3. Prohibition on the use of food etc.:- No food drink, tobacco, pan or any edible item shall be stored or heated or consumed on or near any part of the plant or equipment.

4. Cautionary Notices and Instructions:-

- (1) Cautionary notices in a language understood by the majority of employees shall be prominently displayed in all hazardous areas drawing the attention of all employees about the hazards to health, hazards involving fire explosion and any other hazard such as consequences of tasting of material or substances used in the process or using any contaminated container for drinking or eating to which the employees' attention should be drawn for ensuring their safety and health.
- (2) In addition to the above cautionary notice, arrangements shall be made to instruct and educate all the employees including illiterate employees about the hazards, in the process including the specific hazards to which they may be exposed to, in the normal course of their work. Such instructions and education should also deal with the hazards involved in unauthorised and unsafe practices including the properties of substances used in the process under normal conditions as well as abnormal conditions and the precautions to be observed against each and every hazard. Further, an undertaking from the employees shall be obtained within one month of their employment and for old employees employed, within one month of coming into operation of the rules, to the effect that they have read the contents of the cautionary notices and instructions, understood them and would abide by them. The training and instructions to all employees and all supervisory personnel shall include the significance of different types of symbols and colours used on the labels struck or painted on the various types of containers and pipe lines.

5. Evaluation and provision safeguards before the commencement of process:-

- (1) Before commencing any process or any experimental work, or any new manufacture covered under Appendix 'A' the occupier shall take all possible steps to ascertain definitely all the hazards involved both from the actual operations and the chemical reactions including the dangerous chemical reactions. The properties of the raw materials used, the final products to be made, and any by-products derived during

manufacture, shall be carefully studied and provisions shall be made for dealing with any hazards including effects on employees, which may occur during manufacture.

- (2) Information in writing giving details of the process, its hazards and the steps taken or proposed to be taken from the design stage to disposal stage for ensuring the safety, as in sub-para (1) above should be sent to the Chief Inspector-cum-Facilitator at the earliest but in no case less than 15 days before commencing manufacture, handling, or storage of any of items covered under Appendix 'A' whether on experimental basis, or as pilot plant or as trial production, or as large scale manufacture.
 - (3) The design, construction, installation, operation, maintenance and disposal of the buildings, plant and facilities shall take into consideration effective safeguards against all the safety and health hazards so evaluated.
 - (4) The requirements under the sub-paragraphs (1) to (3) shall not act in lieu of or in derogation to, any other provisions contained in any Act governing the work.
- 6. Authorised entry:-** Authorised persons only shall be permitted to enter any section of the factory or plant where any dangerous operations or processes are being carried on or where dangerous chemical reactions are taking place or where hazardous chemicals are stored.

7. Examinations of instruments and safety devices:-

- (1) All instruments and safety devices used in the process shall be tested before taking into use and after carrying out any repair to them and examined once in a month, by a qualified and experienced person. Records of such tests and examinations shall be maintained in a register.
 - (2) All instruments and safety devices used in the process shall be operated daily or as often as it is necessary, to ensure its effective and efficient working at all times.
- 8. Electrical installations:-** All electrical installations used in the process covered in Appendix 'A' shall be of an appropriate type to ensure safety against the hazard prevalent in that area such as suitability against dust, dampness, corrosion, flammability and explosivity etc., and shall conform to the relevant Indian Standards Institution specifications governing their construction and use for that area.

9. Handling and storage of chemicals:-

- (1) The containers for handling and storage of chemicals shall be of adequate strength taking into consideration the hazardous nature of the contents. They shall also be provided with adequate labeling and colour coding arrangements to enable identification of the containers and their contents indicating the hazards and safe handling methods and shall conform to the respective Indian Standards Institution standards. The instructions given in the label shall be strictly adhered to. Damaged Containers shall be handled only under supervision of a knowledgeable and responsible person and spillage shall be rendered innocuous in a safe manner using appropriate means.
 - (2) The arrangement for the storage of chemicals including charging of chemicals in reaction vessels and containers shall be such as to prevent any risk of fire or explosion or formation of toxic concentration of substances.
 - (3) Without prejudice to the generality of the requirements in sub-paragraph(2) above, the arrangements shall have suitable ventilation facilities and shall enable the maintenance of safe levels in vessels and containers. Such arrangements shall also take into consideration, the type of flooring and the capacity of flooring and the compatibility requirements of substances with other chemicals stored nearby.
- (4)(a) Storage of chemicals and intermediate products, which are highly unstable or reactive or explosive shall be limited to the quantities required for two months use.
 - (b) whenever the quantities laid down in the above clause (a) are to be exceeded, the permission of the Chief Inspector-cum-Facilitator shall be obtained.
 - (c) Notwithstanding anything contained in clauses (a) and (b) above, the Chief Inspector-cum-Facilitator may direct any Factory carrying out processes covered in Appendix

'A' to further limit the storage of hazardous substances to quantities less than two months on considerations of safety.

- (5) Standby arrangements equal to the biggest container shall always be available to transfer the toxic substances quickly into the standby storage facility if any defect develops in any of the container resulting in the release of toxic substances or flammable substances.
 - (6) Any storage facility constructed using non-metallic material such as Fibre glass Reinforced Plastics (FRP), all glass vessels etc. shall have adequate strength to withstand the stress, if any, exerted by the contents and shall be properly anchored, working platforms, access ladders, pipe lines etc., used in such storage facility shall not have any support on the structure of the storage facility and shall be independently supported.
- 10. Facility for isolation:-** The plant and equipment shall be so constructed and maintained as to enable quick isolation of plant or part of plant or equipment, with appropriate indication. One copy of the layout plan indicating the isolation facilities shall always be available with the security personnel, the maintenance and the health and safety personnel and these isolation facilities shall be checked for its effectiveness once in a month.

11. Personal Protective Equipment:-

- (1) All employees exposed to the hazards in the process covered by this schedule shall be provided with appropriate and approved type of personal protective equipment. Such equipment shall be in a clean, sterile and hygienic condition before issue.
- (2) The occupier shall arrange to inform, educate and supervise all the employees in the use of personal protective equipment while carrying out the job.
- (3) As regards any doubt regarding the appropriateness of any personal protective equipment, the decision of the Chief Inspector-cum-Facilitator will be final.

12. Alarm Systems:-

- (1) Suitable and effective alarm system giving audible and visible indications, shall be installed at the control room as well as in all strategic locations so as to enable corrective action to be taken before the operational parameters exceed the predetermined safe levels or lead to conditions conducive for an outbreak of fire or explosion to occur. Such alarm systems shall be checked daily and tested every month at least once to ensure its performance efficiency at all times.
- (2) The Chief Inspector-cum-Facilitator may direct such system to be installed in case of plant or processes where toxic materials are being used and spillage or leakage of which may cause wide spread poisoning in or around the plant.

13. Control of escape of substances into the work atmosphere:-

- (1) Effective arrangements such as, enclosure, or by pass, or efficient exhaust draught, maintenance of negative pressure etc. shall be provided in all plants, containers, vessels, sewers, drains, flues, ducts, culverts, and buried pipes and equipment, to control the escape and spread of substances which are likely to give rise to fire or explosion or toxic hazards during normal working and in the event of accident or emergency.
- (2) In the event of the failure of the arrangements for control resulting in the escape of substances in the work atmosphere immediate steps shall be taken to control the process in such a manner that further escape is brought down to the safe level.
- (3) The substances that would have escaped into the work atmosphere before taking immediate steps as required in sub-paragraph (2), shall be rendered innocuous by diluting with air or water or any other suitable agent or by suitably treating the substances.

- 14. Control of dangerous chemical reactions:-** Suitable provision, such as automatic and or remote-control arrangements, shall be made for controlling the effects of dangerous chemical reactions. In the event of failure of control arrangements

automatic flooding or blanketing or other effecting arrangements shall come into operation.

15. Testing, examination and repair of plant and equipment:-

- (1) All parts of plant, equipment and machinery used in the process which in the likely event of their failure may give rise to an emergent situation shall be tested by a competent person before commencing process and retested once a year or after carrying out repairs to it. The competent persons shall identify the parts of the plant, equipment and machinery required to be tested as aforesaid and evolve a suitable testing procedures. In carrying out the test as mentioned above in respect of pressure vessels or reaction vessels the following precautions shall be observed namely:
 - (a) Before the test is carried out, each vessel shall be thoroughly cleaned and examined externally, and as far as practicable, internally also for surface defects, corrosion and foreign matter. During the process of cleaning and removal of sludge, if any, all due precautions shall be taken against fire or explosion, if such sludge is of phorophenic nature of contents spontaneously combustible chemicals.
 - (b) as soon as the test is completed, the vessel shall be thoroughly dried internally and shall be clearly stamped with the marks and figures indicating the person by whom testing has been done and the date of test; and
 - (c) any vessel which fails to pass the test or which for any other reasons is found to be unsafe for use shall be destroyed or rendered unusable under intimation to the Chief Inspector-cum-Facilitator.
- (2) All parts of plant, equipment, machinery which in the likely event of failure may give rise to an emergent situation shall be examined once in a month by the qualified and experienced person;
- (3) Records of testing and examination referred to in paragraphs (1) and(2) shall be maintained as long as that part of the plant, equipment and machinery are in use.
- (4) All repair work including alteration, modification and addition to be carried to the plant equipment and machinery shall be done under the supervision of a responsible person who shall evolve a procedure to ensure safety and health of persons doing the work. When repairs for modification is done on pipelines, and joints are required to be welded, but welding of joints shall be preferred. Wherever necessary, the person responsible shall regulate the aforesaid work through a 'permit to work system.

16. Staging:-

- (1) All staging that is erected for the purpose of maintenance work or repair work or for work connected with entry into confined spaces and used in the processes included in Appendix 'A' shall be stable, rigid and constructed out of substantial material of adequate strength. Such staging shall conform to the respective Indian Standard specific actions
- (2) Staging shall not be erected over any closed or open vessel unless the vessel is so constructed and ventilated to prevent exposure of persons working on the stages
- (3) All the staging constructed for the purpose of this para shall have appropriate access which are safe and shall be fitted with proper hand rails to a height of the one metre and toe board.

17. Seating arrangements:- The seating arrangements provided for the operating personnel working in processes covered in Appendix 'A' shall be located in a safe manner as to prevent the risk of exposure of toxic, flammable and explosive substances evolved in the work environment in the course of manufacture or repair or maintenance, either due to failure of plant and equipment or due to the substances which are under pressure, escaping into atmosphere

18. Entry into or work in confined spaces:-

- (1) The occupier of every factory to which the provisions of this schedule apply shall

ensure the observance of the following precautions before permitting any person to enter or work inside the confined spaces :-

- (a) identify all confined spaces and the nature of hazards that are encountered in such spaces, normally or abnormally and arrange to develop the most appropriate safeguards for ensuring the safety and health of persons entering into or working inside the confined spaces;
 - (b) regulate the entry or work inside the confined spaces through a 'permit to work system' which should include the safeguards so developed as required under clause (a) above;
 - (c) before testing the confined space for entry into work, the space shall be rendered safe by washing or cleaning with neutralising agents, or purging with steam or inert gases and making adequate forced ventilation arrangements or such measure which will render the confined space safe;
 - (d) shall arrange to carry out such tests as are necessary for the purpose by a qualified and experienced person and ensure that the confined space is safe for the persons to enter or work. Such testing shall be carried out as often as is necessary during the course of work to ensure its continued safety;
 - (e) Shall arrange to educate and train the personnel who would be required to work in confined spaces about the hazards involved in the work. He shall also keep in readiness the appropriate and approved personal protective equipment including arrangements for rescue, resuscitation and first aid, and shall arrange supervision of the work at all times by a responsible and knowledgeable person.
- (2) The manager shall maintain a log of all entry into or work, in, confined spaces and such record shall contain the work and such other details of persons assigned for the work, the location of the work and such other details that would have a bearing on the safety and health of the persons assigned for this work. The log book so maintained shall be retained as long as the concerned employees are in service and produced to the Inspector-cum-Facilitator when demanded.

19. Maintenance work etc.:-

- (1) All the work connected with the maintenance of plants and equipment including cleaning of empty containers which have held hazardous substances used in the processes covered in this Schedule, shall be carried out under 'permit to work system' employing trained personnel and under the supervision of responsible person, having knowledge of the hazards and precautions required to deal with them.
- (2) Maintenance work shall be carried out in such a manner that there is no risk to persons in the vicinity or the persons who pass by. If necessary, the place of such work shall be cordoned off or the presence of unconnected persons effectively controlled.

20. Permit to work system:- The permit to work system shall inter-alia include the observance of the following precautions while carrying out any specified work to be subjected to the permit to work system -

- (a) all work subject to the permit to work system shall be called out under the supervision of a knowledgeable and responsible person;
- (b) all parts of plant or machinery or equipment on which permit to work system is carried out shall remain isolated from other parts throughout the period of permit to work and the place of work including the parts of plant, machinery shall be rendered safe by cleaning, purging, washing etc.;
- (c) all work subject to the permit to work system shall have pre-determined work procedures which integrate safety with the work. Such procedures shall be reviewed whenever any change occurs in material or equipment so that continued safety is ensured;
- (d) persons who are assigned to carry out the permit work system shall be physically fit in all respects taking into consideration the demands and nature, of the work before

entering into the confined space. Such person shall be adequately informed about the correct work procedures as well as the precautions to be observed while carrying out the permit to work system.

- (e) adequate rescue arrangements wherever considered necessary and adequate first aid, rescue and resuscitation arrangements shall be available in good working condition near the place of work while carrying out the permit to work system, for use in emergency.
- (f) appropriate and approved personal protective equipment shall be used while carrying out the permit to work system; and
- (g) after completion of work subject to the permit to work system the person responsible shall remove all the equipment and tools and restore to the original conditions so as to prevent any danger while carrying out regular process.

21. Safety sampling personnel:- The occupier shall ensure the safety of persons assigned for collecting samples by instructing them on the safe procedures. Such personnel shall be provided with proper and approved personal protective equipment, if required.

22. Ventilation:- Adequate ventilation arrangements shall be provided and maintained at all times in the process area where dangerous or toxic or flammable or explosive substances could be evolved. These arrangements shall ensure that concentrations, which are either harmful or could result in explosion, are not permitted to be build up in the work environment.

23. Procedures for meeting emergencies:-

- (1) The occupier of every factory carrying out the works covered in Appendix 'A' shall arrange to identify all types of possible emergencies that could occur in the processes during the course of work or while carrying out maintenance work or repair work, the emergencies so identified shall be reviewed every year.
- (2) The occupier shall formulate a detailed plan to meet all such identified emergencies including arrangements for summoning outside help for rescue and fire fighting and arrangements for making available urgent medical facilities.
- (3) The occupier shall send the list of emergencies and the details of procedures and plans formulated to meet the emergencies, to the Chief Inspector-cum-Facilitator.
- (4) The occupier shall arrange to install distinctive and recognizable warning arrangements to caution all persons inside the plant as well as the neighbouring community, if necessary, to enable evacuation of persons and to enable the observance of emergency procedures by the persons who are assigned emergency duties. All concerned must be well informed about the warning arrangements and their meaning. The arrangements must be checked for its effectiveness every quarter.
- (5) Alternate power supply arrangements shall be made and interlocked with the normal power supply system so as to ensure constant supply of power to the facilities and equipment meant for compliance with requirements of this schedule.
- (6) The occupier shall arrange to suspend the further process work in a place where emergency is established and shall forthwith evacuate all persons in that area except employees who have been assigned emergency duties.
- (7) All the employees of the factory shall be trained about the action to be taken by them including evacuation procedures during emergencies.
- (8) All emergency procedures must be rehearsed every three months and deficiencies, if any, in the achievements of the objectives shall suitably be corrected.
- (9) The occupier shall arrange to have ten percent of the employees trained in the use of First Aid, Fire Fighting appliances and in the rendering of specific First Aid measures taking into consideration the special hazards of the particular process.
- (10) The occupier shall furnish immediately on the request the specific chemical identity of the hazardous substance to the treating physician when the information is needed to administer proper emergency or first-aid treatment to exposed persons.

24. Danger due to effluents:-

- (1) Adequate precautions shall be taken to prevent the mixing of effluents from different processes and operations which may cause dangerous or poisonous gases to be evolved.
- (2) Effluents which contain or give rise in the presence of other effluents to poisonous gases shall be provided with independent drainage systems to ensure that they may be trapped and rendered safe.

PART - III**Fire and Explosions Risks****1. Sources of ignition including lighting installation:-**

- (1) No internal combustion engine and no electric motor or other electrical equipment and fittings and fixtures capable of generating sparks or otherwise causing combustion or any other source of ignition or any naked light shall be installed or permitted to be used in the process area where there could be fire and explosion hazards.
- (2) All hot exhaust pipes shall be installed outside a building and other hot pipes or hot surface or surfaces likely to become hot shall be suitably protected.
- (3) The classification of work areas in terms of its hazard potential and the selection of electrical equipment or other equipment that could constitute a source of ignition shall be in accordance with the respective Indian Standard.
- (4) Where a flammable atmosphere may be prevalent or could occur, the soles of footwear worn by employees shall have no metal on them, and the wheels of trucks of conveyors shall be conductive type.
- (5) All tools and appliances used for work in this area shall be of non-sparking.
- (6) Smoking in process areas where there are risks of fire and explosion shall be prohibited, and warning notices in the language understood by majority of employees shall be posted in the factory prohibiting smoking into specified areas.

2. Static Electricity:-

- (1) All machinery and plant particularly, pipe lines and belt drives, on which static charge is likely to accumulate, shall be effectively earthed. Receptacles for flammable liquids shall have metallic connections to the earthed supply tanks to prevent static sparking. Where necessary, humidity shall be regulated.
- (2) Mobile tanker wagons shall be earthed during filling and discharge, and precautions shall be taken to ensure that earthing is effective before such filling or discharge taken place.

3. Lighting protection:- Lighting protection arrangement shall be fitted where necessary, and shall be maintained.

4. Process heating:- The method of providing heat for a process likely to result in fire and explosion shall be as safe as possible and where the use of naked flame is necessary, the plant shall be so constructed as to prevent any escaping flammable gas, vapour, or dust coming into contact with the flame, or exhaust gases, or other sources likely to cause ignition. Wherever possible, the heating arrangements shall be automatically controlled at a predetermined temperature below the danger temperature.

5. Leakage of inflammable liquids:-

- (1) Provisions shall be made to confine by means of bund walls, dykes, sumps etc., possible leakages from storage vessels containing flammable liquids.
- (2) Waste material in contact with flammable substances shall be disposed of suitably under the supervision of knowledgeable and responsible person.
- (3) Adequate and suitable fire-fighting appliances shall be installed in the vicinity of such vessels.

6. **Safety valves:-** Every still and every closed vessel in which gas is evolved or into which gas is passed, and in which the pressure is liable to rise above the atmospheric pressure, shall have attached to it a pressure gauge, and a proper safety relief arrangement by safety relief valve, rupture disc or other equally efficient means to receive the pressure. The safety relief arrangement shall include rupture disc of adequate size and capacity in case of glass lined reactors or other vessels where corrosive materials are handled. These appliances shall be maintained in good condition.
7. **Installation of pipe line etc.:-** All pipelines carrying flammable or explosive substances shall be protected from mechanical damage and shall be examined by a responsible person once in a week to detect any deterioration or defects, or accumulation of flammable or explosive substances, and record kept of any defects found and repairs made.

B. Fire fighting systems:-

- (1) Every factory employing more than 100 persons and carrying processes listed in Appendix 'A' shall provide-
- (a) Trained and responsible fire fighting squad so as to effectively handle the fire fighting and life saving equipment in the event of fire or other emergency. Number of persons in this squad will necessarily depend upon the size of risk involved but in no case shall be less than such trained persons to be available at any time. The squad shall consist of watch and ward personnel, fire pump man and departmental supervisors and operators trained in the operation of fire and emergency services.
 - (b) Squad leaders shall preferably be trained in a recognised institution and their usefulness enhanced by providing residence on the premises; and
 - (c) Squad personnel shall be provided with clothing and equipment including helmets, boots and belts.
- (2) A muster roll showing the duties allocated to each member of the squad shall be prepared and copies supplied to each leader as well as displayed in prominent places so as to be easily available for reference in case of emergency.
- (3) The pump man shall be thoroughly conversant with the location of all appliances. He shall be responsible for maintaining all fire fighting equipment in proper working order. Any defect coming to his notice shall be immediately be brought to the notice of squad leader.
- (4) As far as is practicable, the fire pump room and the main gates of the factory be connected to all manufacturing or storing areas through telephone interlinked and placed in a convenient location near such areas.

PART-IV

Risks of Toxic Substances

1. Leakage:-

- (1) All plants shall be so designed and constructed as to prevent the escape of toxic substance. Where necessary, separate buildings, rooms, or protective structures shall be used for the dangerous stages of the process and the buildings shall be so designed as to localise any escape of toxic substances.
- (2) Catch pits, bund walls, dykes, or other suitable safeguards shall be provided to restrict the serious effects of such leakages. Catch pits shall be placed below joints in pipelines where there is danger involved to maintenance and other employees from such leakage.

2. **Drainage:-** Adequate drainage shall be provided and shall lead to collection tanks specifically provided for this purpose wherein deleterious material shall be neutralised, treated or otherwise rendered safe before it is discharged into public drains or sewers.

3. Covering of Vessels:-

- (1) Every fixed vessel or structure containing any toxic substance and not so covered as to eliminate all reasonable risk of accidental contact of any portion of the body of employee, shall be so constructed as to avoid physical contact.
- (2) Such vessel shall, unless its edge is at least 90 cms. above the adjoining ground or platform, be securely fenced to a height of at least 90 cms. above such adjoining ground or platform.
- (3) Where such vessels adjoin and the space between them clear of any surrounding brick or other work is either less than 45 cms in width or is 45 or more cms in width, but is not securely fenced on both sides to a height of at least 90 cms, secure barriers shall be so placed as to prevent passage between them.

Provided that sub-paragraph (2) of this paragraph shall not apply to -

- (a) Saturators used in the manufacture of sulphate of ammonia, and
- (b) that part of the sides of brine evaporating pans which require raking, drawing or filling.

4. Continuous exhaust arrangement:-

- (1) Any process evolving toxic vapour, gas, fume and substance shall have efficient continuous exhaust draught, such arrangement shall be interlocked in the process control wherever possible.
- (2) In the event of failure of continuous exhaust arrangement, means shall be provided to automatically stop the process.

5. Work Bench:- All the work benches used in processes involving the manipulation of toxic substances, shall be graded properly and shall be made of smooth impervious surface which shall be washed daily after the completion of work.

6. Provision of LEL and Toxic Gas Detection Systems: The occupier shall provide suitable and adequate safety systems, including Lower Explosive Limit (LEL) and toxic gas detection devices with alarm, in all work areas where there is a likelihood of release of flammable or toxic gases. Such systems shall be maintained in good working order and tested periodically.

7. Provision of Oxygen Level Indicators in Closed Workrooms: The occupier shall provide suitable oxygen level indicators with alarm in all closed or confined workrooms of the factory, so as to continuously monitor oxygen concentration and to warn and caution workers in the event of oxygen depletion or enrichment.

8. Waste disposal:-

- (1) There shall be provided a suitable receptacle made of non absorbable material with a tightly fitting cover for depositing waste material soiled with toxic substances and the contents of such receptacle shall be destroyed by burning or using other suitable methods under the supervision of a responsible person.
- (2) During the course of manufacture, whenever any batch or intermediate products having toxicity is rejected on consideration of quality, sufficient precautions shall be taken to render them innocuous or otherwise treat them or inactive them, before disposal.
 - (3) The empty containers of toxic substances shall be cleaned thoroughly before disposal under the supervision of a responsible person.

PART-V

Special provisions

1. Special precautions for Nitro or Amino Processes:-

- (1) Unless the crystallized nitro or amino substances or any of its liquor is broken or agitated in a completely enclosed process so as not to give rise to dust or fume, such process shall be carried on under an efficient exhaust draught or by adopting any other suitable means in such a manner as to prevent the escape of dust or fume in the working atmosphere.

- (2) No part of the plant or equipment or implements which was in contact with nitro or amino compounds shall be repaired, or handled unless they have been emptied and thoroughly cleaned and decontaminated.
- (3) Filling of containers with nitro or amino compounds shall be done only by using a suitable scoop to avoid physical contact and the drying of the containers in the stove shall be done in such a manner that the hot and contaminated air from the stove is not drawn into the work room.
- (4) Processes involving steaming into or around any vessel containing nitro or amino compounds or its raw materials shall be carried out in such a manner that these steam or vapour is effectively prevented to be blown back into the working atmosphere.
- (5) Suitable antidotes such as methylene blue injections shall always be available at designated places of work for use during emergency involving the poisoning with nitro or amino compounds.

2. Special precautions for 'Chrome processes':-

- (1) Grinding and sieving of raw materials in chrome processes shall be carried on in such a manner and under such condition as to secure effective separation from any other processes and under an efficient exhaust draught.
- (2) There shall be washing facilities located very near to places where wet chrome processes such as leaching, acidification, sulphate settling, evaporation, crystallisation, centrifugation or packing are carried out, to enable quick washing of effected parts of body with running water.
- (3) Weekly inspection of hand and feet of all persons employed in chrome process shall be done by a qualified nurse and record of such inspections shall be maintained in a form approved by the Chief Inspector-cum-Facilitator.
- (4) There shall be always available at designated places of work suitable ointment such as glycerine, Vaseline etc. and water proof plaster in a separate box readily accessible to the employees so as to protect against perforation of nasal septum.

3. Special precautions for processes carried out in all glass vessels:-

- (1) Processes and chemical reactions such as manufacture of vinyl chloride, benzyl chloride etc. which are required to be carried out in all glass vessels shall have suitable means like substantial wire-mesh covering to protect persons working nearby in the event of breakage of glass vessel.
- (2) Any spillage or emission of vapour from all glass vessel due to breakage, shall be immediately inactivated or rendered innocuous by a suitable means such as dilution with water or suitable solvents so as to avoid the risks of fire or explosion or health hazard.

4. Special precautions for processes involving chlorate manufacture:-

- (1) Crystallisation, grinding or packing of chlorate shall not be done in a place used for any other purpose and such places shall have hard, smooth and impervious surface made of non-combustible material. The place shall be thoroughly cleaned daily.
- (2) The personal protective equipment overall, etc. provided for the chlorate employees shall not be taken from the place of work and they shall be thoroughly cleaned daily.
- (3) Adequate quantity of water shall be available near the place of chlorate process for use during fire emergency.
- (4) Wooden vessels shall not be used for the crystallisation of chlorate or to contain crystallised ground chlorate.

5. Special precautions in the use of plant and equipment made from reinforced plastics:-

- (1) All plant and equipments shall conform to appropriate Indian or any other National Standard.

- (2) Care shall be taken during storage, transport, handling and installation of plant and equipments to avoid accidental damage.
- (3) All plant and equipments shall be installed in such a way as to ensure that leads are distributed as intended in design or as per the recommendations of the manufacturers.
- (4) All pipe work shall be supported so that total loads local in the branches on the vessel or tank do not exceed their design values.
- (5) After erection all plant and equipments shall be subjected to a pressure test followed by a thorough examination by a competent person. A certificate of test and examination by competent person shall be obtained and kept available at site.
- (6) All plant and equipments shall be subjected to periodical test and examination and record maintained as per paragraph 15 in part-II of this schedule.
- (7) Plant and equipments during their use shall not be subjected to overfilling or overloading beyond rated capacity.

PART-VI

Medical Requirements

1. **Decontamination facilities:-** In all places where toxic substances are used in processes listed in Appendix 'A' the following provisions shall be made to meet an emergency.

(a) Fully equipped first aid box;

- (b) readily accessible means of drenching with water persons, parts of body of persons, and clothing of persons who have been contaminated with such toxic and corrosive substances, and such means shall be as shown in the Table below:

No. of persons employed at any time	No. of drenching showers
Upto 50 persons	2
Between 51 to 100	2
101 to 200	3
201 to 400	3+1 for every 50 persons thereafter
401 and above	3+1 for every 200 persons 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 time.

2. **Occupational health centre:-** In all the factories carrying out processes covered in Appendix 'A' there shall be provided and maintained in good order an occupational health centre with facilities as per scale laid down hereunder-

(1) For factories employing upto 50 employees-

- (a) The services of a qualified Medical Practitioner hereinafter known as Factory Medical Officer, available on a retainer ship basis, in his notified clinic near to the factory for seeking medical help during emergency. He will also carry out the pre-employment and periodical medical examination as stipulated in paragraph 4 of this part.
- (b) A minimum of five persons trained in first aid procedures, amongst whom at least one shall always be available during the working period.
- (c) A fully equipped first aid box.

(2) For factories employing 51 to 200 employees-

- (a) The occupational health centre shall have a room having a minimum floor area of 15 Sq.m. with floors and walls made of smooth, hard and impervious surface and shall be adequately illuminated, ventilated and equipped,
- (b) A part-time Factory Medical Officer will be in overall charge of the Centre who shall visit the factory minimum twice a week and whose services shall be readily available during emergencies;
- (c) There shall be one qualified and trained dresser-cum-compounder on duty throughout the working period,
- (d) A fully equipped first aid box.

3. For factories employing above 200 employees:-

- (a) There shall be one full-time Factory Medical Officer, for factories employing upto 500 employees and one more Factory Medical Officer for every 1000 employees or part thereof,
- (b) The occupational health centre in this case shall have a minimum of two (2) rooms each having a minimum floor area of 15 sq.m. with floors and walls made of smooth, hard and impervious surface and shall be adequately illuminated, ventilated and equipped,
- (c) There shall be one trained nurse, one dresser-cum-compounder and one sweeper cum ward boy throughout the working period;
- (d) The occupational Health Centre in this case shall be suitably equipped to manage medical emergencies.

3. Ambulance Van:-

- (1) In every factory carrying out processes covered in appendix 'A' there shall be provided and maintained in good condition, a suitably constructed and fully equipped ambulance van as per Appendix 'C', manned by a full-time driver-cum-mechanic and a helper, trained in first aid for the purposes of transportation of serious cases of accidents or sickness unless arrangements for procuring such facility at short notice during emergencies have been made with the nearby hospital or other places. The ambulance van shall not be used for any purpose other than purpose stipulated herein and will always be available near the occupational Health Centre.
- (2) The relaxation to procure Ambulance Van from nearby places provided for in sub-para (1) above will not be applicable to factories employing more than 500 employees.

4. Medical examination:-

- (1) Employees employed in processes covered in Appendix 'A' shall be medically examined by a Factory Medical Officer in the following manner-
 - (a) Once before employment, to ascertain physical suitability of the person to do the particular job.
 - (b) Once in a period of 5 months, to ascertain the health status of the employee, and
 - (c) The details of pre-employment and periodical medical examinations carried out as aforesaid shall be recorded.
- (2) Any finding of the Factory Medical Officer revealing any abnormality or unsuitability of any person employed in the process shall immediately be reported to the Medical Officer who shall in turn, examine the employees concerned and communicate his findings within thirty (30) days. If the Medical Officer is of the opinion that the person so examined is required to be suspended from the process for health protection he will direct the occupier accordingly, who shall not employ the said employee in the same process. However, the person so suspended from the process shall be provided with alternate placement facilities unless he is fully incapacitated in the opinion of the Medical Officer, in which case the person affected shall be suitably rehabilitated.

Provided that the Medical Officer on his own examine any other employee whom he

feels necessary to be examined for ascertaining the suitability of his employment in the process covered in Appendix 'A' or for ascertaining the health status of any other employee and his opinion shall be final.

- (3) No person shall be newly appointed without the certificate of fitness granted by the Factory Medical Officer. If the Factory Medical Officer declares a person unfit for being appointed to work in the process covered in Appendix 'A' such person shall have a right of appeal to the Medical Officer whose opinion shall be final in this regard.
- (4) The employee suspended from the process owing to the circumstances covered in sub-para (2) shall be employed again in the same process only after obtaining the Fitness Certificate from the Medical Officer and after making entries to that effect in the health register.

PART VII

Additional Welfare Amenities

1. Washing Facilities:-

- (1) There shall be provided and maintained in every factory for the use of all the employees taps for washing, at the rate of one tap for every fifteen (15) persons including liquid soap in a container with fitting arrangements and nail brushes or other suitable means for effective cleaning. Such facilities shall be conveniently accessible and shall be kept in a clean and hygienic condition.
- (2) If washing facilities as required above are provided for women such facilities shall be separate of them and adequate privacy at all times shall be ensured in such facilities.

2. Mess room facilities:-

- (1) The occupier of all the factories carrying out processes covered in Appendix 'A' and employing 50 employees or more, shall provide for all the employees working in a shift mess room facilities which are well ventilated and provided with tables and sitting facilities along with the provision of cold and hygienic drinking water facilities.
- (2) Such facilities shall include suitable arrangements for cleaning and washing and shall be maintained in a clean and hygienic condition.

3. Cloak room facilities:-

- (1) The occupier of every factory carrying out any process covered in Appendix 'A' shall provide for all the employees employed in the process cloak room facilities with lockers. Each employee shall be provided with two lockers, one for work clothing and another separately for personal clothing the lockers should be such as to enable the keeping of the clothing in a hanging position.
- (2) The cloak room facilities provided in pursuance of sub-para (1) shall be located as far as possible near to the facilities provided for washing in pursuance of sub-para 1(1). If it is not possible to locate the washing facilities, the cloak room facilities shall have adequate and suitable arrangements for cleaning and washing.

4. Special bathing facilities:-

- (1) The occupier of any factory carrying out the process covered under Appendix 'B' shall provide special bathing facilities for all the employees employed and such facilities shall be provided at the rate of 1 for 25 employees and part thereof, and shall be maintained in a clean and hygienic condition.
- (2) The occupier shall insist all the employees employed in the processes covered in Appendix 'B' to take bath after the completion of the day's shift work using the bathing facilities so provided and shall also effectively prevent such of those employees taking bath in any place other than the bathing facilities.
- (3) Notwithstanding anything contained in sub-para (1) above, the Chief Inspector-cum-Facilitator may require in writing the occupier of any factory carrying out any other process for which in his opinion bathing facilities are essential from the health point of view, to provide special bathing facilities.

PART-VIII**1. Duties of employees:-**

- (1) Every employee employed in the processes covered in Appendix 'A' and Appendix 'B' shall not make safety device or appliance or any guarding or fencing arrangement, inoperative or defective and shall report the defective condition of the aforesaid arrangements as soon as he is aware of any such defect.
- (2) Before commencing any work, all employees employed in processes covered in Appendix 'A' shall check their workplace as well as the machinery, equipment or appliance used in the processes and report any malfunction or defect immediately to the supervisor or any responsible person of the management.
- (3) All employees shall co-operate in all respects with the management while carrying out any work or any emergency duty assigned to them in pursuance of this schedule and shall always use all the personal protective equipments issued to them in a careful manner.
- (4) All employees employed in the processes covered in Appendix 'A' or Appendix 'B' shall not smoke in the process area or storage area. If special facilities are provided by the management only such facilities should be used.
- (5) All employees employed in the processes covered in Appendix 'A' shall not remain in unauthorised place or carryout unauthorised work or improvise any arrangements or adopt short cut method or misuse any of the schedule, in such a manner as to other employed.
- (6) The employees shall not refuse undergoing medical examination as required under these rules.

PART-IX**Restrictions on the employment of young persons under 18 years of age and women**

- (1) The Chief Inspector-cum-Facilitator may by an order in writing, restrict or prohibit the employment of pregnant woman, lactating woman and young persons under the age of 18, in any of the processes covered in Appendix 'A' of this schedule on considerations of health and safety of women and young persons.
- (2) Such persons who are restricted or prohibited from working in the process due to Chief Inspector-cum-Facilitator the order issued in pursuance of sub-para (1) above shall be provided with alternate work which is not detrimental to their health or safety.

PART-X**Exemptions**

- 1. Power of Exemption:-** The State Government or subject to the control of the State Government, the Chief Inspector-cum-Facilitator may exempt from the compliance with any of the requirements of this schedule partly or fully, any factory carrying out processes covered in Appendix 'A', if it is clearly and satisfactorily established by the occupier that the compliance with any of the requirement is not necessary to ensure the safety and health of persons employed suitable and effective alternate arrangements are available to any of the requirements covered in this schedule.

APPENDIX 'A'

Any works or that part of the works in which, -

- (a) the manufacture, manipulation or recovery of any of the following is carried on
 - (i) Sodium, Potassium, Iron, Aluminium, Cobalt, Nickel, Copper, Arsenic, Antimony, Chromium, Zinc, Selenium, Magnesium, Cadmium, Mercury, Neryllium and their organic and inorganic salts, alloys, oxides and hydroxides;
 - (ii) ammonia, ammonium hydroxide and salt of ammonia.
 - (iii) the organic or inorganic compounds of sulphurous, sulphuric, nitric, nitrous, hydrochloric, hydrofluoric, hydroiodic, hydrosulphuric, hydrobromic & boric.

- (iv) cyanogen compounds, cyanide compounds, cyanate compounds;
- (v) phosphorous and its compounds other than organo phosphorous insecticides;
- (b) hydrogen sulphide is evolved by the decomposition of metallic sulphides, or hydrogen sulphide is used in the production of such sulphides;
- (c) bleaching powder is manufactured or chlorine gas is produced in chloro-alkali plants;
- (d) (i) gas tar or coal tar or bitumen or shallow oil asphalt or any residue of such tar is distilled or is used in any process of chemicals manufacture
- (ii) tar based synthetic colouring matters or their intermediates are produced;
- (e) nitric acid is used in the manufacture of nitro compounds;
- (f) explosives are produced with the use of nitro compounds;
- (g) aliphatic or aromatic compounds or their metallic and non-metallic derivatives or substituted derivatives such as chloroform, glycol, formaldehyde, benzyl chloride, phenol, methyl ethyl ketone peroxide, cobalt carbonyl, tungsten carbide etc, are manufactured or recovered;
- (h) Drug and Drug Intermediates are manufactured or any other processes as notified by the State Government.

APPENDIX 'B'

1. Nitro or amido processes
2. All chromo processes
3. Processes of distilling gas or coal tar or processes of chemical manufacture in which tar is used
4. Processes involving manufacture, manipulation, handling or recovery of cyanogen compound, cyanide compound, cyanate compounds.
5. Processes involving manufacture of bleaching powder or production of chlorine gas in chloralkali plants.
6. Manufacture, manipulation or recovery of nickel and its compounds.
7. All processes involving the manufacture, manipulation or recovery of aliphatic or aromatic compounds or their derivatives or substituted derivatives.

APPENDIX 'C'

Ambulance

Ambulance should have the following equipment:

General

- An wheeled stretcher with folding and adjusting devices
- Head of the stretcher must be capable of being tilted upward;
- Fixed suction unit with equipments
- Fixed oxygen supply with equipments.
- Pillow with case
- Sheets;
- Blankets;
- Towels;
- Erexis bag;
- Bed pan
- Urinal
- Glass;

Safety Equipment

- Flares with life of 30 minutes
- Flood lights
- Flash lights
- Fire extinguisher dry powder type
- Insulated gauntlets

Emergency care equipments**Resuscitation**

- Portable suction unit
- Portable oxygen unit
- Bag-valve-mask, hand operated artificial ventilation unit
- Air ways
- Mouth gags

Tracheostomy adaptors

- Short spine board
- I.V. Fluids with administration unit
- B. P. Manometer
- Cuff
- Stethoscope

Immobilization

- Long & Short padded boards
- Wire ladder splints
- Triangular bandage
- Long & short spine boards

Dressings

- Gauze pads - 4" X 4"
- Universal dressing 10" X 36"
- Roll of aluminium foils
- Soft roller bandages 6" x 5 yards
- Adhesive tape in 3" roll
- Safety pins
- Bandage Sheets
- Burn Sheet

Poisoning

- Syrup of Ipecac
- Activated Charcoal Pre-Pocketed in doses
- Snake bite kit
- Drinking water

Emergency Medicines

- As per requirements (under the advice of Factory Medical Officer only)

SCHEDULE -XV**COMPRESSION OF OXYGEN AND HYDROGEN-PRODUCED BY THE ELECTROLYSIS OF WATER**

1. The room in which electrolyser plant is installed shall be separate from the plant for storing and compressing the Oxygen and Hydrogen and also the electric generator room.
2. The purity of Oxygen and Hydrogen shall be tested by a competent person at least once in every shift at the following points:-
 - (i) in the electrolysis room;
 - (ii) at the gas holder in-let; and
 - (iii) at the suction end of the compressor.

The purity figures shall be entered in the register and signed by the persons carrying out such tests.

Provided, however, that if the electrolyser plant is fitted with automatic recorder of purity of Oxygen and Hydrogen with alarm lights, it shall be sufficient if the purity of the gases are tested at the suction end of the compressor only.

3. The Oxygen and Hydrogen gases shall not be compressed if their purity as determined under paragraph 2 above falls below 98 per cent at any time.
4. The bell of any gas holder shall not be permitted to go within 30 cms. of its lowest position when empty and a limit switch shall be fitted to the gas holder in such a manner as to switch off the compressor motor when this limit is reached.
5. There shall be at least two gas holders for each kind of gas compressed and the gas holders for same gas shall be provided with suitable arrangements to ensure that no gas holder is connected to the compressor and to electrolyser at the same time, and only one gas holder is connected to the compressor line at any one time.
6. The water and caustic soda used for making lye shall be chemically pure within pharmaceutical limits.
7. Electrical connections at the electrolyser cells and at the electric generator terminals shall be so constructed as to preclude the possibility of wrong connections leading to the reversal of polarity and in addition an automatic device shall be provided to cut off power in the event of reversal of polarity owing to wrong connections either at the switch board or at the electric generator terminals.
8. Oxygen and Hydrogen pipes shall be painted with distinguishing colours and in the event of leakage in the joints of the hydrogen gas pipe, the pipe after reconnection shall be purged of all air before drawing in hydrogen gas.
9. All electrical wiring and apparatus in the electrolyser room shall be of flame-proof construction or enclosed in flame-proof fittings and no naked light or flame shall be allowed to be taken either in the electrolyser room or where compression and filling of gases is carried on and such warning notices shall be exhibited in prominent places.
10. No part of the electrolyser plant and the gas holders and compressor shall be subjected to welding, brazing, soldering or cutting until steps have been taken to remove any explosive substance from that part and render the part safe for such operations and after the completion of such operations no explosive substance shall be allowed to enter that part until the metal has cooled sufficiently to prevent risk of explosion.
11. No work of operation, repair or maintenance shall be undertaken except under the direct supervision of a person who, by his training, experience and knowledge of the necessary precautions against risk of explosion is competent to supervise such work. No electric generator after erection or repairs shall be switched on to the electrolyzers unless the same is certified by the competent persons under whose direct supervision erection or repairs are carried on to be in a safe condition and the terminals have been checked for the polarity as required by paragraph 7.
12. Every part of the electrolyser plant and the gas holders and compressor shall have a regular schedule of overhaul and checking and every defect noticed shall be rectified forthwith.

SCHEDULE-XVI

MANIPULATION OF STONE OR ANY OTHER MATERIAL CONTAINING FREE SILICA

1. **Application:-** This schedule shall apply to all factories or parts of factories in which manipulation of stone or any other material containing free silica is carried on.
2. **Definitions:-** For the purpose of this schedule-
 - (a) "manipulation " means crushing, breaking, chipping, dressing, grinding, sieving, mixing, grading or handling of stone or any other material containing free silica or any other operation involving such stone or materials.
 - (b) "stone or any other material containing free silica" means a stone or any other solid material containing not less than 5% by weight of free silica.
3. **Precautions in manipulation:-** No manipulation shall be carried out in factory or part of a factory unless one or more of the following measures,

- (a) damping the stone or other material being processed;
 (b) providing water supply;
 (c) enclosing the process;
 (d) isolation the process; and
 (e) providing localized exhaust ventilation, are adopted so as to effectively control the dust in any place in the factory where any person is employed, at a level equal to or below the maximum permissible level for silica dust as laid down in the table:

TABLE

Substance	Permissible time weighted average concentration
1. Silica	
(a) <i>crystalline</i>	
(i) Quartz	
In terms of dust count	1060 / % Quartz + 10 mpp cm
In terms of respirable dust	10 / % respirable Quartz + 2 mg cub m
In terms of total dust	30 / % Quartz + 3 mg cub m
(ii) Cristobalite	Half of the limits given against quartz
(iii) Tridymite	Half of the limits given against quartz
(iv) Silica fused	Same limit as for quartz
(v) Tripoli	Same limit as in formula in item 2 given against quartz
(b) <i>Amorphous</i>	705 mpp cm
2. Silicate having less than 1% free silica weight	
Asbestos (fibres longer than 5 microns)	2 fibres/cub.cm
Mica	705 mpp cm
Mineral wool fibre	10 mg / cu. m
Portland cement	1060 mpp cm
Portland cement	1060 mpp cm
Soap stone	705 mpp cm
Talc (non Bostiform)	Same limit as for asbestos
Talco (fibrous)	Same limit as for asbestos
Tromolite	Same limit as for asbestos
3. Coal dust	
1 For airborne dust having less than 5%	2 mg / cu. m

silicon dioxide by weight	
2. For airborne dust having less than 5% silicon dioxide	Same limits as prescribed by formula in item (2) against quartz.

Provided that such measures as above said are not necessary if the process or operation itself is such that the level of dust created and prevailing does not exceed the permissible level preferred to.

4. Maintenance of floors:-

- (1) All floors or places where fine dust is likely to settle on and whenever any person has to work or pass shall be of impervious material and maintained in such condition that they can be thoroughly cleaned by a moist method or any other method which would prevent dust being airborne in the process of cleaning.
- (2) The surface of every floor of every work room or place where any work is carried on or where any person has to pass during the course of his work, shall be cleaned of dust once at least during each shift after being sprayed with water or any other suitable method so as to prevent dust being airborne in the process of cleaning.

5. Prohibition relating young persons:- No young person shall be employed or permitted to work in any of the operations involving manipulation or at any place where such operations are carried on.

6. Medical facilities and records of examinations and tests:-

- (1) The occupier of every factory to which the schedule applies, shall, -
 - (a) employ a qualified Medical Practitioner who shall be known as Factory Medical Officer for medical surveillance of the employees employed therein whose employment shall be subject to the approval of the Chief Inspector-cum-Facilitator; and
 - (b) Provide to the said Factory Medical Officer all the necessary facilities for the purpose referred to in clause (a).
- (2) The record of medical examination and appropriate tests carried out by the said Factory Medical Officer shall be maintained in a separate register approved by the Chief Inspector-cum-Facilitator, which shall be kept available for inspection by the Inspector-cum-Facilitator.

7. Medical examination by a Factory Medical Officer :-

- (1) Every employee employed in the process specified in paragraph, shall be examined by a Factory Medical Officer within fifteen (15) days of his first employment. Such medical examination shall include pulmonary function tests and chest X-ray. No employee shall be allowed to work after fifteen (15) days of his first employment in the factory unless certified fit for such employment by the Factory Medical Officer.
- (2) Every employee employed in the said processes shall be re-examined by a Factory Medical Officer at least once in every twelve months. Such examination shall, wherever the Factory Medical Officer considers appropriate, include all the tests as specified in sub-paragraph (1) except chest X-ray which will be once in three (3) years.
- (3) The Factory Medical Officer after examining a employee, shall issue a certificate of Fitness. The record of re-examinations carried out shall be entered in the certificate and the Certificate shall be kept in the custody of the Manager of the Factory. The record of each examination carried out under sub-paragraphs (1) and (2), including the nature and the results of the tests, shall also be entered by the Factory Medical Officer in a health register.
- (4) The certificate of fitness and the health register shall be kept readily available for

inspection by the Inspector-cum-Facilitator

- (5) If at any time the Factory Medical Officer is of the opinion that a employee is no longer fit for employment in the said processes on the ground that continuance therein would involve special danger to the health of the employee, he shall make a record of his findings in the said certificate and the health register. The entry of his findings in those documents should also include the period for which he considers that the said person is unfit for work in the said processes.
- (6) No person who has been found unfit to work as said in sub-paragraph(5) above shall be re-employed or permitted to work in the said processes unless the Factory Medical Officer, after further examination, again certifies him fit for employment in those processes.
8. The person suspended from the process shall be provided with alternate placement facilities unless he is fully incapacitated in the opinion of the medical officer, in which case the person affected shall be suitably rehabilitated.
9. **Exemptions:-** If in respect of any factory, the Chief Inspector-cum-Facilitator is satisfied that owing to the exceptional circumstances or infrequency of the processes or for any other reason, all or any of the provisions of this schedule is not necessary for protection of the employees in the factory, the Chief Inspector-cum-Facilitator may by a certificate in writing, which he may in his discretion revoke at any time, exempt such factory from all or any of such provisions subject to such conditions, if any, as he may specify therein.

SCHEDULE-XVII

HANDLING AND PROCESSING OF ASBESTOS, MANUFACTURE OF ANY ARTICLE OF ASBESTOS AND ANY OTHER PROCESS OF MANUFACTURE OTHERWISE IN WHICH ASBESTOS IS USED IN ANY FORM

1. Application:-

- (1) This Schedule shall apply to all "manufacturing process" as defined under clause (z) of section 2(1) of the code, carried on in a factory involving exposure of workers to asbestos and/or product containing Asbestos, viz.
 - (a) breaking, crushing, disintegrating, opening, grinding mixing or serving of asbestos and any other processes involving handling and manipulation of asbestos incidental thereto,
 - (b) all processes in the manufacture of asbestos textiles including preparatory and finishing processes,
 - (c) making or insulation slabs or sections, composed wholly or partly of asbestos, and processes incidental thereto,
 - (d) making or repairing of insulating mattresses, composed wholly or partly of asbestos, and processes incidental thereto,
 - (e) manufacture of asbestos cardboard and paper,
 - (f) manufacture of asbestos cement goods,
 - (h) application of asbestos by spray method,
 - (i) sawing, grinding, turning, abrading and polishing in dry state of articles composed wholly or partly of asbestos,
 - (j) cleaning of any room, vessel, chamber, fixture or appliance for the collection of asbestos dust, and
 - (k) any other processes in which asbestos dust is given off into the work environment.
- (2) The Government may at any time, for the purpose of giving effect to any scientific proof obtained from specialized institutions or experts in the field, notification in the Official Gazette, make suitable changes in the said schedule.
- (3) The provisions of this schedule shall apply to all workers exposed to asbestos in the factory and it shall be the responsibility of the occupier of the factory to comply with

the provisions of the schedule in respect of the workers

- (4) (a) The occupier of the factory wherein asbestos or substances containing asbestos are in use, shall prepare work procedures and practices, in the light of scientific research and technological progress for approval by the Chief Inspector-cum-Facilitator and shall follow only such approved procedures
- (b) Notwithstanding anything mentioned in sub-paragraph (1) use of asbestos is prohibited in the manufacturing process as may be notified by the Government in this behalf.
- (c) (i) Spraying of all forms of asbestos is prohibited in a factory.
- (ii) The prohibition in respect of spraying of asbestos referred to in sub-para (i) may be exempted by the Chief Inspector-cum-Facilitator if the Occupier represents that such spraying is inevitable certain purposes provided adequate measures for ensuring the safety and health of workers are undertaken by the occupier to the satisfaction of the Chief Inspector-cum-Facilitator.

2. Definitions:- For the purpose of this schedule-

- (a) "Asbestos" means any fibrous silicate mineral and any admixture containing actinolite, amosite, anthophyllite, chrysotile, crocidolite, tremolite or any mixture thereof, whether crude, crushed or opened.
- (b) "asbestos textiles" means yarn or clothes composed of asbestos or asbestos mixed with any other materials.
- (c) "approved" means approved for the time being in writing by the Chief Inspector-cum-Facilitator.
- (d) "breathing apparatus" means a helmet or face piece with necessary connection by means of which a person using it breathes air free from dust, or any other approved apparatus.
- (e) "efficient exhaust draught" means localized ventilation by mechanical means for the removal of dust so as to prevent dust from escaping into air of any place in which work is carried on. No draught shall be deemed to be efficient which fails to control dust produced at the point where such dust originates;
- (f) "Preparing" means crushing, disintegrating, and any other processes in or incidental to the opening of asbestos;
- (g) "Protective clothing" means overalls and head covering which (in either case) will when worn exclude asbestos dust;
- (h) "asbestos dust" means airborne particles of asbestos or settled particles of asbestos which are liable to become airborne in the factory;
- (i) "airborne asbestos dust" means for the purposes of measurement, dust particles measured by gravimetric assessment or other equivalent method.
- (j) "repairable asbestos fibers" means asbestos fibers having diameter of less than three (3) micrometer and a length to diameter ratio greater than 3:1.
- (k) "exposure to asbestos" means exposure to airborne repairable asbestos fibers or asbestos dust, whether originating from asbestos or from minerals, materials or products containing asbestos in the factory

2-A. Demolition of plants or structures:- No person shall carry out any demolition of plants or structures containing friable asbestos insulation material and removal of asbestos from building or structures in which asbestos is liable to become air-borne, unless he is recognized and duly empowered by the Chief Inspector-cum-Facilitator of Factories as qualified to carry out such work in accordance with the provisions of this Schedule.

3. Tools and Equipment:- Any tools or equipment used in processes to which this schedule applies shall be such that they do not create asbestos dust above the permissible limit or are equipped with efficient exhaust draught.

4. Exhaust draught:-

- (1) An effective exhaust draught shall be provided and maintained to control dust from the following processes and machines as per the relevant National Standards.
 - (a) manufacture and conveying machinery namely -
 - (i) Preparing, grinding or dry mixing machines,
 - (ii) carding, card waste and ring spinning machines, and looms;
 - (iii) machines or other plant fed with asbestos, and
 - (iv) machines used for the sawing, grinding, turning, drilling, abrading or polishing, in the dry state, of articles composed wholly or partly of asbestos.
 - (b) Cleaning, and grinding of the cylinders or other parts of a carding machine;
 - (c) Chambers, hoppers or other structures into which loose asbestos is delivered or passes;
 - (d) Work-benches for asbestos waste sorting or for other manipulation of asbestos by hand;
 - (e) Workplaces at which the filling or emptying of sacks, skips or other portable containers, weighing or other process incidental thereto which is effected by hand, is carried on;
 - (f) Sack cleaning machines;
 - (g) Mixing and blending of asbestos by hand, and
 - (h) Any other process in which dust is given off into the work environment
- (2) Exhaust ventilation equipment provided in accordance with sub-paragraph (1) shall, while any work of maintenance or repair to the machinery, apparatus or other plant or equipment in connection with which it is provided is being carried on, be kept in use so as to produce an exhaust draught which prevents the entry of asbestos dust into the air of any workplace.
- (3) Arrangements shall be made to prevent asbestos dust discharged from exhaust apparatus being drawn into the air of any work room.
- (4) The asbestos bearing dust removed from any workroom by the exhaust system shall be collected in suitable receptacles or filter bags which shall be isolated from all work areas.

5. Testing and examination of ventilating systems:-

- (1) All ventilating systems used for the purpose of extracting or suppressing dust as required by this schedule shall be as per the relevant Indian Standards, examined and inspected once every week by a responsible person. It shall be thoroughly examined and tested by a competent person once in every period of twelve (12) months. Any defects found by such examinations or test shall be rectified forthwith.
- (2) A register containing particulars of such examination and tests and the state of the plant and the repairs or alterations (if any) found to be necessary shall be kept and shall be available for inspection by an Inspector-cum-Facilitator.

6. Segregation in case of certain process:- Mixing or blending of asbestos by the hand or making or repairing of insulating mattresses composed wholly or partly of asbestos shall not be carried on in any room in which any other work is done.

7. Storage and distribution of loose asbestos:- All loose asbestos shall, while not in use, be kept in suitable closed receptacles which prevent the escape of asbestos dust there from. Such asbestos shall not be distributed within a factory except in closed receptacles or in a totally enclosed system of conveyance.

8. Asbestos sacks:-

- (1) All sacks used as receptacles for the purpose of transport of asbestos within the factory shall be constructed of impermeable materials and shall be kept in good repair.

- (2) A sack which has contained asbestos shall not be cleaned by hand beating but by a machine complying with paragraph 4, of this Schedule.
- (3) Asbestos sacks or receptacles which contain asbestos shall be disposed off in a safe manner.

9. Maintenance of floors and work places:-

- (1) In every room in which any of the requirements of this schedule apply -
- (a) the floors, work-benches, machinery and plant shall be kept in a clean state and free from asbestos debris and suitable arrangements shall be made for the storage of asbestos not immediately required for use, and
- (b) the floors shall be kept free from any materials, plant or other articles not immediately required for the work carried on in the room, which would obstruct the proper cleaning of the floor.
- (2) The cleaning as mentioned in sub-rule (1) shall, so far as is practicable, be carried out by means of vacuum-cleaning equipment so designed and constructed and so used that asbestos dust neither escapes nor is discharged into the air of any workplace.
- (3) When the cleaning is done by any method other than that mentioned in subparagraph (2), the persons doing cleaning work and any other person employed in that room shall be provided with respiratory protective equipment and protective clothing.
- (4) The vacuum-cleaning equipment used in accordance with provisions of subparagraph (2), shall be properly maintained and after each cleaning operation, its surface kept in a clean state and free from asbestos waste and dust.
- (5) Asbestos waste shall not be permitted to remain on the floors or other surfaces at the workplace at the end of the working shift and shall be transferred without delay to suitable receptacles. Any spillage of asbestos waste occurring during the course of the work at any time shall be removed and transferred to the receptacles maintained for the purpose without delay.

- 9A.** The occupier shall replace asbestos or of certain types of asbestos or products containing asbestos by other materials or products or shall use alternative technology, scientifically evaluated as harmless or less harmful, wherever this is possible.
- 9B.** The occupier should take all the measures to prevent or control the release of asbestos into the air and to ensure that the exposure limits or other exposure criteria are complied with and also reduce exposure to as low as a level as is reasonably practicable.

10. Breathing Apparatus, Personnel Protective Equipment and Clothing:-

- (1) The occupier of every factory to which this schedule applies shall provide to workers personnel protective equipments such as hand gloves, shoes, helmets, goggles, earplugs, aprons, safety belt, overall suit, etc., as per the relevant National or International Standards as may be required.

The approved breathing apparatus and appropriate work clothing as per the relevant National or international standards in consultation with the workers representatives and maintained in good conditions for use of every person employed,-

- (a) in chambers containing loose asbestos;
- (b) in cleaning, dust settling or filtering chambers of apparatus;
- (c) in cleaning the cylinders, including the defler cylinders or other parts of a carding machine by means of hand-stickles;
- (d) in filling, beating or levelling in the manufacture or repair of insulating mattresses; and
- (e) in any other operation or circumstances in which it is impracticable to adopt technical means to control asbestos dust in the work environment within the permissible limit.

- (2) Suitable accommodation in conveniently accessible position shall be provided for the use of persons when putting on or taking off breathing apparatus and protective clothing provided in accordance with sub-paragraph (1) and for the storage of such apparatus and clothing when not in use.
- (3) All breathing apparatus and protective clothing not in use shall be stored in the accommodation provided in accordance with sub-paragraph (2) above.
- (4) All protective clothing in use shall be de-dusted under an efficient exhaust draught or by vacuum cleaning and shall be washed at suitable intervals. The cleaning schedule and procedure should be such as to ensure efficiency in protecting the wearer.
- (5) All breathing apparatus shall be cleaned and disinfected at suitable intervals and thoroughly inspected once every month by a responsible person.
- (6) A record of the cleaning and maintenance and of the condition of the breathing apparatus shall be maintained in a register provided for that purpose which shall be readily available for inspection by an Inspector-cum-Facilitator.
- (7) No person shall be employed to perform any work specified in sub-paragraph (1) for which breathing apparatus is necessary to be provided under that sub-paragraph unless he has been fully instructed in the proper use of that equipment.
- (8) No breathing apparatus provided in pursuance of sub-paragraph (1) which has been worn by a person shall be worn by another person unless it has been thoroughly cleaned and disinfected since last being worn and the person has been fully instructed in the proper use of that equipment.
- (9) No worker shall take home any work clothing or special protective clothing or personal protective equipment provided to him for protection against exposure to asbestos.

11. Separate accommodation for personal clothing:- A separate accommodation shall be provided in a conveniently accessible position for all persons employed in operations to which this schedule applies for storing of personal clothing. This should be separated from the accommodation provided under sub-paragraph (2) of paragraph 10 to prevent contamination of personal clothing.

12. Washing and bathing facilities:-

- (1) There shall be provided and maintained in a clean state and in good repair for the use of all workers employed in the processes covered by the schedule, adequate washing and bathing places having a constant supply of water under cover at the rate of one such place for every fifteen (15) persons employed.
- (2) The washing places shall have standpipes placed at intervals of not less than one meter.
- (3) Not less than one half of the total number of washing places shall be provided with bathrooms.
- (4) Sufficient supply of clean towels made of suitable material shall be provided. Provided that such towels shall be supplied individually for each worker if so ordered by the Inspector-cum-Facilitator.
- (5) Sufficient supply of soap and nail brushes shall be provided.

13. Messroom:-

- (1) There shall be provided and maintained for the use of all workers employed in the factory covered by this Schedule, remaining on the premises during the rest intervals, a suitable mess room which shall be furnished with
 - (a) Sufficient tables and benches with back rest; and
 - (b) adequate means for warming food.

14. Prohibition of employment of young persons:- No young person shall be employed in any of the process covered by this Schedule.

15. Prohibition relating to smoking:- No person shall smoke in any area where processes covered by this schedule are carried on. A notice in the language

understood by majority of the workers shall be posted in the plant prohibiting smoking at such areas.

- 16. Pictorial Cautionary Notices:**-Cautionary notices in the form specified in appendix and printed in the language easily read and understood by the majority of the workers shall be displayed in prominent places in the workrooms where asbestos or substances containing asbestos are manufactured, handled or used.

17. Air Monitoring:-

To ensure the effectiveness of control measures in continuous or repetitive processes, the monitoring of asbestos fibres in air as well as personal monitoring of workers shall be carried out at least once in every shift and the result so obtained shall be entered in register and

- (a) There should be no substantial change in workplace conditions
- (b) The results of the two (2) preceding measurements have not exceeded half the relevant control limit.
- (c) All factories should adopt membrane filter test as per the relevant National standards without fail.

18. Medical Control Measures:-

- (1) The occupier of every factory in which a worker employed in the processes specified in sub-paragraph(1) of paragraph 10, shall ensure that every worker employed be examined by a Registered medical practitioner within fifteen (15) days of his first employment. Such medical examination shall include sputum examination for asbestos bodies, pulmonary function test and chest X Ray-Posterior Anterior (PA) view to be compared with standard International Labour Organization Radiographs on Pneumoconiosis. No worker shall be allowed to work after 15 days of his first employment in the factory unless certified fit for such employment by the Registered medical practitioner.
- (2) Every worker employed in the said processes shall be re-examined by a Registered medical practitioner at least once in every twelve months. Such re-examination shall, wherever the Registered medical practitioner considers appropriate, include all the tests as specified in sub-paragraph (1) except chest X-ray which shall be read by a radiologist specialized/ trained in the field of reading International Labour Organization Radiographs on Pneumoconiosis and the chest x-ray which shall be carried out at least once in 3 years.
- (3) Every worker employed in any of the aforesaid processes on the date on which the schedule comes into force shall be radiological examined by the qualified Radiologist at the cost of the occupier using a standard size x-ray plates and the power of the X Ray machine shall be more than 300 milli ampere (mA). The report of such X Ray shall be submitted to the Medical Inspector of Factories / Medical Officer / Chief Inspector-cum-Facilitator for within three months of the said date.
- (4) If at any time the Medical Inspector of Factories / Medical Officer is of the opinion that a worker is no longer fit for employment in the said process on the ground that continuance therein would involve special danger to the health of the worker he shall make a record of his findings in the said Certificate and the health register. The entry of his findings in these documents should also include the period for which he considers that the said person is unfit for work in the said processes. The person suspended from the process shall be provided with alternate placement facilities unless he fully is incapacitated in the opinion of the Medical officer, in which case the person affected shall be suitably rehabilitated.
- (5) No person who has been found unfit to work as said in sub-paragraph (4) above shall be re-employed or permitted to work in the said processes unless the Medical Officer, after further examination, again certifies him fit for employment in those processes.
- (5) If a worker already in employment and declared unfit by the Medical Inspector of Factories/Medical Officer shall not be allowed to work on any of the processes specified in sub-paragraph (1) of paragraph 10, unless he has been examined again

along with standard size chest x-ray plate from a qualified Radiologist, at the cost of the occupier and has been certified to be fit to work on the said processes again.

- (7) For the purpose of medical supervision by the Medical Practitioner/Medical Officer so appointed by the occupier shall be provided for his exclusive use a room in the factory premises which shall be properly cleaned, adequately lighted ventilated and furnished with a screen, a table with office stationery, chairs and other facilities and other instruments including x-ray arrangements for such examinations and such other equipments as may be prescribed by the Chief Inspector-cum-Facilitator from time to time. The medical practitioner so appointed shall perform the following duties :-
- (a) maintain health register;
 - (b) undertake medical supervision of persons employed in the factory;
 - (c) look after health, education and rehabilitation of the sick, injured or affected workers;
 - (d) carry out inspection of work rooms where dangerous operations are carried out and advise the management of the measures to be adopted for the protection of health of the workers employed therein.
- (8) The Health records of the workers exposed to asbestos, shall be kept up to a minimum period of forty (40) years from the beginning of the employment or fifteen (15) years after retirement or cessation of the employment, whichever is later and shall be accessible to workers concerned or their representatives.
- (9) The record of medical examinations and appropriate tests carried out by the said medical practitioner, a certificate of fitness and health shall be maintained in separate register approved by the Chief Inspector-cum-Facilitator of Factories, which shall be kept readily available for inspection by the Inspector-cum-Facilitator and produce on demand.

19. Exemptions:-

- (1) If in respect of any factory, the Chief Inspector-cum-Facilitator is satisfied that owing to the exceptional circumstances or in frequency of the processes or for any other reason, all or any of the provisions of this schedule is not necessary for protection of the workers in the factory, the Chief Inspector-cum-Facilitator may by a certificate in writing, which he may at his discretion revoke at any time, exempt such factory from all or any of such provisions subject to such conditions, if any, as he may specify therein.
- (2) The Chief Inspector-cum-Facilitator may permit temporary derogation, through a notification in an official gazette, from the measures prescribed in this Schedule under conditions and within limits of time determined after consultation with the representative organizations of employers and workers concerned.

SCHEDULE-XVIII

HANDLING AND MANIPULATION OF CORROSIVE SUBSTANCES

1. **Definitions:-** For the purposes of this schedule:-

- (a) "Corrosive operation" - means an operation of manufacturing, storing, handling, processing, packing, or using any corrosive substance in a factory;
- (b) "Corrosive substance" includes sulphuric acid, nitric acid, Hydrochloric acid, hydrofluoric acid, carboric acid, phosphoric acid, liquid bromine, ammonia, sodium hydroxide, potassium hydroxide and any mixture thereof, and any other substance which the State Government may, by notification in the Telangana Gazette, specify to be a corrosive substance.

2. **Flooring:-** The floor of every work-room of a factory in which corrosive operation is carried on shall be made of impervious corrosive and fire resistant material and shall be so constructed as to prevent collection or accumulation of any corrosive substance. The surface of such flooring shall be glazed or smooth and cleaned as often as is necessary and maintained in a sound condition.

3. **Protection Equipment:-**

- (a) The occupier shall provide for the use of all persons employed in any corrosive operation suitable protective wear for hands and feet suitable aprons, face shields, chemical safety goggles, and respirators. The equipment shall be maintained in good order and shall be kept in a clean and hygienic condition by suitably treating them to get rid of the ill effects of any absorbed chemicals and by disinfecting. The occupier shall also provide suitable protective creams and other preparations wherever necessary for the protection of the persons engaged in corrosive operations.
- (b) The protective equipment and preparations provided shall invariably be used by the persons employed in any corrosive operation.
- (c) The occupier shall provide and maintain suitable accommodation for the storage of the protective equipment.

4. Water facilities:- Where any corrosive operation is carried on, there shall be provided as close to the place of such operation as possible a source of clean water at a height 210 cms. from a pipe of 1.25 cm. diameter and fitted with a quick acting valve so that in case of injury to the employee by any corrosive substance, the injured part can be thoroughly flooded with water. Whenever necessary, in order to ensure continuous water supply, a storage tank having a minimum length, breadth and height of 210 cms. and 60 cms. respectively or of such dimensions as are approved by the Chief Inspector-cum-Facilitator shall be provided for the source of clean water.

5. Cautionary notice:- A cautionary notice in the following form and printed in red in the language, which a majority of the persons employed understand shall be displayed prominently close to the place where any of the corrosive operations is carried on and where it can be easily and conveniently be read by the persons employed. If any such person is illiterate, effective steps shall be taken to explain carefully to him the contents of the notice so displayed.

CAUTIONARY NOTICE

Danger

Corrosive substances cause severe burns and vapours thereof may be extremely hazardous. In case of contact, immediately flood the part affected with plenty of water for at least fifteen minutes. Get medical attention quickly.

6. Transport:-

- (a) Corrosive substances shall not be filled, moved or carried except in containers or through pipes and when they are to be transported in containers, the containers shall be securely packed in crates of sound construction and of sufficient strength.
- (b) A container with a capacity of 115 litres or more of a corrosive substance shall be placed in a receptacle or crate and then carried by more than one person at a height below the waist line unless a suitable rubber wheeled truck is used for the purpose.
- (c) Containers for corrosive substances shall be plainly labelled.

7. Devices for handling corrosives:-

- (a) tilting, lifting, or pumping arrangements shall be used for emptying jars, carboys, and other containers, and other containers of corrosive.
- (b) Corrosive substance shall not be handled with bare hands but by means of a suitable scoop or other devices.

8. Opening of valves:- Valves fitted to containers holding a corrosive substance shall be opened with great care. If they do not work freely, they shall not be forced open. They shall be opened by a employee suitably trained for the purpose.

9. Cleaning tanks, stills etc.:-

- (a) In cleaning out or removing residues from suits or other large chambers used for holding any corrosive substance, suitable implements made of wood material or other material shall be used to prevent production of arseniuretted hydrogen (Arsine).
- (b) Whenever it is necessary for any person employed for the purpose of cleaning or

other maintenance work to enter any chamber, tank, vat, pit or other confined space where a corrosive substance had been stored, all possible precautions required under Section 36 shall be taken to ensure the safety of the person employed.

- (c) Wherever possible, before repairs are undertaken to any part of equipment in which a corrosive substance was handled, such equipment or part thereof shall be freed of any adhering corrosive substance by adopting suitable methods.

10. Storage:-

- (a) Corrosive substances shall not be stored in the same room with other chemicals, such as turpentine, carbides, metallic powder and combustible materials, the accidental mixing with which may cause a reaction which is either violent or gives rise to toxic fumes and gases.
- (b) Except as required under paragraph 4, no tap, sink and the like shall be located in any room where concentrated sulphuric acid, caustic soda, caustic potash, and similar corrosive substances are stored.
- (c) Pumping or filling overhead tanks, receptacles, vats, or other containers for storing corrosive substance shall be so arranged that there is no possibility of any corrosive substances overflowing and causing injury to any person.
- (d) Every container having a capacity of twenty litres or more and every pipe line, valve, and fitting used for storage or carrying corrosive substances shall be thoroughly examined every year to find out any defects and the defects so found shall be rectified forthwith. A register shall be maintained of every such examination made and shall be produced before the Inspector-cum-Facilitator whenever required.

11. Fire extinguishers and fire-fighting equipment:- An adequate number of suitable type of fire extinguishers or other fire fighting equipment, depending on the nature of chemicals stored, shall be provided. Such extinguishers or other equipment shall be regularly tested and refilled. Clear instructions as to how the extinguishers or other equipment should be used shall be printed in the language which majority of the persons employed understand and shall be fixed near each extinguisher or other equipment.

1. Exemption:- If, in respect of any factory on an application made by the manager, the Chief Inspector-cum-Facilitator is satisfied that owing to the exceptional circumstances, or the infrequency of the process or for any other reason to be recorded by him in writing, all or any of the provisions of this schedule are not necessary for the protection of the persons employed therein, he may by a certificate in writing, which he may at any time revoke, exempt the factory from such of the provisions and subject to such conditions as he may specify therein.

SCHEDULE-XIX

MANUFACTURE OR MANIPULATION OF CARCINOGENIC DYE INTERMEDIATES

- 1. Application:-** The Schedule shall apply in respect of all factories or any part thereof where processes in which the substances mentioned in paragraphs 3 and 4 are formed, manufactured, handled, or used and the processes incidental thereto in the course of which these substances are formed are carried on. The process indicated in this paragraph shall be referred to hereinafter as "the said process", and such a reference shall mean any or all the processes described in this paragraph.
- 2. Definitions:-** For the purpose of this Schedule the following definitions shall apply, unless the context otherwise requires.
- (a) "controlled substances" means chemical substances mentioned in paragraph 7 of this Schedule.
- (b) "efficient exhaust draught" means localised ventilation effected by mechanical means for the removal of gas, vapour, dust or fume so as to prevent them from escaping into the air of any place in which work is carried on. No draught, shall be deemed to be efficient which fails to remove smoke generated at the point where such gas, vapour,

fume or dust originated.

(c) "first employment" means first employment in the said processes and also re-employment in such processes following any cessation of employment for a continuous period exceeding three calendar months.

(d) "prohibited substances" means chemical substances mentioned in paragraph 3 of this Schedule.

3. Prohibited substances:-For the purpose of this Schedule, the following chemical substances shall be classified as "prohibited substances" except when these substances are present or are formed as a by-product of a chemical reaction in a total concentration not exceeding one per cent. -

- (a) Beta-naphthylamine and its salts,
- (b) Benzidine and its salts,
- (c) 4-amino diphenyl and its salts,
- (d) 4-nitro diphenyl and its salts, and
- (e) any substance containing any of these compounds.

4. Controlled substances:-For the purpose of this Schedule, the following chemical substances shall be classified as controlled substances namely -

- (a) Alpha naphthylamine or alpha naphthylamine containing not more than one per cent of beta naphthylamine either as by-product of chemical reaction or otherwise, and its salts.
- (b) Ortho-toluidine and its salts.
- (c) Diamidine and its salts.
- (d) Dichlorobenzidine and its salts.
- (e) Magneta.

5. Prohibition of employment:- No person shall be employed in the said process in any factory in which any prohibited substance is formed, manufactured, processed, handled or used except as exempted by the Chief Inspector-cum-Facilitator.

6. Requirements for processing or handling controlled substances:-

- (1) Wherever any of the controlled substances referred to in paragraph 4 are formed, manufactured, processed, handled, or used, all practical steps shall be taken to prevent inhalation, ingestion or absorption of the said controlled substance, by the employees while engaged in processing that substance and its storage or transport within the plant, or in cleaning or maintenance of the concerned equipment, plant, machinery and storage areas.
- (2) As far as possible all operations shall be carried out in a totally enclosed system. Whenever such enclosure is not possible, efficient exhaust draught shall be applied at the point where the controlled substances are likely to escape into the atmosphere during the process.
- (3) The controlled substances shall be received in the factory in tightly closed containers and shall be kept so except when those substances are in process or in use. The controlled substances shall leave the factory only in tightly closed containers of appropriate type. All the containers shall be plainly labelled to indicate the contents.

7. Personal protective equipment:-

- (1) The following items of personal protective equipment shall be provided and issued to every employee employed in the said process -
 - (a) long trousers and shirts or overall with full sleeves and head coverings. The shirt or over all shall cover the neck completely.
 - (b) Rubber-gum-boots.
- (2) The following items of personal protective equipment shall be provided in sufficient numbers for use by employees employed in the said processes when there is danger

of injury during the performance of normal duties or in the event of emergency:-

- (a) Rubber hand-gloves
 - (b) rubber aprons
 - (c) Airline respirators or other suitable respiratory protective equipment.
- (3) It shall be the responsibility of Manager to maintain all items of personal protective equipment in a clean and hygienic condition and in good repair.
- 8. Prohibition relating to young person, pregnant and lactating women:-**
- (a) No young person, pregnant woman and lactating woman shall be allowed to work in any room in which the manufacture or manipulation of Carcinogenic Dye Intermediates is carried on.
 - (b) Women other than those specified above shall be allowed in the above works with provision of appropriate personal protective equipment only.
- 9. Floors of work room:-** The floor of every work in which the said manufacturing processes are carried on shall be;
- (a) smooth and impervious to water provided that asphalt or tar shall not be used in the composition of the floor;
 - (b) maintained in a state of good repair;
 - (c) with a suitable slope for easy draining and provided with gutters; and
 - (d) thoroughly washed daily with the drain water being led into a sewer through a closed channel.
- 10. Disposal of empty container:-** Empty containers used for holding controlled substances shall be thoroughly cleaned of their contents and treated with an inactivating agent before being discarded.
- 11. Manual handling:-** Controlled substances shall not be allowed to be mixed, filled, emptied or handled except by means of a scoop with a handle. Such scoop shall be thoroughly cleaned daily.
- 12. Instructions regarding risk:-** Every employee on his first employment in the said processes shall be fully instructed on the properties of the toxic chemicals to which he is likely to be exposed to, of the dangers involved and the precautions to be taken. Employees shall also be instructed about the measures to be taken to deal with an emergency.
- 13. Cautionary placards:-** Cautionary placards in the Form specified in Appendix attached to this Schedule and printed in the language of the majority of the employees employed in the said processes shall be affixed in prominent places frequented by them in the factory, where the placards can be easily and conveniently read by the employees. Arrangements shall be made by the manager to instruct periodically and such employees regarding the precautions contained in the cautionary placards.
- 14. Medical facilities and records of examinations and tests:-**
- (1) The occupier of every factory to which the schedule applies shall-
 - (a) Employ qualified Medical Practitioner who shall be known as Factory Medical Officer for medical surveillance of the employees employed therein whose employment shall be subject to the approval of the Chief Inspector-cum-Facilitator and
 - (b) Provide to the said Factory Medical Officer all the necessary facilities for the purpose referred to in clause (a)
 - (2) The record of medical examinations and appropriate tests carried out by the said Factory Medical Officer shall be maintained in a separate register approved by the Chief Inspector-cum-Facilitator, which shall be kept readily available.
- 15. Medical examination by a Factory Medical Officer:-**
- (1) Every employee employed in the said processes shall be examined by a Factory

Medical Officer within fifteen (15) days of his first employment. Such examination shall include tests for detection of methemoglobin in blood (Haematological tests), paranitriphenol in urine, Pulmonary function tests and C.N.S. tests. No employee shall be allowed to work after fifteen (15) days of his first employment in the factory unless certified fit for such employment by the Factory Medical Officer.

- (2) Every employee employed in the said processes shall be re-examined by a Factory Medical Officer at least once in every six calendar months and such re-examination shall, wherever the Factory Medical Officer considers appropriate, include all the tests specified in sub-paragraph (1).
 - (3) The Factory Medical Officer after examining a employee, shall issue a Certificate of Fitness. The record of examination and re-examinations carried out shall be entered in the Certificate and the Certificate shall be kept in the custody of the manager of the factory. The record of such examination carried out under sub-paragraphs (1) and (2) including the nature and the results of these tests, shall also be entered by Factory Medical Officer in health register.
 - (4) The certificate of Fitness and the health register shall be kept readily available for inspection by the Inspector-cum-Facilitator.
 - (5) If at any time the Factory Medical Officer is of the opinion that a employee is no longer fit for employment in the said processes on the ground that continuance there would involve special danger to the health of the employee, he shall made a record of his findings in the said certificate and the health register. The entry of his findings in those documents should also include the period for which he considers that the said person is unfit to work in the said processes.
 - (6) No person who has been found unfit to work as said in sub-paragraph (5) shall be re-employed or permitted to work in the said processes unless the Factory Medical Officer, after further examination, again certifies him fit for employment in those processes.
- 15A. The person so suspended from the processes shall be provided with alternate placement facilities unless he is fully incapacitated in the opinion if of the Factory Medical Officer, in which case the person affected shall be suitably rehabilitated.
16. **Obligation of the employees:-** It shall be the duty of the persons employed in the said processes to submit themselves for the medical examination including exfoliative cytology of urine by the Factory Medical Officer or the Factory medical officer as provided for under these rules.
17. **Washing and bathing facilities:-**
- (1) The following washing and bathing facilities shall be provided and maintained in a clean state and in good repair for the use of all employees employed in the said processes namely:-
 - (a) A wash place under cover having constant supply of water and provided with clean towels, soap and hair brushes and with at least one stand pipe for every such employee.
 - (b) 50 per cent of the stand pipes provided under clause (a) shall be located in bathrooms where both hot and cold water shall be made available during the working hours of the factory and for one hour thereafter.
 - (c) The washing and bathing facilities shall be in close proximity of the area housing the said processes.
 - (d) Clean towels shall be provided individually to each employee.
 - (e) In addition to the taps mentioned under clause (a) one stand pipe, in which warm water is made available, shall be provided on each floor.
 - (2) Arrangements shall be made to wash factory uniforms and other work clothes every day.
18. **Food, drinks, etc., prohibited in work room:-** No employee shall consume foods, drink, pan, supari or tobacco or shall smoke in any work room in which the said

processes are carried on and no employee shall remain in such room during intervals for meals or rest.

- 19. Cloak room:-** There shall be provided and maintained in a clean state and in a good repair for the use of employees those employed in the said processes:
- a cloak room with lockers having two compartments one for street clothes and the other for work clothes; and
 - a place separate from the locker room and from the mess room for the storage of protective equipment provided under paragraph 7. The accommodation provided shall be under the care of a responsible person and shall be kept clean.
- 20. Mess room:-** There shall be provided and maintained for the use of employees employed in the said processes who remain on the premises during the meal intervals, a mess room which shall be furnished with tables and benches and provided with suitable means for warming food.
- 21. Time allowed for washing:-** Before the end of each shift thirty minutes shall be allowed for bathing for each employee who is employed in the said processes. Further, at least ten minutes shall be allowed for washing before each meal in addition to the regular time allowed for meals.
- 22. Restriction on age of persons employed:-** No employee under the age of forty years shall be engaged in the factory in the said processes for the first time after the date on which the Schedule comes into force.
- 23. Exemptions regarding prohibited substances:-**
- (1) The Chief Inspector-cum-Facilitator may by a certificate in writing (which he may at his discretion revoke at any time) subject to such conditions, if any, as may be specified therein, exempt any process in the course of which any of the prohibited substances is formed, processed, manufactured, handled, or used from the provisions of paragraph 5 if he is satisfied that the process is carried out in a totally enclosed and hermetically sealed system in such a manner that the prohibited substance is not removed from the system except in quantities no greater than that required for the purpose of control of the process or such purposes as is necessary to ensure that the product is free from any of the prohibited substances.
 - (2) The Chief Inspector-cum-Facilitator may allow the manufacture, handling or use of benzidine hydrochloride provided that all the processes in connection with it are carried out in a totally enclosed system in such a manner that no prohibited substance other than benzidine hydrochloride is removed therefrom except in quantities no greater than that required for the purpose of control of the processes or such purposes as is necessary to ensure that the product is free from prohibited substances and that adequate steps are taken to ensure that benzidine hydrochlorides is except while not in a totally enclosed system, kept wet with not less than one part of water to two parts of benzidine hydrochloride at all times.
- 24. General Exemption.** If in respect of any factory, the Chief Inspector-cum-Facilitator is satisfied that owing to the exceptional circumstances or infrequency of the processes or for any other reasons, all or any of the provisions of this Schedule are not necessary for the protection of the employees in the factory, the Chief Inspector-cum-Facilitator may by a certificate in writing (which he may in his discretion revoke at any time), exempt such factory from all or any of such provisions subject to such conditions, if any, as he may specify therein.

APPENDIX

Cautionary Placard/Notice

[See Paragraph 13]

1. Dye intermediates which are nitro or amino derivatives or aromatic hydrocarbons are toxic. You have to handle these chemicals frequently in this factory.
2. Use the various items of protective wear to safeguard your own health.
3. Maintain scrupulous cleanliness at all times, thoroughly wash hands and feet.

before taking meals. It is essential to take a bath before leaving the factory.

4. Wash off any chemical falling on your body with soap and water. If splashed with a solution of the chemical, move the contaminated clothing immediately. These chemicals are known to produce cyanosis. Contact the Factory Medical Officer or appointed doctor immediately and get his advice.

5. Handle the dye intermediates only with long handled scoops, never with bare hands.

6. Alcoholic drinks should be avoided, as they enhance the risk of poisoning by the chemicals.

7. Keep your food and drinks away from work place. Consuming food, drinks or tobacco in any form at the place of work is prohibited.

8. Serious effects from work with toxic chemicals may follow after many years. Great care must be taken to maintain absolute cleanliness of body, clothes, machinery and equipment.

SCHEDULE-XX

PROCESS OF EXTRACTING OILS AND FATS FROM VEGETABLE AND ANIMAL SOURCES IN SOLVENT EXTRACTION PLANTS

1. Definitions:-

- (a) "Solvent extraction plant" means a plant in which the process of extracting oils and fats from vegetable and animals sources by the use of solvents is carried on.
- (b) "Solvent" means an inflammable liquid such as pentane, hexane and heptane used for the recovery of vegetable oils.
- (c) "Flame-Proof enclosure" as applied to electrical machinery or apparatus means an enclosure that will withstand, when covers or other access doors are properly secured, an internal explosion of the flammable gas or vapour which may enter or which may originate inside the enclosure without suffering damage and without communicating internal inflammation (or explosion) to the external flammable gas or vapour.

2. Location and layout:-

- (a) No solvent extraction plant shall be permitted to be constructed or extended to within a distance of 30 meters from the nearest residential locality.
- (b) A 1.5 meter high continuous wire fencing shall be provided around the solvent extraction plant upto a minimum distance of 15 meters from the plant.
- (c) No person shall be allowed to carry any matches or an open flame or fire inside the area bound by the fencing.
- (d) Boiler houses and other buildings where open flame processes are carried on shall be located at least 30 meters away from the solvent extraction plant.
- (e) If godowns and preparatory processes are at less than 30 meters distance from the solvent extraction plant, there shall be at least 15 meters distance from the plant, and a continuous barrier wall of non-combustible material 1.5 meters high shall be erected at a distance of not less than 15 meters from the solvent extraction plant so that it extends to at least 30 meters of vapour travel around its ends from the plant to the possible source of ignition.

3. Electrical installations:-

- (a) All electrical motors and wiring and other electrical equipment installed or housed in solvent extraction plant shall be of flame-proof construction.
- (b) All metal parts of the plant and building including various tanks and containers where solvents are stored or are present and all parts of electrical equipment not required to be energized shall be properly bonded together and connected to earth so as to avoid accidental rise in the electrical potential of such parts above earth potential.

- 4. Restriction of smoking:-** Smoking shall be strictly prohibited within 15 metres distance from solvent extraction plant. For this purpose 'No Smoking' signs shall be permanently displayed in the area.
- 5. Precautions against friction:-**
- All tools and equipments including ladders, chains and other lifting tackle required to be used in solvent extraction plant shall be of non-sparking type.
 - No machinery or equipment in any solvent extraction plant shall be belt driven unless the belt used is of such a type it does not permit accumulation of static electricity to a dangerous level.
 - No person shall be allowed to enter and work in the solvent extraction plant wearing clothes made of nylon or such other fiber that can generate static electrical charge or wearing foot-wear which is likely to cause sparks by friction.
- 6. Fire Fighting apparatus:-**
- Adequate number of portable fire extinguishers suitable for use against flammable liquid fires shall be provided in the solvent extraction plant.
 - An automatic water spray sprinkler system on a wet-pipe or open head deluge system with sufficient supply of storage water shall be provided over solvent extraction plant and throughout the building housing such plant.
- 7. Precautions against power failure:-** Provision shall be made for automatic cutting off of steam in the event of power failure and also for emergency overhead water supply for feeding water by gravity to condensers which shall come into play automatically with the power failure.
- 8. Magnetic separators:-** Oil cake shall be fed to the extractor by a conveyor through a hopper and a magnetic separator shall be provided to remove any piece of iron during its transfer.
- 9. Venting:-**
- Tanks containing solvents shall be protected with emergency venting to relieve excessive internal pressure in the event of fire.
 - All emergency relief vents shall terminate at least 6 meters above the ground and be so located that vapours will not re-enter the building in which solvent extraction plant is located.
- 10. Waste Water:-** Process waste water shall be passed through a flash evaporator to remove any solvent before it is discharged into a sump which should be located within the fenced area but should not be closer than 8 meters to the fence.
- 11. Ventilation:-** The solvent extraction plant shall be well ventilated and if the plant is housed in a building the building shall be provided with mechanical ventilation with provision for at least six air changes per hour.
- 12. House-keeping:-**
- Solvents shall not be stored in an area covered by solvent extraction plant except in small quantities which shall be stored in approved safety cans.
 - Waste materials such as oily rags, other wastes and absorbents used to wipe off solvent and paints and oils shall be deposited in approved containers and removed from the premises at least once a day.
 - Space within the solvent extraction plant and within 15 meters from the plant shall be kept free from any combustible materials and any spills of oil or solvent shall be cleaned up immediately.
- 13. Examination and Repairs:-**
- The solvent extraction plant shall be examined by the competent person to determine any weakness or corrosion and wear once in every twelve (12) months. Report of such examination shall be supplied to the Inspector-cum-Facilitator with his observation as to whether or not the plant is in safe condition to work.

- (b) No repairs shall be carried out to the machinery or plant except under the direct supervision of the competent person.
- (c) Facility shall be provided for purging the plant with inert gas before opening for cleaning or repairs and before introducing solvent after repairs.
- 14. Operating Personnel:-** The plant and machinery in the solvent extraction plant shall be in the charge of such duly qualified and trained persons as are certified by the competent person to be fit for the purpose and no other person shall be allowed to operate the plant and machinery.
- 15. Prohibition relating to young persons, pregnant women and lactating women :-**
- (a) No young person, pregnant woman and lactating woman shall be allowed to work in the solvent extraction plant.
- (b) Women other than those specified above shall be allowed in the above works with provision of appropriate personal protective equipment only.
- 16. Vapour Detection:-** A suitable type of flameproof and portable combustible gas indicator shall be provided and maintained in good working order and a schedule of routine sampling of atmosphere at various locations as approved by the Chief Inspector-cum-Facilitator shall be drawn out and entered in a register maintained for the purpose.
- (1) When the solvent is removed from a batch extractor by vacuum, vacuum gauges shall be provided and tests shall be carried out to ensure that a minimum vacuum of 650 mm (26") mercury is obtained and maintained steadily for a minimum period of 30 minutes before extractor is allowed to be opened for discharge of cake or for persons to enter.
- (2) Where solvent is removed by steam heating, the presence of the solvent shall be tested at the vent provided on the top of the vessel before opening the vessel.
- (3) When on opening the door of a batch extractor the extractor meal cannot be dislodged from the extractor freely, the door shall be closed and material re-heated for at least sixty minutes before the door is reopened.
- (4) A log book of operations with the following particulars shall be maintained and made available on demand to the Inspector-cum-Facilitator:-
- (i) Vacuum gauge reading for each charge where vacuum extraction is used.
- (ii) Date of testing of continuity of electrical bonding and earthing system and the report of each test.
- (iii) Loss of solvent every 24 hours of operation or less of solvent per tonne of raw material treated.
- 17. Exemption:-** If in respect of any factory, the Chief Inspector-cum-Facilitator is satisfied that owing to the exceptional circumstances or infrequency of the processes or for any other reasons, all or any of the provisions of this Schedule is not necessary for the protection of the employees in the factory, the Chief Inspector-cum-Facilitator may, by a certificate in writing (which he may, in his discretion revoke at any time), exempt such factory from all or any of the provisions subject to conditions, if any, as he may specify therein.

SCHEDULE-XXI

CARBON DISULPHIDE PLANTS

- 1. Application:-** This Schedule shall apply to all electric furnaces in where carbon disulphide is generated and all other plants where carbon disulphide after generation, is condensed, refined and stored.

These rules are in addition to and not in derogation of any of the provisions of the Act and Rules made thereunder.

- 2. Construction, Installation and Operation:-**

- (a) The buildings in which electric furnaces are installed and carbon disulphide after generation is condensed and refined shall be segregated from other parts of the factory and shall be open type to ensure optimum ventilation and the plant layout shall be such that only minimum number of employees are exposed to the risk of any fire or explosion at any one time.
- (b) Every electric furnace and every plant in which carbon disulphide is condensed, refined and stored with all their fittings and attachments shall be of good construction, sound material and of adequate strength to sustain the internal pressure to which the furnace or the plant may be subjected and shall be signed that carbon disulphide liquid and gas are in closed system during their normal working.
- (c) The electric furnace support shall be firmly grouted about 2 feet in concrete or by other effective means.
- (d) Every electric furnace shall be installed and operated according to manufacturer's instructions and these instructions shall be clearly imparted to the personnel in-charge of construction and operation.
- (e) The instruction regarding observance of correct furnace temperature, Sulphur dose admissible current power consumption and periodical checking of charcoal level shall be strictly complied with.

3. Electrodes:-

- (a) Where upper ring electrode(s) made of steel are used in the electric furnace, they shall be of seamless tube construction and shall have arrangement for being connected to cooling water system through a siphon built in the electrodes or through a positive pressure water pump.
- (b) The arrangement for cooling water referred to in Clause (a) shall be connected with automatic alarm system which will actuate in the event of interruption of cooling water in the electrodes and give visible and audible alarm signals in the control room and simultaneously stop power supply for the furnace operation and stop the further supply of water. The alarm system and the actuating device shall be checked everyday.

4. **Maintenance of Charcoal level:-** When any electric furnace is in operation, it shall be ensured that the electrodes are kept covered with a charcoal bed.

5. **Charcoal Separator:-** A cyclone type of charcoal separator shall be fitted on the off-take pipe between the electric furnace and sulphur separator to prevent entry of pieces of charcoal into the condensers piping.

6. Rupture Discs and Safety Seal:-

- (a) At least two rupture discs of adequate size which shall blow off at a pressure twice the maximum operating pressure shall be provided on each furnace and shall either be mounted directly on the top of the furnace or each through an independent pipe as close as possible to the furnace.
- (b) A safety water seal shall be provided and tapped from a point between the charcoal separator and the sulphur separator.

7. Pyrometers and Manometers:-

- (a) Each electric furnace shall be fitted with adequate number of pyrometers to give an indication of the temperature as correctly as practicable at various points in the furnace. The dials for reading the temperatures shall be located in the control room.
- (b) Manometers or any other suitable devices shall be provided for indicating pressure-
 - (i) in the off take pipe before and after the sulphur separator, and
 - (ii) in primary and secondary condensers.

8. **Check Valves:-** All piping carrying carbon disulphide shall be fitted with check valves at suitable positions so as to prevent gas from flowing back into an electric furnace in the event of its shut down.

9. Inspection and Maintenance of Electric Furnaces:-

- (a) Every electric furnace shall be inspected internally by a competent person, -
- (i) before being placed in service after installation;
 - (ii) before being placed in service after reconstruction or repairs; and
 - (iii) periodically every time the furnace is opened for cleaning or deashing or for replacing electrodes.
- (b) When an electric furnace is shut down for cleaning or deashing,
- (i) the brick lining shall be checked for continuity and any part found defective moved;
 - (ii) after removal of any part of the lining referred to in (a) the condition of the shell shall be closely inspected; and
 - (iii) any plates forming shell found corroded to the extent that safety of the furnace is endangered shall be replaced.

10. Maintenance of Records:-

The following hourly records shall be maintained in a log book.

- (i) Manometer readings at the points specified in 7 (b) (i) and (ii).
- (ii) Gas temperature indicated by pyrometers and all other vital points near the sulphur separator and primary and secondary condensers.
- (iii) Water temperature and flow or water through the siphon in the electrodes.
- (iv) Primary and secondary voltages and current and energy consumed.

11. Electrical apparatus, wiring and fittings:- All buildings in which carbon disulphide is refined or stored shall be provided with electrical apparatus, wiring and fittings which shall afford adequate protection from fire and explosion.

12. Prohibition relating to smoking:- No person shall smoke or carry matches, fire or naked light or other means of producing a light or spark in buildings in which carbon disulphide is refined or stored, and notice in the language understood by a majority of the employees shall be posted in the plant prohibiting smoking and carrying of matches, fire or naked light or other means of producing naked light or spark into such rooms.

13. Means of Escape:- Adequate means of escape shall be provided and maintained to enable persons to move to a safe place as quickly as possible in case of an emergency. At least two independent stair cases of adequate width shall be provided in every building housing the furnaces at reasonable intervals at opposite ends. These shall always be kept clear of all obstructions and so designed as to afford easy passage.

14. Warnings in case of fire:- There shall be adequate arrangements for giving warnings in case of fire or explosion which shall operate on electricity and in case of failure of electricity, by some mechanical means.

15. Fire-fighting Equipment:-

- (a) Adequate number of suitable fire extinguishers or other firefighting equipment shall be kept in constant readiness for dealing with risks involved and depending on the amount and nature of materials stored.
- (b) Clear instructions as to how the extinguishers or other equipment should be used printed in the language which the majority of the employees employed understand, shall be affixed to each extinguisher or other equipment and the personnel trained in their use.

16. Bulk Sulphur:-

- (a) Open or semi enclosed spaces for storage of bulk sulphur shall be sited with due regard to the dangers which may arise from sparks given off by nearby locomotive etc. and precautions shall be taken to see that flames, smoking and matches and

other sources of ignition do not come in contact with the clouds of dust arising during handling of bulk sulphur.

- (b) All enclosures for bulk sulphur shall be of non-combustible constructions adequately ventilated and so designed as to provide a minimum of ledges on which dust may lodge.
- (c) The bulk sulphur in the enclosures shall be handled in such a manner as to minimise the formation of dust clouds and no flame, smoking and matches or other sources of ignition shall be employed during handling and non-sparking tools shall be used whenever sulphur is shoveled or otherwise removed by hand.
- (d) No repairs involving flames, heat or use of hand or power tools shall be made in the enclosure where bulk sulphur is stored.

17. Liquid Sulphur:- Open flames, electric sparks and other sources of ignition, including smoking and matches, shall be excluded from the vicinity of molten sulphur.

18. Training and supervision:-

- (a) All electric furnaces and all plants which carbon disulphide is condensed, refined or stored shall be under adequate supervision at all times while the furnaces and plant are in operation.
- (b) Employees in charge of operation and maintenance of electric furnaces and the plants shall be properly qualified and adequately trained.

19. Washing facilities:- The Occupier shall provide and maintain in a clean state and in good repair, for the use of all persons employed, wash place under cover with at least one tap or stand-pipe, having a constant supply of clean water for every five such persons, the taps or standpipes being spaced not less than 120 centimetres apart with a sufficient supply of soap and clean towels, provided that towels shall be supplied individually to each employee if so ordered by the Inspector-cum-Facilitator.

All the employees employed in the sulphur storage, handling and melting operations shall be provided with a nail brush.

20. Personal Protective Equipment:-

- (a) Suitable goggles and protective clothing consisting of overalls without pockets, gloves and footwear shall be provided for the use of operatives,
 - (i) when operating valves or cocks controlling fluids etc;
 - (ii) drawing off of molten sulphur from sulphur pots; and
 - (iii) handling charcoal or sulphur.
- (b) Suitable respiratory protective equipment shall be provided and stored in the appropriate place for using during abnormal conditions or in an emergency.
- (c) Arrangements shall be made for the proper and efficient cleaning of all such protective equipment.

21. Cloak rooms:- There shall be provided and maintained for the use of all persons employed in the processes a suitable cloak room for clothing put off during work hours and a suitable place separate from the cloak room for the storage of overalls or working clothes. The accommodation provided shall be placed in the charge of a responsible person and shall be kept clean.

22. Unauthorized Persons:- Only maintenance and repair personnel, persons directly connected with the plant operations and those accompanied by authorized persons shall be admitted into the plant.

SCHEDULE-XXII

MANUFACTURE AND MANIPULATION OF DANGEROUS PESTICIDES

1. Definitions:-For the purpose of this schedule the following shall apply:-

- (i) 'Dangerous pesticides' means any product proposed or used or controlling, destroying or repelling any pest or for preventing growth or mitigating effects of such growth

including any of its formulations which is considered toxic under and is covered by the Insecticides Act, 1968 (Central Act No. 46 of 1968) and the rules made thereunder and any other product, as may be notified, from time to time, by the State Government.

- (ii) 'Manipulation' includes mixing, tending, formulating, filling, emptying, packing or otherwise handling.
- (iii) 'Efficient exhaust draught' means localised mechanical ventilation for removal of smoke, gas, vapour, dust, fume or mist so as to prevent them from escaping in the air of any work room in which work is carried on. No exhaust draught shall be considered efficient if it fails to remove smoke generated at the point where such gas, fume, dust, vapour or mist originates from the process.
- (iv) 'First employment' shall mean first employment in any manufacturing process to which this schedule applies and shall also include re-employment in the said manufacturing process following any cessation of employment for a continuous period exceeding three calendar months.

2. Application:- This schedule shall apply in respect of all factories or any plant thereof in which the process of manufacture or manipulation of dangerous pesticide hereinafter referred to as the said manufacturing process is carried on.

3. Instruction of employees:- Every employee on his first employment shall be fully instructed on the properties including dangerous properties of the chemicals handled in the said manufacturing process and the hazards involved. The employees shall also be instructed in the measures to be taken to deal with any emergency. Such instructions shall be repeated periodically.

4. Cautionary Notice and Placards:- Cautionary notices and placards in the form specified in Appendix 1 of this schedule and printed in the language of the majority of the employees shall be displayed in all work places in which said manufacturing process is carried on so that they can be easily and conveniently read by the employees. Arrangements shall be made by the occupier and the manager of the factory to periodically instruct the employees regarding the health hazards arising in the said manufacturing process and methods of protection. Such notices shall include brief instructions regarding the periodical clinical tests required to be undertaken to protect the health of the employees.

5. Prohibition relating to young persons, pregnant women and lactating women:-

- (a) No young person, pregnant woman and lactating woman shall be allowed to work in any room in which the manufacture and manipulation of dangerous pesticides is carried on or in any room in which dangerous pesticide is stored.
- (b) Women other than those specified above shall be allowed in the above works with provision of appropriate personal protective equipment only.

6. Food, drinking and smoking prohibited:-

- (1) No food, drink, tobacco, pan or supari shall be brought in or consumed by any employee into any work room in which the said manufacturing process is carried out.
- (2) Smoking shall be prohibited in any work room in which the said manufacturing process is carried out.

7. Medical facilities and records of examinations and tests:-

- (1) The occupier of every factory to which the schedule applies, shall, -
 - (a) employ a qualified Medical Practitioner who shall be known as Factory Medical Officer for medical surveillance of the employees employed therein whose employment shall be subject to the approval of the Chief Inspector-cum-Facilitator,
 - (b) provide to the said Factory Medical Officer all the necessary facilities for the purpose referred to in clause (a).
- (2) The record of medical examination and appropriate tests carried out by the said Factory Medical Officer shall be maintained in a separate register approved by the

Chief Inspector-cum-Facilitator, which shall be kept readily available.

8. Medical examination by a Factory Medical Officer :-

- (1) Every employee employed in the processes mentioned in paragraph 2 shall be examined by the Factory Medical Officer within fifteen (15) days of his first employment. Such examination in respect of Halogenated Pesticides, shall include tests for determination of the chemical in blood and in fat tissues, EEG abnormalities and memory tests. In respect of organo phosphorous compounds such examinations shall include tests for depression of cholinesterase in plasma and red blood cells. No employee shall be allowed to work after fifteen (15) days of his first employment in the factory unless certified fit for such employment by the Factory Medical Officer.
 - (2) Every employee employed in the said processes shall be re-examined by a Factory Medical Officer at least once in every six calendar months. Such examination shall, wherever the Factory Medical Officer considers appropriate, include the tests specified in sub-paragraph (1). Further every employee employed in the said processes shall also be examined once in every three months by the Factory Medical Officer.
 - (3) The Factory Medical Officer after examining a employee, shall issue a certificate of fitness in. The record of examination and re-examinations carried out shall be entered in the certificate and the certificate shall be kept in the custody of the manager of the factory. The record of each examination carried out under sub-paragraphs (1) and (2), including the nature and the results of these tests, shall also be entered by the Factory Medical Officer in a health register.
 - (4) The certificate of fitness and the health register shall be kept readily available for inspection by the Inspector-cum-Facilitator.
 - (5) If at any time the Factory Medical Officer is of the opinion that a employee is no longer fit for employment in the said processes on the ground that continuance therein could involve special danger to the health of the employee, he shall make a record of his findings in the said certificate and the health register. The entry of his findings in those documents should also include the period for which he considers that the said person is unfit to work in the said processes.
 - (6) No person who has been found unfit to work as said in sub-paragraph (5) shall be re-employed or permitted to work in the said processes unless the Factory Medical Officer after further examination again certifies him fit for the employment in those processes.
- 8A.** The person so suspended from the process shall be provided with alternate placement facilities unless he is fully incapacitated in the opinion of the Factory Medical Officer, in which case the person affected shall be suitably rehabilitated.

9. Protective clothing and protective equipment:-

- (1) Protective clothing consisting of long pants and shirts or overalls with long sleeves and head covering shall be provided for all employees employed in the said manufacturing process.
- (2) (a) Protective equipments consisting of rubber gloves, gurt boots, rubber aprons, chemical safety goggles, and respirators shall be provided for all employees employed in the said manufacturing process.
- (b) gloves, boots, aprons shall be made from synthetic rubber where a pesticide contains oil.
- (3) Protective clothing and equipment shall be worn by the employees supplied with such clothing and equipment.
- (4) Protective clothing and equipment shall be washed daily from inside and outside if the employees handle pesticides containing nicotine or phosphorous and shall be washed frequently if handling other pesticides.
- (5) Protective clothing and equipment shall be maintained in good repair.

10. Floors and work benches:-

- (1) Floors in every work room where dangerous pesticides are manipulated shall be of cement or other impervious material giving a smooth surface.
- (2) Floors shall be maintained in good repair, provided with adequate slope leading to a drain and thoroughly washed once a day with hose pipe.
- (3) Work benches where dangerous pesticides are manipulated shall be made of smooth, non-absorbing material preferably stainless steel and shall be cleaned at least once daily.

11. Spillage and waste:-

- (1) If a dangerous pesticide during its manipulation splashes or spills on the work bench, floor or on the protective clothing worn by a employee, immediate action shall be taken for thorough decontamination of such areas or articles.
- (2) Cloth rags, paper or other material soaked or soiled with a dangerous pesticide shall be deposited in suitable receptacle with tight fitting cover. Contaminated waste shall be destroyed by burning at least once a week.
- (3) Suitable deactivating agents, where available, shall be kept in a readily accessible place for use while attending to a spillage.
- (4) Easy means of access shall be provided to all parts of the plant for cleaning, maintenance and repairs.

12. Empty containers used for dangerous pesticides:- Containers used for dangerous pesticides shall be thoroughly cleaned of their contents and treated with an inactivating agent before being discarded or destroyed.

13. Manual handling:-

- (1) A dangerous pesticide shall not be required or allowed to be manipulated by hand except by means of a long handled scoop.
- (2) Direct contact of any part of the body with a dangerous pesticide during its manipulation shall be avoided.

14. Ventilation:-

- (1) In every work room or area where a dangerous medicine is manipulated, adequate ventilation shall be provided at all times by the circulation of fresh air.
- (2) Unless the process is completely enclosed the following operations during manipulation of a dangerous pesticide shall not be undertaken without an efficient exhaust draught.
 - (a) emptying a container holding a dangerous pesticide.
 - (b) blending a dangerous pesticide.
 - (c) preparing a liquid or powder formulation containing a dangerous pesticide.
 - (d) changing or filling a dangerous pesticide into a container, tank, hopper or machine or small sized containers.
- (3) In the event of a failure of the exhaust draught provided on the above operation, the above operations shall be stopped forthwith.

15. Time allowed for washing:-

- (1) Before each meal and before the end of the day's work at least ten minutes in addition to the regular rest interval shall be allowed for washing to each employee engaged in the manipulation of dangerous pesticide.
- (2) Every employee engaged in the manipulation of dangerous pesticides shall have a thorough wash before consuming any food and also at the end of the day's work.

16. Washing and bathing facilities:-

- (1) There shall be provided and maintained in clean state and in good repair for the use of all employees employed in the factory where the said manufacturing process is

carried on, adequate washing and bathing places having a constant supply of water under cover at the rate of one such place for every five (5) persons employed.

- (2) The washing places shall have stand pipes placed at intervals of not less than one metre.
- (3) Not less than one half of the total number of washing places shall be provided with bath rooms.
- (4) Sufficient supply of clean towels made of suitable material shall be provided.

Provided that such towels shall be supplied individually for each employee if so ordered by the Inspector-cum-Facilitator

- (5) Sufficient supply of soap and nail brushes shall be provided.
- 17. Cloak room:-** There shall be provided and maintained for the use of all employees employed in the factory, where the said manufacturing process is carried on, -
 - (a) a cloak room for clothing put off during working hours with adequate arrangements for drying clothing, if wet, and
 - (b) separate and suitable arrangements for the storage of protective clothing provided under paragraph B.

18. Mess room:- There shall be provided and maintained for the use of all employees employed in the factory in which the said manufacturing process is carried on and remaining on the premises during the rest intervals, a suitable mess room which shall be furnished with, -

- (a) sufficient tables and benches with back rest; and
- (b) adequate means for warming food.

The mess-room shall be placed under the charge of a responsible person and shall be kept clean.

19. Exemption:- If in respect of any factory the Chief Inspector-cum-Facilitator is satisfied that owing to the exceptional circumstances or infrequency of the said manufacturing process or for any other reason which he shall record in writing all or any of the provisions of this Schedule are not necessary for the protection of the employees employed in the factory, he may, by a certificate in writing, exempt such factory, from all or any of the provisions on such condition as he may specify therein. Such certificate may, at any time be revoked by the Chief Inspector-cum-Facilitator after recording his reasons thereof.

20. Manipulation not to be undertaken:- Manufacture or manipulation of a pesticide shall not be undertaken in any factory unless a certificate regarding its dangers or otherwise is obtained from the Chief Inspector-cum-Facilitator.

APPENDIX-1

Cautionary Notice (Insecticides and Pesticides)

1. Chemicals handled in this plant are poisonous substances.
2. Smoking, eating food or drinking, chewing tobacco in this area is prohibited. No food stuff or drink shall be brought in this area.
3. Some of these chemicals may be absorbed through skin and may cause poisoning.
4. A good wash shall be taken before meals.
5. A good bath shall be taken at the end of the shift.
6. Protective clothing and equipment supplied shall be used while working in this area.
7. Containers of pesticides shall not be used for keeping food stuffs.
8. Spillage of the chemicals on any part of the body or on the floor or work bench shall be immediately washed away with water.
9. Clothing contaminated due to splashing shall be removed immediately.

10. Scrupulous cleanliness shall be maintained in this area.
11. Do not handle pesticides with bare hands. use scoops provided with handle.
12. In case of sickness like nausea, vomiting, giddiness, the manager should be informed who will make necessary arrangements for treatment.
13. All employees shall report for the prescribed medical test regularly to protect their own health.

SCHEDULE-XXIII

MANUFACTURE, HANDLING AND USE OF BENZENE

1. This schedule is made to provide protection against hazards of poisoning from benzene and shall apply in respect of factories or parts thereof in which benzene or substances containing benzene are manufactured, handled or used.
2. **Definitions:-** For the purpose of this schedule:-
 - (a) "Substances containing benzene" means substances wherein benzene content exceeds 1 per cent, by volume.
 - (b) "Substitute" means a chemical which is harmless or less harmful than benzene and can be used in place of benzene.
 - (c) "Enclosed system" means a system which will not allow escape of benzene vapours to the working atmosphere.
 - (d) "Efficient exhaust draught" means localized ventilation effected by mechanical means for the removal of gases, vapours and dusts or fumes so as to prevent them from escaping into the air of any work-room. No draught shall be deemed to be efficient if it fails to remove smoke generated at the point where such gases, vapours, fumes or dust originate.
3. **Prohibition and substitution:-**
 - (a) Use of benzene and substances containing benzene is prohibited in the following processes:
 - (i) manufacture of varnishes, paints and thinners, and
 - (ii) cleaning and degreasing operations
 - (b) Benzene or substances containing benzene shall not be used as a solvent or diluent, unless the process in which it is used is carried on in an enclosed system or unless the process is carried on in manner which is considered equally safe as if it were carried out in an enclosed system.
 - (c) Where suitable substitutes are available, they shall be used instead of Benzene or substances containing Benzene. This provision, however shall not apply to the process specified in **Appendix-A** of this Schedule.
 - (d) The Chief Inspector-cum-Facilitator may, subject to confirmation by the State Government, permit exemptions from the percentage laid down in clause (a) and clause (b) of paragraph 2 temporarily under conditions and within limits of time to be determined after consultation with the employees and employers concerned.
4. **Protection against inhalation:-**
 - (a) The process involving the use of benzene or substances containing benzene shall as far as practicable be carried out in an enclosed system.
 - (b) Where, however, it is not practicable to carry out the process in an enclosed system, the work-room in which benzene or substances containing benzene are used shall be, equipped with an efficient exhaust draught or other means for the removal of benzene vapours or prevent their escape into the air of the work-room so that the concentration of benzene in the air does not exceed 25 parts per million by volume or 80 mg/3m³.
 - (c) Air analysis for the measurement of concentration of benzene vapours in air shall be carried out every 8 hours at such intervals as may be directed by the Chief Inspector-

cum-Facilitator at places where process involving use of benzene is carried on and the result of such analysis shall be recorded in a register specially maintained for this purpose.

If the concentration of benzene vapours in air as measured by air analysis, exceeds 25 parts per million by volume or 80 mg/3m, the manager shall forthwith report of concentration to the Chief Inspector-cum-Facilitator stating the reasons for such increase.

- (d) Employees who for special reasons are likely to be exposed to concentration of benzene in the air of the work-room exceeding the maximum referred to in clause (b) shall be provided with suitable respirators or face masks. The duration of such exposure shall be limited as far as possible.

5. Measures against skin contact:-

- (a) Employees who are likely to come in contact with liquid benzene or liquid substances containing benzene shall be provided with suitable gloves, aprons, boots and where necessary vapour tight chemical goggles, made of material not affected by benzene or its vapours.
- (b) The protective ware referred to in sub-clause (a) shall be maintained in good condition and inspected regularly.

6. Prohibition relating to young persons, pregnant women and lactating women:-

- (a) No young person, pregnant woman and lactating woman shall be allowed to work in any work-room involving exposure to benzene or substances containing benzene.
- (b) Women other than those specified above shall be allowed in the above works with provision of appropriate personal protective equipment only.

7. Labelling:- Every container holding benzene or substances containing benzene shall have the word "Benzene" and approved danger symbols clearly visible on it and shall also display information of benzene content, warning about toxicity and warning about inflammability of the chemical.

8. Improper use of benzene:-

- (a) The use of benzene or substances containing benzene by employees for cleaning their hands or other work clothing shall be prohibited.
- (b) Employees shall be instructed on the possible dangers arising from such misuse.

9. Prohibition of consuming food, etc., in work-rooms:- No employee shall be allowed to store or consume food or drink in the work-room in which benzene or substances containing benzene are manufactured, handled or used. Smoking and chewing tobacco or pan shall be prohibited in such work-rooms.

10. Instructions as regards risks:- Every employee on his first employment shall be fully instructed on the properties of benzene or substances containing benzene which he has to handle and of the dangers involved. Employees shall also be instructed on the measures to be taken to deal with in an emergency.

11. Cautionary notices:- Cautionary notices in the form specified in Appendix-B and presented in the language easily read and understood by the majority of the employees shall be displayed in prominent places in the work-rooms where benzene or substances containing benzene are manufactured, handled or used.

12. Washing facilities, cloak-room and mess-room:- In factories in which benzene or substances containing benzene are manufactured handled or used, the occupier shall provide and maintain in clean state and in good repair:-

- (a) washing facilities under cover of the standard of at least one tap for every persons having constant supply of water with soap and a clean towel provided individually to each employee if so ordered by the Inspector.
- (b) a cloak-room with lockers for each employee, having two compartments-one for street clothing and one for work clothing; and

- (c) a mess-room furnished with tables and benches with means for warming food, provided that where a canteen or other proper arrangements exist for the employees to take their meals the requirements of mess-room shall be dispensed with.

13. Medical facilities and records of examinations and tests:-

- (1) The occupier of every factory to which the Schedule applies, shall -
- employ a qualified Medical Practitioner who shall be known as Factory Medical Officer for medical surveillance of the employees employed therein, whose employment shall be subject to the approval of the Chief Inspector-cum-Facilitator, and
 - Provide to the said Factory Medical Officer all the necessary facilities for the purpose referred to in clause (a).
- (2) The record of medical examinations and appropriate tests carried out by the said Factory Medical Officer shall be maintained separate register approved by the Chief Inspector-cum-Facilitator, which shall be kept readily available for inspection by the Inspector-cum-Facilitator

14. Medical examination by Factory Medical Officer :-

- Every employee employed in processes mentioned in paragraph 1, shall be examined by a Factory Medical Officer within fifteen (15) days of his first employment. Such examination shall include tests for detection of phenol in urine and determination of urinary sulphide ratio and C.N.S. and haematological tests. No employee shall be allowed to work after fifteen (15) days of his first employment in the factory unless certified fit for such employment by the Medical officer.
 - Every employee employed in this said processes shall be re-examined by a Factory Medical Officer at least once in every twelve calendar months and such examination shall, whenever the Factory Medical Officer considers appropriate, include all the tests specified in sub-paragraph (1). Further, every employee shall also be examined once in every three calendar months by the Factory Medical Officer.
 - The Factory Medical Officer after examining a employee, shall issue a certificate of fitness. The record of examination and re-examinations carried out shall be entered in the Certificate and the Certificate shall be kept in the custody of the manager of the factory. The record of each examination carried out under sub-paragraphs (1) and (2), including the nature and the results of these tests shall also be entered by the Factory Medical Officer in a health register.
 - The Certificate of fitness and the health register shall be kept readily available for inspection by the inspector-cum-Facilitator.
 - If any time the Factory Medical Officer is of the opinion that a employee is no longer fit for employment in the said processes on the ground that continuance therein would involve special danger to the health of the employee, he shall make a record of his findings in the said certificate and the health register. The entry of his findings in those documents should also include the period of which he considers that the said person is unfit to work in the said processes.
 - No person who has been found unfit to work as said in sub-paragraph(5) shall be re-employed or permitted to work in the said processes unless the Factory Medical Officer, after further examination, again certifies him fit for employment in these processes.
15. The person so suspended from the process shall be provided with alternate placement facilities unless he is fully incapacitated in the opinion of the Factory Medical Officer, in which case the person affected shall be suitably rehabilitated.

APPENDIX-A

(Clause 3(b))

1. Production of benzene
2. Process where benzene is used for chemical synthesis
3. Motor spirits (used as fuel).

APPENDIX-B**(Clause 11)****(a) The hazards:-**

- (i) Benzene and substances containing benzene are harmful.
- (ii) Prolonged or repeated breathing of benzene vapours may cause suit in acute or chronic poisoning.
- (iii) Benzene can also be absorbed through skin which may cause skin and other diseases.

(b) The preventive measures to be taken:-

- (i) Avoid breathing of benzene vapours.
- (ii) Avoid prolonged or repeated contact of benzene with the skin.
- (iii) Remove benzene with soaked or wet clothing promptly.
- (iv) If at any time you are exposed to high concentration of benzene vapours and exhibit the sign and symptoms such as dizziness, difficulty in breathing, excessive excitation and losing of consciousness, immediately inform your Factory Manager.
- (v) Keep all the containers of benzene closed.
- (vi) Handle, use and process benzene and substances containing benzene carefully in order to prevent their spillage on floor.
- (vii) Maintain good housekeeping.

(c) The protective equipment to be used:-

- (i) Use respiratory protective equipment in places where benzene vapours are present in high concentration.
- (ii) In emergency, use self-generating oxygen mask or oxygen or air cylinder masks.
- (iii) Wear hand gloves, aprons, goggles and gum boots to avoid contact of benzene with your skin and body parts.

(d) The first aid measures to be taken in case of acute benzene poisoning:-

- (i) Remove the clothing immediately if it is wetted with benzene.
- (ii) If liquid benzene enters eyes, flush thoroughly for at least fifteen (15) minutes with clean running water and immediately secure medical attention.
- (iii) In case of unusual exposure to benzene vapour, call a physician immediately. Until he arrives do the following:-

If the exposed person is conscious:-

- (a) Move him to fresh air in open.
- (b) Lay down without a pillow and keep him quiet and warm.

If the exposed person is unconscious:-

- (a) Lay him down preferably on the left side with the head low.
- (b) Remove any false teeth, chewing-gum, tobacco or other foreign objects which may be in his mouth.
- (c) Provide him artificial respiration in case difficulty is being experienced in breathing.
- (d) In case of shallow breathing or cyanosis (blueness of skin, lips, ears, finger-nail beds), he should be provided with medical oxygen or oxygen, carbon dioxide mixture. If needed, he should be given artificial respiration. Oxygen should be administered by a trained person only.

SCHEDULE-XXIV**MANUFACTURE OR MANIPULATION OF MANGANESE AND ITS COMPOUNDS**

1. Definitions:- For the purpose of the Schedule:-

- (a) "Manganese Process" means processing, manufacture or manipulation of manganese or any compound of manganese or any ore or any mixture containing manganese.
- (b) "First Employment" means employment in any manganese process and includes also re-employment in any manganese process following any cessation of employment for a continuous period exceeding 3 calendar months.
- (c) "Manipulation" means mixing, blending, filling, emptying, grinding, sieving, drying, packing, sweeping or otherwise handling of manganese or a compound of manganese, or an ore of mixture containing manganese.
- (d) "Efficient exhaust ventilation" means localized ventilation effected by mechanical means for the removal of dust or fume or mist at its source of origin so as to prevent it from escaping into the atmosphere of any place where any work is carried on. No draught shall be deemed to be efficient which fails to remove the dust or fume or mist at the point where it is generated and fails to prevent it from escaping into and spreading into the atmosphere of a work place.

2. Application:- This Schedule shall apply to every factory in which or in any part of which any manganese process is carried.

3. Exemption:- If in respect of any factory, the Chief Inspector-cum-Facilitator is satisfied that owing to any exceptional circumstances, or infrequency of the process, or for any other reason, application of all or any of the provisions of this schedule is not necessary for the protection of the persons employed in such factory he may, by an order in writing which he may at his discretion revoke exempt such factory from all or any of the provisions on such conditions and for such period as he may specify in the said order.

4. Isolation of a process:- Every manganese process which may give rise to dust, vapour or mist containing manganese, shall be carried on in a totally enclosed system or otherwise effectively isolated from other processes so that other plants and processes and other parts of the factory and person employed on other work of process may not be affected by the same.

5. Ventilation of Process:- No process in which any dust, vapour or mist containing manganese is generated, provision shall be carried out except under and efficient exhaust ventilation which shall be applied as near to the point of generation as practicable.

6. Medical facilities and records of examination and tests:-

(1) The occupier of every factory to which the schedule applies, shall -

(a) employ a qualified Medical Practitioner who shall be known as Factory Medical Officer for medical surveillance of the employees employed therein whose employment shall be subject to the approval of the Chief Inspector-cum-Facilitator, and

(b) provide to the said Factory Medical Officer all the necessary facilities for the purpose referred to in clause (a).

(2) The record of medical examinations and appropriate tests carried out by the said Factory Medical Officer shall be maintained in a separate register approved by the Chief Inspector-cum-Facilitator, which shall be kept readily available for inspection by the Inspector-cum-Facilitator.

6A. Medical examination by a Factory Medical Officer :- (1) Every employee employed in any manganese process shall be examined by Factory Medical Officer within fifteen (15) days of his first employment. Such examinations include tests for detection of a serum calcium, serum phosphate and manganese in blood and urine and also include steadiness tests and other neuro-muscular co-ordination tests. No employee shall be allowed to work after fifteen (15) days of his first employment in the factory unless certified for such employment by the Factory Medical Officer.

- (2) Every employee employed in a manganese process shall be re-examined by a Factory Medical Officer at least once in every three calendar months and such examination shall, wherever the Factory Medical Officer considers appropriate, include all the tests sub-paragraph (1).
 - (3) The Factory Medical Officer after examining a employee, shall issue a certificate of fitness in Form 28. The record of examinations and re-examinations carried out shall be entered in the certificate and the certificate shall be kept in the custody of the manager of the factory. The record of each examination carried out under sub-paragraphs (1) and (2), including the nature and the results of these tests, shall also be entered by the Factory Medical Officer in a health register.
 - (4) The certificate of fitness and the health register shall be kept readily available for inspection by the Inspector-cum-Facilitator.
 - (5) If at any time the Factory Medical Officer is of the opinion that the employee is no longer fit for employment in the said process on the ground that continuance therein would involve special danger to the health of the employee, he shall make a record of his findings in the said certificate and the health register. The entry of his findings in those documents should also include the period for which he considers that the said person is unfit to work in the said process.
 - (6) No person who has been found unfit to work as said in sub-paragraph (5) shall be re-employed or permitted to work in the said processes unless the Factory Medical Officer, after further examination, again certifies him fit for employment in those processes.
- 6B.** The person so suspended from the process shall be provided with alternate placement facilities unless he is fully incapacitated in the opinion of the Factory Medical Officer, in which case the person affected shall be suitably rehabilitated.

7. Personal Protective Equipment:-

- (1) The occupier of the factory shall provide and maintain in good and clean condition suitable overall and head coverings for all persons employed in any manganese process and such overalls and head coverings shall be worn by the persons while working on a manganese process.
- (2) The occupier of the factory shall provide suitable respiratory protective equipment for use by employees in emergency to prevent inhalation of dusts, fumes or mists. Sufficient number of complete sets of such equipment shall always be kept near the work place and the same shall be properly maintained and kept always in a condition to be used readily.
- (3) The occupier shall provide and maintain for the use of all persons employed suitable accommodation for the storage and make adequate arrangements for cleaning and maintenance of personal protective equipments.

8. Prohibition relating to young persons, pregnant women and lactating women:-

- (a) No young person, pregnant woman and lactating woman shall be allowed to work in any manganese process.
- (b) Women other than those specified above shall be allowed in the above works with provision of appropriate personal protective equipment only.

9. Food, drinks prohibited in the work rooms:- No food, drink, pan and supari or tobacco shall be allowed to be brought into or consumed by any employee in any work room in which any manganese process is carried on.

10. Mess room:- There shall be provided and maintained for the use of the persons employed in a manganese process a suitable mess room which shall be furnished with sufficient tables and benches and adequate means for warming of food. The mess room shall be placed under the charge of a responsible person and shall be kept clean.

11. Washing facilities:- There shall be provided and maintained in a clean state and in good condition, for the use of persons employed on manganese process a wash

place under cover, with either -

- (1) a trough with smooth impervious surfaces fitted with a waste pipe without plug. The trough shall be of sufficient length to allow at least 60 centimetres for every ten such persons employed at any one time, and having a constant supply of water from taps or jets above the trough at intervals of not more than 60 centimetres or at least one wash basin for every five such persons employed at any one time, fitted with a waste pipe and plug and having a constant supply of water, and
 - (2) Sufficient supply of soap or other suitable cleaning material and nail brushes and clean towels.
- 12. Cloak-room:-** If the Chief Inspector-cum-Facilitator so requires there shall be provided and maintained for the use of persons employed in manganese process a cloak-room for clothing put off during working hours with adequate arrangement for drying the clothing.
- 13. Cautionary placard and instruction:-** Cautionary notices in the following form and printed in the language of the majority of the employees employed, shall be affixed in prominent places in the factory where they can be easily and conveniently read by the employees and arrangement shall be made by the occupier to instruct periodically all employees employed in a manganese process regarding the health hazards connected with their duties and the best preventive measures and methods to protect themselves. The notices shall always be maintained in a legible condition.

CAUTIONARY NOTICE

Manganese and Manganese Compounds:-

1. Dust fumes and mist of Manganese and compounds are toxic when inhaled or when ingested.
2. Do not consume food or drink near the work-place.
3. Take a good wash before taking meals.
4. Keep the working area clean.
5. Use the protective clothing and equipments provided.
6. When required to work in situation where dust, fumes or mists are likely to be inhaled, use respiratory protective equipment provided for the purpose.
7. If you get severe headaches, prolonged sleeplessness or abnormal sensations on the body, report to the Manager who would make arrangements for your examination and treatment.

SCHEDULE-XXV

OPERATIONS INVOLVING HIGH NOISE AND VIBRATION LEVELS

Part-A High Noise Levels:

1. **Application:** This Part of the schedule shall apply to all operations in any manufacturing process having high noise level.
2. **Definitions:** For the purpose of this schedule, -
 - (a) "Noise" means any unwanted sound
 - (b) "High noise level" means any noise level measured on the A-weighted scale is 85 dB or above.
 - (c) "Decibel" means one-tenth of "Bel" which is the fundamental division of a logarithmic scale used to express the ratio of two specified or implied quantities, the number of "Bels" denoting such a ratio being the logarithm to the base of 10 of this ratio. The noise level (or the sound pressure level) 0 corresponds to a reference pressure of 20×10^{-6} Newton per square meter or 0.0002 dynes per square centimeter which is the threshold of hearing, that is, the lowest sound pressure level necessary to produce the sensation of hearing in average healthy listeners. The decibel in abbreviated form is dB.

- (d) "Frequency" is the rate of pressure variations expressed in cycles per second or hertz.
- (e) "dBA" refers to sound level in decibels as measured on a sound level meter operating on the A-weighting network with slow meter response.
- (f) "A-weighting" means making graded adjustments in the intensities of sound of various frequencies for the purpose of noise measurement, so that the sound pressure level measured by an instrument reflects the actual response of the human ear to the sound measured.

3. Protection against Noise:-

- (1) In every factory, a suitable engineering control or administrative measures shall be taken to ensure, so far as is reasonably practicable, that no employee is exposed to sound levels exceeding the maximum permissible noise exposure levels specified in Tables 1 and 2.

Table 1

Permissible Exposure in Cases of Continuous Noise

Total time of exposure (continuous short term exposures)	Sound pressure level in or a number of dBA per day, in hours
8	85
6	87
4	90
3	92
2	95
1½	97
1	100
¾	102
½	105
¼	110

Note: 1. No exposure in excess of 110 dBA is to be permitted.

2. For any period of exposure falling in between any figure and the next higher or lower figure as indicated in column 1, the permissible sound pressure level is to be determined by extrapolation on a proportionate basis.

Table 2

Permissible Exposure Levels of Impulsive or Impact Noise

Peak sound pressure level in dB	Permitted number of impulses or impact per day
140	100
135	315
130	1,000
125	3,160
120	10,000

Notes: 1. No exposure in excess of 140 dB peak sound pressure level is permitted.

2. For any peak sound pressure level falling in between any figure and the next higher or lower figure as indicated in column 1, the permitted number of impulses or impacts per day is to be determined by extrapolation on a proportionate basis.

- (2) For the purposes of this schedule, if the variations in the noise level involve maximum at intervals of one second or less, the noise is to be considered as a continuous one and the criteria given in Table 1 would apply. In other cases, the noise is to be considered as impulsive or impact noise and the criteria given in Table 2 would apply.
- (3) When the daily exposure is composed of two or more periods of noise exposure at different levels their combined effect should be considered, rather than the individual effect of each. The mixed exposure should be considered to exceed the limit value if the sum of the fractions

$\frac{C_1 + C_2 + \dots + C_n}{T_1 + T_2 + \dots + T_n}$	C _n exceeds unity,
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Where the C₁, C₂ etc., indicate the total time of actual exposure at a specified noise level and T₁, T₂, etc. denote the time of exposure of less than 90 dBA may be ignored in the above calculation.

4. (1) Where it is not possible to reduce the noise exposure to the levels specified in sub-paragraph (1) of paragraph 3 by reasonably practicable engineering control or administrative measures, the noise exposure shall be reduced to the greatest extent feasible by such control measures, and each employee so exposed shall be provided with suitable ear protectors as per relevant National or International Standards so as to reduce the exposure to noise to the levels specified in sub-paragraph (1) of paragraph 3.
- (2) The Occupier shall provide personal hearing protectors to the employees, -
- (a) So as to eliminate the risk to hearing or to reduce the risk to as low a level as is reasonably practicable.
- (b) After consultation with the employees concerned or their representative.
- (c) Ensure the hearing protectors is full and properly fitted, periodically checked for the effectiveness, used and maintained in good working order and repair.
- (d) Ensure that employees are given periodical training in the use, care and maintenance of the personal hearing protectors.
- (5) Where the ear protectors provided in accordance with sub-paragraph 2 and worn by a employee cannot still attenuate the noise reaching near his ear, as determined by subtracting the attenuation value in dBA of the ear protectors concerned from the measured sound pressure level, to a level permissible under Table 1 or Table 2 as the case may be, the noise exposure period shall be suitably reduced to correspond to the permissible noise exposures specified in sub-paragraph(1).
- (5)(a) In all cases where the prevailing sound levels exceed the permissible levels specified in sub-paragraph (1) of paragraph 3 there shall be administered an effective hearing conservation programme which shall include among other hearing conservation measures, pre-employment and periodical auditory surveys conducted on employees exposed to noise exceeding the permissible levels, and rehabilitation of such employees either by reducing the exposure to the noise levels or by transferring them to places where noise levels are relatively less or by any other suitable means.
- (b) Every employee employed in areas where the noise exceeds the maximum permissible exposure levels specified in sub-paragraph (1) of paragraph 3 shall be subjected to any auditory examination by a Registered medical practitioner within fourteen (14) days of his first employment and thereafter, shall be re-examined at least once a every twelve (12) months. Such initial and periodical examinations shall include tests which the Registered medical practitioner may consider appropriate and shall include determination of auditory thresholds for pure tones of 125, 250, 500, 1000, 2000, 4000 and 8000 cycles per second.

Part-B High Vibration Levels:

1. Applications

2. This part of the Schedule shall apply to all operations in a manufacturing part of the process having high undesired vibrations

3. Definition:

- (a) "daily exposure" means the quantity of mechanical vibration to which an employee is exposed during a working day, which takes account of the magnitude and duration of the vibration;
- (b) "Vibration" means a mechanical phenomenon where by oscillations occur about equilibrium point. The oscillations may be periodic or random
- (c) "high vibration" means any exposure greater than the exposure limit value and action value specified in paragraph-3.
- (d) "exposure action value" means the level of daily exposure set out in paragraph-3 for any employee which, if reached or exceeded, requires specified action to be taken to reduce risk;
- (e) "exposure limit value" means the level of daily exposure for any employee which must not be exceeded, as specified in sub-paragraph (3) of paragraph 3.
- (f) "hand-arm vibration" means mechanical vibration which is transmitted into the hands and arms during a work activity;
- (g) "mechanical vibration" means vibration occurring in a piece of machinery or equipment or in a vehicle as a result of its operation; and
- (h) "whole-body vibration" means mechanical vibration which is transmitted into the body, when seated or standing, through the supporting surface, during a work activity or as described in sub-paragraph (2) of paragraph 3.

4. Exposure Limit Values and Action Values:-

(1) For hand-arm vibration-

(a) the daily exposure limit value is $5 \text{ m/s}^2 \text{A}(8)$;

(b) the daily exposure action value is $2.5 \text{ m/s}^2 \text{A}(8)$;

and daily exposure shall be ascertained on the basis set out in the relevant National/International Standards specified in table 1 below.

(2) For whole body vibration-

(a) the daily exposure limit value is $1.15 \text{ m/s}^2 \text{A}(8)$;

(b) the daily exposure action value is $0.5 \text{ m/s}^2 \text{A}(8)$;

and daily exposure shall be ascertained on the basis set out in the relevant National/International Standards.

Table-1

The Threshold Limit Values (TLVs) for exposure of the hand to vibration in X, Y or Z direction of axes in the three dimensional system shall be as given below:

Total Daily Exposure Duration (hours)	Maximum value of frequency weighted acceleration (m/s^2) in any direction
4 to less than 8 hours	4
2 to less than 4 hours	6
1 to less than 2 hours	8
Less than 1 hour	12

(3) Assessment of vibration exposure shall be made for each applicable direction (X, Y, Z) since vibration is a vector quantity (magnitude and direction). In each direction, the magnitude of the vibration during normal operation of the power tool, machine or

work piece should be expressed by the root-mean-square (RMS) value of the frequency - weighted component acceleration, in units of meter per second squared(m/s^2)

5. Assessment of Risk to Health due to Vibration at the Workplace -

- (a) An occupier who carries out work which is liable to expose any employee from vibration shall make a suitable and sufficient assessment of the risk created by that work to the health and safety of those and the risk assessment shall identify the control measures that need to be taken.
- (b) The Risk assessment should be reviewed whenever it is felt the changes in the process makes the earlier risk assessment no longer valid.

6. Engineering Control Measures:-

- (1) The occupier shall ensure that risk from the exposure of employees to vibration is either eliminated at source or, where this is not reasonably practicable, reduced to as low a level as is reasonably practicable.
- (2) Where it is not reasonably practicable to eliminate risk at source pursuant to sub-paragraph (1) and an exposure action value is likely to be reached or exceeded, the employer shall reduce exposure to as low a level as is reasonably practicable by establishing and implementing a programme of engineering control measures which are appropriate to this type of activity.
- (3) The occupier shall ensure that the employees are provided with the following measures.
 - (a) Work equipment of appropriate ergonomic design which, taking account of the work to be done, produces the least possible vibration;
 - (b) the provision of auxiliary equipment which reduces the risk of injuries caused by vibration; and install appropriate maintenance programmes for work equipment, the workplace and workplace systems.
- (4) Subject to paragraph 5, the employer shall ensure that his employees are not exposed to vibration above an exposure limit value, and shall take necessary to identify the reasons for the limit being exceeded and take appropriate steps to reduce the exposure to vibration to below limit value.

Provided that where the exposure of an employee to vibration is usually below the exposure action value but varies markedly from time to time and may occasionally exceed the exposure limit value

Provided further that (a) any exposure to vibration averaged over one week is less than the exposure limit value and there is evidence to show that the risk from the actual pattern of exposure is less than the corresponding risk from constant exposure at the exposure limit value; (b) risk is reduced to as low a level as is reasonably practicable, taking into account the special circumstances.

7. Medical Examination:-

- (1) The occupier shall ensure that the employees who are likely to be exposed to vibration at above exposure action value are subjected to periodical medical examination once in a year. The medical examination shall include general and physical examination as well as special test for Reynaud's phenomenon.
- (2) The health record of employees shall be maintained by the occupier for a period of 5 years from the date of last test and produce to the Inspector-cum-Facilitator on demand.
- (3) If at any time the Registered medical practitioner is of the opinion that the employee is no longer fit to work in the said process on the ground that continuance working would involve danger to the health of the employee he shall make a record of his findings in the said certificate and the health register. The entry of his findings in those documents should also include the period for which he considers that the said person is unfit for work in the said processes. The person declared unfit in such circumstances shall be provided with alternate placement facility unless he is fully

incapacitated in the opinion of the Registered medical practitioner in which case the person affected shall be suitably rehabilitated.

8. Personal Protective Equipment:-

- (1) The occupier shall ensure that the employee who are likely to be exposed to high level of vibration are provided with appropriate PPE and protective clothing conforming to national or international standards. Such Personal Protective Equipment should include hand gloves and safety shoes. The protective clothing shall be able to protect the employees from cold and damp.
- (2) The occupier shall ensure that employees are given periodical training in the use, care and maintenance of the Personal Protective Equipment.

9. Administrative Control Measures:-

- (1) The occupier shall ensure that as far as reasonably practicable as all necessary control measures are taken to ensure that the unwanted vibrations does not affect the health of the employees employed in the process to which this part of schedule apply.
- (2) The occupier shall provide all employees with information instruction and training to be adopted to limit the exposure limit values and action values as set out in sub-paragraph-3.
- (3) Without prejudice to the generality of paragraph (1), the information, instruction and training provided under that paragraph shall include,-
 - (i) the exposure limit values and action values set out in paragraph-4;
 - (ii) safe working practices to minimize exposure to vibration;
 - (iii) suitable and sufficient information and training for employees such that work equipment may be used correctly and safely, in order to minimise their exposure to vibration;
 - (iv) limitation of the duration and magnitude of exposure to vibration;
 - (v) appropriate work schedules with adequate rest periods; and
 - (vi) The information, instruction and training required by paragraph 2 shall be updated to take account of significant changes in the type of work carried out or the working methods used by the employer.
- (4) The Occupier shall display pictorial cautionary notices/warning signs at conspicuous places where there are possibilities of employees being exposed to undesired high vibrations.

10. Prohibition relating to young persons, pregnant women and lactating women and persons with disabilities:-

- (a) No young person, pregnant woman, lactating woman and persons with disabilities shall be allowed to work in the process covered by this part of the Schedule.
- (b) Women other than those specified above shall be allowed in the above works with provision of appropriate personal protective equipment only.

11. Exemptions:- If in respect of any factory, the Chief Inspector-cum-Facilitator is satisfied that owing to any exceptional circumstances, or infrequency of the process, or for any other reason, application of all or any of the provisions of this schedule is not necessary for the protection of the persons employed in such factory, he may by an order in writing which he may at his discretion revoke, exempt such factory from all or any of the provisions on such conditions and for such period as he may specify in the said matter.

SCHEDULE-XXVI

MANUFACTURE OF RAYON VISCOSE PROCESS

1. Definitions:-For the purpose of this schedule,-

- (a) "approved" means approved for the time being in writing by the Chief Inspector-cum-

Facilitator:

- (b) "breathing apparatus" means a helmet or face piece with necessary connections by means of which the person using it in a poisonous, asphyxiating or irritant atmosphere breathes unpolluted air, or any other approved apparatus;
- (c) "churn" means the vessel in which alkali cellulose pulp is treated to a dissolver;
- (d) "dumping" means transfer of cellulose xanthate from a dry churn to a dissolver;
- (e) "efficient exhaust draught" means localized ventilation by mechanical means for the removal of any gas or vapour, so as to prevent it from escaping into the air of any place in which work is carried on. No draught shall be deemed to be efficient if it fails, to control effectively any gas or vapour generated at the point where such gas or fume originates;
- (f) "Furne process" means any process in which carbon disulphide or hydrogen sulphide is produced, used or given off;
- (g) "life belt" means a belt made of leather or other suitable material which can be securely fastened round the body with a suitable length of rope attached to it, each of which is sufficiently strength to sustain the weight of a man;
- (h) "protective equipment" means apron, goggles, face shields, foot wear, gloves and overall made of suitable materials.

2. Ventilation:-

- (1) In all the workrooms where a furne process is carried on, adequate ventilation by natural or mechanical means shall be provided so as to control, in association with other control measures, the concentration of Carbon-di-sulphide and hydrogen sulphide in the air of every work environment within the permissible limits.
- (2) Notwithstanding the requirements in sub-paragraph (1) an efficient exhaust draught shall be provided and maintained to control the concentration of carbon-di-sulphide and hydrogen sulphide in the air at the following locations:-
 - (a) dumping hoppers of dry churns;
 - (b) spinning machines;
 - (c) tric rollers and cutters used in staple fibre spinning;
 - (d) hydro-extractors for yam cakes;
 - (e) after treatment processes; and
 - (f) spinbaths.
- (3) In so far as the spinning machines and tric rollers and cutters used a staple fibre spinning are concerned, they shall be, for the purpose of ensuring the effectiveness of the exhaust draft to be provided as required in sub-paragraph (1), enclosed as fully as practicable and provided with suitable shutters in sections to enable the required operations to be carried out without giving rise to undue quantities of Carbon-di-sulphide and hydrogen sulphide escaping to the work environment.
- (4) No dry churn shall be opened after completion of reaction without initially exhausting the residual vapours of carbon-di-sulphide by operation of a suitable an efficient arrangement for exhausting the vapours which shall be continued to be operated as long as the churn is kept opened.
- (5) Whenever any ventilation apparatus normally required for the purpose of meeting the requirements in sub-paragraphs (2), (3) and (4) is ineffective, fails, or is stopped for any purpose whatsoever, all persons shall be required to leave the work areas where the equipment of processes specified in the above said sub-paragraphs are in use, as soon as possible, and in any case not later than 15 minutes after such an occurrence.
- (6)(i) All ventilating systems provided for the purposes as required in sub-paragraphs (2), (3) and (4) shall be examined and inspected once every week by a responsible person. It shall be thoroughly examined and tested by a competent person once in every period of twelve (12) months. Any defects found by such examinations or test shall be rectified forth with.

- (ii) A register containing particulars of such examinations and tests, and the state of the systems and the repairs or alterations (if any) found to be necessary shall be kept and shall be available for inspection by an Inspector-cum-Facilitator.
- 3. Waste from spinning machines:-** Waste yarn from the spinning machine shall be deposited in suitable containers provided with close fitting covers. Such waste shall be disposed off as quickly as possible after decontamination.
- 4. Lining of Dry Churns:-** The inside surface of all dry churns shall be coated with a non-sticky paint so that cellulose xanthate will not stick to the surface of the churn. Such coating shall be maintained in good condition.
- 5. Air monitoring:-**
- (1) To ensure the effectiveness of the control measures, monitoring of carbon-di-sulphide and hydrogen sulphide in air shall be carried out once at least in every shift and the record of the results so obtained shall be entered in a register specially maintained for the purposes.
 - (2) For the purpose of the requirement in sub-paragraph (1) instantaneous gas detector tubes shall not be used. Samples shall be collected over a duration of not less than 10 minutes and analyzed by an approved method. The locations where such monitoring is to be done shall be as directed by the Inspector-cum-Facilitator.
 - (3) If the concentration of either carbon-di-sulphide or hydrogen sulphide exceeds the permissible limits for such vapour or gas as laid down in **Rule 49**, suitable steps shall be taken for controlling the concentrations in air of such contaminants report of such occurrences shall be sent to the Chief Inspector-cum-Facilitator of forthwith.
- 6. Prohibition to remain in fume process rooms:-** No person during his intervals for meal, or rest shall remain in any room wherein fume process is carried out.
- 7. Prohibition relating to employment of young persons:-** No young person shall be employed or permitted to work in any fume process or in any room in which any such process is carried on.
- 8. Protective equipment:-** (1) The occupier shall provide and maintain in good condition protective equipment as specified in the Table for use of persons employed in the processes referred to therein

TABLE

S. No.	Process	Protective equipment
1.	Dumping	Overall, face-shields, gloves and foot-wear - all made of suitable materials
2.	Spinning	Suitable aprons, gloves and footwear
3.	Process involving or likely to involve contact with viscose solution	Suitable gloves and footwear
4.	Handling of sulphur	Suitable chemical goggles
5.	Any other process involving contact with a hazardous chemical	Protective equipment as may be directed by the Chief Inspector-cum-Facilitator by an order in writing

- (2) A suitable room, rooms or lockers shall be provided exclusively for the storage of all the protective equipment supplied to employees and no such equipment shall be stored at any place other than the room, rooms, or lockers so provided.

9. Breathing apparatus:-

- (1) There shall be provided in every factory where fume process is carried on, sufficient supply of-
- breathing apparatus;
 - oxygen and suitable appliances for its administration; and
 - life belts.
- (2)(i) The breathing apparatus and other appliances referred to in sub-paragraph (1) shall be maintained in good condition and kept in appropriate locations so as to be readily available.
- The breathing apparatus and other appliances referred to in clauses (a) and (b) of sub-paragraph (1) shall be cleaned and disinfected at suitable intervals and thoroughly inspected once every month by a responsible person.
 - A record of the maintenance and of the condition of the breathing apparatus and other appliances referred to in sub-clause (1) shall be entered in a register provided for that purpose which shall be readily available for inspection by an Inspector-cum-Facilitator.
- (3) Sufficient number of employees shall be trained and periodically retrained in the use of breathing apparatus and administering artificial respiration so that at least two (2) such trained persons would be available during all the working hours in each room in which fume process is carried on.
- (4) Breathing apparatus shall be kept properly labelled in clean, dry, light-proof cabinet and if liable to be affected by fumes, shall be protected by placing them in suitable containers.
- (5) No person shall be employed to perform any work specified in sub-paragraph (1) for which breathing apparatus is necessary to be provided under that sub-paragraph unless he has been fully instructed in the proper use of that equipment.
- (6) No breathing apparatus provided in pursuance of sub-paragraph (1) which has been worn by a person shall be worn by another person unless it has been thoroughly cleaned and disinfected since last being worn and the person has been fully instructed in the proper use of that equipment.
- 10. Electric fittings:-** All electric fittings in any room in which carbon-di-sulphide is produced, used or given off or is likely to be given off into the work environment, other than a spinning room, shall be of flame-proof construction and all electric conductors shall either be enclosed in metal conduits or be lead-sheathed.
- 11. Prohibition relating to smoking, etc:-** No person shall smoke or carry matches, fire or naked light or other means of producing a naked light or spark in a room in which fume process is carried on. A notice in the language understood by the majority of the employees shall be posted in prominent locations in the plant prohibiting smoking and carrying of matches, fire or naked light or other means of producing naked light or spark into such rooms.
- Provided that fire, naked light or other means of producing a naked light or spark may be carried on in such room only when required for the purposes of the process itself under the direction of a responsible person.
- 12. Washing and bathing facilities:-**
- There shall be provided and maintained in a clean state and in good repair for the use of all employees employed in the processes covered by the schedule, adequate washing and bathing under cover at the rate of one such place for every 25 persons employed.
 - The Washing places shall have standpipes placed at intervals of not less than one metre.
 - Not less than one half of the total number of washing places shall be provided with bathrooms.

- (4) Sufficient supply of clean towels made of suitable materials shall be provided.
Provided that such towels shall be supplied individually for each employee if so ordered by the Inspector-cum-Facilitator

- (5) Sufficient supply of soap and nail brushes shall be provided

13. Rest room:-

- (1) A rest room shall be provided for the employees engaged in doffing operations of filament yarn spinning process
(2) Such rest room shall be provided with fresh air supply and adequate seating arrangement

- 14. Cautionary notice and instructions:-** The following cautionary notice shall be prominently displayed in each fume process room.

CAUTIONARY NOTICE

1. Carbon disulphide (CS) and Hydrogen (H₂S) which may be present in this room are hazardous to health.
2. Follow safety instructions.
3. Use protective equipment and breathing apparatus as and when required.
4. Smoking is strictly prohibited in this area.
 - (1) This notice shall be in a language understood by the majority of the employees and displayed where it can be easily and conveniently read. If any employee is illiterate, effective steps shall be taken to explain carefully to him the contents of the notice so displayed.
 - (2) Arrangements shall be made to instruct each employee employed in any room in which a fume process is carried on regarding the health hazards connected with their work and the preventive measures and methods to protect themselves. Such instructions shall be given on his first employment and repeated periodically.
 - (3) Simple and special instructions shall be framed to ensure that effective measures will be carried out in case of emergency involving escape of carbon disulphide and hydrogen sulphide.

These instructions shall be displayed in the concerned areas and employees shall be instructed and trained in the actions to be taken in such emergencies.

15. Medical facilities and records of examinations and tests:-

- (1) The occupier of each factory to which this schedule applies, shall-
- (a) employ a qualified Medical Practitioner who shall be known as Factory Medical Officer for medical surveillance of the employees employed in the fume process whose employment shall be subject to the approval of the Chief Inspector-cum-Facilitator; and
 - (b) provide to the said Factory Medical Officer all the necessary facilities for the purpose referred to in clause (a).
- (2) The record of medical examination and appropriate tests carried out by the said Factory Medical Officer shall be maintained in a separate register approved by the Chief Inspector-cum-Facilitator, which shall be kept readily available for inspection by the Inspector-cum-Facilitator

- 16. Medical Examination by a Factory Medical Officer :-** (1) Every employee employed in the fume process shall be examined by a certifying surgeon within 15 days of his first employment. Such examination shall include tests for estimation of exposure coefficient (iodineazide test on urine), and cholesterol, as well as electrocardiogram (ECG) and Central Nervous System (CNS) tests. No employee shall be allowed to work after 15 days of his first employment in the factory unless certified for such employment by the Factory Medical Officer

- (2) Every employee employed in the fume process shall be re-examined by a Factory

- Medical Officer at least once in every twelve calendar months. Such examination shall, wherever the Factory Medical Officer considers appropriate, include all the tests as specified in sub-paragraph (1).
- (3) The Factory Medical Officer after examining a employee, shall issue a certificate of fitness. The record of re-examination carried out shall be entered in the certificate and the certificate shall be kept in the custody of the manager of the factory. The record of each examination carried out under sub-paragraphs (1) and (2), including the nature and results of the tests, shall also be entered by the Factory Medical Officer in a health register.
 - (4) The certificate of fitness and the health register shall be kept readily available for inspection by the Inspector-cum-Facilitator
 - (5) If at any time the Factory Medical Officer is of the opinion that a employee is no longer fit for employment in the fume process on the ground that continuance therein would involve special danger to the health of the employee, e shall make a record of his findings in the said certificate and the health register. The entry for which he considers that the said person is unfit for work in the fume process.
 - (6) No person who has been found unfit to work as said in sub-paragraph(5) shall be re-employed or permitted to work in the fume process unless the Factory Medical Officer , after further examination again certifies him fit for employment in such process.
17. The person so suspended from the process shall be provided with alternate placement facilities unless he is fully incapacitated in the opinion of the Factory Medical Officer , in which case the person affected shall be suitably rehabilitated.
18. **Exemption:-** If in respect of any factory, the Chief Inspector-cum-Facilitator is satisfied that owing to the exceptional circumstances or infrequency of the processes or for any other reason, all or any of the provisions of this schedule is not necessary for protection of the employees in the factory, the Chief Inspector-cum-Facilitator may, by a certificate in writing, which he may at his discretion, revoke at any time, exempt such factory from all or any of such provisions subject to such conditions, if any, as he may specify therein.

SCHEDULE-XXVII

HIGHLY FLAMMABLE LIQUIDS AND FLAMMABLE COMPRESSED GASES

1. **Application:-** These rules will be applicable to all factories where highly flammable liquids or flammable compressed gases are manufactured, stored, handled or used.
2. **Definitions For the Purpose of this schedule:-**
 - (a) "highly flammable liquid" means any liquid including its solution, emulsion or suspension which when tested in a manner specified by sections 14 and 15 of the Petroleum Act, 1934 (Central Act No.30 of 1934) given off flammable vapours at a temperature less 32 degrees centigrade.
 - (b) flammable compressed gas" means flammable compressed gas as defined in section 2 of the Static and Mobile Pressure Vessels (unfired) Rules, 1961 framed under the Explosives Act, 1880
3. **Storage:-**
 - (1) Every flammable liquid or flammable compressed gas used in every factory shall be stored in suitable fixed storage tank, or in suitable closed vessel located in a safe position under the ground, in the opener in a store room of adequate fire resistant construction.
 - (2) Except as necessary for use, operation or maintenance, every vessel or tank which contains or had contained a highly flammable liquid or flammable compressed gas shall be taken to contain or immediately drain off to a suitable container any spill or leak that may occur.
 - (3) Every container, Vessel, tank, cylinder, or store room used for storing highly flammable liquid or flammable compressed gas shall be clearly and in bold letters mark "Danger-highly Flammable Liquid" or "Danger-Flammable Compressed Gas."

- 4. Enclosed systems for conveying Highly flammable Liquids:-**Wherever it is reasonably practicable, highly flammable liquids shall be conveyed within a factory in totally enclosed systems consisting of pipe lines, pumps and similar appliances from the storage tank or vessel to the point of use. Such enclosed systems shall be so designed, installed, operated and maintained as to avoid leakage or the risk of spilling.
- 5. Preventing Formation of Flammable Mixture with Air:-** Where there is a possibility for leakage or spill of highly flammable liquid or flammable compressed gas from an equipment pipe line, valve, joint or other part of a system, all practicable measures shall be taken to contain, drain off or dilute such spills or leakage as to prevent formation of flammable mixture with air. Sensor with alarm shall be provided to warn formation of flammable mixture with air where highly flammable liquids or flammable compressed gases are handled.
- 6. Prevention of ignition:-** In every room, work place or other location where highly flammable liquid or flammable combustible gas is stored, conveyed, handled or used or where there is danger of fire or explosion from accumulation of highly flammable liquid or flammable compressed gas in air, all practicable measures shall be taken to exclude the sources of ignition.

Such precautions shall include the following:

- (a) All electrical apparatus shall either be excluded from the area of risk or they shall be 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) No person shall wear or be allowed to wear any footwear having 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;
 - (f) Interlocking of transfer pump with earthing of mobile tanker for loading and unloading;
 - (g) 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.
- 7. Prohibition of smoking:-** No person shall smoke in any place where highly flammable liquid or flammable compressed gas is present in circumstances that smoking would give rise to a risk of fire. The occupier shall take all practicable measures to ensure compliance with this requirement including display of a bold notice indicating prohibition of smoking at every place where this requirement applies.
- 8. Firefighting:-** In every factory where highly flammable liquid or flammable compressed gas is manufactured, stored, handled and used appropriate and adequate means of fighting a fire shall be provided. The adequacy and suitability of such means which expression includes the fixed and portable fire extinguishing systems, extinguishing material, procedures and the process of firefighting, shall be to be standards and levels prescribed by the Indian Standards applicable.
- 9. Exemptions:-** If in respect of any factory, the Chief Inspector-cum-Facilitator is satisfied that owing to the exceptional circumstances as or infrequency of the processes or for any other reasons for protect the provisions of this schedule other reasons, all or any of the provisions of this schedule is not necessary for protection of the employees in the factory, the Chief Inspector-cum-Facilitator may, by a certificate in writing, which he may, at his discretion, revoke at any time, exempt such factory from all or any of such provisions subject to such conditions, if any as he may specify therein.

SCHEDULE-XXVIII

OPERATIONS IN FOUNDRIES AND FURNACES

1. Application

Provisions of this schedule shall apply to all parts of factories where any of the following operations or process are carried on:

- (a) The production of iron casting or, as the case may be, steel castings by casting in moulds made of sand, loam, moulding composition or other mixture of materials, or by shell moulding or by centrifugal casting and any process incidental to such production.
- (b) the production of non-ferrous castings by casting metal in moulds made of sand, loam, metal, moulding composition or other material or mixture of materials, or by shell mouldings, die-casting (including pressure die-casting), centrifugal casting or continuous casting and any process incidental to such production ;
- (c) the melting and casting of non-ferrous metal (and/or ferrous metal) for the production of ingots, billets, slabs or other similar products and the stripping thereof ; but shall not apply with respect to
- (i) any process with respect to the smelting and manufacture of lead and the Electric Accumulators;
- (ii) any process for the purposes of printing works ; or
- (iii) any smelting process in which metal is obtained by a reducing operation or any process incidental to such operation, or
- (iv) the production of steel in the form of ingots; or
- (v) any process in the course of the manufacture of solder or any process incidental to such manufacture, or
- (vi) the melting and casting of lead or any lead-based alloy for the production of ingots, billets, slabs or other similar products or the stripping thereof, or any process incidental to such melting, casting or stripping.

2. Definition

For the purpose of this Schedule

- (a) "approved respirator" means a respirator of a type approved by the Chief Inspector-cum-Facilitator ;
- (b) "Cupola or furnace" includes a receiver associated therewith;
- (c) "dressing or fettling operations" includes stripping and other removal of adherent sand, cores, runners, risers, flash and other surplus metal from a casting and the production of reasonably clean and smooth surface, but does not include
- (d) the removal of metal from a casting when performed incidentally in connection with the machining or assembling of castings after they have been dressed or fettled, or any operation which is a knockout operation within the meaning of this Schedule ;
- (e) "foundry" means those parts of a factory in which the production of iron or steel or non-ferrous castings (not being the production of pig iron or the production of steel in the form of ingots) is carried on by casting in moulds made of sand, loam, moulding composition or other mixture of materials, or by steel moulding or by centrifugal casting in metal moulds lined with sand, or die casting including pressure die castings, together with any part of the factory in which any of the following processes are carried on as incidental processes in connection with and in the course of, such production, namely, the preparation and mixing of materials used in foundry process, the preparation of moulds and cores, knock-out operations and dressing or fettling operations ;
- (f) "knock-out operations" means all methods of removing castings from moulds and the following operations, when done in connection therewith, namely, stripping, coring out and the removal of runners and risers ;
- (g) "pouring aisle" means an aisle leading from a main gangway or directly from a cupola or furnace to where metal is poured into moulds.

- (h) "qualified supervisor" means a person possessing a Bachelor's Degree in Science or Diploma or Degree in Engineering with minimum 2 years experience in furnace and foundry operations.

3. Prohibition of use of certain materials as parting materials

- (1) A material shall not be used as a parting material if it is a material containing compounds of silica calculated as silica to the extent more than five per cent, by weight of the dry material.

Provided that this prohibition shall not prevent the following being used as a parting material if the material does not contain an admixture of any other silica:

- (a) Zirconium silicate (zircon),
 - (b) Calcined china clay
 - (c) Calcined aluminous fireclay.
 - (d) Silimanite
 - (e) Calcined or fused alumina.
 - (f) Olivine.
 - (g) Natural sand.
- (2) Dust or other matter deposited from a fettling or blasting process shall not be used as a parting material or as a constituent in a parting material.

4. Arrangement and storage

For the purposes of promoting safety and cleanliness in workrooms, the following requirements shall be observed:

- (a) moulding boxes, loam plates, ladles, patterns, pattern plates, frames, boards, box weights, and other heavy articles shall be so arranged and placed as to enable work to be carried on without unnecessary risk.
 - (b) suitable and conveniently accessible racks, bins or other receptacles shall be provided and used for the storage of other gear and tools.
 - (c) where there is bulk storage of sand, fuel, metal scrap or other materials or residues, suitable bins, bunkers or other receptacles shall be provided for the purpose of such storage.
- ### 5. Construction, Installation and Operation of furnace
- (1) The precinct in which induction furnace is installed shall be of adequate strength and shall be segregated from the other parts of the factory in such a way so that minimum number of workers is exposed to the risk of any fire or explosion at any time.
 - (2) Furnace shed shall be well ventilated.
 - (3) All the fitting and attachment of induction furnace shall be of good construction, sound material and adequate strength.
 - (4) Adequate arrangements shall be made to avoid tilting of the ladles while transportation.
 - (5) Ladle shall not be filled with molten metal more than 3/4th of its volume to avoid spillage of molten metal while being carried by the crane.
 - (6) The refractory material of the induction furnace shall be strong at high temperature, resistant to thermal shock, chemically inert, low thermal conductivity and co-efficient of expansion and of adequate uniform thickness.
 - (7) The lining of the induction furnace shall be checked by qualified supervisor every week for any wear and tear and damage as per relevant Bureau of Indian Standards.
 - (8) Adequate precautions shall be taken during repair of induction furnace as per relevant bureau of Indian Standards.

6. Construction of floors

- (1) Floors or indoor workplaces in which the processes are carried on, other than parts which are of sand, shall have an even surface of hard material.
- (2) No part of the floor of any such indoor workplace shall be of sand except, where this is necessary by reason of the work done.
- (3) All parts of the surface of the floor of any such indoor workplace which are of sand shall, so far as practicable, be maintained in an even and firm condition.

7. Means of escape

There shall be at least two ways of escape with adequate width at opposite ends of the furnace platforms.

8. Display of Notice

Notice regarding non-use of water, etc. near induction furnace shall be displayed

9. Charging of scrap in Induction Furnace

- (1) No scrap material with close cavities shall be charged in the induction furnace. Scrap to be charged shall be dry and shall not contain oil or any other liquid or moisture.
- (2) No scrap material shall be fed into induction furnace unless it is thoroughly checked in the presence of qualified Supervisor.
- (3) Sealed container or part made by centrifugal casting shall not be fed into the furnace unless it is cut into pieces.
- (4) No worker shall be engaged in charging of scrap material in induction furnace unless practical measures such as substantial safeguards against splash of hot metal, spatter etc. are provided.
- (5) Scrap received in the form of pressed bundle should be opened, sorted and only then fed into furnace.

10. Cleanliness of Indoor workplaces

- (1) All accessible parts of the walls of every indoor workplace in which the processes are carried on and of everything affixed to those wall shall be effectively cleaned by a suitable method to a height of not less than 4.2 meters from the floor at least once in every period of fourteen months. A record of the carrying out of every such effective cleaning in pursuance of this paragraph including the date (which shall be not less than five months nor more than nine months after the last immediately preceding washing, cleaning or other treatment).
- (2) Effective cleaning by a suitable method shall be carried out at least once every working day of all accessible parts of the floor of every indoor workplace in which the processes are carried on, other than parts which are of sand, and the parts which are of sand shall be kept in good order.

11. Manual operations involving molten metal

- (1) There shall be provided and properly maintained for all persons employed on manual operations involving molten metal with which they are liable to be splashed, a working space for that operation
 - (a) which is adequate for the safe performance of the work and
 - (b) which, so far as reasonably practicable, is kept free from obstruction.
- (2) Any operation involving the carrying by hand of a container holding molten metal shall be performed on a floor all parts of which where any person walks while engaged in the operation shall be on the same level.

Provided that, where necessary to enable the operation to be performed without undue risk, nothing in this paragraph shall prevent the occasional or exceptional use of a working space on a different level from the floor, being a space provided with a safe means of access from the floor for any person while engaged in the operation.

12. Gangways and pouring aisles

- (1) In every workroom to which this paragraph applies constructed, reconstructed or converted for use as such after the making of this schedule and, so far as reasonably practicable, in every other workroom to which this paragraph applies, sufficient and clearly defined main gangways shall be provided and properly maintained which
 - (a) shall have an even surface of hard material and shall, in particular, not be of sand or have on them more sand than is necessary to avoid risk of flying metal from accidental spillage
 - (b) shall be kept, so far as reasonably practicable, free from obstruction ;
 - (c) if not used for carrying molten metal, free from obstruction ;
 - (d) if used for carrying molten metal shall be
 - i. Where truck ladles are used exclusively, at least 600 millimeters wider than the overall width of the ladle.
 - ii. Where hand shanks are carried by not more than two men, at least 920 millimeters in width ;

- iii. Where hand shanks are carried by more than two men, atleast 1.2 meters in width, and
 - iv. Where used for simultaneous travel in both directions by men carrying hand shanks, atleast 1.8 meters in width.
- (2) In workroom to which this paragraph applies constructed, reconstructed or converted for use as such after the making of this Schedule, sufficient and clearly defined pouring aisles shall be provided and properly maintained which
- (a) shall have an even surface of hard material and shall, in particular, not be of sand or have on them more sand than is necessary to avoid risk of flying metal from accidental spillage;
 - (b) shall be kept so far as reasonably practicable free from obstruction ;
 - (c) if molten metal is carried in hand ladles or bull ladles by not more than two men per ladle, shall be atleast 450 millimeters wide, but where any moulds alongside the aisle are more than 510 millimeters above the floor of the aisle, the aisle shall be not less than 600 millimeters wide
 - (d) if molten metal is carried in hand ladles or bull ladles by more than two men per ladle, shall be atleast 760 millimeters wide ;
 - (e) if molten metal is carried in crams, trolley or truck ladles, shall be of a width adequate for the safe performance of the work.
- (3) Requirements of sub-paragraphs (1) and (2) shall not apply to any workroom or part of a workroom if, by reason of the nature of the work done therein, the floor of that workroom or, as the case may be, that part of a workroom has to be of sand
- (4) In this paragraph "workroom to which this paragraph applies" means a part of a ferrous or non-ferrous foundry in which molten metal is transported or used, and a workroom to which this paragraph applies shall be deemed for the purposes of this paragraph to have been constructed, reconstructed or converted for use as such after the making of this schedule if the construction, reconstruction or conversion thereof was begun after the making of this Schedule

13. Work near cupolas and furnaces

No person shall carry out any work within a distance of four meters from a vertical line passing through the delivery and of any spout of a cupola or furnace, being a spout used for delivering molten metal, or within a distance of 2.4 meters from a vertical line passing through the nearest part of any ladle which is in position at the end of such a spout, except in either case where it is necessary for the proper use or maintenance of a cupola or furnace that work should be carried out within that distance of that work is being carried out at such a time and under such conditions that there is no danger to the person carrying it out from molten metal which is being obtained from the cupola or furnace or is in a ladle in position at the end of the spout.

14. Dust and fumes

- (1) Open coal, coke or wood fires shall not be used for heating or drying ladles inside a workroom unless adequate measures are taken to prevent, so far as practicable, fumes or other impurities from entering into or remaining in the atmosphere of the workroom.
- (2) No open coal, coke or wood fires shall be used for drying moulds except in circumstances in which the use of such fires is un-avoidable
- (3) Mould stoves, core stoves and annealing furnaces shall be so designed, constructed, maintained and worked as to prevent, so far as practicable, offensive or injurious fumes from entering into any workroom during any period when a person is employed therein
- (4) All knock-out operations shall be carried out
 - (a) In a separate part of the foundry suitably partitioned off, being a room or part in which, so far as reasonably practicable, effective and suitable local exhaust ventilation are provided ; or
 - (b) In an area of the foundry in which, so far as reasonably practicable, effective and suitable local exhaust ventilation is provided, or where compliance with this requirement is not reasonably practicable, a high standard of general ventilation is provided.
- (5) All dressing or fettling operations shall be carried out

- (a) in a separate room or in a separate part of the foundry suitably partitioned off ; or
- (b) in an area of the foundry set apart for the purpose ; and shall, so far as reasonably practicable, be carried out with effective and suitable local exhaust ventilation or other equally effective means of suppressing dust, operating as near as possible to the point of origin of the dust.

15. Maintenance and examination of exhaust plant

- (1) All ventilating plant used for the purpose of extracting, suppressing or controlling dust or fumes shall be properly maintained.
- (2) All ventilation plant used for the purpose of extracting, suppressing or controlling dust or fumes shall be examined and inspected once every week by a responsible person. It shall be thoroughly examined and tested by a competent person atleast once in every period of twelve months; and particulars of the results of every such examination and test shall be entered in a register which shall be kept readily available for inspection by an Inspector-cum-Facilitator. Any defect found on any such examination and test shall be immediately reported in writing by the person carrying out the examination and test to the Occupier of the Factory.

16. Protective equipment

- (1) The occupier shall provide and maintain suitable protective equipment specified for the protection of workers,
 - (a) suitable gloves or other protection for the hands for workers engaged in handling any hot material likely to cause damage to the hands by burn, scald or scar, or in handling pig iron, rough castings or other articles likely to cause damage to the hands by cut or abrasion;
 - (b) approved respirators for workers carrying out any operations creating a heavy dust concentration which cannot be dispelled quickly and effectively by the existing ventilation arrangements.
- (2) No respirator provided for the purposes of sub-paragraph (1) (b) has been worn by a person shall be worn by another person if it has not since been thoroughly cleaned and disinfected.
- (3) Persons who for any of their time
 - (a) work at a spout of or attend to, a cupola or furnace in such circumstances that material there from may come into contact with the body, being material at such a temperature that its contact with the body would cause a burn ; or
 - (b) are engaged in, or in assisting with, the pouring of molten metal ; or
 - (c) carry by hand or move by manual power any ladle or mould containing molten metal ; or
 - (d) are engaged in knocking-out operations involving material at such a temperature that its contact with the body would cause a burn; shall be provided with suitable footwear and gaiters which worn by them prevent, so far as reasonably practicable, risk of burns to his feet and ankles.
- (4) Where appropriate, suitable screens shall be provided for protection against flying materials (including splashes of molten metal and sparks and chips thrown off in the course of any process).
- (5) The occupier shall provide and maintain suitable accommodation for the storage and make adequate arrangements for cleaning and maintaining of the protective equipment supplied in pursuance of this paragraph.
- (6) Every person shall make full and proper use of the equipment provided for his protection in pursuance of sub-paragraphs (1) and (4) and shall without delay report to the Occupier, or other appropriate person any defect in, or loss of, the same.
- (7) Workers working in the furnace/casting pit area shall be provided with cotton clothes, Safety shoes, leg guards, apron, face shield, hand gloves and safety helmet.

- (8) Workers employed for segregation of scrap shall be provided with safety shoes and hand gloves.
- (9) Fire retardant and heat retardant clothing shall be provided to all the workers working on platform of induction furnace.

17. Training and Supervision

- (1) All operations under this Schedule shall be carried out under the supervision of qualified supervisors at all times.
- (2) Workers carrying out operations and maintenance activities in foundries and furnaces shall be adequately trained.

18. Washing and bathing facilities

- (1) There shall be provided and maintained in clean state and good repair for the use of all workers employed in the foundry,
 - (a) a wash place under cover with either
 - (i) a trough with impervious surface fitted with a waste pipe without plug, and of sufficient length to allow atleast sixty centimeters for every 10 such persons employed at any one time and having a constant supply of clean water from taps or jets above the trough at intervals of not more than sixty centimeters ; or
 - (ii) atleast one tap or stand pipe for every ten such persons employed at any one time, and having a constant supply of clean water, the tap or stand pipe being spaced not less than 1.2 meters apart ; and
 - (b) not less than one-half of the total number of washing places provided under clause (a) shall be in the form of bathrooms ;
 - (c) a sufficient supply of clean towels made of suitable material changed daily, with sufficient supply of nail brushes and soap.
- (2) The facilities provided for the purposes of sub-paragraph (1) shall be placed in charge of a responsible person or persons and maintained in a clean and orderly condition.

19. Disposal of dross and skimming

Dross and skimming's removed from molten metal or taken from a furnace shall be placed forthwith in suitable receptacles.

20. Disposal of waste

Appropriate measures shall be taken for the disposal of all waste products from shell moulding (including waste burnt sand) as soon as reasonably practicable after the castings have been knocked-out.

21. Material and equipment left out of doors

All material and equipment left out of doors (including material and equipment so left only temporarily or occasionally) shall be so arranged and placed as to avoid unnecessary risk. There shall be safe means of access to all such material and equipment and, so far reasonably practicable, such access shall be by roadways or pathways or which shall be properly maintained. Such roadways or pathways shall have a firm and even surface and shall, so far as reasonably practicable be kept free from obstruction.

22. Medical facilities and records of examinations and tests (1) The occupier of every factory to which the schedule applies, shall

- (a) employ a qualified medical practitioner who shall be known as Factory Medical Officer for medical surveillance of the workers employed therein whose employment shall be subject to the approval of the Chief Inspector-cum-Facilitator; and
- (b) Provide to the said Factory Medical Officer all the necessary facilities for the purpose referred to in sub-paragraph (a).

23. Medical Examination by a Factory Medical Officer:-

- (1) Every employee employed in a foundry shall be examined by a Factory Medical Officer within fifteen (15) days of his first employment. Such medical examination shall include pulmonary function tests and chest X-ray. No employee shall be allowed to work after 15 days of his first employment in the factory unless certified fit for such employment by the Factory Medical Officer.
- (2) Every employee employed in the said processes shall be re-examined by a Factory Medical Officer at least once in every twelve months. Such examination shall wherever the Factory Medical Officer considers appropriate, include all the tests as specified in sub-paragraph (1) except chest X-ray which will be once in three (3) years.
- (3) The Factory Medical Officer after examining a employee shall issue a certificate of fitness. The record of examination and re-examinations carried out shall be entered in the certificate and the certificate shall be kept in the custody of the manager of the factory. The record of each examination carried out under sub-paragraphs (1) and (2), including the nature and results of the tests, shall also be entered by the Factory Medical Officer in a health register.
- (4) The certificate of fitness and the health register shall be kept readily available for inspection by the Inspector-cum-Facilitator.
- (5) If at any time the Factory Medical Officer is of the opinion that a employee is no longer fit for employment in the said processes on the ground that continuance therein would involve special danger to the health of the employee, he shall make a record of his findings in the said certificate and the health register. The entry of his findings in those documents should also include the period for which he considers that the said person is unfit for work in the said processes. The person so suspended from the process shall be provided with alternate placement facilities unless he is fully incapacitated in the opinion of the Factory Medical Officer in which case the person affected shall be suitably rehabilitated.
- (6) No person who has been found unfit to work as said in sub-paragraph(5) above shall be re-employed or permitted to work in the said processes unless the Factory Medical Officer, after further examination, again certifies him fit for employment in those processes.

24. Exemption:- If in respect of any factory, the Chief Inspector-cum

-Facilitator is satisfied that owing to the exceptional circumstances or infrequency of the processes or for any other reason, all or any of the provisions of this schedule is not necessary for protection of the workers in the factory, the Chief Inspector-cum-Facilitator may by a certificate in writing, which he may at his discretion revoke any time, exempt such factory from all or any of such provisions subject to such conditions, if any, as he may specify therein.

SCHEDULE-XXIX

FIRE WORKS MANUFACTORIES AND MATCH WORKS

1. **Application:-** Provisions of this Schedule shall apply to all manufactories and processes incidental thereto carried on in any fireworks manufactory or a match works and shall be in addition to and not in derogation of any provisions of the Code and Rules that are applicable to fireworks manufacturing and match works.
2. **Definition:-**
 - (a) "Fire Works Manufacturing" means any factory or such parts of any factory wherein the following chemicals or combination of chemicals and materials are being used for the manufacture of crackers, sparkles, caps, fuses, blasting powder and fire works.
 - (i) Saltpeter (ii) Pyrotechnic aluminium Powder (iii) Barium Nitrate (iv) Charcoal (v) Potassium Chloride (vi) Red Phosphorus (vii) Gum (viii) Dextrine (ix) Strontium Nitrate (x) Magnesium Powder (xi) Copper Coated Wires (xii) Steel filings of iron filings (xiii) G.I. Wire (xiv) Gun Powder (Black Powder).

- (b) "Match Works" means any factory which manufactures safety matches or colour matches by the use of chemicals mentioned in clause (a).
- (c) "Breathing apparatus" means a device covering mouth or nose with necessary connections by means of which a person using it in a poisonous asphyxiating or irritant atmosphere breaths ordinary air or any other suitable apparatus approved in writing by the Chief Inspector-cum-Facilitator in this behalf.
- 3. Buildings:-** (a) The building of any fireworks manufactory or match factory shall conform to the standards prescribed under the Indian Explosives Act, 1884 (Central Act IV of 1884) and the height of such buildings shall at no time be less than 3 metres.
- (b) no building inside a fireworks manufacturing shall have a first floor at any time;
- (c) in Match works, provided with a first floor, there shall be 2 staircases leading from the first floor to the ground floor irrespective of the number of persons employed in the first floor and one of the staircases shall be of masonry construction of non-inflammable materials.
- (d) all doors shall open outwards and all the doorways shall be kept free from obstructions;
- (e) all doors of workrooms shall not be less than 1.2 metres in width or less than 2 metres in height;
- (f) the floors of all work rooms including mixing sheds shall be completely covered by a rubber sheet having a smooth surface and having a thickness of at least 3 m.m. If the floor cannot be covered by a single rubber sheet, more than one rubber sheet may be used, so that each sheet is overlapped by the other at least 150 m.m., and
- (g) mixing sheds shall be 30.5 metres away from all other sheds and be separately by baffle walls opposite each exist of the mixing shed.
- 4. Housekeeping:-** (a) every part of ways, works, machinery and plant shall be maintained in a clean and tidy condition.
- (b) any spillage of materials shall be cleaned without delay; and
- (c) close passages, passages and gangways shall be kept free of temporary obstructions.
- 5. Electrical Equipment:-**(a) if at any time use of electricity is allowed in the factory, all leads, etc., shall be in conduits with flame-proof junctions.
- (b) electrical supply shall never be through a lamp even with a nonconducting handle.
- 6. Protective Clothing:-** (a) Under no circumstances clothes made of artificial fibre like terebene, etc., be allowed inside the factory.
- (b) all employees shall be supplied with asbestos aprons especially to cover the chest, gonads and thighs.
- (c) breathing apparatus shall be used in mixing sheds to avoid employees inhaling poisonous fumes in the event of an untoward reaction.
- (d) in mixing sheds where aluminium and magnesium powders are used "antistatic" footwear to combat static electricity shall be supplied; and (e) all protective equipments shall be maintained in an efficient condition and also be maintained in a clean and hygienic condition.
- 7. Match Works:-** In Match Works
- (i) the residue of the head composition shall not in any way be mixed with the residue of the friction composition;
- (ii) the rooms comprising the two mixing departments namely,
- (a) head composition; and
- (b) friction composition shall be entirely separated from each other and the drains from these two departments shall be kept entirely separate.
- (iii) rubbish containing the residues of the head composition and friction composition shall be kept and burnt separately.
- (iv) department in which completed matches (matches with heads on fire stored shall be

separated from all other departments by means by fireproof walls and doors providing adequate means of escape in case of fire.

Provided that the Chief Inspector-cum-Facilitator may, subject to such conditions, as he may deem necessary, exempt any factory in existence on the first January, 1935, from the provisions of this clause.

- (v) splints, veneers and other materials in excess of the quantity required for the day's manufacture shall be kept in separate rooms of the factory where no manufacturing process is carried on. No manufactured material shall be stored anywhere in the factory compound for more than five days after the manufacture except in the storage godowns.

Provided that nothing contained in this clause shall apply to splints and veneers in cases stored in peeling and box making departments.

- (vi) store room for matches shall have entirely separated by fire-proof walls from the buildings used for manufacture.
- (vii) the racks in the dipped splints room shall have sides top and the rear part provided with non-inflammable materials.
- (viii) the process of packing shall be done in an area away from the place of manufacture to the satisfaction of the Inspector-cum-Facilitator; and
- (ix) no child shall be employed or permitted to work directly connected with the manufacturing process upto final production of match sticks.

8. Precaution to be, taken in connection with manufacture of fuses used in crackers etc.- (a) bundles of fuses shall be handled by carrying and not dragging them on the floor.

- (b) drying of fuses after wrapping shall be carried out on platforms away from workrooms.
- (c) cutting shall be done by experienced employees employed only for this purpose and under proper supervision.
- (d) cutting shall be done on a large masonry platform covered with a tarpaulin and kept free from grit and pebbles.
- (e) cutting shall be done on a raised platform so that employees can work standing. Cutting must be done by placing the fuse on wooden sleepers kept over blocks of wood. Brick shall not be used beneath the wooden sleepers; and
- (f) employees, while on dangerous operations, shall not wear clothing sewn with ferrous or steel buttons, buckles or attachments. They shall not carry on their persons, iron knives, keys etc.

9. Prohibition relating to young persons, pregnant women and lactating women -

- (a) No young person, pregnant woman, lactating woman shall be allowed to work in the operation where chemicals mixed and where fuses are cut.
- (b) Women other than those specified above shall be allowed in the above works with provision of appropriate personal protective equipment only.
- (c) Children shall not be employed or permitted to work in the manufacturing process or any work or operation or process connected therewith or incidental thereto in fireworks manufacturing.

10. General:- (a) no person other than a factory employee and/or an inspecting officer or others connected with the manufacturing process shall be allowed to enter the working area.

- (b) cardboard containers and trays without steel nails shall be used for storage and day-to-day working purposes.
- (c) during the manufacture of fuses only brass or non-ferrous knives shall be used and drying of fuses shall be away from all workrooms.
- (d) door mats shall be provided outside the workroom and near all drying platforms and where fuses are cut for the employees to clean their feet.

- (e) at no time, mixing materials shall exceed the quantity that is required for the manufacture of mixing for half an hour operation only.
- (f) for filling up chemicals in the inner tubes of crackers, only aluminium or plastic rings shall be used and not galvanized iron rings.
- (g) buckets, containers, hoops, locks, nails, screws, bolts, nuts, knives, scissors, etc., made up of iron shall not be used within the factory premises.
- (h) wooden racks without iron nails shall be used for drying paper cap sheets, in amrooos factories.
- (i) wooden racks used for drying paper cap sheets shall be provided with asbestos or other fire resistant sheets on the three sides leaving the front side open.
- (j) dried paper cap sheets shall be carried in wooden trays with four compartments (partitions) each compartment (partition) carrying a single sheet.
- (k) each manufacturing shed of a fireworks shall have at least two doors facing each other. The doors provided to the worksheets of adjacent rows shall not face each other.
- (l) not more than four persons shall be employed or allowed at any one time in any one building in which explosive is being manufactured.

11. Display of notices:- The following notices in the local language understood by the majority of employees shall be displayed at a conspicuous place in the factory.

- (a) Smoking is strictly prohibited.
- (b) no one shall carry matches or other igniting materials into the factory.
- (c) no employee shall be in a workroom or area where no work has been assigned to him.
- (d) if anything untoward happens in any shed all employees shall dash to the gates which serve as out gates of the factory and in no circumstances be curious to see what has happened in the affected shed.
- (e) any spillage of materials should be cleaned without any delay.
- (f) wearing clothes made of artificial fibre like terrene, terylene, etc., is prohibited. Clothings sewn with ferrous or steel buttons or buckles or attachments should not be worn.
- (g) foot wears with iron nails should not be used.
- (h) employees should not carry with themselves iron knives and iron key etc.

12. First-aid boxes:- (a) All the required materials required for first aid treatment shall be kept in the First-Aid Box. In addition, four stretchers shall be available for every twenty persons employed in the premises.

- (b) adequate amount of burn dressings and 24 ounces of coconut oil to be used as the first remedy for burns shall be kept in the first-aid box.
- (c) persons who are in charge of First-Aid Boxes shall be those who possess the certificate granted by the Saint John's Ambulance Association for rendering first-aid.

13. Exemption:- If the Chief Inspector-cum-Facilitator is satisfied in respect of any factory or any process that owing to the special conditions or special methods of work or by reason of the frequency of the process, or for other reason the application of all or any of the provisions of the schedule to the factory or process, or for the persons employed in such factory or process, is not necessary, he may be order in writing exempt such factory or part of the factory or process or any part of the factory or person from all or any of these provisions subject to such conditions as he may deem expedient to ensure safety and health of the employees.

The Chief Inspector-cum-Facilitator may at any time in his discretion, revise such order without assigning any reason.

HANDLING AND PROCESSING OF COIR FIBRE

- 1. Application:-** This schedule shall apply to all factories or part of factories in which any of the following operations involving coir fibre is carried on:-
- (a) hammering
 - (b) harvesting
 - (c) defibering/decortications
 - (d) spinning/cuting
 - (e) bleaching
 - (f) dyeing
 - (g) spooling and bailing
 - (h) PVC tufting
 - (i) Weaving
 - (j) Shearing
 - (k) rubber backing
 - (l) latex backing
 - (m) stencilling
 - (n) flocking
- 2. Definition:- Dangerous Chemical:** Any chemical used in any of the operations listed in paragraph 1 shall be considered as dangerous chemical for the purpose of this Schedule.
- 3 Declaration of operations as dangerous:-** Harvesting, defibering, bleaching, dyeing, Tufting, rubber backing, shearing, stenciling, flocking and latex backing of coir are declared to be dangerous operations when carried out in any factory.
- 4. Prohibition relating to young persons, pregnant women and lactating women:-**
- (a) No young person shall be employed or permitted to work in any operations specified in paragraph 1.
 - (b) No pregnant woman, lactating woman shall be allowed to work in any operation specified in paragraph 3.
 - (c) Women other than those specified above shall be allowed in the above works with provision of appropriate personal protective equipment only".
- 5. Storage and Handling of dangerous chemicals:-** Whenever any dangerous chemical is handled, stored or used, all necessary steps shall be taken to prevent inhalation, ingestion or absorption of this chemical by employees while engaged in operations specified in paragraph 1.
- 6. Seating arrangement:-** Suitable seating arrangements shall be provided for the employees engaged in manual defibering and manual hammering operations.
- 7. Ventilation:-** Bleaching and dyeing operation shall be carried out separately away from other operations. Effective arrangements shall be made to prevent escape of fumes in the work environment.
- 8. Escape of dust and fumes:-** Suitable and adequate arrangements shall be made to prevent the escape of dust and fumes in work environment.
- 9. Personal Protective Equipment:-**
- (a) The occupier shall provide the following for free of cost and maintain in good condition for use of all persons engaged in the operations mentioned in the paragraph 3
 - (i) Suitable gloves of durable quality for both hands.
 - (ii) Rubber boots of durable quality for both legs.
 - (iii) Goggles
 - (iv) Nose mask
 - (v) Any other appliances, which in the opinion of Chief Inspector-cum -Facilitator shall be necessary for protection of the employees.
 - (b) All persons engaged in operations specified in paragraph 3, while at work in these operations make use of the material and appliances provided.

10. Food and drink:-

- (i) No food or drink shall be brought into any room in which any of the operations specified in paragraph 3 is carried on.
- (ii) No food or drink shall be consumed in any room in which any of the operations specified in paragraph 3 is carried on.

11. Floor of workrooms:- The floor of every room in which any of the operations specified in paragraph 3 is carried on shall be:

- (i) of cement or similar material so as to be smooth and impervious;
- (ii) maintained in sound condition; and
- (iii) provided with suitable and adequate arrangements for drainage.

12. Washing facilities:-

- (a) The occupier shall provide and maintain for the use of all persons employed in operation specified in paragraph 3, suitable washing facilities consisting of
 - (i) a water tank capable of holding sufficient water and having taps at the rate of one tap for every ten persons employed at any one time. The floor around the tank and below the taps shall be cement plastered and maintained in sound and clean conditions. Suitable and adequate arrangements for drainage shall be provided around the tanks and the taps; and
 - (ii) sufficient supply of nail brushes, soap or other suitable cleaning material and clean towels.
- (b) The facilities so provided shall be placed under the charge of a responsible person and shall be kept clean.

13. Medical Examination:-

- (a) All persons employed in operations under paragraph 1 shall be medically examined by a Registered medical practitioner within fourteen (14) days of their first employment in such process; and thereafter shall be examined by the Registered medical practitioner at intervals of not more than six (6) months; and record of such examinations shall be entered by the Registered medical practitioner in the health register.
- (b) Health Register containing the names of all persons employed in the operations under paragraph 1 shall be kept.
- (c) No persons after suspension shall be employed unless the Registered medical practitioner, after re-examination, again certifies him to be fit for employment.

14. Exemptions:- The Chief Inspector-cum-Facilitator may grant exemption from the operation of any clause of the Schedule to the extent he deems suitable, where he is satisfied that their observations are not necessary for safeguarding the health of the employees.**SCHEDULE-XXXI****HANDLING AND PROCESSING OF COTTON**

1. Application:- This Schedule shall apply to all factories or part offactories in which any of the following processes are carried on:

- (a) Opening of cotton bale
- (b) Carding
- (c) Combing of cotton
- (d) Spinning of cotton yarn
- (e) Cleaning of waste cotton
- (f) Ginning of cotton

2. Definition:- For the purpose of this Schedule:-

"Efficient exhaust draught" means localized ventilation by mechanical means, for the removal of cotton dust so as to prevent dust from escaping into the air of any place in which work is carried on.

Explanation: No draught shall be deemed to be efficient which fails to control dust produced at the source.

3. Exhaust Draught Examination and Test:-

- (1) An efficient exhaust draught shall be provided and maintained by the occupier for the following processes and machines to trap cotton dust or fluff at the source of origin and those in air:
 - (a) bale breaking and mixing of cotton,
 - (b) blow room machinery, cards, combing, spinning, winding machines,
 - (c) machines used for processing waste cotton, and
 - (d) any other process in which cotton dust is given off into the work environment.
- (2) All equipment for extraction of cotton dust or fluff shall be examined and tested by competent person at least once in every six months and any defects disclosed by such examination and tests, shall be rectified. A register about such examination and test shall be maintained by the occupier.

4. Protective appliances: The occupier shall make arrangements for:

- (a) supply of a suitable personal protective appliances to all employees likely to be exposed to cotton fluff or dust;
- (b) supply of these appliances on individual basis;
- (c) maintaining these appliances in working condition by cleaning and replacement;
- (d) storage of these appliances in hygienic condition;
- (e) education of employees to use appliances, and
- (f) proper supervision to ensure whether the employees are using these appliances in working process.

5. Medical Examination:-

- (1) The occupier shall arrange for medical examination of employees by a qualified **medical practitioner** having adequate experience in treatment of person affected by lung ailments at least once in a period of six (6) months. Such medical examinations shall include lung function test, immunoglobulin test and any other test or tests which may be found necessary to detect the cases of above referred disease.
- (2) The occupier shall keep a continuous medical surveillance so that susceptible employees may be detected and transferred out of the exposure before irreversible damage cause to the health of the employees.

6. Environment Monitoring:- The occupier of the factory shall ensure that:-

- (a) cotton dust in the ambient air of the workroom or any other place where cotton is processed or handled shall not exceed concentration 0.2 mg /m³
- (b) environment in those areas shall be regularly monitored and results shall be made available to the Chief Inspector-cum-Facilitator on demand.

7. Control Measures:- Without prejudice to the other methods as stated above for prevention of above referred disease, the Occupier shall adopt such other control measures like adoption of vacuum stripping of cards instead of brush stripping, cleaning of the workroom by vacuum cleaners instead of brooms, etc. or any other measures as the Chief Inspector-cum-Facilitator may suggest at any time.

8. House Keeping:- A high standard of housekeeping shall be provided and maintained by the occupier.

9. Fire Hydrant System

The occupier shall install and maintain a properly designed fire hydrant system covering all areas where cotton is handled, processed, stored or ginned.

(a) The hydrant system shall maintain a minimum running pressure of 7 kg/cm² at the farthest hydrant point.

(b) A dedicated fire-water storage tank of adequate capacity shall be provided.

(c) Fire pumps (main, standby and jockey) shall be installed and tested weekly to maintain uninterrupted hydrant pressure.

(d) Hydrant points, hoses, branch pipes, nozzles and hose-boxes shall be maintained in good condition and kept unobstructed.

(e) Quarterly performance testing shall be carried out and records maintained.

(f) At least 10% of the total workforce in each shift shall be trained in fire-fighting and hydrant operation.

(g) Fire-fighting training shall be conducted once every six months.

10. Exemption:- If in respect of any factory, the Chief Inspector-cum-Facilitator is satisfied that owing to exceptional circumstances all or any of the provisions of this schedule are not necessary for the protection of the employees of the factory, the Chief Inspector-cum-Facilitator may certify in writing (which at his discretion revoke at any time) exempt such factory from all or any of such provisions of his schedule subject to such conditions, if any, as he may specify therein).

SCHEDULE-XXXII

DUST HAZARD CONTROL IN FACTORIES

1. Application

These rules apply to all factories where dusts—whether metallic, mineral, organic, fibrous, or otherwise—are generated, processed, handled, stored, or transported, and where such dusts may create a risk of fire, explosion, or occupational disease.

2. Definitions

(a) "Dust" means finely divided solid particles which may become airborne during manufacture, processing, handling, or clearing.

(b) "Combustible dust" means any dust capable of burning or deflagrating when suspended in air.

(c) "Dust-producing process" means any operation resulting in generation, liberation, or dispersion of dust in air.

(d) "Local exhaust ventilation system" (LEV) means an engineered system designed to capture dust at its source and prevent its release into the workplace atmosphere.

(e) "Dust collector" means any air-cleaning equipment such as bag filters, cyclones, or scrubbers attached to a dust-producing process.

3. Dust Hazard Assessment

(1) Every occupier shall conduct a systematic assessment of each dust-producing process to identify sources of dust emission, accumulation, ignition sources, explosion hazards.

(2) The assessment shall cover process equipment, material handling systems, building layout, housekeeping, and emergency arrangements.

(3) The report of such assessment shall be kept available for inspection and updated every five years or when significant process changes occur.

4. Control of Dust Generation and Dispersion

(1) All dust-producing processes shall, as far as practicable, be enclosed and provided with efficient local exhaust ventilation systems.

(2) Exhaust ducts and collectors shall be constructed of non-combustible materials and effectively earthed to prevent accumulation of static charges.

(3) Exhaust air shall not be recirculated into workrooms unless adequately filtered and monitored.

(4) Dust collectors shall be installed outside the main building wherever possible, and fitted with suitable relief or isolation devices to limit damage in case of an explosion.

5. Building and Layout Requirements

- (1) Workrooms handling dust shall be of fire-resisting construction with smooth surfaces to avoid dust deposition.
- (2) Openings such as doors, windows, and vents shall be arranged to facilitate natural ventilation and pressure relief.
- (3) Workplaces where dust explosion hazards exist shall not be located beneath occupied floors or adjacent to ignition sources.
- (4) Adequate spacing shall be provided between dust-producing equipment to permit safe cleaning and maintenance.

6. Prevention of Ignition Sources

- (1) Smoking, open flame, or hot-work activities shall be strictly prohibited in areas where combustible dust may be present except under a written *hot-work permit* issued by the manager.
- (2) All mechanical equipment shall be properly maintained to prevent overheating, frictional sparks, or static discharge.
- (3) Electrical installations in dust-hazard areas shall comply with standards prescribed for hazardous locations under relevant Indian Standards.
- (4) All conductive plant, ducting, and metal parts shall be bonded and earthed to prevent accumulation of electro static charge.

7. Housekeeping and Cleaning

- (1) Every occupier shall maintain all floors, ledges, beams, and equipment free from accumulations of dust.
- (2) Cleaning shall be carried out by vacuum or wet methods; dry sweeping or use of compressed air for dust removal is prohibited unless specifically designed for such purpose.
- (3) A cleaning schedule shall be drawn up and strictly followed, and records thereof maintained for inspection.

8. Explosion Prevention and Mitigation

- (1) Wherever combustible dust may accumulate in sufficient quantity to form an explosive mixture, suitable explosion-relief panels, isolation valves, or suppression systems shall be provided.
- (2) Dust collectors handling explosive or combustible materials shall be provided with explosion-relief vents discharging to safe locations.
- (3) Buildings and enclosures used for such operations shall be designed to minimize propagation of explosion or fire to adjoining areas.

10. Maintenance and Testing

- (1) Local exhaust ventilation systems and dust collectors shall be inspected at least once every six months by a competent person, and a record of such inspection shall be maintained.
- (2) Defects likely to affect safe performance shall be rectified forthwith.
- (3) Performance of the system shall be tested annually and reports shall be retained for five years.

11. Health and Safety of Workers

- (1) Workers exposed to dust shall be provided with suitable respiratory protective equipment conforming to relevant Indian Standards.
- (2) Medical examination of such workers shall be carried out once in a year.
- (3) No person suffering from respiratory or skin disease aggravated by dust exposure shall be employed on such work without medical fitness certification.

12. Training and Awareness

- (1) Every worker and supervisor engaged in dust-producing processes shall be trained in

- (a) hazards of combustible and toxic dusts,
 - (b) safe operating and cleaning procedures,
 - (c) use of protective equipment, and
 - (d) emergency response in case of dust fire or explosion.
- (2) Refresher training shall be conducted at least once every twelve months and records maintained.

13. Emergency Preparedness

- (1) Factories handling combustible dusts shall prepare a written emergency plan covering fire and explosion scenarios.
- (2) Emergency drills shall be conducted at least once in six months.
- (3) Suitable fire-fighting equipment, including dry chemical extinguishers, shall be provided and maintained.

14. Records and Documentation

The occupier shall maintain and produce on demand:

- (a) Dust hazard assessment reports,
- (b) Maintenance and inspection records,
- (c) Cleaning schedules,
- (d) Training and drill registers, and
- (e) Medical surveillance records.

J. Supanbunder

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