

GOVERNMENT OF JAMMU AND KASHMIR
CIVIL SECRETARIAT LABOUR AND EMPLOYMENT DEPARTMENT

Jammu, 3rd February 2021

S.O: 36: The following draft rules, which the Government of Jammu & Kashmir proposes to make in exercise of powers conferred by Sections 133 and 135 of the Occupational Safety, Health and Working Conditions Code, 2020 (37 of 2020) read with section 24 of General Clauses Act, 1897(10 of 1897) and in supersession of the-

1. The Jammu & Kashmir Building and Other Construction Workers (Regulation of Employment and Condition of Services) Rules, 2006;
2. The Jammu & Kashmir Factories Rules; 1972
3. The Contract Labour (Regulation & Abolition) Jammu & Kashmir Rules, 1972;
4. The Inter-State Migrant Workmen (Regulation of Employment and Conditions of Service) Jammu and Kashmir Rules, 1984.
5. The Jammu and Kashmir Motor Transport workers Rules 1972.

except in respect of things done or omitted to be done before such supersession, are hereby notified as required by sub-section (1) of Section 133 and sub-section (1) of section 135, for information of all persons likely to be affected thereby and notice is hereby given that the said draft notification will be taken into consideration after the expiry of a period of 45 days from the date on which the copies of the Official Gazette in which this notification is published are made available to the public;

Objections and suggestions, if any, may be addressed to Commissioner Secretary to Government Labour & Employment Department, Government of Jammu & Kashmir, Civil Secretariat Jammu / Srinagar e-mail I.D - scyclejks@gmail.com. The objections and suggestions should be sent in a proforma containing columns (i) specifying the name and address of the persons and organizations and column (ii) specifying the rule or sub-rule which is proposed to be modified and column (iii) specifying the revised rule or sub rule proposed to be submitted and the reasons therefore;

Objections and suggestions, which may be received from any person or organization with respect to the said draft notification before expiry of a period of 45 days, specified above, will be considered by the Government of Jammu and Kashmir.

DRAFT RULES
CHAPTER - I
PRELIMINARY

1. Short title, extent and commencement.-(1) These rules may be called the Occupational Safety, Health and Working Conditions (Jammu & Kashmir) Rules, 2021.

- (a) They extend to whole territorial jurisdiction of Jammu & Kashmir.
- (b) They shall come into force on the date of their final publication in the Official Gazette.

2. Definitions:

(1) In these rules, unless the context otherwise requires,-

- a) "Appellate Officer" means the Officer as notified by the Government of Jammu and Kashmir under section-4 of the code;
- b) "Code" means the Occupational Safety, Health and Working Conditions Code, 2020;
- c) "Section" means the Section of the Code;
- d) "Form" means a form annexed to these rules;
- e) "Schedule" means a schedule annexed to these rules;
- f) "Registering Officer" means the registering officer appointed by the Government of Jammu and Kashmir for purpose of these rule;
- g) "Social Security Fund" - means Jammu and Kashmir Social Security Fund established under Social Security Code, 2020;
- h) "Board" means the Jammu and Kashmir Occupational, Safety and Health Advisory Board established/constituted under section-17 of the code;
- i) "Authority" means an Authority designated by Jammu and Kashmir Government under sub section (1) of section-119;

- j) "Appellate Authority" means an authority prescribed by the Government of Jammu and Kashmir under sub section (6) of section-119;
- k) "Enquiry Officer" means Officer appointed by the Government of Jammu and Kashmir for holding enquiry under section-111 of the Code;
- l) "Compounding Officer" means an officer notified by the Government of Jammu and Kashmir under section-114;
- m) "Chief Inspector Cum Facilitator" means Chief Inspector Cum Facilitator appointed by the Government of Jammu and Kashmir under sub section (5) of section-34;
- n) "Inspector Cum Facilitator" means Inspector Cum Facilitator appointed by the Government of Jammu and Kashmir under sub section (1) of section-34 of the code;

(2) The words and expressions used in these rules and are not defined therein, but are in the Code, shall have respective meaning assigned to them in the Code.

CHAPTER - II Registration

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.

4. Substance or quantity of substance under clause (zb) of sub section (1) of section-2

For the purpose of this clause, "hazardous substance" means any substance or such quantity of substance as specified by the Government of Jammu and Kashmir by way of notification.

5. Late fee under proviso to sub section (1) of section-3

The registering Officer as notified by Jammu & Kashmir Government shall register any establishment to which this Code applies after expiry of period prescribed under this Code on payment of late fee at the rate of 25% per annum of the total fee to be deposited for such registration with the officer electronically or otherwise alongwith the prescribed fee from the time the code is implemented.

6. 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 here

1. The employer seeking registration for an establishment not already registered shall apply before Registering Officer, electronically in Form-I on the official Portal of Labour Department, Government of Jammu and Kashmir (www.jklabour.com) by giving details about the establishment, and uploading documents related to Registration of the establishment, 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. The applicant shall be responsible for veracity of all information submitted in the application.
2. The Permanent Account Number (PAN) of the applicant or the establishment allotted under Income Tax Act, 1961 or any other unique number allotted to the establishment under any other Act for the time being in force or any other particular furnished in the form, may be verified online.
3. The following fee shall be deposited alongwith the registration application electronically on the portal for the registration of establishments:

(a)	No registration fee shall be charged for the establishments already registered under Central Labour Laws for updation of information	Nil
(b)	Establishments employing 10 to 19 workers	Rs. 2000
(c)	Establishments employing 20 to 49 workers	Rs. 3000
(d)	Establishments employing 50 to 99 workers	Rs. 5000
(e)	Establishments employing 100 to 149 workers	Rs. 7000
(f)	Establishments employing 150 to 199 workers	Rs. 10000

(g)	Establishments employing 200 and 499 workers	Rs. 15000
(h)	Establishments employing 500 and 999 workers	Rs. 20000
(i)	Establishments employing 1000 and above	Rs. 30000

4. The certificate of registration shall be issued in Form-II electronically immediately if the application is complete in all respects but not later than seven 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 Government of Jammu and Kashmir may, for such period, by notification, dispense with requirement of electronic registration, in respect of establishment or class of establishment, or part or whole of Jammu and Kashmir, and submission of application in the form so provided, may be allowed.

5. 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.
6. The registering officer under the Code may direct the employer who fails to comply with the requirements of sub-rule (1), to do so within the time stated therein and such employer shall, thereupon comply with the instructions issued by the officer in this behalf.
7. The employer in respect of an establishment which commences its work in Jammu and Kashmir already registered under any other central labour law for the time being in force shall, update the registration particulars on the official Portal of Labour Department, Government of Jammu and Kashmir, within six months from the date on which the Code comes into force.
8. Any registration obtained by providing wrong information shall be liable to be cancelled provided that establishment has been given an opportunity to show cause, electronically or by registered post, as to why the certificate of registration should not be cancelled.
9. 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, and in all correspondence with the office concerned.
10. 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 days of such change by submitting an application online in Form-I.
11. 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 online on the Official Portal of Labour Department, Government of Jammu and Kashmir after giving complete details of the dues payable under the Central Labour Codes:

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 in force in accordance with the law applicable for the time being and submitted a self-certification to that effect along with the application.

12. The registering officer shall maintain a register of establishment electronically in Form-III showing the particulars of establishment in relation to which certificates of registration have been issued by him.
13. 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, the work is to be executed, intimating the actual date of the commencement, completion of work and cessation of establishment, as the case may be, in Form-IV annexed to these rules electronically and the same shall be auto-shared to EPFO and ESIC.

7. Appeal under Section-3

1. The employer aggrieved by the order of Registering Officer, may appeal against such order before the appellate officer appointed by the Government of Jammu and Kashmir for such purpose within thirty days from the date of receipt by him of such order, electronically or otherwise.
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 otherwise.

4. On receipt of the appeal, the appellate officer 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 officer 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 officer for the restoration of the appeal within thirty days from the date of receipt of the order 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 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 days from the date of receipt of appeal.

8. The form and manner of sending the notice and authority to whom the notice shall be send and the manner of intimating the authority under sub section (1) of section-5.

The employer of every establishment to whom these rules apply shall within thirty days of the commencement or cessation of operation, submit to the Registering Officer in Form-IV, electronically or otherwise and the notice of cessation of operation shall be enclosed with a certificate 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.

CHAPTER - III
Duties of Employer and Employee

9. Annual Health examination or test free of costs, age of employees or class of employees or establishment or class of establishments under clause (c) of sub section (1) of section-6

Every employer of factory, building & other construction work and motor transport undertakings shall arrange to conduct free of cost medical examination for every worker annually i.e. within 120 days from the commencement of every calendar year who has completed 45 years of age. The medical examination shall be conducted by a qualified medical practitioner as per proforma in Form-V and such medical certificate shall be submitted to the concerned employer and employee.

10. The information to be included in the letter of appointment and the form of such letter 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 prescribed format as appended to this rule:

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 coming into force of this rule.

Format

- (i) Name of employee;
- (ii) Father's name;
- (iii) Aadhar number;
- (iv) Labour Identification Number (LIN)/ registration number of the establishment;
- (v) Universal Account Number (UAN) / Insurance Number (ESIC);
- (vi) Designation;
- (vii) Category of skill;
- (viii) Date of joining;
- (ix) Wages, Basic Pay & Dearness Allowance;
- (x) Other allowance including accommodation whichever is/are applicable;
- (xi) Avenue for achieving higher wages/higher position;
- (xii) Applicability of social security EPFO and ESIC benefits applicable;
- (xiii) Health check-up: Broad Nature of duties to be performed;
- (xiv) Any other information

Signature

Occupier/ employer/owner/agent/manager

11. The nature of bodily injury and the manner of notice and the time within which the notice shall be sent and the authority to which the notice shall be sent under sub section (1) of section (10) & section (11).

1. Where at any place in an establishment which is factory, building & other construction work and motor transport undertaking, an accident occurs which results in the death of any person, the employer or occupier or manager of the establishment shall forthwith send a notice thereof in Form-VI electronically or otherwise and inform by telephone to the Inspector - Cum- Facilitator-or, Chief Inspector-Cum- Facilitator and District Magistrate, and Competent Authority as notified by the Jammu and Kashmir Government, under Social Security Code, 2020 and the family members/kin of the injured or deceased person.
2. Where at any place in an establishment which is factory, building & other construction work, or motor transport undertaking, 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 hours or more immediately following the accident, the employer or occupier or manager of the establishment shall forthwith send a notice in Form-VI within twelve hours after the completion of forty eight hours, electronically or otherwise to the Inspector- Cum- Facilitator.
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:
 - a. The Chief Inspector-Cum- Facilitator;
 - b. District Magistrate;
 - c. The Assistant Labour Commissioner having jurisdiction;
 - d. The Inspector- Cum- Facilitator;

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 or otherwise to the authorities and persons mentioned in sub-rules (1) and (2) and also have this information confirmed in writing within 12 hours of the death.

Provided further that, if the period of disability from working for 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 in the prescribed form within 24 Hours following the hours when the actual total period of disability from working resulting from the accident or the dangerous occurrence becomes 48 hours.

SCHEDULE

The following classes of dangerous occurrences, whether or not they are attended by 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; contact work, excavation and collapse of transmission;
- (vii) Spillage or leakage of hazardous substances and damage to their container;

- (viii) collapse, capsizing, toppling or collision of transport equipment within the establishment;
- (ix) fall from height of any excavation, loading or transport machinery;
- (x) an instantaneous failure of a pillar, part of a pillar or several pillars of coal (i.e., a 'bump') in working below ground;
- (xi) a rock-burst in working belowground; a premature collapse of any part of the working;
- (xii) a breakage, fracture or failure of an essential part of any machine or apparatus whereby the safety of persons may be endangered;
- (xiii) a slide causing injury to any person, damage to any machinery, or interruption of normal mining operations;
- (xiv) failure of dump or side in opencast working; a blowout;
- (xv) 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;
- (xvi) a major uncontrolled emission of petroleum or chemical spillage;

12. The form of notice related to certain diseases and the time within which the notice shall be sent and the authority to which the notice shall be sent under sub section (1) & (2) of section 12.

1. A notice in the following format shall be sent forthwith electronically, to the Inspector - Cum- Facilitator or Chief Inspector - Cum- Facilitator, 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 of establishment:
- ii. Nature of establishment :
- iii. Details of Patient:
 - (a) Name of Patient:
 - (b) Works number of Patient:
 - (c) Address of Patient:
 - (d) Precise occupation of Patient:
- iv. Nature of disease from which patient is suffering:
- v. Date of Detection of Disease:
- vi. Details of Medical Practitioner:
- vii. Has the case been reported to the Medical Officer:

Date:

Signature of employer or Occupier or Manager

- (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, the qualified medical practitioner shall without delay send a report in writing to the office of the Chief Inspector - Cum- Facilitator & Inspector - Cum- Facilitator stating-

- (i) the name and full postal address of the patient,
- (ii) the disease from which he believes the patient to be suffering, and
- (iii) the name and address of the establishment in which the patient is or was last employed.



13. The manner of making report by employee under clause (d) and other duties of employees under clause (g) of section 13 -
If an employee comes to know about any unsafe or unhealthy condition in the establishment, he shall report to the employer, health and safety representative or safety officer or agent or manager as soon as practicable, electronically or otherwise or telephonically.
14. Manner of sending report of action taken 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 electronically or by registered speedpost or telephonically.

CHAPTER - IV
Occupational Safety & Health

15. The constitution, procedure and other matters relating to State Advisory Board under sub-section (2) of section 17 -
The Jammu and Kashmir Government may constitute a board to be called Jammu and Kashmir occupational, safety and health Advisory Board to advise the Government of Jammu and Kashmir on such matters arising out of the Administration of this code as may be referred to it by the Government of Jammu and Kashmir.
16. The number of members and their qualifications under sub-section (3) of section 17 -
1. The Board shall consist of:-
 - (a) Hon'ble Minister Labour and Employment, Jammu and Kashmir..... Chairperson.
 - (b) Administrative Secretary, Labour and Employment Department.....Member (ex-officio)
 - (c) Chairman, Jammu and Kashmir Pollution Control Board.....Member (ex-officio)
 - (d) Labour Commissioner, Jammu and Kashmir.....Member Secretary
 - (e) Regional Director, ESIC.....Member
 - (f) Director, Health Services Jammu/ Kashmir Members
 - (g) Two Representatives of Employers.....Members
 - (h) Two Representatives of Employees.....Members
 2. The Board may meet as often as necessary to discharge the functions as specified in Section 17 of the Code.
 3. **Resignation.-**
 - i. A member of the Board, not being an ex-officio member, may resign his office by a letter in writing addressed to the Chairperson of the Board.
 - ii. The seat of such a member shall fall vacant from the date on which his resignation is accepted by the Government of Jammu and Kashmir, or on the expiry of thirty days from the date of receipt of the letter of resignation by the Government of Jammu and Kashmir whichever is earlier.
 4. **Cessation of membership.-**If any member of the Board, not being an ex-officio member, fails to attend three consecutive meetings of the Board, without obtaining the leave sanctioned by the Chairperson of such Board for such absence, he shall cease to be a member of Board.
Provided that the Government of Jammu and Kashmir may, if 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 Board.
 5. **Disqualification for membership.-**A person shall be disqualified for being a member of the Board—
 - (i) if he is of unsound mind and stands so declared by the competent authority;
 - (ii) if he is an un-discharged insolvent; or
 - (iii) if he has been convicted for an offence, having a penalty of imprisonment of three months or more;
 6. **Removal from membership.-**The Government of Jammu and Kashmir may remove any member of the Board, if in its opinion such member has ceased to represent the interest which he purports to represent on such Board:



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

7. 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 Board shall be paid travelling allowance for attending the meeting of the Board at such places as per the instructions issued by Finance Department, Government of Jammu and Kashmir from time to time. The amount so paid to the non-official members shall be debited from the official account of the member Secretary of the Board.

17. The manner of constituting a safety committee and the manner and the purpose for choosing the representatives under sub section (1) & (2) of section 22-

- (1) Every establishment employing 500 or more workers except for the establishment prescribed under sub-section (1) of Section 22 shall constitute a safety committee consisting of representatives of employers and workers.
- (2) The tenure of the safety committee shall be for three years. The safety committee shall meet at least once in every quarter.
- (3) The representative of the workers shall be chosen by the registered trade Union. In case where there is no registered trade union the members may be chosen by the workers of the establishment.

Provided that there shall be adequate representation of the women workers in the committee.

- (4) Safety Committee shall have the right to be adequately and suitably informed of—
 - i. potential safety and health hazards to which the workers may be exposed at workplace;
 - ii. data on accidents as well as data resulting from surveillance of the working environment and of the health of employees, conducted at such establishments.
- (5) The owner, employer, occupier, agent or manager shall, within a period of one month from the date of receipt of the recommendations of the Safety Committee shall take action to implement these commendations.

CHAPTER - V

Hours of Work & Annual Leave with Wages

18. Conditions for exemption of workers from weekly 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 day of rest. Where the weekly day of rest is not the same day for all persons employed in the establishment, the notice shall show the day of rest allowed to each relay, or set of persons or individual.

- (2) 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.
- (3) 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 work 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.
- (4) 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.

19. The total number of hours of overtime under second proviso of section 27-(1) In pursuance of Section 27 of Code, where in an establishment a worker 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 shall in respect of such overtime work be entitled to wages at the rate of twice his 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 worker paid by the month, the daily wages shall be 1/26th of his monthly wages; and in the case of any other worker it shall be the daily wages or earnings as the case may be.

- (4) the spread over for the workers shall exceed twelve hours in any one day under the following works and circumstances in factories and building & other construction, namely;
- i. Urgent repairs;
 - ii. work in the nature of preparatory or complimentary work;
 - iii. 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;
 - iv. work which for technical reasons must be carried on continuously;
 - v. engaged in making or supplying articles of prime necessity which must be made or supplied everyday,
 - vi. engaged in a process which cannot be carried on except during fixed seasons;
 - vii. engaged in a process which cannot be carried on except at times dependent on the irregular action of natural forces;
 - viii. engaged in an engine-rooms or boiler-houses or in attending to power-plant or transmission machinery;
 - ix. engaged in process on account of the break-down of machinery;
 - x. engaged in the loading or unloading of railway wagons or lorries or trucks;
 - xi. exceptional press of work and engaged in any work, which is notified by the Central Government/ Government of Jammu and Kashmir in the Official Gazette as a work of national importance;

Provided that no worker shall be allowed to work overtime exceeding one hundred twenty five hours in any quarter of a year.

20. Circumstances for exemption from restriction on double employment in a factory under section 30- The Government of Jammu and Kashmir may in exceptional cases as it deem proper exempt any establishment or any person on double employment under this section by notification in official gazette assigning full justification of such order/ notification.
21. The form and 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 -
The notice referred to in sub-section (2) of section 31 shall be displayed at conspicuous places on a notice board or electronic board and maintained in Form-VII and copy of such notice shall be sent to Inspector - Cum- Facilitator electronically or otherwise or by registered post.

CHAPTER- VI **Maintenance of Registers, Records & Returns**

22. The form and register and particulars of workers under clause (a) of section 33 -
- (1) Every employer shall maintain register of workers, wages, overtime, fine, deduction for damage or loss in Form-VIII electronically or otherwise and shall be kept available at an office or the nearest convenient building within the precincts of the establishment;
 - (2) (i) in case of manual registers and other records, be legibly entered in ink in English and Hindi/Urdu or the language understood by a majority of the persons employed;
(ii) be preserved in original for a period of one calendar year after the date of the last report or entry;
Provided that when the original record is lost or destroyed before the expiry of one year period, true copies thereof, if available, shall be preserved for the prescribed period;
 - (3) The record as prescribed under sub-rule (1) and sub-rule (2) shall be produced, electronically or by registered post, on demand before the Chief Inspector - Cum- Facilitator or an Inspector - Cum- Facilitator or any person authorized in that behalf by the Government of Jammu and Kashmir.



23. The manner and form of displaying notices under clause (b) of section 33 –
Every employer shall cause to display at the conspicuous place of the workplace of the establishment under his control, 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, Hindi, or Urdu or in any other official Language of Jammu & Kashmir as the case may be.

24. Return, manner of filing the return and periods of filing return to Inspector - Cum-Facilitator under clause (d) of section 33 –

- (1) Every employer of an establishment shall send annually a return relating to such establishment in duplicate 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 with a copy to Director General, Economics & Statistics, Government of Jammu and Kashmir.
- (2) 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 a Form-X.
- (3) Register of leave with wages under clause (a) of section 33.-
 - (i) The owner, agent or manager of every establishment shall maintain in respect of every employee thereof a record of leave with wages electronically or manually in Form-XI.
 - (ii) The register mentioned in clause (i) shall be preserved for a period of two 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.

CHAPTER – VII

Inspector - Cum- Facilitator and Other Authority

25. The qualification and experience of Chief Inspector - Cum- Facilitator under sub section (5) of section 34 – The Government of Jammu and Kashmir may appoint an officer not below the rank of Labour Commissioner as Chief Inspector - Cum- Facilitator for the whole Territory of Jammu and Kashmir under the provisions of this code.

26. The 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 – An Inspector - Cum- Facilitator shall take samples or substances in an establishment as per the inspection scheme mandated under official portal of labour department after informing the employer of the establishment, taken in the manner herein after providing 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, or injury to the health of employee in the establishment

27. The other powers and duties under clause (xiv) of sub section (1) of section 35 –

- (1) Inspector - Cum- Facilitator shall, after every inspection, as may be deemed necessary, issue prohibition or improvement notice in the Form-XII pointing out the non-compliance of provisions of safety, health and working conditions under the Code, and rules and regulations framed thereunder, to the employer or occupier or owner or manager or their agent.
- (2) An Inspector - Cum- Facilitator shall, at each inspection, ascertain to what extent any shortcomings notified at a previous inspection have been rectified and the notices previously issued have been complied with. His findings and any shortcomings which may come to light during the inspection, together with any order passed by him under the Code or the regulations made thereunder shall be recorded and maintained.

28. The specialized qualification and experience, duties and responsibilities of experts to be empanelled under section 37.

(1) Eligibility of the Firm:

- (i) The Firm should be registered body corporate in India under appropriate legal framework, such as Companies Act or LLP Act;
- (ii) The Firm should be registered in Labour Department.

- (iii). The Firm should have experience and authorization to undertake and evaluate labour regulatory compliance;
- (iv) The Firm should have Labour Law Auditor and Technical Auditor on company payroll.

(2). Eligibility of Labour Law and Technical Auditor:

(i). Eligibility: Labour Law Auditor

- (a) Should be having a minimum of 7 years of experience under Labour Law; OR
Should be having a minimum of 7 years of experience as a legal practitioner under Labour Law; Or
Should have served as Labour Enforcement Officer or above for 7 years.
- (b) Should not currently be a part-time/full-time employee in any unit/establishment in the U.T of Jammu & Kashmir or its subsidiaries or branches elsewhere in the country.
- (c) Should not be of an age more than 65 years.
- (d) Should be medically fit to carry out inspection procedure.

(ii). Eligibility: Technical Auditor: - Should have one year full time Diploma in industrial safety recognized by the Board of Technical Education or All India Council of Technical Education or recognized university; and either of the following qualifications:

- (a). Degree in branch of Chemical, Mechanical, Electrical or Production Engineering and having five years' experience in manufacturing, maintenance, design, project or safety department in the supervisory or above capacity in factories; OR
- (b) Diploma in branch of Chemical, Mechanical, Electrical or Production branch Engineering and having seven years experience in manufacturing, maintenance, design, project or safety department in the supervisory or above capacity in factories; OR
- (c) Degree of Bachelor of Science with Physics and/or Chemistry and having ten years experience in manufacturing or Safety.

(3) Competent person under clause (1) of sub section (1) of section 2 of the Code.

- (i). The Chief Inspector-cum-Facilitator may recognize any person as 'competent person' for the area and for the period as specified in Schedule-A.
Provided that the Chief Inspector-cum-Facilitator may relax the requirements of qualifications in respect of 'competent person' with the prior approval of the Government of Jammu and Kashmir.
Provided further that the competent person recognised under sub rule (3) shall not be above the age of sixty-five years and shall be physically fit for the purpose of carrying out the requisite tests, examination and inspection.
- (ii). The Chief Inspector-cum-Facilitator may recognise an institution of repute, having persons possessing qualification and experience as specified in the Schedule B, as competent person and issue a certificate of competency in its favour in Form XIX.
- (iii) The Chief Inspector-cum-Facilitator on receipt of an application in Form XVII from a person or from an institution in Form XVIII, as the case may be, intending to be recognized as a competent person for the purposes of the Code and the rules made thereunder, shall register such application and after satisfying himself as regards competence and facilities available at the disposal of the applicant may recognise the applicant as a competent person. Such application shall be disposed of either by issuing a certificate of competency in Form XIX or by rejecting the same specifying reasons thereof, within a period of sixty days.
- (iv) The Chief Inspector-cum-Facilitator: -if he has reason to believe that a competent person -
 - (a) has violated any condition stipulated in the certificate of competency; or
 - (b) has carried out a test, examination and inspection or has acted in a manner inconsistent with the intent or the purpose of the Code or the rules made thereunder, or has omitted to act as required under the Code or the rules made thereunder; or
 - (c) for any other reason to be recorded in writing;
 may revoke the certificate or competency after giving an opportunity of being hearing to the competent person.

Explanation - For the purpose of this rule, an institution includes an organization (including Government, autonomous, co-operative, corporate or private).

- (v) The Chief Inspector-cum-Facilitator may, for reasons to be recorded in writing direct for the recertification of any of the area as defined in Schedule-A.

29. The manner of providing alternative employment under sub clause (d) of clause (A) of sub section (1) of section 38-
The occupier of the factory may take necessary steps for providing employment to the workers affected by the order of prohibition issued by Inspector - Cum- Facilitator under sub clause (d) of clause (A) of sub section (1) of section 38 and as far as practicable provide alternate employment to the workers so affected. Where it may not be possible for the occupier to provide such employment, he shall be responsible for making payment of salary/wages to the affected workers during the period for which the prohibition order is in operation.
30. The qualification for the appointment of medical practitioner under sub section (1) of section 42- The medical practitioner shall be a Medical Officer who possesses any recognized medical qualification as defined in the 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 (f) of section 35, 36, 37 and 40 of the Act.
31. Duties of Medical officer under sub section (2) of section 42 -
- (1) On receipt of a reference under clause (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 Occupier, manager, owner of the establishment concerned after retaining a copy thereof.
 - (2) The medical officer may seek opinion of specialists like radiologist, dentist and orthopaedic surgeon as the case may be, for the purpose of determination of age.
 - (3) Medical Officer shall carry out such examination and furnish such report as Government of Jammu and Kashmir may direct:
 - (6) for examination and certification of workers in an establishment in such dangerous occupation or processes as specified in First Schedule to the Code;
 - (7) for medical supervision of any establishment or class of establishment where cases of chronic occupational illness have occurred due to arduous nature of any process carried on or hazardous condition of work;
 - (8) 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;
 - a. to undertake occupational health survey for any 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.
 - b. to assess the age and issue fitness of adolescent for employment in an establishment or class of establishment.
32. Other establishment engaged in the dangerous occupation or processes under clause (a) of sub section (2) of section 42-
The Medical Officer shall perform the examination and certification of the workers in a factory or in such other establishments engaged in dangerous occupation and processes as specified in schedule-B annexed with these rules.
33. Medical supervision and other establishment under clause (b) of sub section (2) of section 42-
The Medical Officer shall perform the examination and certification of the workers in a factory or in such other establishments where the cases of illness have occurred which it is reasonable to believe are due to the nature of any process carried on or other conditions of work prevailing in such establishments and inform the occupier, owner, Chief Inspector - Cum- Facilitator and the appropriate Government for study and remedial measures as may be required in this behalf.
34. Other establishment under clause (c) of sub section (2) of section 42- The Medical Officer shall perform the examination and certification of an adolescent worker for the purpose of ascertaining his fitness of employment in a factory, motor transport undertaking or in any other establishments as specified in Schedule-B annexed with these rules.

CHAPTER- VIII

Special Provisions relating to Employment of Women

35. Conditions relating to safety, holiday and working hours or any other condition to be observed by the employer 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 p.m in any day, namely:-
- (1) the consent of women employ shall be taken;
 - (2) No women shall be employed against the maternity benefit provisions laid down under the Social Security Code, 2020 (36 of 2020);



- (3) adequate transportation facilities shall be provided to women employee to pick-up and drop such employee at her residence;
- (4) the workplace including passage towards conveniences or facilities concerning toilet, washrooms, drinking water, entry and exit of women employee should be well-lit;
- (5) the toilet, washroom and drinking facilities should be near the workplace where such women employee are employed; and
- (6) Provide safe, secure and healthy working condition such that no women employee is disadvantaged in connection with her employment.
- (7) in case of below ground mine not less than 3 women employees shall be on duty at any place.
- (8) The provisions of the Sexual Harassment of Women at workplace (Prevention, Prohibition and Redressal) Act, 2013 (14 of 2013), as applicable to the establishments, shall be complied with.

36. The manner of requiring the employer to provide the adequate safeguards under section 44-
The Government of Jammu and Kashmir may declare by notification the class of establishments and the scheme, and standards for safeguarding of women in hazardous and dangerous processes.

CHAPTER -IX

Special Provision for Contract Labour, Inter State Migrant Worker & Audio- Visual Workers etc.

37. Conditions including in particular conditions as to hours of work, fixation of wages and other essential amenities in respect of contract labour under clause (a) of sub-section (3) of section 47 - The contractor shall ensure that:
- 1) the hours of work shall conform to the rules made under Section 25 of the Occupational Safety, Health and Working Conditions Code, 2020 (37 of 2020).
 - 2) the wages shall be paid in accordance with the Code on Wages, 2020 (29 of 2020).
 - 3) if the contract worker 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 and;
 - 4) all other facilities and entitlements shall be provided by the contractor.
 - 5) in case the contractor fails to make payment of minimum wages to the contract worker, then the Labour Commissioner, Jammu & Kashmir, Deputy Labour Commissioner/the Assistant Labour Commissioner having jurisdiction, who shall cause such payment to be made to the contract workers who have not been paid out of the security deposit maintained under this section included by invoking the bank guarantee; and
 - 6) 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 under this section.

38. 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 shall be made on-line electronically through Official Portal of Labour Department of Jammu & Kashmir Government (www.jklabour.com) in Form-XIII to the Licensing Officer. The Licensing Officer may issue the license to the contractor in Form XIV electronically immediately, if the application is complete in all respects but not later than seven days from the date of submission of complete application, failing which such license shall be deemed to have been issued and the license shall be auto generated:

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

39. The procedure under sub-section (2) of section 48:-

- 1) Before a license is issued under any rule of these rules, bank guarantee for an amount calculated at the rate of Rupees 1000 for each of the worker to be employed as contract labour, in respect of which the application for license has been made, shall be deposited by the contractor for performance of the conditions of the license and compliance with the



provisions of the Code or the rules made thereunder.

- 2) Wherein the issued contract license had expired, based on the request of the applicant, the licensing officer may adjust the security deposit in respect of his application for new license to be issued in Form- XIV.
- 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 but does not exceed 100 contract labour	Rs. 1000
(c)	101 but does not exceed 300 contract labour	Rs. 2000
(d)	301 but does not exceed 500 contract labour	Rs. 3000
(e)	501 but not exceeding 1000 contract labour	Rs. 5000
(f)	1001 but not exceeding 5000 contract labour	Rs. 10000
(g)	5001 but not exceeding 10000 contract labour	Rs 20000
(h)	10001 but not exceeding 20000 contract labour	Rs 30000
(i)	20001 and above contract labour	Rs.40000

40. Manner of applying for the renewal of licence and the manner of renewal of licence under sub-section (3) of section 48:-

- (1) Every contractor shall apply electronically on the Official Portal of Labour Department (www.jklabour.com) of Jammu & Kashmir Government to the licensing authority for renewal of the license.
- (2) Every such application shall be submitted on the said portal at least 30 days prior to expiry of license period but not before 90 days of such expiry of license.
- (3) The security deposit and the fee chargeable for renewal of the license shall be the same as for the grant of license under rule 36.

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.

- (4) Every application for renewal, complete in all respects, shall be made on the portal of the Labour Department (www.jklabour.com). The renewal certificate shall be auto generated and the same may be downloaded by the applicant from the portal.

41. Responsibility of the 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, 2020 and where the rates have been fixed by agreement, settlement or award, not less than the rates fixed by such agreement or award.
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 whose decision shall be final.
3. In other cases the wage rates, holidays, hours of work and conditions of service of the workers of the contractor shall be such as specified under the Code and rules made thereunder.
4. All contract labour shall be made member of EPFO and ESIC subject to applicability as under respective provisions of the Code on Social Security, 2020.
5. The contractor shall notify any change in the number of workers or conditions of work to the Licensing Authority, electronically.



42. The manner of intimation of work order and time-limit for such 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 under that work order, duration of work orders.
(2) the details of work order shall be sent by the contractor or his authorized representative.
(3) The intimation shall be sent electronically on the Official Portal of Labour Department of Jammu & Kashmir Government or e-mail of the Labour Commissioner, Jammu & Kashmir Government.
43. The manner of suspending or cancelling the licence under sub-section (2) of section 50 & Section 51-
1). If the Licensing Authority is satisfied that the licence has been obtained by mis-representation or suppression of any material fact or if the contractor has failed to comply with the conditions subject to which licence was granted or the contractor has contravened any provision of Part-I, Chapter-XI of the Code or rules made thereunder, the Licensing Authority shall issue a show cause notice of 30 days to the contractor electronically or otherwise. On receipt of the reply if any, from the contractor within 30 days, 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 workers, he may pass a Speaking Order recording the reasons for revocation or suspension or otherwise and communicate to the contractor electronically. A copy of the Order shall be endorsed to the Labour Commissioner, Jammu and Kashmir, Deputy Labour Commissioner/Assistant Labour Commissioner having jurisdiction.
(3) If the contractor has not 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.
(4) If the contractor fails to comply with the directions as in sub-rule (1), the Licensing Authority may forthwith pass an order of revocation of license, recording the reasons thereof and communicate to the contractor electronically or otherwise. The copy of the order shall be endorsed electronically or otherwise to Labour Commissioner, Jammu and Kashmir, Deputy Labour Commissioner/Assistant Labour Commissioner having jurisdiction as the case may be.
44. The period before which the wages shall be paid under sub-section (1) 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 and any other mode prescribed under code on wages 2020.
45. The mode of payment of wages under proviso to sub-section (2) of section 55- Every Contractor to whom this code applies shall make the disbursement of wages through bank transfer or electronic mode and inform the principle employer electronically or otherwise the amount so paid by such mode provided that where it is not practicable to disburse payment in the mode specified in this rule then the payment shall be made in the mode other than electronic mode as prescribed under relevant provisions of code on wages 2020.
46. The manner of payment of wages from security deposit 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, the Labour Commissioner, Government of Jammu and Kashmir or his representative or the competent officer as may be notified by Government of Jammu and Kashmir 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 and the bills of the contractor as the case may be. The contractor shall re-furnish the security deposit within a period of 30 days or else his license will be liable to be suspended.
47. The form of issuing experience certificate under section 56- Every concerned contractor shall issue on demand, experience certificate in Form-NV to the contract labour giving details of the period, work performed, experience gained in various fields performed by such contract labour.

48. The 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 / Secretary to Government, Labour and Employment Department, Government of Jammu & Kashmir giving reasons along with supporting documents.
49. 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 Commissioner / Secretary to Government, Labour and Employment Department, Government of Jammu & Kashmir shall if he deem proper, refer the application to the Labour Commissioner, Government of Jammu & Kashmir for making such enquiry as may be required and the Labour Commissioner shall submit the report/ recommendation to the Commissioner/Secretary to Govt.Labour and Employment Department within thirty days for taking appropriate action under these rules and the Commissioner/Secretary to Govt.Labour and Employment Department shall decide the matter within one month from the date of receipt of such report / recommendation and communicate the said decision of the Government to the parties through electronically or otherwise for implementation of the said order of the Government.
50. Minimum service for entitlement, class of travel and other matters 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 of the following, namely:
if he has worked for a period of not less than 180 days in the concerned establishment(s) 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 now 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 employer shall give journey allowance.
51. Manner of providing facility of toll free helpline under section 63 -A Toll-Free help-line number shall be provided by the Labour and Employment Department, Government of Jammu & Kashmir, to address queries and grievances of the inter-state migrant workers.
52. Manner of providing for study of inter-State migrant workers under section 64-The Government of Jammu & Kashmir may identify the fields where studies are to be carried out to promote safety, health and welfare of inter-state migrant workers. Wherever required the Government of Jammu & Kashmir may also consult the Central Government or expert organizations involved in the safety, health and welfare of inter-state migrant workers.
53. Authority to whom a copy of the agreement shall be forwarded by the producer under sub-section (3) of section 66- The Jammu and Kashmir Government may notify an officer not below the rank of Assistant Labour Commissioner 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 XVI.
54. Details under clause (vi) 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 the Industrial Relations Code, 2020 and rules framed thereunder.
55. Rules in respect of factory or class or description of factories under sub-section (1) of section 79-
The Government or the Chief Inspector - Cum- Facilitator may require for the purposes of the Code, submission of plans of any factory which was either in existence on the date of the commencement of these Rules or which had not been constructed or extended since then. Such plans shall be drawn to scale showing: --
(a) the site of the factory and immediate surrounding including adjacent buildings and other structures, Roads, drains, etc.
(b) the plan, elevation and necessary cross-sections of the factory buildings indicating all relevant details relating to natural lighting, ventilation and means of escape in case of fire, and the position of the plant and machinery, aisles and passage-ways; and
(c) such other particulars as the Government or the Chief Inspector - Cum- Facilitator, as the case may be, may require.

56. Mode of submission of application under sub-section (2) of section 79-

- (1) No building shall be constructed or used as factory unless plans in respect of such building are approved by the Chief Inspector - Cum- Facilitator.
- (2) No addition/alteration or extension in the existing factory building shall be made unless plans in respect of such additions, alterations or extensions are approved by the Chief Inspector - Cum- Facilitator.
- (3) Application for approval of the plans shall be made electronically in Form XX along with the following plans and documents to the Inspector - Cum- Facilitator of the area: -
 - a) Flow chart of the manufacturing process giving a brief description of the process in its various stages;
 - b) Site plan drawn to scale showing the site of the factory and immediate surroundings including adjacent buildings and other structures, roads, drains, etc;
 - c) The Plan, elevations and necessary cross-sections drawn to scale showing all relevant details relating to natural lighting, ventilation, and means of escape in case of fire, position of plant and machinery, aisles and passageways;
 - d) Such other particulars as the Inspector - Cum- Facilitator may require in relation to the approval.
- (4) If the Inspector - Cum- Facilitator is satisfied that the plans and documents are in consonance with the requirements of the rules, he shall forward the plans and documents to the Chief Inspector - Cum- Facilitator for approval. The Chief Inspector - Cum- Facilitator after being similarly satisfied shall approve the plans;
Provided that where the plans and documents fall short of the requirements of these rules, the Inspector - Cum- Facilitator or the Chief Inspector - Cum- Facilitator as the case may be, may return the documents to the applicant for modifications and corrections as suggested therein;
Provided further that the plans shall not be deemed to have been submitted till such time as they are resubmitted duly modified and amended.
- (5) The internal height of a workroom shall be not less than 4.25 m measured from the floor level to the lowest part of the roof and if the roof is of corrugated iron which is neither covered with tiles nor has an inner ceiling of lining of heat-resisting material with an air space of at least 10 cm. Between it and the corrugated iron, the internal height shall be not less than 5 m;
Provided that in the case of building having a brick or concrete roof, or a combination of the two, the minimum height may be 3.75 m if approved by the Chief Inspector of Factories:
- (6) There shall be provided at all times for each person employed in any room of a factory where mechanical or electrical power is used, at least 36 square feet (3.35 square meter) of floor space exclusive of that occupied by machinery and a breathing space of at least 500 cubic feet (14 cubic meter).
- (7) The provisions of sub-rule (5) of rule 53 shall not apply to rooms intended for storage, go downs and like purposes and also rooms intended solely for office purposes where only clerical work is done.
- (8) No manufacturing process shall be carried on in any building or part of a building whether newly constructed, re-constructed or extended, or in any building which has been taken into use as a factory or part of a factory until a **Certificate of Stability** in respect thereof, in Form XXI signed by a competent person has been sent by the occupier or manager of the factory to the Chief Inspector - Cum- Facilitator and accepted by him. Neither any new plant nor machinery shall be added to any building of a factory nor brought into use after such addition until a certificate of stability in Form XXI signed by a competent person in respect thereof has been sent by the occupier or manager of the factory to the Chief Inspector - Cum- Facilitator and accepted by him.
No person except in the case of building owned by any Government shall be authorized to sign a certificate of stability or to certify plans and specifications who is in the employment of the owner or builder of the building in respect of which the certificate is given.
- (9) The employer seeking registration for a factory and grant of a licence shall apply electronically on the official Portal of the Labour Department (www.jklabour.com), Government of Jammu and Kashmir by giving details about the factory as specified in the Form-IA. The Form shall be signed digitally or in any other manner as may be required on the portal. The applicant shall be responsible for veracity of all information submitted in the application.

Provided that the occupier of the premises in use as a factory on the date of commencement of these rules shall submit such an application within thirty days from the commencement of these rules.



(10) A registration certificate for a factory shall be granted in Form XXII by the Chief Inspector - Cum- Facilitator or any other officer appointed and specially empowered in this behalf by the Chief Inspector - Cum- Facilitator electronically immediately, if the application is complete in all respects but not later than seven days from the date of submission of complete application, failing which such license shall be deemed to have been issued and the license shall be auto generated.

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

(11) Every application for renewal, complete in all respects, shall be made on the portal of the Labour Department (www.jklabour.com) and shall be made not less than sixty days before the date on which the licence expires and if the application is complete in all respects, the renewal certificate shall be auto generated in Form XXII and the same may be downloaded by the applicant from the portal.

Provided that if the application for renewal, complete in all respects, is not received within the time specified in sub-rule (11), the licence shall be renewed only on payment of a fee twenty five percent in excess of the fees ordinarily payable for the renewal of the licence

(12) The fees for grant of licence shall be the same as for renewal of licence for one year and shall be as specified in the Schedules mentioned below

SCHEDULE

Quantity of H.P Installed	MINIMUM NUMBER OF PERSONS EMPLOYED DURING THE YEAR									
	20	50	100	250	500	750	1000	2000	5000	&
	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs
NIL	390	530	950	2210	4310	6410	8510	12710	13510	
10	410	610	1020	2290	4380	6480	8590	12780	13980	
50	630	880	1310	2560	4660	6760	8860	13060	15080	
100	980	1230	1650	2910	5010	7110	9210	13410	17910	
250	1960	2280	2710	3960	6050	8160	9860	14460	20050	
500	3780	4030	4450	5710	7810	9910	12010	16210	25100	
1000	7280	7530	7950	9210	11310	13410	15510	19710	30500	
1500	10780	11030	11450	12710	14810	16910	19010	23210	35100	
2000	14280	14530	14950	16210	18310	20410	22510	26710	38700	
5000 & above	20530	20780	21210	22450	24500	26510	29760	33910	44500	

SCHEDULE

Scale of fees payable for licensing and annual renewal of licences of Electricity Generating, Transforming or Transmitting Factories		
Total Installed Capacity of Electricity Generating Station	Number of Workers to be Employed	Fees Payable
1	2	3
Not over 1000 kW (1MW)	1 or above	10000
Over 1000 kW but not over 5000 kW (5MW)	do	20000
Over 5000 kW but not over 10000 kW (10MW)	do	33500
Over 10000 kW but not over 50000 kW (50MW)	do	63500
Over 50000 kW but not over 60000 kW (60MW)	do	73500
Over 60000 kW but not over 80000 kW (80MW)	do	87000
Over 80000 kW but not over 100000 kW (100MW)	do	100000
Over 100000 kW but not over 150000 kW (150MW)	do	127000
Over 150000 kW but not over 200000 kW (200MW)	do	150000
Over 200000 kW but not over 300000 kW (300MW)	do	175000
Over 300000 kW but not over 500000 kW (500MW)	do	200000
Over 500000 kW but not over 1000000 kW (1000MW)	do	300000
Over 1000000 kW but not over 1500000 kW (1500MW)	do	400000
Over 1500000 kW but not over 2000000 kW (2000MW)	do	500000
Over 2000000 kW (2000MW)	do	667000

(13) Every licence granted or renewed under these rules shall be valid for a period upto ten (10) years as per the request of the licensee and shall remain in force till the 31st December of the year for which the licence is granted or renewed.

57. Common facilities and services for joint liability of owner of premises and occupiers of the factories under section 80 .

(1) Wherein any premises, separate buildings are leased to different occupiers for use as separate factories, the owner of the premises shall be responsible for the provisions and maintenance of common facilities and services, such as approach road, 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 were the occupier or manager of the factory, 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) safeness of access to the floors or flats and maintenance and cleanliness of stair cases and common passages;

(iv) precautions in cases of fire;

(v) maintenance of hoists and lifts; and

(vi) maintenance of any other common facilities provided in the premises.

(3) The Chief Inspector - Cum- Facilitator shall have subject to the control of the appropriate Government, power to issue orders to the owner of the premises in respect of carrying out of the provisions of sub-section (1) and (2).

(4) The provisions of sub-section (2) relating to the liability of the owner/occupier shall apply where in any premises independent rooms with common latrines, urinals and washing facilities are leased to different occupier for use as separate factories:

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



- (5) The Chief Inspector - Cum- Facilitator shall have subject to the control of the appropriate Government, the power to issue orders to the owners/occupier of the premises referred to in respect of the carrying out of the provisions of section 24 of the code.
- (6) Where in any premises, portions of a room or a shed are leased to different occupiers for use as separate factories; the owner/occupier of the premises shall be liable for any contravention of the provisions of—
- (i) Chapter V of the code, except section 23, sub-section (2) clause (iii) and (iv).
- (ii) Chapter V of the code, except the List of matters at S.No. (2), (3), (7), (15) & (16) in the Second Schedule of the Code.
 Provided in respect of the provisions at S.No. (1), (4), (12) listed in the Second Schedule of the Code, the owners liability shall be only in so far as such provisions relate to things under his control.
 Provided further that the occupier shall be responsible for complying with the provisions of Chapter V in respect of plant and machinery belonging to or supplied by him.
- (iii) Chapter VI of the Code, Section 24, sub-section (1) clause (i).
- (7) The Chief Inspector - Cum- Facilitator shall have subject to the control of the appropriate Government, the power to issue orders to the owners of the premises in respect of the carrying out the provisions of clause 7 sub-section 1.
- (8) In respect of Clause (4) and (6) of sub-section 1, while computing for the purposes of any of the provisions of this Code, the total number of workers employed, the whole of the premises shall be deemed to be a single factory.

58. Rules under section 82 -

1. **Dangerous manufacturing processes or operations.** The following operations when carried on in any factory are declared to be dangerous manufacturing processes or operations under Section 82 of the code:
- 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 of metals such as chromium, nickel, cadmium, zinc, copper, silver or gold.
 - iii. Manufacture and repair of electric accumulators.
 - iv. Glass manufacture.
 - v. Grinding or glazing of metals.
 - vi. Manufacture and treatment of lead and certain compounds of lead.
 - vii. Generation of gas from dangerous petroleum.
 - viii. Cleaning, smoothening or roughening etc. of articles by a jet of sand, metal shot, grit or other abrasive propelled by a blast of compressed air or steam.
 - ix. Lining and tanning of raw hides and skins and processes incidental thereto.
 - x. Carrying on of certain processes of lead and lead material in Printing Presses and Type Foundries.
 - xi. Chemical works.
 - xii. Manufacture of pottery and ceramics.
 - xiii. Compression of Oxygen and Hydrogen produced by the electrolysis of water.
 - xiv. Manipulation of stone or any other material containing free silica;
 - xv. Handling and processing of asbestos, manufacture of any article of asbestos and any other process of manufacture or otherwise in which asbestos is used in any form;
 - xvi. Handling and manipulation of corrosive substances
 - xvii. Use of ovens and driers in factories
 - xviii. Manufacture or Manipulation of Carcinogenic intermediates;
 - xix. Process extracting vegetable oils from oil cakes in solvent extraction plants.
 - xx. Manufacture and manipulation of manganese and its compounds.
 - xxi. Protection against hazards of poisoning arising from benzene.
 - xxii. Carbon disulphide plants.
 - xxiii. Operations involving High Noise levels.
 - xxiv. Manufacture or manipulation of dangerous pesticides.
 - xxv. Manufacture of Rayon by Viscose
 - xxvi. Highly Flammable liquids and Flammable Compressed Gases.
 - xxvii. Operation in foundries
2. **Prohibiting or restricting the employment of Pregnant woman in the manufacturing process or operation.** Every Occupier or employer shall ensure to prohibit or restrict the employment of pregnant women in hazardous and dangerous

operations which exposes them to serious risk of bodily injury, poisoning or disease. However, the Occupier shall make all the necessary arrangements for providing adequate safeguards prior to the employment of pregnant woman in case they are required to work in hazardous or dangerous operations.

3. **Periodical Medical Examination.**

- i. For the medical examination of workers to be carried out by the certifying surgeon as required by Schedule B-I to Schedule B-XXVII, the occupier of the factory shall pay fee at the rate of five hundred rupees per examination of each worker every time he/she is examined;
- ii. The fees prescribed in clause (i) shall be exclusive of any charges for biological, radiological or other tests which may have to be carried out in connection with the medical examinations. Such charges shall be paid by the occupier;
- iii. The fees to be paid for medical examination shall be paid electronically to the Chief Inspector - Cum- Facilitator in the manner as may be prescribed by him.

4. **Welfare amenities, sanitary facilities, protective clothing and other necessary requirements for dangerous operations.** The provisions specified in the Schedule B-I to Schedule B-XXVII shall apply to any class or description of factories wherein dangerous manufacturing processes or operations specified in each Part of the Schedule are carried on.

5. Notwithstanding anything contained in Schedule B-I to Schedule B-XXVII, the Inspector - Cum- Facilitator may issue order in writing to the Manager or Occupier or both, directing them to carry such measures, and within such time, as may be specified in such order with a view to remove conditions dangerous to the health of the worker or to suspend any process, where such process constitutes in the opinion of the Inspector - Cum- Facilitator imminent danger of poisoning or toxicity.
6. Any register or record of medical examinations and tests connected therewith required to be carried out, under any of the Schedule B-I to Schedule B-XXVII, in respect of any worker, shall be kept readily available to the Inspector - Cum- Facilitator and shall be preserved till the expiry of a period of one year after the worker ceases to be in employment of the factory.

59. **Site Appraisal Committee under Section 83:**

- 1) The Government of Jammu and Kashmir may constitute a Site Appraisal Committee as and when necessary consisting of:
 - i) The Chief Inspector of Factories who shall be its Chairman;
 - ii) a representative of the State Pollution Control Board of the Government of Jammu & Kashmir;
 - iii) a representative of the Department of Environment of the Government of Jammu & Kashmir;
 - iv) a representative of the Local Government wing of the Department of Local Government Housing and Urban Development Department of the Government of Jammu and Kashmir ;
 - v) an expert in the field of occupational health;
 - vi) a representative of the Department of Industries of the Government of Jammu and Kashmir ; and
 - vii) a scientist having specialised knowledge of the hazardous process which will be involved in the factory; and
 - viii) any other person as deemed fit by the government of Jammu & Kashmir.
- 2) No member, unless required to do so by a court of law, shall disclose otherwise than in connection with the purposes of the Act, at any time any information relating to manufacturing or commercial business or any working process which may come to his knowledge during his tenure as a Member on this Committee.
- 3)
 - i. Applications for appraisal of sites in respect of the industries covered under clause (za) of sub-section (1) of section 2 of the Code shall be submitted to the Chairman of the Site Appraisal Committee;
 - ii. The application for site appraisal along with fifteen copies thereof shall be submitted in Form XXV. The Committee may dispense with furnishing of information on any particular item in the application Form, if it considers the same to be not relevant to the application under consideration.
 - iii. **Functions of the Site Appraisal Committee:--**
 - (a) The Chairman shall arrange to register the applications received for appraisal of site in separate register and acknowledge the same within a period of seven days;
 - (b) The Chairman shall fix up the meetings in such manner that all the applications received and registered are referred to the Committee within a period of one month from the date of their receipt;



- (c) The Committee shall adopt a procedure for its working keeping in view the need for expeditious disposal of applications;
- (d) The Committee shall examine the applications for appraisal of a site with reference to the prohibitions and restriction on the location of an industry and the carrying on of processes and operations in different areas as per the provisions of rule 5 of the Environment (Protection) Rules, 1986 framed under the Environment (Protection) Act, 1986;
- (e) The Committee may call for documents examine experts, inspect the site if necessary and take other steps for formulating its views in regard to the suitability of the site; and
- (f) Wherever the proposed site required clearance by the Ministry of Industries or by the Ministry Environment and Forests of Government of India, the application for Site Appraisal will be considered by the Site Appraisal Committee only after such clearance had been received.

60. The manner of disclosing information by occupier of a factory under sub-section (1), (2), (5) and (7) of section 84;

- (1) The occupier of every factory carrying on a 'hazardous process' shall arrange to obtain or develop information in the form of Material Safety Data Sheet (MSDS) in respect of every hazardous substance or material handled in the manufacture, transportation and storage in the factory. It shall be accessible upon request to a worker for reference.
 - (i) Every such Material Safety Data Sheet shall include the following information: -
 - a) The identity used on the label;
 - b) Hazardous ingredients of the substance;
 - c) Physical and chemical characteristics of the hazardous substance;
 - d) The physical hazards of the hazardous substance, including the potential for fire, explosion and reactivity;
 - e) The health hazards of the hazardous substance, including signs and symptoms of exposure and any medical conditions which are generally recognised as being aggravated by exposure to the substance;
 - f) The primary route(s) of entry;
 - g) The permissible limits of exposure proscribed in the Schedule E of the Code, and in respect of a Chemical not covered by the said Schedule, any exposure limit used for recommended by the manufacturer, importer or occupier;
 - h) Any generally applicable precautions for safe handling and use of the hazardous substance, which are known, including appropriate hygienic practices, protective measures during repairs and maintenance of contaminated equipment, procedures for clean-up of spills and leaks;
 - i) Any generally applicable control measures, such as appropriate engineering controls, work practices, or use of personal protective equipment;
 - j) Emergency and first aid procedures;
 - k) The date of preparation of the Material Safety Data Sheet, or the last change to it;
 - l) The name, address and telephone number of the manufacturer, importer, occupier or other responsible party preparing or distributing the Material Safety Data Sheet, who can provide additional information on the hazardous substance and appropriate emergency procedures, if necessary.
- (2) The occupier while obtaining or developing a Material Safety Data Sheet in respect of a hazardous substance shall ensure that the information recorded accurately reflects the scientific evidence used in making the hazard determination. If he becomes newly aware of any significant evidence used in making the hazard determination. If he becomes newly aware of any significant information regarding the hazards of a substance, or ways to protect against the hazards, this new information shall be added to the Material Safety Data Sheet as soon as practicable.

(i) An example of such Material Safety Data Sheet is given in the Schedule C.

(ii) Labelling

Every container of hazardous substances shall be clearly labelled or marked to identify:

- a) the contents of the container;
- b) the name and address of the manufacturer or importer of the hazardous substances;
- c) the physical and health hazards; and
- d) The recommended personal protective equipment need to work safely with the hazardous substance.

(3). DISCLOSURE OF INFORMATION TO WORKERS

(i) The occupier of a factory carrying on a 'hazardous process' shall supply to all workers the following information in relation to handling of hazardous materials or substances in the manufacture, transportation, storage and other processes:

- a) Requirements of Sections 84, 85 and 89 of the Code;
- b) A list of 'hazardous processes' carried on in the factory;
- c) Location and availability of all Material Safety Data Sheets as per Rule 58;
- d) Physical and health hazards arising from the exposure to or handling of substances;
- e) Measures taken by the occupier to ensure safety and control of physical and health hazards;
- f) Measures taken by the workers to ensure safe handling, storage and transportation of hazardous substances;
- g) Personal Protective Equipment required to be used by workers employed in 'hazardous process' or 'dangerous operations';
- h) Meaning of various labels and markings used on the containers of hazardous substances as provided under Rule 58;
- i) Signs and symptoms likely to be manifested on exposure to hazardous substances and to whom to report;
- j) Measures to be taken by the workers in case of any spillage or leakage of a hazardous substance;
- k) Role of workers vis-à-vis the emergency plan of the factory, in particular the evacuation procedures;
- l) Any other information considered necessary by the occupier to ensure safety and health of workers.

(ii). The information required by sub-rule (i) shall be compiled and made known to workers individually through supply of booklets or leaflets and display of cautionary notices at the workplaces. The booklets, leaflets and the cautionary notices displayed in the factory shall be in the language understood by the majority of the workers and also explained to them.

(iii). The Chief Inspector-Cum-Facilitator may direct the occupier to supply further information to the workers as deemed necessary.

(4) DISCLOSURE OF INFORMATION TO GENERAL PUBLIC

(i) The occupier of every factory carrying on a 'hazardous process' shall in consultation with the District Emergency Authority designated by the Appropriate Government, take appropriate steps to inform the general public who are likely to be in the area which might be affected by an accident. Such information shall include:

- (a) Name of the factory and address where situated;
- (b) Identification, by name and position, of the person giving the information;
- (c) Confirmation that the factory has approval from the Factories Inspectorate and Pollution Control Board;
- (d) An explanation in simple terms of the hazardous process(es) carried on in the premises;
- (e) The common names of the hazardous substances used which could give rise to an accident likely to affect them, with an indication of their principal harmful characteristics;
- (f) Brief description of the measures to be taken to minimize the risk of such an accident in compliance with its legal obligations under relevant safety statutes;
- (g) Salient features of the approved disaster control measures adopted in the factory;
- (h) Details of the factory's emergency warning system for the General Public;
- (i) General advice on the action members of the public should take on hearing the warning;
- (j) Brief description of arrangements in the factory, including liaison with the emergency services, to deal with foreseeable accidents of such nature and to minimize their effects; and
- (k) Details of where further information can be obtained.

(ii) The occupier shall also supply any further information-

- a) to general public as directed by the District Emergency Authority from time to time;
- b) to the elected representatives of the general public on request;

(iii) The occupier shall endeavor to enter an agreement with the District Emergency Authority for the area, within whose jurisdiction the factory is situated, for the District Emergency Authority to take appropriate steps to inform the general public outside the factory who are likely to be affected by an accident as required in clause (i).

(iv) The information prescribed in sub-rule (4) shall be in the regional language and in English or Hindi.

(5) DISCLOSURE OF INFORMATION TO THE LOCAL AUTHORITY

The occupier of every factory carrying on a 'hazardous process' shall furnish the following information in writing to the local authority having jurisdiction over the area in which the factory is situated -

- i. the information furnished to general public as prescribed in sub rule (4);
- ii. a statement of the names and quantities generally stored or in process of hazardous substances included in the list of chemicals prescribed under clauses (vi) and (vii) of sub-section (2) of Section 3 of the Environment (Protection) Act, 1986.

(6) DISCLOSURE OF INFORMATION TO DISTRICT EMERGENCY AUTHORITY

i). The occupier of a factory carrying on a hazardous process, shall intimate the District Emergency Authority designated by the Government of Jammu and Kashmir, all information having a bearing on preparation of an on-site emergency plan and a disaster control and management plan in respect of the factory.

ii). Without prejudice to the generality of this clause, the occupier shall furnish the District Emergency Authority the following:

- a) a report on status relating to risk assessment and environmental impact assessment and the measures taken for prevention of accidents,
- b) compilation of Material Data Sheets in respect of hazardous substances used, produced or stored in the factory,
- c) a statement on all possible sources of accidents involving fire, explosion, release or leakage of toxic substances and the plan of the premises where such an accident may occur.
- d) A statement on resources and facilities available for dealing with an emergency including any agreement entered into with a neighbouring factory for aid and assistance in the event of an emergency,
- e) A map of the area showing the approaches to the factory location of emergency facilities such as hospitals, police, fire service,
- f) The organisation of the management and the responsibility for safety indicating therein the persons responsible for on-site emergency action,
- g) Details relating to alert system,
- h) Information on availability of antidotes for poisoning resulting from an accident,
- i) Any other information as may be considered relevant by the occupier or asked for by the District Emergency Authority.

(7) DISCLOSURE OF INFORMATION TO THE CHIEF INSPECTOR

i). The occupier of every factory carrying on 'hazardous process' shall furnish, in writing, to the Chief Inspector cum facilitator a copy of all the information furnished to the workers, local authority, general public and the District Emergency Authority.

ii). A copy of compilation of Material Safety Data Sheets in respect of hazardous substances used, produced or stored in the factory shall be furnished to the Chief Inspector, and the local Inspector.

iii). The occupier shall also furnish any other information asked for by the Chief Inspector from time to time for the purpose of this Code and Rules made thereunder.

(8) EMERGENCY PLAN

i. The occupier of a factory carrying on a hazardous process shall prepare a draft on-site emergency plan and submit it to the Chief Inspector cum facilitator. The Chief Inspector cum facilitator may make such modification in the plan as necessary, in consultation with the occupier and approve the same.

ii. The occupier will submit a copy of the approved plan to the District Emergency Authority.

iii. The occupier will intimate the workers the provisions of the emergency plan and hold rehearsals of the plan periodically. He shall review the plan from time to time and make necessary changes therein under intimation to the Chief Inspector cum facilitator and the District Emergency Authority.

- iv. The Chief Inspector cum facilitator may issue guidelines relating to formulation of emergency plans. He may also direct modifications of the emergency plan in respect of any factory as may be necessary, from time to time.

(9) DISASTER CONTROL AND MANAGEMENT PLAN

- i. The occupier of every factory carrying on a hazardous process shall prepare a draft disaster control and management plan in respect of his factory and submit the same to the Chief Inspector cum facilitator and the District Emergency Authority.
- ii. The District Emergency Authority on receipt of the plan shall hold consultation with the occupier, representatives of the Chief Inspector, the State Pollution Control Board, local authority as well as police, health fire brigade and other authorities concerned and finalise the plan.
- iii. The District Emergency Authority shall forward a copy of the final plan to the occupier and all authorities concerned. The occupier shall intimate the workers the contents of the plan.
- iv. The occupier in consultation with the District Emergency Authority will arrange rehearsals of the plan at least once a year.
- v. The Chief Inspector cum facilitator may issue guidelines for formulation of disaster control and management plans. The Chief Inspector as well as the District Emergency Authority may after mutual consultation also direct modifications of the disaster control and management plan in respect of a factory as may be necessary from time to time.

(10) INFORMATION ON INDUSTRIAL WASTES

- i. The information furnished under sub rules (3),(5),(6) & (7) of Rule 60 shall include the quantity of the solid and liquid wastes generated per day, their characteristics and the method of treatment such as incineration of solid wastes, chemical and biological treatment of liquid wastes, and arrangements for their final disposal.
- ii. It shall also include information on the quality and quantity of gaseous waste discharged through the stacks or other openings, and arrangements such as provision of scrubbers, cyclone separators, electro-static precipitators or similar such arrangements made for controlling pollution of the environment.
- iii. The occupier shall also furnish the information prescribed in the clause (i) and clause (ii) to the State Pollution Control Board.

(11) REVIEW OF THE INFORMATION FURNISHED TO WORKERS ETC.

- i. The occupier shall review once in every calendar year and modify, if necessary, the information furnished under sub rule (3) to (7) of Rule 60 to the workers, general public, local authority, Chief Inspector and the District Emergency Authority.
- ii. In the event of any change in the process or operations or methods of work or when any new substance is introduced in the process or in the event of a serious accident taking place, the information so furnished shall be reviewed and modified to the extent necessary.

(12) CONFIDENTIALITY OF INFORMATION

(i) The occupier of a factory carrying on 'hazardous process' shall disclose all information needed for protecting safety and health of the workers and the general public in the neighbourhood –

- a. His workers;
b. District Emergency Authority; and
c. Chief Inspector

as required under sub rules (3), (6) and (7) of Rule 60. If the occupier is of the opinion that the disclosure of details regarding the process and formulations will adversely affect his business interests, he may make a representation to the Chief Inspector cum facilitator stating the reasons for withholding such information. The Chief Inspector cum facilitator shall give an opportunity to the occupier of being heard and pass an order on the representation.

(ii) An occupier aggrieved by an order of Chief Inspector cum facilitator may prefer an appeal before the Government of Jammu and Kashmir within a period of 30 days. The Jammu & Kashmir Government shall give



an opportunity to the occupier of being heard and pass an order. The order of the Government shall be final.

61) The conditions for accessibility of the record by the workers under clause (a) of section 85.-

- 1) The occupier of every factory carrying out a 'hazardous process' shall make accessible the health records including the record of worker's exposure to hazardous process or, as the case may be, the medical records of any worker for his perusal under the following conditions:-
 - i. Once in every six months or immediately after the medical examination whichever is earlier;
 - ii. If the factory Medical Officer or the Certifying Surgeon as the case may be, is of the opinion that the worker has manifested signs and symptoms of any notifiable disease as specified in the Third Schedule of the Code.
 - iii. If the worker leaves the employment;
 - iv. If any one of the following authorities so direct
 - the Chief Inspector cum facilitator;
 - the Health Authority of the Central or Government of Jammu and Kashmir;
 - the Commissioner of Workmen's Compensation;
 - the Director, Employees State Insurance Corporation (Medical Benefits); and
 - the Director General, Factory Advice Service and Labour Institutes.
- 2) A copy of the upto date health records including the record of worker's exposure to hazardous process or, as the case may be, the medical records shall be supplied to the worker on receipt of an application from him. X-ray plates and other medical diagnostic reports may also be made available for reference to his medical practitioner.

62) The qualification and experience of persons handling hazardous substance and manner of providing necessary facilities for protecting the workers under clause (b) of section 85.-

- 1) All persons who are required to supervise the handling of hazardous substances shall possess the following qualifications and experience:
 - 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.
 - iii. The experience stipulated above shall be in process operation and maintenance in the Chemical Industry.
 - iv. The Chief Inspector - Cum- Facilitator may require to undergo training in Health and Safety for supervision.
- 2) The syllabus and duration of the above training and the organisations conducting the training shall be approved by the DGFASLI or the appropriate Government in accordance with the guidelines issued by the DGFASLI.

63) The manner of providing for medical examination of a worker under sub-clause (ii) of clause (c) of section 85.

- 1) Workers employed in a 'hazardous process' shall be medically examined by a qualified medical practitioner herein after referred to as a Factory Medical Officer, in the following manner:-
 - i. Once before employment, to ascertain physical fitness of the person to do the particular job:-
 - ii. Once in a period of 6 months, to ascertain the health status of all the workers in respect of occupational health hazards to which they are exposed and in cases where in the opinion of the Factory Medical Officer it is necessary to do so at a shorter interval in respect of any workers.
 - iii. The details of pre-employment and periodical medical examination carried out as aforesaid shall be recorded in the Health Register in the Form XXIV.
- 2) No person shall be employed for the first time without a certificate of fitness in Form XXIII granted by the Factory Medical Officer. If the Factory Medical Officer declares a person unfit for being employed in any process covered under sub-rule (1), such a person shall have the right to appeal to the Inspector who shall refer the matter to the Certifying Surgeon whose opinion shall be final in this regard. If the Inspector is also a Certifying Surgeon, he may dispose of the application himself.
- 3) Any findings of the Factory Medical Officer revealing any abnormality or unsuitability of any person employed in the process shall immediately be reported to the Certifying Surgeon who shall in turn, examine the concerned worker and communicate his findings to the occupier within 30 days. If the Certifying Surgeon is of the opinion

that the worker so examined is required to be taken away from the process for health protection, he will direct the occupier accordingly, who shall not employ the said worker in the same process. However, the worker so taken away shall be provided with alternate placement unless he is in the opinion of the Certifying Surgeon, fully incapacitated in which case the worker affected shall be suitably rehabilitated.

- 4). A Certifying Surgeon on his own motion or on a reference from an Inspector may conduct medical examination of a worker to ascertain the suitability of his employment in a hazardous process or for ascertaining his health status. The opinion of the Certifying Surgeon in such a case shall be final. The fee required for this medical examination shall be paid by the occupier.
- 5). The worker taken away from employment in any process under sub-rule (2) may be employed again in the same process only after obtaining the Fitness Certificate from the Certifying Surgeon and after making entries to that effect in the Health Register.
- 6). The worker required to undergo medical examination under these rules and for any medical survey conducted by or on behalf of the Central Government or the State Government shall not refuse to undergo such medical examination.

64) The measures or standards under sub-section (f) of section 86.-

1) OCCUPATIONAL HEALTH CENTRES

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 here under:-

i. For factories employing upto 50 workers-

- a. The services of a Factory Medical Officer on retainer-ship basis, in his clinic to be notified by the occupier. He will carry out the pre-employment and periodical medical examination as stipulated in rule 61 and render medical assistance during any emergency.
- b. A minimum of 5 persons trained in first-aid procedures amongst whom atleast one shall always be available during the working period;
- c. A fully equipped first-aid box.

ii. For factories employing 51 to 200 workers-

- a. An occupational Health Centre having a room with a minimum floor area of 15 sq mm with floors and walls made of smooth and impervious surface and with adequate illumination and ventilation as well as equipment as per the Schedule D.
- b. 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;
- c. One qualified and trained dresser-cum-compounder on duty throughout the working period;
- d. A fully equipped first aid box in all the departments;

iii. For Factories employing above 200 workers;

- a. One full-time Factory Medical Officer for factories employing upto 500 workers and one more Medical Officer for every additional 1000 workers or part thereof;
- b. An Occupational Health Centre having at least 2 rooms each with a minimum floor area of 15 sq.metre with floors and walls made of smooth and impervious surface and adequate illumination and ventilation as well as equipment as per the Schedule D.
- c. There shall be one nurse, one dresser-cum-compounder and one sweeper-cum-ward boy throughout the working period;
- d. The Occupational Health Centre shall be suitably equipped to manage medical emergencies.

- 2). The Factory Medical Officer required to be appointed under clause (a) shall have qualifications included in Schedule to the Indian Medical Degrees Act of 1916 or in the Schedules to the Indian Medical Council Act,

1956 and possess a Certificate of Training in Industrial Health of minimum three months duration recognised by the Government of Jammu and Kashmir :

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 may specify, grant exemption from the requirement of this sub-rule, if in his opinion a suitable person possessing the necessary qualification is not available for appointment;
 - (iii) In case of a person who has been working as a Factory Medical Officer for a period of not less than 3 years on the date of commencement of this rule, the Chief Inspector - 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 Course shall be approved by the Directorate General of Factory Advice Service and Labour Institutes or the Government of Jammu and Kashmir in accordance with the guidelines issued by the DGFASLI.
- 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:
- i. Name and address of the Factory Medical Officer;
 - ii. Qualifications
 - iii. Experience, if any, and
 - iv. The sub-rule under which appointed.

5). **AMBULANCE VAN**

- (i) 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 (5) and 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. The ambulance van shall not be used for any purpose other than the purpose stipulated herein and will normally be stationed at or near to the Occupational Health Centre.

Provided that a factory employing less than 200 workers, may make arrangements for procuring such facility at short notice from a nearby hospital or other places, to meet any emergency.

- (iii) 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 tilted 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; - Floodlights;
- Flash lights; -Fire extinguisher dry power type;
- Insulated gauntlets

c. **Emergency Care Equipment**

Resuscitation

- Portable suction unit; Portable oxygen units;
- Bag-valve-mask, hand operated artificial ventilation unit;

- Airways; -Mouth gags; - Tracheostomy adapters;
- Short spine board; I.V. Fluids with administration unit;
- B.P. Manometer; - Cumm;-Stethoscope

Immobilization

- Long and short padded boards; - Wire ladder splints;
- Triangular bandage; - Long and short spine boards

Dressings

- Gauze pads – 4" x 4"; - Universal dressing 10" x 36";
- Roll of aluminum foils; - Soft roller bandages 6" x 5 yards; -Adhesive tape in 3" roll; -Safety pins;
- Bandage sheets; - Burnsheets.

Poisoning

- Syrup of Ipecac; - Activated Charcoal Pre packeted in doses; - Snake bite kit;
- Drinking water

Emergency Medicines

- As per requirement (under the advice of Medical Officer only)

6). DECONTAMINATION FACILITIES

In every factory, carrying out 'hazardous process', the following provisions shall be made to meet emergency:-

- fully equipped first aid box;
- readily accessible means of water for washing by workers as well as for drenching the clothing of workers who have been contaminated with hazardous and corrosive substance; and such means shall be as per the scale shown in the Table below:

TABLE

S.No	<u>No. of persons employed at any time</u>	<u>No. of drenching showers</u>
(i)	Upto 50 workers	2
(ii)	Between 51 to 200 workers	2+ 1 for every additional 50 or part thereof
(iii)	Between 201 to 500 workers	5 + 1 for every additional 100 or part thereof
(iv)	501 workers and above	8 + 1 for every additional 200 or part thereof

- a sufficient number of eye wash bottles filled with distilled water or suitable liquid, kept in boxes or cupboards conveniently situated and clearly indicated by a distinctive sign which shall be visible at all times.

65). ISSUE OF GUIDELINES

For the purpose of compliance with the requirements under sub-sections (1) (4) and (7) of Section 84 or Section 85 of the Code, the Chief Inspector-cum-Facilitator may, if deem necessary, issue guidelines from time to time to the occupiers of factories carrying on 'hazardous process'. Such guidelines may be based on National Standards, Codes of Practice, or recommendations of International Bodies such as ILO and WHO.

66). The value of the maximum permissible limit of exposure of chemical and toxic substances in manufacturing process in any factory under section 88.-



The maximum permissible threshold limits of exposure of chemical and toxic substances in manufacturing processes (whether hazardous or otherwise) in any factory shall be of the value indicated in the Schedule E.

67. The appellate authority for appeal against the order of Inspector - Cum- Facilitator of factory and the manner of appeal under section 90 -

- 1). An appeal presented under section 90 shall lie with the Chief Inspector - Cum- Facilitator in cases where the order appealed against is an order passed by that officer, with the appropriate Government or with such authority as the appropriate Government may appoint in this behalf and shall be in the form of a memorandum setting forth concisely the grounds of objection to the order and bearing court-fees stamp in accordance with Article 11 of Schedule II to the Court-fees Act, 1870, and shall be accompanied by a copy of the order appealed against.
- 2). On receipt of the memorandum of appeal, the appellate authority shall, if it thinks fit or if the appellant has requested that the appeal should be heard with the aid of assessors, call upon the body declared under sub-rule (3) to be representative of the industry concerned, to appoint an assessor within a period of 14 days. If an assessor is nominated by such body, the appellate authority shall appoint a second assessor itself. It shall then fix a date for the hearing of the appeal and shall give due notice of such date to the appellant and to the Inspector - Cum-Facilitator whose order is appealed against, and shall call upon the two assessors to appear upon such date to assist in the hearing of the appeal.
- 3). The appellant shall state in the memorandum presented under sub-rule (1) whether he is a member of one or more of the following bodies. The body empowered to appoint the assessor shall-
 - i). if the appellant is a member of one of such bodies, be that body;
 - ii). if he is a member of two such bodies, be the body which the appellant desired should appoint such assessor; and
 - iii). if the appellant is not a member of any of the aforesaid bodies or if he does not state in the memorandum which of such bodies he desires should appoint the assessor, be the body which the appellant authority considers as the best fitted to represent the industry concerned.

1.....
2.....
3.....
4.....
- 4). An assessor appointed in accordance with the provisions of sub-rules 2 and 3 shall receive, for the bearing of the appeal, a fee to be fixed by the appellate authority, subject to a maximum of Rs..... per diem. He shall also receive the actual travelling expenses. The fees and travelling expenses shall be paid to the assessors by appropriate Government, but where assessors have been appointed at the request of the appellant and the appeal has been decided wholly or partly against him the appellate authority may direct that the fees and travelling expenses of the assessors shall be paid in whole or in part by the appellant.

68. Persons defined to hold positions of supervision or management under clause (b) of sub-section (1) of section 91 -

- (1) The following persons shall be deemed to hold positions of supervision or management:-
 - i). all persons specified in the Schedule F; and
 - ii). any other person who, in the opinion of the Inspector - Cum- Facilitator, holds a position of supervision or management as given in Schedule G.
- (2) All timekeepers employed in a factory within the meaning of sub-section (1) of section 2 shall be deemed to be employed in a confidential position in the factory.

69. Exemptions under clause (b) of sub-section (1) of section 91- Adult workers engaged in factories specified in column 2 of the Schedule G on the work specified in column 3 of the said schedule shall be exempted from the provisions of the sections specified in the column 4 subject to the conditions, if any, specified in column 5 of the said schedule.



Offences and Penalties

70) Manner of holding enquiry under sub-section (1) of section 111-

The Government of Jammu & Kashmir may by notification in the official gazette appoint any gazetted officer not below the rank of Assistant Labour Commissioner having jurisdiction for holding enquiry and imposing penalty in such manner as may be prescribed by the Central Government under this section.

71) 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 Government of Jammu and Kashmir for such purpose within thirty days from the date of receipt by him of such order, electronically or otherwise alongwith fee @ 25% of penalty imposed 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 onlineelectronically 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 registeredpost.
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 applicantelectronically 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 theappeal 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 days from the date of receipt of appeal.

72) Manner of compounding under sub-section (1) of section 114 -

- (1) The officer notified by the Government of Jammu and Kashmir for the purposes of compounding of offences under sub-section (1) of section 114 shall issue electronically or otherwise, a compounding notice for the offences which are compoundable under sub-section (1) of section 114.
- (2) The person so noticed may apply to the officer electronically or otherwise and deposit the entire compounding amount by electronic transfer or otherwise, within thirty days of the receipt of the notice.
- (3) The Compounding Officer shall issue a composition certificate within twenty days of receipt of the composition amount, to such person from whom such amount has been received in satisfaction of the composition notice.
- (4) If a person so noticed fails to deposit the composition amount within the one month before the institution of prosecution, the prosecution shall be proceeded with before the competent Court.
- (5) No prosecution shall be instituted without giving an opportunity to the employer to comply with such provisions subjected to proviso of sub-section (1) of Section 110 and compounding as under Section 114.

CHAPTER - XI Social Security Fund

73) Other sources of fund under sub-section (2) of section 115-The Jammu and Kashmir Government may by notification make separate rules for generating other sources of Jammu & Kashmir Social Security Fund as under:-

- (1) The Registration / Renewal fees collected from the establishments under this code and any other labour law enacted by the state legislature.

- (2) The unclaimed amount presently lying in the official accounts of all Assistant Labour Commissioners under Payment of Wages Act, 1936, Payment of Gratuity Act, 1972, Minimum Wages Act, 1948, Payment of Bonus Act, 1965, Employees Compensation Act, 1923 etc.
- (3) The unclaimed Security amount under Contract Labour (Regulation & Abolition) Act, 1970 / Inter-state Migrant Workmen (RECS) Act, 1979.
- (4) Any other resource as the Government of Jammu and Kashmir may decide at any point of time.

74) The manner of administering and expending the fund under sub-section (2) of section 115 - The Government of Jammu and Kashmir in consultation with Jammu and Kashmir unorganized sector workers welfare board may take steps required for the manner of Administering the expenditure of the fund.

CHAPTER - XII
Miscellaneous

75) The form of application, manner of filing the application and the fee to be accompanied therewith including the information relating to the employment of inter-State migrant workers under sub-section (2) of section 119 -

- (1) If a contractor desirous of obtaining licence 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 districts or for the whole territory of Jammu and Kashmir, then he shall apply electronically or otherwise on the official portal of Labour Department, Government of Jammu and Kashmir in Form-XIII to the licensing authority appointed by the Government amongst the officers not below the rank of Labour Commissioner, Government of Jammu and Kashmir.
- (2) Application for single licence shall be submitted electronically or otherwise to the authority notified in this behalf under sub-section (1) of section 119 of this code.
- (3) License issued under this rule shall be valid for five years.
- (4) Copy or copies of the licence so issued shall be sent to the district officers of the Labour Department in whose jurisdiction, the contract work or works for which licence is issued, falls.

76) Actions, manner of taking actions and inquiry under sub-section (3) of section 119 - Where the Authority referred to in sub-section (3) of Section 119 is satisfied that the common licence may be issued in respect of factory, industrial premises and for construction establishment engaging contract worker or any combination thereof, a single licence for any one of them under these rules shall be issued in Form - XIV electronically or otherwise within 45 days of the receipt of the said application. In case the Authority rejects the registration application, He shall assign the reasons for such rejections and communicate to the party within the above mentioned period electronically or otherwise as the case may be.

77) The form of appeal, the fee to be accompanied there with and the appellate authority under sub-section (6) of section 119 -

- (1) Any person aggrieved by an order passed under this section by the Authority referred to rule 72 shall prefer an appeal before the Administrative Secretary, Labour and Employment Department, Government of Jammu and Kashmir.
- (2) The Application for the appeal shall be accompanied with the rejection order of the Registering Authority and fee receipt of Rs. 1000/- to be deposited in the official account of the Appellate Authority.

78) The manner of survey under sub-section (2) of section 121 - The committee as referred under sub-section (2) of section 121 shall be nominated and approved by the Government of Jammu & Kashmir.

79) Any other matter which is required to be, or may be, prescribed under this code - The Jammu and Kashmir Government may at any time after publication of these rules make such amendments and insertions as it deem proper by way of notification for carrying out any of the provisions under this code.

Schedule - A
(See sub rule (3) of rule 28)



Facilities at his command	
(5)	
ience of ing and	
testing, tice and natural building	
reliable safety of	
experience	
rance of pection of ds, safety	Gauges for measurement, instruments for measuring speed and any other equipment or device to determine the safety in the use of dangerous machines
levices and id any other a reliable the proper ppliance and	
aintenance of h inspection of nversant with her statutory ocedures and arrive at a regards to the	Facilities for load testing, tensile testing, gauges. Other equipments for measurement and for determining the safe working conditions of hoists and lifts
e of 07 years in: s or operation/ n and inspection y, chains, ropes,	Facilities for load testing, tensile testing, heat treatment, equipments for measurement, gauges and such other equipments to determine the safe working conditions of
at relevant codes t procedures	

- c) 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 women and young persons** - No women, adolescent or child shall be employed or permitted to work at a bath.
4. **Floor of workrooms** - The floor of every workroom containing a bath shall be impervious to water. The floor shall be maintained in good and level condition and shall be washed down at least once a day.
5. **Protective devices** -
- I. 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 footwear, and chemical goggles.
 - II. 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** -
- I. 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 5 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 cms, or
 - ii. at least one wash basin for 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.*
 - II. In addition to the facility in sub-paragraph I, an approved type 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 litres 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 workers employed shall be affixed in a prominent place in the factory where it can be easily and conveniently read by the workers.

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 workers 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 for medical surveillance of the workers employed therein whose appointment shall be subject to the approval of the Chief Inspector cum facilitator;
 - b) Provide to the said medical practitioner 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 workers 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 medical practitioner shall examine all workers 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 in every fortnight

- (3) The record of the examinations referred to in sub-paragraph (2) shall be maintained in a separate register approved by Chief Inspector cum facilitator which shall be kept readily available for inspection by the Inspector cum facilitator.
9. Medical examination by the Certifying Surgeon –
- I. Every worker employed in the electrolytic processes shall be examined by a Certifying Surgeon before his first employment. Such examination shall include X-ray of the chest and –
- in case of chromium plating include examination for nasal septum perforation and test for chromium in urine;
 - in case of nickel plating, test for nickel in urine; and
 - in case of cadmium plating, test for cadmium in urine and -2 microglobulin in urine.
- II. No worker shall be employed in any electrolytic process unless certified fit for such employment by the Certifying Surgeon.
- III. Every worker employed in the electrolytic processes shall be re-examined by a Certifying Surgeon at least once in every year, except in case of the workers employed in cadmium, chromium and nickel plating processes for whom this examination shall be carried out once in every six months. Such reexamination shall, wherever the Certifying Surgeon considers appropriate, include tests as specified under sub-paragraph (I) excluding the X-ray of the chest which shall not be required normally to be carried out earlier than once in three years.
- IV. The certifying surgeon after examining a worker, shall issue a Certificate of Fitness in Form XXIII. The record of examination and re-examinations carried out shall be kept in the custody of the manager of the factory. The record of each examination carried out under sub-paragraphs (I) and (II) including the nature and the results of the tests, shall also be entered by the Certifying Surgeon in a health register in Form XXIV.
- V. The certificate of fitness and the health register shall be kept readily available for inspection by the Inspector cum facilitator.
- VI. If at any time the Certifying Surgeon is of the opinion that a worker is no longer fit for employment in the electrolytic processes on the ground that continuance therein would involve 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 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 Certifying Surgeon in which case the person affected shall be suitably rehabilitated.
- VII. No person who has been found unfit to work as said in sub-paragraph (VI) shall be re-employed or permitted to work in the said processes unless the Certifying Surgeon after further examination, again certifies him fit for employment in these processes.

Schedule B-III

Manufacture and repair of electric accumulators

- 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.
- Definitions** - For the purposes of this schedule -
 - "Lead process" means the melting of lead or any material containing lead, casting, pasting, lead burning, or any other work, including trimming, or any other abrading or cutting of pasted plates, involving the use, movement or manipulation of or contact with, any oxide of lead;
 - "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;
- Prohibition relating to women and young persons** - No women or young person shall be employed or permitted to work in any lead process or in any room in which the manipulation of raw oxide of lead or pasting is carried on.
- Separation of certain processes** - 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 processes :-
 - manipulation of raw oxide of lead;
 - pasting;
 - drying of pasted plates;
 - formation with lead turning (tacking) necessarily carried on in connection therewith; and
 - melting down of pasted plates.
- Air space** - In every room in which a lead process is carried on, there shall be at least 14.2 cubic meters of air space for each person employed therein, and in computing this air space no height over 3.65 meters shall be taken into account.



6. **Ventilation** - Every workroom shall be provided with inlets and outlets of adequate size as to secure and maintain efficient ventilation in all parts of the room.
7. **Distance between workers 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 1.5 meters.
8. **Floor of workrooms** -
 - I. The floor of every room in which 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; and
 - c) kept free from materials, plant, or other obstructions not required for, or produced in, the process carried on in the room.
 - II. In all such rooms other than grid casting shops the floor shall be cleansed daily after being thoroughly sprayed with water at a time when no other work is being carried on in the room.
 - III. In grid casting shops the floor shall be cleansed daily.
 - IV. Without prejudice to the requirements of sub-paragraphs (I), (II) and (III), where manipulation of raw oxide of lead or pasting is carried on, the floor shall also be -
 - a) kept constantly moist while work is being done;
 - b) provided with suitable and adequate arrangements for drainage; and
 - c) Thoroughly washed daily by means of hose pipe.
9. **Work-benches** - The work-benches at which any lead process is carried on shall-
 - a) have a smooth surface and be maintained in sound condition;
 - b) be kept free from all materials or plant not required for, or produced in, the process carried out there at; and all such work-benches other than those in grid casting shops shall be cleaned daily either after being thoroughly damped or by means of suction cleaning apparatus at the time when no other work being carried on there at; and all such work-benches in grid casting shops shall be cleaned daily; and every work-bench used for pasting shall-
 - i. be covered throughout with sheet lead and other impervious material;
 - ii. be provided with raised edges;
 - iii. be kept constantly moist while pasting being carried on.
10. **Exhaust draught**- The following provisions shall not be carried on without the use of an efficient exhaust draught:-
 - a) Melting of lead or material containing lead.
 - b) Manipulation of raw oxide of lead unless done in an enclosed apparatus so as to prevent the escape of dust into work-room.
 - c) Pasting.
 - d) Trimming, brushing, filing or any other abrading or cutting or pasted plates giving rise to dust.
 - e) Lead burning other than-
 - i. "tacking" in the formation room.
 - ii. Chemical burning for making 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 affected by mechanical means and shall operate on the dust or fume given off as nearly as may be at the point of reason so as to prevent it entering the air of any room in which person's works.
11. **Fumes and gasses from melting pots** - The products of combustion produced in the heating of any melting pot shall not be allow to escape into a room in which persons work .
12. **Containers 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 shall be deposited.
14. **Racks and shelves drying room** - a) The racks and shelves provided in any drying room shall not be more than 2.4 m from the floor and not more than 60 cm in width;

Provided that as regards racks or shelves set or drawn from both sides the total width shall not exceed 120 cm.

 b) Such racks and shelves shall be cleaned only after being thoroughly damped unless so efficient suction cleaning apparatus is used for this purpose.
15. **Protective clothing**-
 - I. Protective clothing shall be provided and maintained in good condition for all person employed in-
 - a) Manipulation of raw oxide of lead;
 - b) Pasting;
 - c) The formation room;
 and such clothing shall be worn by the person concerned.



- II. The protective clothing shall consist of a water-proof apron and water-proof footwear; and also as required persons employed in the manipulation of raw oxide of lead or in the pasting the head covering shall be washed daily.
16. **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. The mess room shall be placed under the charge of a responsible person and shall be kept clean.
17. **Cloak room**- there shall be provided and maintained for the use of all persons employed in a lead process-
- a cloak room for clothing put-off during working hours with adequate arrangements for drying the clothes, if wet. Such accommodation shall be separate from mess room.
 - separate and suitable arrangements for the storage of protective clothing provided as per sub-rule (15)
18. **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 wash place with either -
 - a trough with a smooth impervious surface fitted with a waste pipe without plug, and of sufficient length to allow at least 60 centimetres 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 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 an adequate supply of water laid on.
 - a sufficient supply of clean towels made of suitable materials renewed daily, which supply in case of pasters and person employed in manipulation of raw oxide of lead shall include a separate marked towel for each worker; and
 - a sufficient supply of soap or other suitable cleansing material and of nail brushes.
 - There shall in addition be provided means of washing in 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.
19. **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 each person employed in the manipulation of raw oxide of lead or in pasting.
- Provided that if there is be one basin or 60 centimeters of trough for each such person, this paragraph shall not apply.
20. **Facilities for bathing**- sufficient bath accommodation to the satisfaction of the Chief Inspector cum Facilitator shall be provided to all the persons engaged in manipulation of raw oxide of lead or in pasting and a sufficient supply of soap and clean towels.
21. **Foods, drinks etc. prohibited in work-rooms**- no food, drink, pan and supari or tobacco shall be consumed or brought by any worker into any work-room in which any lead process is carried on.
22. **Medical facilities and records of medical examination and tests** -
- The occupier of every factory in which manufacture and repair of electric accumulators is carried on shall -
 - Employ a qualified medical practitioner for medical surveillance of the workers employed there in whose employment shall be subject to the approval of chief inspector; and
 - Provide to the set medical practitioner all necessary facilities for the purpose referred to in clause (a).
 - The record of medical examinations and appropriate test carried out by the said medical practitioner shall be maintained in a separate register approved by the chief inspector and such register shall be kept readily available for inspection by the inspector.
23. **Medical examination by the Certifying Surgeon** -
- Every worker employed in a lead processes shall be examined by a Certifying Surgeon within 15 days of his first employment. Such examination shall include test for lead in urine and blood, ALA in urine, hemoglobin content, stippling of cells and steadiness test. 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 Certifying Surgeon.
 - Every worker employed in the said processes shall be re-examined by a Certifying Surgeon at least once in every 3 calendar months and such re-examination shall, wherever the Certifying Surgeon considers appropriate, include tests specified in sub-paragraph (I).
 - The Certifying Surgeon after examining a worker shall issue a Certificate of Fitness in Form XXIII. 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 subparagraphs (I) and (II), including the nature and the results of the tests, shall also be entered by the Certifying Surgeon in a health register in Form XXIV.

- IV. The Certificate of Fitness and the health register shall be kept readily available for inspection by the Inspector.
- V. If at any time the Certifying Surgeon is of the opinion that a worker 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 worker he shall make 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.
- VI. No person who has been found unfit to work as said in sub-paragraph (V) shall be re-employed or permitted to work in the said processes unless the Certifying Surgeon, after further examination, again certifies him fit for employment in those processes.

Schedule B-IV
Glass Manufacture

1. **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, yields to an aqueous solution of hydrochloric acid a quantity soluble lead compound exceeding, when calculated as lead monoxide, five percent of the dry weight of the portion taken analysis.
The method of treatment shall be as follows:-
A weighed quantity of the material which has been dried at 100 degrees centigrade 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.
2. **Exhaust draught** - The following processes shall not be carried on except under an efficient exhaust draught or such other conditions as may be approved by the Chief Inspector cum Facilitator :-
- a) the mixing of raw materials to form a "Bator";
- b) the dry grinding, glazing and polishing of glass or any article of glass;
- c) all processes in which hydrofluoric acid fumes or ammonical vapours are given off;
- d) all processes in the making of furnace moulds or "pots" including the grinding or crushing of used "pots"; and
- e) All processes involving the use of a dry lead compound.
3. **Prohibition relating to women and young person** - No woman or young person shall be employed or permitted to work in any of the operations specified in paragraph 2 or at any place where such operations are carried on.
4. **Floor and work-benches** - The floor and work-benches of every room in which a dry compound of lead is manipulated or in which any process is carried on giving off silica dust shall be kept moist and shall comply with the following requirements :-
- a) **The floor shall be -**
- i. of cement or similar material so as to be smooth and impervious to water;
- ii. maintained in sound condition; and
- iii. cleansed daily after being thoroughly spread with water at a time when no other work is being carried on the room; and
- b) **The work-benches shall -**
- i. have a smooth surface and be maintained in sound condition, and
- ii. cleansed 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 thereat.
5. **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 in 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 workplaces shall be so enclosed in projecting hoods that openings required for the 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.
6. **Storage and transport of hydrofluoric acid** - Hydrofluoric acid shall not be stored or transported except in cylinders or receptacles made of lead or rubber.
7. **Blow pipes** - Every glass blower shall be provided with a separate blow pipe bearing the distinguishing mark of the person to whom it is issued and suitable facilities shall be readily available to every glass blower for sterilising his blow pipe.
8. **Food, drinks, etc., prohibited in workrooms** - No food, drink, pan and supari or tobacco shall be brought into or consumed by any worker in any room or workplace wherein any process specified in paragraph 2 is carried on.

9. **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 2 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.
10. **Washing facilities** - There shall be provided and maintained in a clean state and in good repair for the use of all persons employed in the processes specified in paragraph 2
- a) a wash place 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 60 centimetres 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 60 centimetres; 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;
 - b) a sufficient supply of clean towels made of suitable material renewed daily with sufficient supply of soap or other suitable cleansing material and of nail brushes; and
 - c) a sufficient number of stand pipes with taps the number and location of which shall be to the satisfaction of the Chief Inspector cum facilitator.
11. **Medical facilities and record of examinations and tests** -
- I. The occupier of every factory in which glass manufacturing processes are carried out, shall -
 - a) employ a qualified medical practitioner for medical surveillance of the workers employed therein whose appointment shall be subject to the approval of the Chief Inspector cum facilitator; and
 - b) Provide to the said medical practitioner all the necessary facilities for the purpose referred to in clause (a).
 - II. The records of medical examinations and appropriate tests carried out by the said medical practitioner 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. **Medical Examination by Certifying Surgeon** -
- I. Every worker employed in processes specified in paragraph 2 shall be examined by the Certifying Surgeon within 15 days of his first employment. Such examination shall include pulmonary function tests and in suspected cases chest X-ray as well as tests for lead and urine. No worker shall be allowed to work after 15 days of first employment in the factory unless certified for such employment by the Certifying Surgeon.
 - II. Every worker employed in the said processes shall be re-examined by the Certifying Surgeon at least once in every twelve calendar months. Such re-examination shall, wherever the Certifying Surgeon considers appropriate, include tests as specified in sub-paragraph (I).
 - III. The Certifying Surgeon after examining a worker, shall issue a Certificate of Fitness in Form XXIII. 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 subparagraph (I) and (II), including the nature and the results of the tests, shall also be entered by the Certifying Surgeon in a health register in Form XXIV.
 - IV. The Certificate of Fitness and the health register shall be kept readily available for inspection by the Inspector.
 - V. If at any time the Certifying Surgeon is of the opinion that a worker is no longer fit for employment in the said processes on the ground that continuance therein would involve special danger to the health of worker, 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 Certifying Surgeon, in which the person affected shall be suitably rehabilitated.
 - VI. No person who has been found unfit to work as said in sub-paragraph (V) shall be re-employed or permitted to work in the said processes unless the Certifying Surgeon, after further examination, again certifies him fit for employment in those processes.
13. **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 danger to the persons employed therein, or that the application of this schedule 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.

1. **Exception.** -
 - (a) Nothing in this schedule shall apply to any factory in which only repairs are carried on except any part thereof in which one or more persons are wholly or mainly employed in the grinding or glazing of metals.
 - (b) Nothing in this schedule except paragraph 4 shall apply to any grinding or glazing of metals carried on intermittently and at which no person is employed for more than 12 hours in any week.
2. **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 bonded 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 the 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 the 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; and
 - g) "rodding" means the dressing of the surface of a revolving grindstone by the application of a rod, bar or strip of metal to such surface.
3. **Equipment for removal of dust** - No racing, dry grinding or glazing shall be performed without -
 - a) a hood or other appliance so constructed, arranged, placed and maintained as 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 to attach thereto any instrument necessary for ascertaining the pressure of air in the said duct; and
 - c) a fan or other efficient means of producing a draught sufficient to extract the dust :

Provided that the 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, abrasive 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 an adequate supply of water is laid on at the upper surface of the grindstone or adequate appliances for the interception of dust are provided in accordance with the requirements of paragraph 3.
7. **Examination of dust equipment** -

All equipment for the extraction or suppression of dust shall at least once in every six months be examined and tested by competent person, and any defect disclosed by such examination and test shall be rectified as soon as practicable.
8. **Medical facilities and record of examinations and tests** -
 - I. The occupier of every factory in which grinding or glazing of metals are carried out, shall -
 - a) employ a qualified medical practitioner for medical surveillance of the workers employed therein whose appointment shall be subject to the approval of the Chief Inspector cum facilitator; and
 - b) Provide to the said medical practitioner all the necessary facilities for the purpose referred to in clause (a).
 - II. The record of medical examinations and appropriate tests carried out by the said medical practitioner 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 the Certifying Surgeon** -
 - I. every worker employed in grinding or glazing of metal and processes incidental thereto shall be examined by a Certifying Surgeon within 15 days of his first employment. Such examination shall include pulmonary function tests and in suspected cases chest X-rays. 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 Certifying Surgeon.
 - II. Every worker employed in the said processes shall be re-examined by a Certifying Surgeon at least once in every 12 calendar months. Such re-examination shall, wherever the Certifying Surgeon considers appropriate, include tests as specified in sub-paragraph (I).
 - III. The Certifying Surgeon after examining a worker shall issue a Certificate of Fitness in Form XXIII. 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 (I) and

- (II), including the nature and the results of the tests, shall also be entered by the Certifying Surgeon in a health register in Form XXIV.
- IV. The Certificate of Fitness and the health register shall be kept readily available for inspection by the Inspector.
- V. If at any time the Certifying Surgeon is of the opinion that a worker is no longer fit for employment in the said processes on the found that continuance therein would involve special danger to the health of the worker he shall make 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 Certifying Surgeon, in which case the person affected shall be suitably rehabilitated.
- VI. No person who has been found unfit to work as said in sub-paragraph (V) shall be re-employed or permitted to work in the said processes unless the Certifying Surgeon, after further examination, again certifies him fit for employment in those processes.
10. **Exemption** - 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.

Schedule B-VI

Manufacture and treatment of lead and certain compounds of lead

1. **Definitions** - For this purpose of this schedule -
- a) "lead compound" means any compound of lead other than galena which, when treated in the manner described below, yields to an aqueous solution of hydrochloric acid, a quantity of soluble lead compound exceeding, when calculated as lead monoxide, five per cent of the "dry weight" of the portion taken for analysis. In the case of paints and similar products and other mixtures containing oil or fat the "dry weight" means the dry weight of the material remaining after the substance has been thoroughly mixed and treated with suitable solvents to remove oil, fats, varnish or other media.
The method of treatment shall be as follows:-
A weighed quantity of the material which has been dried at 100 degree centigrade 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 precipitate as lead sulphate and weighed as lead sulphate;
- b) "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 dusts originate.
2. **Application** - This schedule shall apply to all factories or parts of factories in which any of the following operations are carried on :-
- work at a furnace where the reduction or treatment of zinc or lead ores is carried on ;
 - the manipulation, treatment or reduction of ashes containing lead, the desilvering of lead or the melting of scrap lead or zinc;
 - the manufacture of solder or alloys containing more than ten percent of lead;
 - the manufacture of any oxide, carbonate, sulphate, chromate, acetate, nitrate or silicate of lead;
 - the handling or mixing of lead tetra-ethyl;
 - any other operation involving the use of a lead compound; and
 - The cleaning of workrooms where any of the operations aforesaid are carried on.
3. **Prohibition relating to women and young persons** - No women or young person shall be employed or permitted to work in any of the operations specified in paragraph 1.
4. **Requirements to be observed** - No person shall be employed or permitted to work in any process involving the use of lead compounds if the process is such that dust or fume from a lead compound is produced therein, or the persons employed therein are liable to be splashed with any lead compound in the course of their employment unless the provisions of paragraphs 5 to 13 are complied with.



5. **Exhaust draught** - Where dust, fume, gas or vapour is produced in the process, provision shall be made for removing them by means of an efficient exhaust draught to contrive as to operate on the dust, fume, gas or vapour as closely as possible to the point of origin.
6. **Medical facilities and record of examinations and tests** -
- I. The occupier of every factory in which grinding or glazing of metals are carried out, shall -
 - a) employ a qualified medical practitioner for medical surveillance of the workers employed therein whose appointment shall be subject to the approval of the Chief Inspector cum facilitator; and
 - b) Provide to the said medical practitioner all the necessary facilities for the purpose referred to in clause (a).
 - II. The record of medical examinations and appropriate tests carried out by the said medical practitioner 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.
7. **Medical examination by the Certifying Surgeon** -
- I. every worker employed shall be examined by a Certifying Surgeon within 15 days of his first employment. Such examination shall include pulmonary function tests and in suspected cases chest X-rays. 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 Certifying Surgeon.
 - II. Every worker employed in the said processes shall be re-examined by a Certifying Surgeon at least once in every 3 calendar months. Such re-examination shall, wherever the Certifying Surgeon considers appropriate, include tests as specified in sub-paragraph (I).
 - III. The Certifying Surgeon after examining a worker, shall issue a Certificate of Fitness in Form XXIII. 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 subparagraphs (I) and (II), including the nature and the results of the tests, shall also be entered by the Certifying Surgeon in a health register in Form XXIV.
 - IV. The Certificate of Fitness and the health register shall be kept readily available for inspection by the Inspector cum facilitator.
 - V. If at any time the Certifying Surgeon is of the opinion that a worker 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 worker he shall make 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 Certifying Surgeon, in which case the person affected shall be suitably rehabilitated.
 - VI. 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 Certifying Surgeon, after further examination, again certifies him fit for employment in those processes.
8. **Food, drinks, etc. prohibited in workroom** - No food, drink, pan and supari or tobacco shall be brought into or consumed by any worker in any workroom in which the process is carried on and no person shall remain in any such room during intervals for meals or rest.
9. **Protective clothing** - Suitable protective overalls and head coverage shall be provided, maintained and kept clean by the occupier and such overalls and head coverings shall be worn by the persons employed.
10. **Cleanliness of workrooms, tools, etc.** - The rooms in which the persons are employed and all tools and apparatus used by them shall be kept in a clean state.
11. **Washing facilities** -
- I. The occupier shall provide and maintain for the use of all persons employed suitable washing facilities consisting of -
 - a) a trough with a smooth impervious surface fitted with a waste pipe, without plug, and of 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 60 centimeters;
 - b) At least one wash-basin for every ten persons employed at any one time, fitted with a waste pipe and plug and having a constant supply of clean water; together with, in either case, a sufficient supply of nail brushes, soap or other suitable cleansing material and clean towels.
 - II. The facilities so provided shall be placed under the charge of a responsible person and shall be kept clean.
12. **Mess room or canteen** - The occupier shall provide and maintain for the use of the persons employed suitable and adequate arrangements for taking their meals. The arrangements shall consist of the use of a room separate from any workroom which shall be furnished with sufficient tables and benches, and unless a canteen serving hot meals is provided, adequate means of

- warming the food. The room shall be adequately ventilated by the circulation of fresh air, shall be placed under the charge of a responsible person and shall be kept clean.
13. **Cloak room** - The occupier shall provide and maintain for the use of persons employed, suitable accommodation for clothing not worn during working hours, and for the drying of wet clothing.
 14. **Exemption** - Where 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, he may by certificate in writing exempt any factory from all or any of such provisions, subject to such conditions as he may specify.

Schedule B-VII

Generating petrol gas from dangerous petroleum

1. **Prohibition relating to women and young persons** - No woman or young person shall be employed or permitted to work in or shall be allowed to enter any building in which the generation of gas from dangerous petroleum is carried on.
2. **Flame traps** - The plant for generation of gas from dangerous petroleum and associated piping and fittings 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 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 "generating building"). In the case of such plants 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.
5. **Plant to be approved by Chief Inspector** - Petrol gas shall not be manufactured except in a plant for generating gas, the design and construction of which has been approved by the Chief Inspector cum facilitator.
6. **Escape of dangerous petroleum** - Effective steps shall be taken to prevent dangerous petroleum from escaping into any drain or sewer.
7. **Prohibition relating to smoking** - No person shall smoke or carry matches, fire or naked light or other means of producing a naked light or spark in the generation room or building or in the vicinity thereof and a warning notice in the language understood by the majority of the workers 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 dangerous petroleum or container** - No unauthorized person shall have access to any dangerous petroleum or to a vessel containing or having actually contained dangerous petroleum.
9. **Electric fittings** - All electric fittings shall be of flameproof construction and all electric conductors shall either be enclosed in metal conduits or be lead-sheathed.
10. **Construction of doors** - All doors in the generating room or building shall be constructed to open outwards or to slide and no door shall be locked or obstructed or fastened in a such a 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 dangerous petroleum 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 dangerous petroleum or inflammable vapour.

Schedule B-VIII

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. **Definitions** - For the purposes of this schedule -
 - a) "blasting" means cleaning, smoothing, roughening, or removing of any part of the surface of any article by the use of an abrasive of a jet of sand, metal shot, or grit or other material, propelled by a blast of compressed air or steam;



- b) "blasting enclosure" means a chamber, barrel, cabinet or any other enclosure designed for the performance of blasting therein;
 - c) "blasting chamber" means a blasting enclosure in which any person may enter at any time in connection with any work or otherwise; and
 - d) "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 smoothening of a casting, but does not include the free treatment.
2. **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 :

Provided that this clause shall come into force two years after the coming into operation of this schedule.

Provided further that no woman or young person shall be employed or permitted to work at any operation of sand blasting.

3. **Precautions in connection with blasting operations** -

- a) Blasting shall not be done except in a blasting enclosure and no work other than blasting and any work immediately incidental thereto and clearing and repairing of the enclosure including the plant and appliances situated therein, shall be kept closed and air tight while blasting is being done therein.
- b) **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 enclosure, and from apparatus connected therewith, into the air of any room.
- c) **Provision of separating apparatus:** There shall be 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 opinion that it is not reasonably practicable to provide such separating apparatus.
- d) **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 of by such method and in such 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.
- e) **Operation of ventilating plant:** The ventilating plant provided for the purpose of subparagraph (d) shall be 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.

4. **Inspection and examination** -

- I. Every blasting enclosure shall be specially inspected by a competent person at least once in 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.
- II. Particulars of the result of every such inspection, examination or 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.

5. **Provision of protective helmets, gauntlets and overalls** -

- I. 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 this use whilst he is in the chamber and shall not remove it until he is outside the chamber.
- II. Each protective helmet shall carry a distinguishing mark indicating the person by whom it is intended to be used and no person shall be allowed or required to wear a helmet not carrying his mark or a helmet which has been worn by another person and has not since been thoroughly disinfected.
- III. Each protective helmet when in use shall be supplied with clean and not unreasonably cold air at a rate of not less than 170 litres per minute.

- IV. Suitable gauntlets and overalls 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.
6. **Precautions in connection with cleaning and other work -**
- I. 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 or 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.
- II. In connection with any cleaning operation referred to in paragraph 5, 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.
7. **Storage accommodation for protective wear -** Adequate and suitable storage accommodation for the helmets, gauntlets and overalls required to be provided by paragraph 5 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.
8. **Maintenance and cleaning of protective wear -** All helmets, gauntlets, overalls and other protective devices or clothings provided and worn for the purposes 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 not be used for removing dust from any clothing.
9. **Maintenance of vacuum cleaning plant -** Vacuum cleaning plant used for the purpose of this schedule shall be properly maintained.
10. **Restrictions in employment of young persons -**
- I. No person under 18 years of age shall be employed in blasting or assisting at blasting or in any blasting chamber or in the cleaning of any blasting apparatus or any blasting enclosure or any apparatus or ventilating plant connected therewith or be employed on maintenance or repair work at such apparatus, enclosure or plant.
- II. No person under 18 years of age shall be employed to work regularly within twenty feet of any blasting enclosure unless the enclosure is in a room and he is outside that room where he is effectively separated from any dust coming from the enclosure.
11. **Power to exempt or relax -**
- I. 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 an 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 relaxed without endangering the health of the persons employed or that application of any such requirements is for any reason impracticable or inappropriate, he may, with the previous sanction of the J&K 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 such conditions and for such period as may be specified in the said order.
- II. Where an exemption has been granted under sub-paragraph (I), 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.
12. **Medical facilities and records of examinations and tests -**
- I. The occupier of every factory to which the Schedule applies, shall -
- a) employ a qualified medical practitioner for medical surveillance of the workers employed therein whose employment shall be subject to the approval of the Chief Inspector of Factories; and
- b) Provide to the said medical practitioner all the necessary facilities for the purpose referred to in clause (a).
- II. The record of medical examinations and appropriate tests carried out by the said medical practitioner shall be maintained in a separate register approved by the Chief Inspector of Factories, which shall be kept readily available for inspection by the Inspector.
13. **Medical examination by the Certifying Surgeon -**
- I. Every worker employed in any of the processes to which this schedule shall be examined by a Certifying Surgeon within 15 days of his first employment. Such examination shall include pulmonary function tests and chest X-rays. 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 Certifying Surgeon.



- II. Every worker employed in the said processes shall be re-examined by a Certifying Surgeon at least once in every 12 calendar months and such re-examination shall, wherever the Certifying Surgeon considers appropriate, include pulmonary function test and chest X-ray once in every three years.
- III. The Certifying Surgeon after examining a worker shall issue a Certificate of Fitness in Form XXIII. 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 (I) and (II), including the nature and the results of the tests, shall also be entered by the Certifying Surgeon in a health register in Form XXIV.
- IV. The Certificate of Fitness and the health register shall be kept readily available for inspection by the Inspector cum facilitator.
- V. If at any time the Certifying Surgeon is of the opinion that a worker 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 worker he shall make 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 Certifying Surgeon, in which case the person affected shall be suitably rehabilitated.
- VI. No person who has been found unfit to work as said in sub-paragraph (V) shall be re-employed or permitted to work in the said processes unless the Certifying Surgeon, after further examination, again certifies him fit for employment in those processes.

Schedule B-IX

Liming and tanning of raw hides and skins and processes incidental thereto.

1. **Cautionary notices -**
 - I. Cautionary notices as to anthrax in the form specified by the 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.
 - II. 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.
 - III. 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 so placed as to be easily and conveniently read by the persons employed.
 - IV. 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 person in charge of such box or cupboard.
 - V. If any person employed in the factory is illiterate, effective steps shall be taken to explain carefully to such illiterate person the contents of the notice specified in sub-paragraphs (I), (II) and (IV) and if chrome solutions are used in the factory, the contents of the notice specified in sub-paragraph (III).
2. **Protective clothing -** The occupier shall provide and maintain in good condition the following articles of protective clothing -
 - a) waterproof footwear leg coverings, 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;
 - c) protective footwear, aprons and gloves for persons employed in processes involving the handling of hides and skins, other than in processes specified in subparagraphs (a) and (b) above :

Provided that the gloves, aprons, leg coverings or boots may be of rubber or leather, but the gloves and boots to be provided under sub-paragraphs (a) and (b) shall be of rubber.

Provided further that 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 cloakroom -** There shall be provided and maintained in a clean 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 of at least 60 centimetres 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 60 centimetres; or
 - at least on 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 clean water; together with, in either case, a sufficient supply of nail brushes, soap or other suitable cleansing material and clean towels;

- b) a suitable mess room, adequate for the number remaining on the premises during the meal intervals, which shall be furnished with sufficient tables and benches and adequate means for warming food and for boiling water. The mess room shall –
 - i. be separate from any room or shed in which hides or skins are stored, treated or manipulated;
 - ii. be separate from the cloakroom; and
 - iii. be placed under the charge of a responsible person; and
- c) the occupier shall provide and maintain for use of all persons employed suitable accommodation for clothing put off during working hours and another accommodation for protective clothing and also adequate arrangements for drying up the clothing in both the cases, if wet. The accommodation so provided shall be kept clean at all times and placed under the charge of a responsible person.
4. **Food, drinks, etc. prohibited in workrooms** - No food, drink, pan and supari or tobacco shall be brought into or consumed by any worker in any workroom or shed in which hides or skins are stored, treated or manipulated.
5. **Medical facilities and record of examinations and tests** –
 1. The occupier of every factory in which the schedule applies, shall –
 - a) employ a qualified medical practitioner for medical surveillance of the workers employed therein whose employment shall be subject to the approval of the Chief Inspector of Factories;
 - b) Provide to the said medical practitioner 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 a box readily accessible to the workers and solely used for the purpose of keeping the ointment and the plaster.
 - II. The records of medical examinations and appropriate tests carried out by the said medical practitioner 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.
6. **Medical Examination by Certifying Surgeon** –
 - I. Every worker employed in shall be examined by a Certifying Surgeon within 15 days of his first employment. Such examination shall include 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 Certifying Surgeon.
 - II. Every worker employed in the said processes shall be re-examined by the Certifying Surgeon at least once in every twelve calendar months. Such re-examination shall, wherever the Certifying Surgeon considers appropriate, include tests as specified in subparagraph (I).
 - III. The Certifying Surgeon after examining a worker shall issue a Certificate of Fitness in Form XXIII. 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-paragraph (I) and (II), including the nature and the results of the tests, shall also be entered by the Certifying Surgeon in a health register in Form XXIV.
 - IV. The Certificate of Fitness and the health register shall be kept readily available for inspection by the Inspectorcum facilitator.
 - V. If at any time the Certifying Surgeon is of the opinion that a worker 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 worker, 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 Certifying Surgeon, in which case the person affected shall be suitably rehabilitated.
 - VI. No person who has been found unfit to work as said in sub-paragraph (V) above shall be re-employed or permitted to work in the said processes unless the Certifying Surgeon, after further examination, again certifies him fit for employment in those processes.

Schedule B-X

Carrying on of certain processes of lead and lead material in Printing presses and type foundries

1. **Definitions** - For the purpose of this schedule –
 - a) "lead material" means material containing not less than five per cent of lead.
 - b) "lead process" means –
 - i. the melting of lead or any lead material for casting and mechanical composing;

- ii. the recharging of machines with used lead material;
 - iii. any other work including removal of dross from melting pots and cleaning of plungers; and
 - iv. Manipulation, movement or other treatment of lead material.
- c) "efficient exhaust draught" means localised ventilation effected by hand 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 smoke generated at the point where such gas, vapour, fume, or dust originate.

2. Exhaust draught -

- I. None of the following processes shall be carried on except with an efficient exhaust draught 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:-

- a) melting lead material or slugs; and
- b) Heating lead material so that vapour containing lead is given off.

Provided that the aforesaid processes may be carried on without efficient exhaust draught if they are carried on in such a manner as to prevent free escape of gas, vapour, fume or dust into any place in which work is being done or is carried on in electrically-heated and thermostatically controlled melting pots.

- II. 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.
3. **Prohibition relating to women and young persons.** - No woman or young person shall be employed or permitted to work in any lead process.

4. **Separation of certain processes.**- 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 any other processes :-

- a) melting of lead or any lead material;
- b) casting of lead ingots; and
- c) Mechanical composing.

5. **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 workroom near the machine except when the dross is being deposited therein.

6. **Floor of workroom** - The floor of every workroom 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 sound 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.

7. **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 messroom which shall be furnished with sufficient tables and benches.

8. Washing facilities -

- I. 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 a smooth impervious surface fitted with a waste pipe without plug, and of sufficient length to allow at least 60 centimetres 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 60 centimetres; 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 adequate supply of water laid on or always readily available; and
- b) a sufficient supply of clean towels made of suitable materials renewed daily, with a sufficient supply of soap or other suitable cleansing material.

9. Medical facilities and record of examination and tests:-

- I. The occupier of every factory to which this Schedule applies, shall-
- a) employ a qualified medical practitioner for medical surveillance of the workers employed therein whose employment shall be subject to the approval of the Chief Inspector of Factories; and
 - b) Provide to the said medical practitioner all the necessary facilities for the purpose referred to in clause (a).
- II. The record of medical examinations and appropriate tests carried out by the said medical practitioner shall be maintained in a separate register approved by the Chief Inspector of Factories, which shall be kept readily available for inspection by the Inspector.

10. Medical examination by Certifying Surgeon -

- I. Every worker employed in a lead processes shall be examined by a Certifying Surgeon within 15 days of his first employment. Such examination shall include tests for lead in urine and blood. ALA in urine, haemoglobin content, stippling of cells and steadiness test. 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 Certifying Surgeon.
- II. Every worker employed in the said processes shall be re-examined by a Certifying Surgeon at least once in every six calendar months. Such re-examination shall, wherever the Certifying Surgeon considers appropriate, include tests as specified in subparagraph (I).
- III. The Certifying Surgeon after examining a worker, shall issue a Certificate of Fitness in Form XXIII. 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 subparagraphs (I) and (II), including the nature and the results of the tests, shall also be entered by the Certifying Surgeon in a health register in Form XXIV.
- IV. The Certificate of Fitness and the health register shall be kept readily available for inspection by the Inspector cum facilitator.
- V. If at any time certifying surgeon 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 so suspended from the process shall be provided with alternate placement facilities unless he is fully incapacitated in the opinion of the Certifying Surgeon, in which case the person affected shall be suitably rehabilitated.
- VI. No person who has been found unfit to work as said in sub-paragraph (V) above shall be re-employed or permitted to work in the said processes unless the Certifying Surgeon, after further examination, again certifies him fit for employment in those processes.
11. Food, drinks, etc. prohibited in workrooms - No food, drink, pan and supari or tobacco shall be consumed or brought by any worker into any workroom in which any lead process is carried on.
12. The occupier shall provide to all persons employed in lead process two full sleeve overall every year, arrange for their weekly washing and maintain these in good condition. The person employed in such a process shall wear these overall while engaged in such work.
13. Exemption - Where the Chief 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 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.

Schedule B-XI

Manufacture of pottery

1. **Savings:-** These provisions shall not apply to a factory in which any of the following articles, but no other pottery, are made:
 - a) Unglazed or salt glazed bricks and tiles; and
 - b) Architectural terra-cotta made from plastic clay and either unglazed or glazed with a leadless glaze only.
2. **Definitions -** For the purposes of this schedule -
 - a) "pottery" includes earthenware, stoneware, porcelain, china tiles, and any other articles made from such 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 removal of dust or fume so as to prevent it from escaping into 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) "fetting" includes scalloping, towing, sand papering, sand sticking, brushing or any other process of cleaning of potteryware in which dust is given off;
 - d) "leadless glaze" means a glaze which does not contain more than one per cent of its dry weight, of a lead compound calculated as lead monoxide;
 - e) "low solubility glaze" means a glaze which does not yield to dilute hydrochloric acid more than five per cent of its dry weight, of a soluble lead compound calculated as lead monoxide when determined in the manner described below :
 A weighed quantity of the material which has been dried at 100 degrees centigrade and thoroughly mixed shall be continuously shaken for one hour at the common temperature with 1000 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 sulphide;
 - f) "sand or powdered flint or quartz" does not include natural sands; and

- g) "potter's shop includes all places where pottery is formed by pressing or by any other process and all places where shaping, fettling or other treatment of pottery articles prior to placing for the biscuit fire is carried on.
3. **Efficient exhaust draught** - The following processes shall not be carried on without the use of an efficient exhaust draught -
- all processes involving the manipulation or use of a dry and unfritted lead compound;
 - fettling operations of any kind, whether on greenware 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;
 - sifting of clay dust or any other material for making tiles or other articles or other articles by pressure, except where -
 - it is done in an machine so enclosed as to effectually prevent the escape of dust; or
 - the material to be sifted is so damp that no dust can be given off;
 - pressing of tiles from clay dust, an exhaust opening being connected with each press, and pressing from clay dust of articles other than tiles, unless the material is so damp that no dust is given off;
 - fettling of tiles made from clay dust by pressure, except where the fettling is done wholly on, or with, damp material, and fettling of other articles made from clay dust, unless the material is so damp that no dust is given off;
 - process of loading and unloading of saggars where handling and manipulation of ground and powdered flint, quartz, alumina or other materials are involved;
 - brushing of earthenware 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 of Factories as adequate having regard to all the circumstances of the case;
 - fettling of biscuitware which has been fired in powdered flint or quartz except where this is done in machines so enclosed as to effectually prevent the escape of dust;
 - where cleaning after the application of glaze by dipping or other process;
 - crushing and dry grinding of materials for pottery bodies and saggars, unless carried on in machines so enclosed as to effectively prevent the escape of dust or is so damp that no dust can be given off;
 - sieving or manipulation of powdered flint, quartz, clay grog or mixture of these materials unless it is so damp that no dust can be given off; grinding of tiles on a power driven wheel unless an efficient water spray is used on the wheel;
 - 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;
 - preparation or weighing out of flow material, lawning of dry colours, colour dusting and colour blowing;
 - mould making unless the bins or similar receptacles used for holding plaster of paris are provided with suitable covers; and
 - manipulation of calcined material unless the material has been made and remains so wet that no dust is given off.
4. **Separation of processes** - 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:-
- crushing and dry grinding or sieving of materials, fettling, pressing of tiles, drying of clay and greenware, loading and unloading of saggars; and
 - all processes involving the use of a dry lead compound.
5. **Prohibition on use of glaze** - No glaze which is not a leadless glaze or a low solubility glaze shall be used in a factory in which pottery is manufactured.
6. **Prohibition relating to women and young persons**.- No woman or young person shall be employed or permitted to work in any of the operations specified in paragraph 4, or at any place where such operations are carried on.
7. **Provision of screen to potter's wheel** - The potter's wheel (Jolly and Jigger) shall be provided with screens or so constructed as to prevent clay scrapings being thrown off beyond the wheel.
8. **Control of dust during cleaning** -
- All practical measures shall be taken by damping or otherwise to prevent dust arising during cleaning of floors.
 - 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.
9. **Floor of certain workrooms** - The floors of potter's shops, slip houses, dipping houses and ware cleaning rooms shall be hard, smooth and impervious and shall be thoroughly cleaned daily by an adult male using a moist method.
10. **Protective equipment** -
- The occupier shall provide and maintain suitable overalls and hand coverings for all persons employed in process included under paragraph 3.
 - The occupier shall provide and maintain suitable aprons of a of a waterproof or similar material, which can be sponged daily, for the use of the dippers, dippers assistants, throwers, jolly workers, casters, mould makers and filter press and pug mill workers.
 - Aprons provided in pursuance of paragraph 10(ii) shall be thoroughly cleaned daily by the wearers by sponging or other wet process. All overalls 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.

- IV. No person shall be allowed to work in emptying sacks of dust materials, weighing out and mixing of dusty materials and charging of ball mills and plungers without wearing a suitable and efficient dust respirator.
- 11. Washing facilities -**
- I. The occupier shall provide and maintain, in a clean state and in good repair for the use of all persons employed in any of the processes specified in paragraph 3 -
- 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 60 centimetres 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 60 centimetres; 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 120 centimetres apart; and
- b) a sufficient supply of clean towels made of suitable materials changed daily, with a sufficient supply of soap and nail brushes.
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 times, shall be allowed for washing to each person employed in any of the processes mentioned in paragraph 3.
- 13. Mess room -**
- I. There shall be provided and maintained for use of all persons remaining within the premises during the rest intervals, a suitable messroom providing accommodation of 0.93 square meter per head and furnished with -
- a) a sufficient number of tables and chairs or benches with back rest;
- b) arrangements for washing utensils;
- c) adequate means for warming food; and
- d) adequate quantity of drinking water.
- II. 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 workrooms -** No food, drink, pan and supari or tobacco shall be brought into, or consumed by any worker in any workroom in which any of the processes mentioned in paragraph 3 are carried on and no person shall remain in any such room during intervals for meals or rest.
15. **Cloakrooms etc -** There shall be provided and maintained for the use of all persons employed in any of the processes mentioned in paragraph 3.
- a) a cloakroom for clothing put off during working hours and such accommodation shall be separate from any mess room; and
- b) Separate and suitable arrangements for the storage of protective equipment provided under paragraph 10.
- 16. Medical facilities and records of examinations and tests -**
- I. The occupier of every factory in which manufacture of pottery is carried on, shall -
- a) employ a qualified medical practitioner for medical surveillance of the workers employed therein whose employment shall be subject to the approval of the Chief Inspector of Factories; and
- b) provide to the said medical practitioner all the necessary facilities for the purpose referred to in clause (a).
- II. The record of medical examinations and appropriate tests carried out by the said medical practitioner shall be maintained in separate register approved by the Chief Inspector of Factories, which shall be kept readily available for inspection by the Inspector.
- 17. Medical examination by Certifying Surgeon -**
- I. Every worker employed in any process mentioned under paragraph 3, shall be examined by a Certifying Surgeon within 15 days of his first employment. Such examination shall include tests for lead in urine and blood, ALA in urine, hemoglobin content, stippling of cells and. 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 Certifying Surgeon.
- II. All persons employed in any of the processes included under sub-paragraphs 3(a) and 3(n) shall be examined by a Certifying Surgeon once in every 3 calendar months. Those employed in any other processes mentioned in the remaining sub-paragraphs of paragraph 3 shall be examined by a Certifying Surgeon one in every 3 months. Such examinations in respect of all the workers shall include all the tests as specified in sub-paragraph (I) except chest X-ray which will be once in 3 years.
- III. The Certifying Surgeon after examining a worker, shall issue a Certificate of Fitness in Form XXIII. 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 (I) and (II), including the nature and the results of the tests, shall also be entered by the Certifying Surgeon in a health register in Form XXIV.
- IV. The Certificate of Fitness and the health register shall be kept readily available for inspection by the Inspector.

- V. If at any time the Certifying Surgeon 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 so suspended from the process shall be provided with alternate placement facilities unless he fully is incapacitated in the opinion of the Certifying Surgeon, in which case the person affected shall be suitably rehabilitated.
- VI. No person who has been found unfit to work as said in sub-paragraph
- VII. Above shall be re-employed or permitted to work in the said processes unless the Certifying Surgeon, after further examination, again certifies him fit for employment in those processes.

18. Applications - These provisions shall not apply to a factory in which any of the following articles, but no other pottery, are 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.

19. Exemption - If in respect of any factory the Chief Inspector of Factories 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 a 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 B-XII

Chemical Works

PART I

- Application** - This schedule shall apply to all manufacture and processes incidental thereto carried on in chemical works.
- Definitions** - For the purpose of this schedule -
 - "chemical works" means any factory or such parts of any factory as are listed in appendix 'A' to this schedule;
 - "efficient exhaust draught" 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 hydroxide of potassium or sodium;
 - "chrome process" means the manufacture 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 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 the 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 fatality or exert serious affliction of health, or chronic harmful effects 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 64, exceeding the concentration specified therein would make the substance toxic;
 - "emergency" means a situation or condition leading to a circumstance 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 or pollution to the work and outside environment, affecting the workers or neighbourhood in a serious manner, demanding immediate action;
 - "dangerous chemical reactions" means high speed reactions, runaway reactions, delayed reactions, etc. and are characterised by evolution of large quantities of heat, intense release of toxic or flammable gases or vapours, sudden pressure build-up etc.;
 - "manipulation" means mixing, blending, filling, emptying, grinding, sieving, drying, packing, sweeping, handling, using, etc.;
 - "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;
 - "appropriate personal protective equipment" means that when the protective equipment is used by the worker, he shall have no risk to his life or health or body; and
 - "confined space" means any space by reason of its construction 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

Applying to all the works in Appendix 'A'

1. **Housekeeping -**
 - I. Any spillage of materials shall be cleaned up before further processing.
 - II. Floors, platforms, stairways, passages and gangways shall be free of any obstructions.
 - III. There shall be provided easy means of access to all parts of the parts of the plant to facilitate cleaning.
2. **Improper use of chemicals**-chemicals or solvents or empty containers containing chemicals or solvents shall be permitted to be used by workers for any purpose 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 -**
 - I. Cautionary notices in a language understood by the majority of workers shall be prominently displayed in all hazardous areas drawing the attention of all workers about the hazards to health, hazards involving fire and explosion and any other hazard such as consequences of testing of material or substances used in the process or using any contaminated container for drinking or eating, to which the workers' attention should be drawn for ensuring their safety and health.
 - II. In addition to the above cautionary notice, arrangement shall be made to instruct and educate all the workers including illiterate workers 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 workers shall be obtained within 1 month of their employment and for old workers 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 workers and all supervisory personnel shall include the significance of different types of symbols and colors used on the labels stuck or painted on the various types of containers and pipe lines.
5. **Evaluation and provision of safeguards before the commencement of process -**
 - I. 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 workers, which may occur during manufacture.
 - II. 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 (I) above should be sent to the Chief Inspector 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.
 - III. 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.
 - IV. The requirements under the sub-Para (I) to (III) shall not act in lieu of or in derogation to, any other provisions contained in any Act governing the work.
6. **Authorized entry** - Authorized 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. **Examination of instruments and safety devices -**
 - I. 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 competent person. Records of such tests and examinations shall be maintained in a register.
 - II. 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 ISI specifications governing their construction and use for that area.
9. **Handling and storage of chemicals -**
 - I. 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 labelling 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 ISI 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.
- II. The arrangements 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 above the limits specified in Rule 66.
 - III. Without prejudice to the generality of the requirements in sub- Para (II) 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.
 - IV.
 - 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 clause (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.
 - d) 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.
 - V. Any storage facility constructed using non-metallic material such as Fibreglass 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, pipelines 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** -
- I. All workers exposed to the hazards in the processes 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.
 - II. The occupier shall arrange to inform, educate and supervise all the workers in the use of personal protective equipment while carrying out the job.
 - III. 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** -
- I. Suitable and effective alarm systems giving audible and visible indications, shall be installed at the control room as well as in all strategic locations where process control arrangements are available 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.
 - II. The Chief Inspector cum facilitator may direct such system to be installed in case of plants 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** -
- I. 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.
 - II. 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.
 - III. the substances that would have escaped into the work atmosphere before taking immediate steps as required in sub-Para (II), 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 effective arrangements shall come into operation.
- 15. Testing, examination and repair of plant & equipment** -
- I. 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 at an interval of two years or after carrying out repairs to it. The competent person 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 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 matters. 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 pyrophoric nature or contains 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 reason is found to be unsafe for use shall be destroyed or rendered unusable under intimation to the Chief Inspector cum facilitator.
 - II. All parts of plant, equipment, machinery which is the likely event of failure may give rise to an emergent situation shall be examined once in a month by the competent person.
 - III. Records of testing and examination referred to in paragraphs (I) and (II) shall be maintained as long as that part of the plant, equipment and machinery are in use.
 - IV. All repair work including alteration, modification and addition to be carried out 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 or modification is done on pipelines, and joints are required to be welded, butt welding of joints shall be preferred. Wherever necessary, the responsible person shall regulate the aforesaid work through a 'Permit to work system'.
- 16. Staging** -
- I. 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 specifications.
 - II. 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.
 - III. 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 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 to 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 the atmosphere.
- 18. Entry into or work in confined spaces** -
- I. 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 sub-clause (a) above;
 - c) before testing the confined space for entry into or work, the place 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 competent 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 resurrection and first aid, and shall arrange supervision of the work at all times by a responsible and knowledgeable person.

- ii. The manager shall maintain a log of all entry into or work in, confined spaces and such record shall contain the details of persons assigned for the work, the location of the work and such other details that would have a bearing on the log book so maintained shall be retained as long as the concerned workers are in service and produces to the Inspector when demanded.
- 19. Maintenance work etc -**
- i. 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.
- ii. Maintenance work shall be carried out in such a manner that there is no risk to persons in the vicinity or to 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 carried 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 predetermined 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 to 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';
- 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 condition 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 built up in the work environment.
- 23. Procedures for meeting emergencies -**
- i. 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.
- ii. The occupier shall formulate a detailed plan to meet all such identified emergencies including arrangements for summoning outside help for rescue and fire fighting arrangements for making available urgent medical facilities.
- iii. The occupier shall send the list of emergencies and the details of procedures and plans formulated to meet the emergencies, to the Chief Inspector of Factories.
- iv. The occupier shall arrange to install distinctive and recognisable 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 month.
- v. 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 Paragraphs 10, 11, 12, 13, 14, 18, 22, and this paragraph of Part II, Part III, Part IV and Part V of this Schedule.
- vi. 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 workers who have been assigned emergency duties.

- VII. All the employees of the factory shall be trained about the action to be taken by them including evacuation procedures during emergencies.
- VIII. All emergency procedures must be rehearsed every three months and deficiencies, if any, in the achievement of the objectives shall suitably be corrected.
- IX. The occupier shall arrange to have ten percent of the workers trained in the use of First Aid Fire Fighting appliances and in the rendering of specific hazards of the particular process.
- X. The occupier shall furnish immediately on request the specific chemical identity of the hazardous substance to the treating physician where the information is needed to administer proper emergency or first-aid treatment to exposed persons.

24. Danger due to effluents -

- I. 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.
- II. 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 Explosion Risks**

- 1. Sources of ignition including lighting installation.-
 - I. 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 in the process area where there could be fire and explosion hazards.
 - II. 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.
 - III. 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.
 - IV. Where a flammable atmosphere may be prevalent or could occur, the soles of footwear worn by workers shall have no metal on them, and the wheels of trucks or conveyors shall be conductive type.
 - V. All tools and appliances used for work in this area shall be of non-sparking type.
 - VI. 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 workers shall be posted in the factory prohibiting smoking into specified areas.
- 2. Static Electricity -
 - I. 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.
 - II. 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 take place.
- 3. **Lightning protection** - Lightning 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 arrangement shall be automatically controlled at a pre-determined temperature below the danger temperature.
- 5. **Leakage of flammable liquids** -
 - I. Provision shall be made to confine by means of bund walls, dykes, sumps etc. Possible leakages from storage vessels containing flammable liquids.
 - II. Waste material in contact with flammable substances shall be disposed off suitably under the supervision of knowledgeable and responsible person.
 - III. Adequate and suitable fire-fighting appliances shall be installed in the vicinity of such vessels.
- 6. **Safety valves** - Every still and every closed vessel 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 valve or other equally efficient means to relieve the pressure. 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 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.
- 8. **Fire fighting systems** -
 - I. Every factory employing 500 or more persons and carrying out 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 8 such trained persons to be available at any time. The squad shall consist of watch & ward personnel, fire pump man and departmental supervisors and operators trained in the operation of fire & emergency services.
 - b) Squad leaders shall preferably be trained in a recognized government institution and their usefulness enhanced by providing residence on the premises.
 - c) Squad personnel shall be provided with clothing and equipment including helmets, boots and belts.
- II. 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.
 - III. 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.
 - IV. As far as is practicable, the fire pump room and the main gate(s) of the factory be connected to all manufacturing or storing areas through telephone interlined and placed in a convenient location near such areas.

PART IV
Risks of Toxic Substances

- I. **Leakage -**
 - I. 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 buildings shall be so designed as to localize any escape of toxic substances.
 - II. 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 workers 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 -**
 - I. 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 a worker, shall be so constructed as to avoid physical contact.
 - II. Such vessel shall, unless its edge is at least 90 centimetres above the adjoining ground or platform, be securely fenced to a height of at least 90 centimetres above such adjoining ground or platform.
 - III. Where such vessels adjoin and the space between them, clear of any surrounding brick or other work is either less than 45 centimetres in width or is 45 or more centimetres in width, but is not securely fenced on both sides to a height of at least 90 centimetres, secure barriers shall be so placed as to prevent passage between them :
Provided that sub-paragraph (II) 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 -**
 - I. 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.
 - II. 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 the 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. **Waste disposal -**
 - I. 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.
 - II. During the course of manufacture, whenever any batch or intermediate products having toxicity is rejected on considerations of quality, sufficient precautions shall be taken to render them innocuous or otherwise treat them or inactivate them, before disposal.
 - III. The empty containers of toxic substances shall be cleaned thoroughly before disposal under the supervision of a responsible person.

PART V
Special Provisions



- I. **Special precautions for Nitro or Amino Processes -**
 - I. 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.
 - II. 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.
 - III. 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.
 - IV. Processes involving the steaming into or around any vessel containing nitro or amino compounds or its raw materials shall be carried out in such a manner that the steam or vapour is effectively prevented to be blown back into the working atmosphere.
 - V. 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 -**
 - I. 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.
 - II. 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 affected parts of body with running water.
 - III. 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 of Factories.
 - IV. 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 workers so as to protect against perforation of nasal septum.
3. **Special precautions for processes carried out in all glass vessels -**
 - I. 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.
 - II. Any spillage or emission of vapour from the all glass vessel due to breakage, shall be immediately inactivated or rendered innocuous by suitable means such as dilution with water or suitable solvents so as to avoid the risks of fire or explosion or health hazards.
4. **Special precautions for processes involving chlorate manufacture -**
 - I. 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.
 - II. The personal protective equipment likes overall, etc. provided for the chlorate workers shall not be taken from the place of work and they shall be thoroughly cleaned daily.
 - III. Adequate quantity of water shall be available near the place of chlorate process for use during fire emergency.
 - IV. 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 -**
 - I. All plant and equipment shall conform to appropriate Indian or any other National Standard.
 - II. Care shall be taken during storage, transport, handling and installation of plant and equipment to avoid accidental damage.
 - III. All plant and equipment shall be installed in such a way as to ensure that loads are distributed as intended in design or as per the recommendations of the manufacture.
 - IV. All pipe work shall be supported so that total loads local to the branches on the vessel or tank do not exceed their design values.
 - V. After erection all plant and equipment shall be subjected to a pressure test followed by a thorough examination by a competent person. The test and examination shall be as per relevant Standard. A certificate of test and examination by a competent person shall be obtained and kept available at site.
 - VI. All plant and equipment shall be subjected to periodical test and examination and record maintained as per Paragraph 15 in Part II of this Schedule.
 - VII. Plant and equipment during their use shall not be subjected to over filling or over loading 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	3
101 to 200	3 + 1 for every 50 persons thereafter
201 to 400	5 + 1 for every 100 persons thereafter
401 and above	7 + 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 times.

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

i. For factories employing upto workers -

a) the services of a qualified medical practitioner hereinafter known as Factory Medical Officer, available on a retainership 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 examinations 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.

ii. For factories employing 51 to 200 workers -

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 over all charge of the Centre who shall visit the factory minimum twice in 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.

iii. For factories employing above 200 workers -

a) There shall be one full-time Factory Medical Officer for factories employing upto 500 workers and one more medical officer for every 1000 workers or part thereof.

b) The occupational health centre in this case shall have a minimum of 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 -

I. 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 the purpose stipulated herein and will always be available near the Occupational Health Centre.

II. The relaxation to procure Ambulance Van from nearby places provided for in sub-para (I) above will not be applicable to factories employing more than 500 workers.

4. Medical examination -

I. Workers 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 6 months, to ascertain the health status of the worker, and

c) The details of pre-employment and periodical medical examinations carried out as aforesaid shall be recorded in the prescribed form.

- II. 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 Certifying Surgeon who shall in turn, examine the concerned workers and communicate his findings within 30 days. If the Certifying Surgeon 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 worker 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 Certifying Surgeon, in which case the person affected shall be suitably rehabilitated :
- Provided that the Certifying Surgeon on his own may examine any other worker 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 worker and his opinion shall be final.
- III. 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 Certifying Surgeon, whose opinion shall be final in this regard.
- IV. The worker 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 Certifying Surgeon and after making entries to that effect in the health register.

PART VII
Additional Welfare Amenities

1. Washing facilities -

- I. There shall be provided and maintained in every factory for the use of all the workers taps for washing, at the rate of one every 15 persons including liquid soap in a container with tilting 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.
- II. If washing facilities as required above are provided for women, such facilities shall be separate for them and adequate privacy at all times shall be ensured in such facilities.

2. Mess room facilities -

- I. The occupier of all the factories carrying out processes covered in Appendix 'A' and employing 50 workers or more, shall provide for all the workers 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.
- II. Such facilities shall include suitable arrangements for cleaning and washing and shall be maintained in a clean and hygienic condition.

3. Cloakroom facilities -

- I. The occupier of every factory carrying out any process covered in Appendix 'A' shall provide for all the workers employed in the process cloak room facilities with lockers. Each worker shall be provided with two lockers, one for work clothing and another separately for personal clothing and the lockers should be such as to enable the keeping of the clothing in a hanging position.
- II. The cloak room facilities provided in pursuance of sub-para (I) shall be located as far as possible near to the facilities provided for washing in pursuance of para 1(I). If it is not possible to locate the washing facilities the cloakroom facilities shall have adequate and suitable arrangements for cleaning & washing.

4. Special bathing facilities -

- I. The occupier of any factory carrying out the process covered under Appendix 'B' shall provide special bathing facilities for all the workers employed and such facilities shall be provided at the rate of 1 for 25 workers and part thereof, and shall be maintained in a clean and hygienic condition.
- II. The occupier shall insist all the workers employed in the processes covered in Appendix 'B' to take bath after the completion of the day's or shift work using the bathing facilities so provided and shall also effectively prevent such of those workers taking bath in any place other than the bathing facilities.
- III. Notwithstanding anything contained in sub-para (I) above, the Chief Inspector may require in writing the occupier of any factory carrying out any other process for which his opinion bathing facilities are essential from the health point of view, to provide special bathing facilities.

PART VIII

I. Duties of workers -

- I. Every worker 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.



- II. Before commencing any work, all workers 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 mal-function or defect immediately to the supervisor or any responsible person of the management.
- III. All workers 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 equipment issued to them in a careful manner.
- IV. All workers 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.
- V. All workers employed in the processes covered in Appendix 'A' shall not remain in unauthorised place or carry out unauthorised work or improvise any arrangement or adopt short cut method or misuse any of the facilities provided in pursuance of the Schedule, in such a manner as to cause risk to themselves as well as to others employed.
- VI. The workers 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 of Factories may by an order in writing, restrict or prohibit the employment of women 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 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 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 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, beryllium and their organic and inorganic salts, alloys, oxides and hydroxides;
 - ii. ammonia, ammonium hydroxide and salts of ammonium;
 - iii. the organic or inorganic compounds of sulphurous, sulphuric, nitric, nitrous, hydrochloric, hydrofluoric, hydriodic, hydro sulphuric, hydrobromic, boric;
 - iv. cyanogen compounds, cyanide compounds, cyanate compounds;
 - v. phosphorous and its compounds other than organo phosphorus insecticides.
 - vi. chlorine
- 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 chlor-alkali plants;
- d)
 - i. gas tar or coal tar or bitumen or shale 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, ethylene glycol, formaldehyde, benzyle chloride, phenol, methyl ethyl keytone peroxide, cobalt carbonyl, tungsten carbide etc. are manufactured or recovered.

Appendix 'B'

Concerning Special Bathing Accommodation in pursuance of Para 4 of Part IV

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1. Nitro or amido processes
2. All chrome 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 cyanogens 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 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 equipment;
- Fixed oxygen supply with equipment;
- Pillow with case;
- Sheets;
- Blankets;
- Towels;
- Emesis 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 equipment :-

Resuscitation :

- Portable suction unit;
- Portable oxygen unit;
- Bag-valve-mask, hand operated artificial ventilation unit;
- Airways;
- Mouth gags;
- Tracheostomy adapters;
- Short spine board;
- I.V. Fluids with administration unit;
- B.P. manometer;
- Cugg;
- Stethoscope

Immobilisation

- 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; (Pre packeted in doses)
- Activated charcoal;
- Snake bite kit;
- Drinking water.

Emergency Medicines:

- As per requirement (under the advice of Medical Officer only)

Schedule B-XIII

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 material;
 - 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 a factory or part of a factory unless one or more of the following measures, namely -
 - a) damping the stone or other material being processed,
 - b) providing water spray,
 - c) enclosing the process,
 - d) isolating the process, and
 - e) providing localised 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 Table 2 appended to Rule 64.

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 referred to.
- 4. Maintenance of floors-**
 - I. All floors or places where fine dust is likely to settle on and whereon 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.
 - II. 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 cleansed of dust once at least during each shift after being sprayed with water or by 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 out.
- 6. Medical Facilities and records of examinations and tests -**
 - I. The occupier of every factory to which the schedule applies, shall -
 - a) employ a qualified medical practitioner for medical surveillance of the workers employed therein whose employment shall be subject to the approval of the Chief Inspector of Factories; and
 - b) provide to the said medical practitioner all the necessary facilities for the purpose referred to in clause(I).
 - II. The record of medical examinations and appropriate tests carried out by the said medical practitioner shall be maintained in separate register approved by the Chief Inspector of Factories, which shall be kept readily available for inspection by the Inspector.
- 7. Medical examination by Certifying Surgeon -**
 - I. Every worker employed in the processes specified in paragraph 1, shall be examined by a Certifying Surgeon within 15 days of his first employment. Such medical examination shall include pulmonary function test and chest X-Ray - Posterior Anterior (PA) view to be compared with standard ILO 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 Certifying Surgeon.

- II. Every worker employed in the said processes shall be re-examined by a Certifying Surgeon at least once in every twelve months. Such re-examination shall, wherever the Certifying Surgeon considers appropriate, include all the tests as specified in sub-paragraph (I) except chest X-ray which will be carried out at least once in 3 years, which shall be read by a radiologist specialized in the field of reading ILO Radiographs on Pneumoconiosis.
- III. The Certifying Surgeon after examining a worker, shall issue a Certificate of Fitness in Form XXIII. 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 (I) and (II), including the nature and the results of the tests, shall also be entered by the Certifying Surgeon in a health register in Form XXIV.
- IV. The Certificate of Fitness and the health register shall be kept readily available for inspection by the Inspector.
- V. If at any time the Certifying Surgeon 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 so suspended from the process shall be provided with alternate placement facilities unless he fully is incapacitated in the opinion of the Certifying Surgeon, in which case the person affected shall be suitably rehabilitated.
- VI. No person who has been found unfit to work as said in sub-paragraph (V) above shall be re-employed or permitted to work in the said processes unless the Certifying Surgeon, after further examination, again certifies him fit for employment in those processes.
8. **Work place/ Environment Monitoring:** The occupier to ensure work place/ environment monitoring to be performed to determine magnitude of exposure/ concentration to evaluate engineering controls, selecting respiratory protection, work practices and the need for medical surveillance.
 - a) Exposure/ concentration measurements should be made in the employee's actual breathing zone.
 - b) Total sampling time shall be at least 7 hours.
 - c) Work place/ Environment Monitoring shall be repeated quarterly.
 - d) The report of dust sampling by occupier shall be made available to the public
9. **Training/Awareness:** Workers shall be trained in the following:-
 - (a) Health effects of free silica dust exposure.
 - (b) Operations and material that produce free silica dust hazards.
 - (c) Engineering controls and work practice controls that reduce dust concentration.
 - (d) The importance of good housekeeping and cleanliness.
 - (e) Proper use of personal protective equipment such as respirators etc.
 - (f) Personal hygiene practices to reduce exposure.
10. **Exemptions** - If in respect of any factory, the Chief Inspector 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 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 B-XIV

Handling and processing of Asbestos, manufacture of any article of Asbestos and any other process of manufacture or otherwise in which Asbestos is used in any form.

1. **Application** - This schedule shall apply to all factories or parts of factories in which any of the following processes is carried on :-
 - a) breaking, crushing, disintegrating, opening, grinding, mixing or sieving 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 of 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;

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- f) manufacture of asbestos cement goods;
- g) application of asbestos by spray method;
- h) sawing, grinding, turning, abrading and polishing in dry state of articles composed wholly or partly of asbestos;
- i) cleaning of any room, vessel, chamber, fixture or appliance for the collection of asbestos dust; and
- j) Any other processes in which asbestos dust is given off into the work environment.

2. **Definition** - For the purpose of this Schedule -

- a) "asbestos" means any fibrous silicate mineral and any admixture containing actinolite, amosite, anthophyllite, thrysotile, crocidolite, tremolite or any mixture thereof, whether crude, crushed or opened;
- b) "asbestos textiles" means yarn or cloth composed of asbestos or asbestos mixed with any other material;
- c) "approved" means approved for the time being in writing by the Chief Inspector;
- 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 a localised 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.

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 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** -

I. An efficient exhaust draught shall be provided and maintained to control dust from the following processes and machines :

- 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;
 - 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.

II. Exhaust ventilation equipment provided in accordance with sub-paragraph (I) 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 work place.

III. Arrangements shall be made to prevent asbestos dust discharged from exhaust apparatus being drawn into the air of any workroom.

IV. 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** -

I. All ventilating systems used for the purpose of extracting or suppressing dust as required by this schedule 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 12 months. Any defects found by such examinations or test shall be rectified forthwith.

II. A register containing particulars of such examination and tests and the state of the plant and the repairs or alternations (if any) found to be necessary shall be kept and shall be available for inspection by an Inspector.

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 therefrom and such asbestos shall not be distributed in the factory except in such receptacles or in totally enclosed system of conveyance.
8. **Asbestos sacks**
 - I. 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.
 - II. A sack which has contained asbestos shall not be cleaned by hand beating but by a machine, complying with paragraph 4.
9. **Maintenance of floors and workplaces** -
 - I. 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.
 - II. The cleaning as mentioned in sub-rule (I) shall so far as is practicable, as 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 work place.
 - III. When the cleaning is done by any method other than that mentioned in sub paragraph (II), the persons doing cleaning work and any other person employed in that room shall be provided with respiratory protective equipment and protective clothing.
 - IV. The vacuum cleaning equipment used in accordance with provisions of subparagraph (II), shall be properly maintained and after each cleaning operation, its surfaces kept in a clean state and free from asbestos waste and dust.
 - V. Asbestos waste shall not be permitted to remain on the floors or other surfaces at the work place 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.
10. **Breathing apparatus and protective clothing** -
 - I. An approved breathing apparatus and protective clothing shall be provided 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 defer cylinders, or other parts of a carding machine by means of hand-strikes;
 - 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.
 - II. 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 this rule and for the storage of such apparatus and clothing when not in use.
 - III. All breathing apparatus and protective clothing Washing not in use shall be stored in the accommodation provided in accordance with sub-rule (II) above.
 - IV. 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 the efficiency in protective the wearer.
 - V. All breathing apparatus shall be cleaned and disinfected at suitable intervals and thoroughly inspected once every month by a responsible person.
 - VI. 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.
 - VII. No person shall be employed to perform any work specified in sub-paragraph (I) 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.
 - VIII. No breathing apparatus provided in pursuance of sub-paragraph (I) 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.
11. **Separate accommodation for personal clothing** - A separate accommodation shall be provided in a conveniently accessible position for all persons employed in operation to which this schedule applies for storing of personal clothing. This should be

separated from the accommodation provided under sub-paragraph (II) of paragraph 10 to prevent contamination of personal clothing.

12. Washing and bathing facilities -

- I. 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 15 persons employed.
- II. The washing places shall have standpipes placed at intervals of not less than one metre.
- III. Not less than one half of the total number of washing places shall be provided with bathrooms.
- IV. 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.
- V. Sufficient supply of soap and nail brushes shall be provided.

13. Mess room -

- I. There shall be provided and maintained for the use of all worker 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.
- II. The mess room shall be placed under the charge of a responsible person and shall be kept clean.

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. Cautionary notices -

- I. Cautionary notices in the form specified in the appendix shall be displayed at the approaches and along the perimeter of every asbestos processing area to warn all persons regarding -
 - a) hazards to health from asbestos dust,
 - b) need to use appropriate protective equipment,
 - c) Prohibition of entry to unauthorised persons, or authorised persons but without protective equipment.
- II. Such notices shall be in the language understood by the majority of the workers.

17. Air monitoring - To ensure the effectiveness of the control measures, monitoring of asbestos fibre 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 purpose.

18. Medical facilities and records of medical examinations and tests -

- I. The occupier of every factory or part of the factory to which the schedule applied, shall-
 - a) employ a qualified medical practitioner for medical surveillance of the workers covered by this schedule whose employment shall be subject to the approval of the Chief Inspector of Factories;
 - b) Provide to the said medical practitioner all the necessary facilities for the purpose referred to in clause (a).
- II. The record of medical examinations and appropriated tests carried out by the said medical practitioner shall be maintained in a separate register approved by the Chief Inspector of Factories, which shall be kept readily available for inspection by the Inspectors.

19. Medical examination by Certifying Surgeon -

- I. Every worker employed in the processes specified in paragraph 1 shall be examined by a Certifying Surgeon within 15 days of his first employment. Such examination shall include pulmonary function test and chest X Ray - Posterior Anterior (PA) view to be compared with standard ILO 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 Certifying Surgeon.
- II. Every worker employed in the process referred to sub-paragraph (I) shall be re-examined by a Certifying Surgeon at least once in every twelve calendar months. Such examination shall, wherever the Certifying Surgeon considers appropriate, include all the tests specified in sub-paragraph (I) except chest X-ray which shall be read by a radiologist specialized/trained in the field of reading ILO Radiographs on Pneumoconiosis which will be carried out once in 3 years.
- III. The Certifying Surgeon after examining a worker shall issue a Certificate of Fitness in Form XXIII. 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 (I) and (II), including the nature and the results of the tests, shall also be entered by the Certifying Surgeon in a health register in Form XXIV.
- IV. The certificate of Fitness and the health register shall be kept readily available for inspection by the Inspector.

- V. If at any time the Certifying Surgeon is of the opinion that a worker 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 worker, 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. The person so suspended from the process shall be provided with alternate placement facilities unless he is fully incapacitated in the opinion of the Certifying Surgeon, in which case the person affected shall be suitably rehabilitated.
- VI. No person who has been found unfit to work as said in sub-paragraph (V) shall be re-employed or permitted to work in the said processes unless the Certifying Surgeon, after future examination, again certifies him fit for employment in these processes.
20. **Exemptions** - If in respect of any factory, the Chief Inspector 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 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.

21. Pictorial cautionary notice -

1. Asbestos/asbestos dust which is used, handled or manipulated in this factory is a very hazardous to health.
2. Prolonged exposure to asbestos dust may lead to serious diseases like lung fibrosis (Asbestosis) and lung cancer.
3. Entry is prohibited without protective equipment.
4. Wear the Protective Equipments to safeguard your health.
5. No food stuffs or drinks shall be brought into this area.
6. Smoking, eating food or drinking and chewing tobacco in this area is prohibited.
7. Scrupulous cleanliness shall be maintained in this area.
8. Dry sweeping in this area is prohibited. Any spillage of asbestos shall be cleaned by vacuum cleaning only.
9. A sack or container contaminated with asbestos shall not be cleaned by hand and is to be disposed off by an appropriate method.
10. All protective equipments and clothing shall be re-dusted by vacuum cleaning and stored in an appropriate place provided for the purpose.
11. Entry of unauthorized persons or authorized persons without proper protective equipments is prohibited.
12. Report for the prescribed medical examinations and tests regularly to protect your own health.
13. Report to your doctor immediately if you suffer from persistent breathlessness, chest tightness, or cough.

Schedule B-XV

Handling or 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; and
 - b) "corrosive substance" includes sulphuric acid, nitric acid, hydrochloric acid, hydrofluoric acid, carboric acid, phosphoric acid, liquid chlorine, liquid bromine, ammonia, sodium hydroxide and potassium hydroxide and a mixture thereof, and any other substance which the State Government by notification in the Official Gazette specify to be corrosive substance.
2. **Flooring** - The floor of every workroom of a factory in which corrosive operation is carried on shall be made of impervious, corrosion and fire resistance material and shall be so constructed as to prevent collection of any corrosive substance. The surface of such flooring shall be smooth and cleaned as often as necessary and maintained in a sound condition.
3. **Protective 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 clean and hygienic condition by suitably treating 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.
 - b) The Protective equipment and preparations provided shall be used by the persons employed in any corrosive operation.
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 of 210 centimetres from a pipe of 1.25 centimetres diameter and fitted with a quick acting valve so that in case of injury to the worker 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 centimetres, 120 centimetres and 60 centimetres respectively or such dimensions as are approved by the chief inspector shall provided as the source of clean water.

5. **Cautionary notice** - A cautionary notice in the following form and printed in the language which majority of the workers employed understand, shall be displayed prominently close to the place where a corrosive operation is carried out and where any of the operation mentioned in clause 2 above is carried out and where it can be easily and conveniently read by the workers. If any worker 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 15 minutes.

Get medical attention quickly.

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6. **Transport** -
- I. Corrosive substances shall not be filled, moved or carried except in containers or through pipes and when they are to be transported in containers, they shall be placed in crates of sound construction and of sufficient strength.
 - II. A container with a capacity of 11.5 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.
 - III. Containers for corrosive substances shall be plainly labelled.
7. **Devices for handling corrosive** -
- I. Tiling, lifting or pumping arrangements shall be used for emptying jars, carboys and other containers of corrosives.
 - II. Corrosive substance shall not be handled by bare hands but by means of a suitable scoop or other device.
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 worker suitably trained for the purpose.
9. **Cleaning tanks, stills, etc.** -
- I. In cleaning out or removing residues from stills or other large chambers used for holding any corrosive substance, suitable implements made of wood or other material shall be used to prevent production of arseniuretted hydrogen (arsine).
 - II. Whenever it is necessary for the purpose of cleaning or other maintenance work for any worker to enter chamber, tank, vat, pit or other confined space where a corrosive substance had been stored, all possible precautions required under section 23 of the Code shall be taken to ensure the worker's safety.
 - III. 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** -
- I. Corrosive substances shall not be stored in the same room with other chemicals, such as turpentine, carbides, metallic powders and combustible materials, the accidental mixing with which may cause a reaction which is either violent or gives rise to toxic fumes and gases.
 - II. Pumping or filling overhead tanks, receptacles, vats or other containers for storing corrosive substances shall be so arranged that there is no possibility of any corrosive substance overflowing and causing injury to any person.
 - III. Every container having a capacity of twenty litres or more and every pipeline, valve, and fitting used for storing or carrying corrosive substances shall be thoroughly examined every year for finding out any defects, and defects so found out shall be removed forthwith. A register shall be maintained of every such examination made and shall be produced before the Inspector whenever required.
11. **Fire extinguishers and fire fighting equipment** - An adequate number of suitable types of fire extinguishers or other 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, printed in the language which majority of the workers employed understand, shall be affixed near each extinguisher or other equipment.
12. **Exemption** - If in respect of any factory on application made by the manager, the Chief Inspector 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 B-XVI
Processing of cashewnut

1. Application. - This schedule shall apply to all factories in which roasting, scrubbing and shelling of cashewnuts or extracting oil from cashewnuts or cashewnut shells are carried on.
2. Prohibition of employment of women and young persons.- No woman or young person shall be employed in any of the processes specified in paragraph 1 except in shelling of roasted cashewnuts.
3. Protective clothing and equipment.- The occupier shall provide and maintain for the use of all persons employed in roasting and scrubbing of cashewnuts or extracting oil from cashewnuts or cashewnut shells.
 - (a) suitable rubber or washable leather gloves;
 - (b) suitable type of impervious aprons with sleeves to cover body down to knees and shoulders; and
 - (c) suitable type footwear to afford protection to feet and legs against cashewnut oil; and for the workers employed in cashewnut shelling, either-
 - (d) a protective ointment containing 10% of shellac, 5% of alcohol, 10% of sodium perborate, 5% of carbitol and 20% talc; or
 - (e) sufficient quantity of kaolin and coconut oil; and
 - (f) any other material or equipment - which the Chief Inspector of Factories may deem to be necessary for the protection of the workers.
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 the use, maintenance and cleanliness.
5. Disposal of shells, ashes, or oil of cashewnut.- (1) shells, ashes or oil of cashewnut shall not be stored in any room in which workers are employed and shall be removed at least twice a day to any pit or enclosed place in the case shells and ashes and to closed containers kept in a separate room in the case of oil.
 - (2) No worker shall be allowed to handle shells or oil of cashewnuts without using the protective clothing or equipment provided under paragraph 3 above.
6. Floors of workrooms.- The floor of every workroom 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 cashewnut oil in any workroom shall be washed with soap and cleaned immediately.
7. Seating accommodation.- Workers engaged in shelling of cashewnuts shall be provided with adequate seats or work benches which shall be cleaned daily.
1. Mess room. - (1) There shall be provided and maintained for the use of all person employed in processes specified in paragraph 1, a suitable restroom furnished with sufficient tables and chairs or benches.
 - (2) Separate lockers shall be provided where food, etc. shall be stored by workers before it is consumed in the restroom.
8. Food, drinks, etc. prohibited in workrooms.- No food, drink, pan, supari or tobacco shall be brought or consumed by any worker 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.
9. Washing facilities.- Where roasting, scrubbing and shelling of cashewnuts or extracting oil from cashewnut or cashewnut shells is carried on, there shall be provided and maintained in a clean state 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 10 workers, and the taps or stand pipes shall be spaced not less than 1.2 meters apart.
10. 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 each person employed in processes specified in paragraph 1.
11. Smoke or gas produced by roasting cashewnuts.- 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 workers are employed.
12. 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 workers and no such equipment shall be stored in any place other than the room or places so provided.
13. Medical facilities and records of examinations and tests.- (1) The occupier of every factory to which this schedule applies, shall-
 - (a) employ a qualified medical practitioner for medical surveillance of the workers employed therein whose employment shall be subject to the approval of the Chief Inspector of Factories; and
 - (b) provide to the medical practitioner all the necessary facilities for the purpose referred to in clause (a).(2) The said medical practitioner 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 medical practitioner shall be maintained in a separate register approved by the Chief Inspector of Factories, which shall be kept readily available for inspection by the Inspector.
- (4) The first-aid box maintained shall also contain Burrough's Solution (1:20) and aqueous solution of tannic acid (10%) for treatment of cases of dermatitis.
14. Medical examination by Certifying Surgeon.- (1) Every worker employed in the processes specified in paragraph 1 shall be examined by a Certifying Surgeon within 15 days of his first employment. Such examinations shall include skin test for dermatitis and 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 Certifying Surgeon.
- (2) Every worker employed in the said processes shall be re-examined by a Certifying Surgeon atleast once in every three calendar months. Such examinations shall wherever the Certifying Surgeon considers appropriate, include asking test for dermatitis.
- (3) The Certifying Surgeon after examining a worker, shall issue a Certificate of Fitness in Form XXIII. 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 these tests, shall also be entered by the Certifying Surgeon in a health register in Form XXIV.
- (4) The Certificate of Fitness and the health register shall be kept readily available for inspection by the Inspector.
- (5) If at any time the Certifying Surgeon is of the opinion that a worker 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 worker, 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 shall be provided with alternate placement facilities unless he is fully incapacitated in the opinion of the Certifying Surgeon, 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) shall be re-employed or permitted to work in the said processes unless the Certifying Surgeon, after further examination, again certifies him fit for employment in those processes.
15. Exemption - The Chief Inspector of Factories may grant exemptions from the operation of any of these where he is satisfied that their observance is not necessary for safeguarding the health of the workers.

Schedule B-XVII

Compression of oxygen and hydrogen produced by electrolysis of water.

1. Location of electrolyte plant - The room in which electrolysis plant is installed shall be separate from the plant for storing and compressing the oxygen and hydrogen and also the electric generator room.
2. Testing of purity -
 - I. The purity of oxygen and hydrogen shall tested by a competent person at least once in every shift at the following posts:-
 - a) in the electrolysis room;
 - b) at the gas holder inlet; and
 - c) at the suction and of the compressor.
 - II. The purity figures shall be entered in a register and signed by the persons carrying out such test:
 Provided, however, that if the electrolysis plant is fitted with automatic recorder of purity of oxygen and hydrogen with alarm lights, it shall be sufficient if the purity of gases is tested at the suction and of the compressor only.
3. Restriction as to the compression - The oxygen and hydrogen gases shall not be compressed if their purity as determined under paragraph 2 above falls below 98% at any time.
4. Limit switch for gas holder - The bell of any gas holder shall not be permitted to go within the 30 centimetres 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 the limit is reached.
5. Provision of negative pressure switch - In addition to the limit switch in the gas holder, a sensitive negative pressure switch shall be provided in or adjacent to the suction main for hydrogen close to the gas holder and between the gas holder and the hydrogen compressor to switch off the compressor motor in the event of the gas holder being emptied to the extent as to cause vacuum.
6. Purity of caustic soda - The water and caustic soda used for making lye shall be chemically pure within pharmaceutical limits.
7. Precautions against reversal of polarity - 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. **Colouring of gas pipes** - Oxygen and hydrogen gas pipes shall be painted with distinguishing colours and in the event of leakage at the joints of the hydrogen gas pipe, the pipe after reconnection shall be purged of all air before drawing in hydrogen gas.
9. **Use of flameproof fittings** - All electrical wiring and apparatus in the electrolyser room shall be of flameproof construction or enclosed in flameproof fittings and no naked light or flame shall be allowed to be taken either in the electrolyser room or where compression and filling of the gases is carried on and such warning notices shall be exhibited in prominent places.
10. **Prohibition of hot work** - 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. **Repair, etc. to be done under supervision** - No work or operations, 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/the electrolyser 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. **Checking of plant** - Every part of the electrolysis 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 B-XVIII

Process of extracting oils and fats from vegetables and animal sources in solvent extraction plants

1. Definitions - For the purposes of this schedule -

- a) "solvent extraction plant" means a plant in which the process of extracting oils and fats from vegetable and animal sources by use of solvents is carried on;
- b) "solvent" means an flammable liquid such as pentane, hexane and heptane use for the recovery of vegetable oils;
- c) "flameproof 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;
- d) "competent person" for the purpose of this schedule shall be at least a member of the Institution of Engineers (India) or an Associate Member of the said Institution with 10 years experience in a responsible position as may be approved by the Chief Inspector cum Facilitator:

Provided that a graduate in mechanical engineering or chemical technology with specialised knowledge of oils and fats and with a minimum experience of 5 years in a solvent extraction plant shall also be considered to be a competent person.

Provided further that the State Government may accept any other qualifications if in its opinion they are equivalent to the qualifications aforesaid.

2. Location and layout -

- I. No solvent extraction plant shall be permitted to be constructed or extended to within a distance of 30 meters from the nearest residential locality.
- II. 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.
- III. No person shall be allowed to carry any matches or an open flame or fire inside the area round by the fencing.
- IV. 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; If god owns and preparatory processes are at a distance of less than 30 metres from the solvent extraction plant, these shall be at least 15 meters distant 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 sources of ignition.

3. Electrical installations -

- I. All electrical motors and wiring and other electrical equipment installed or housed insolvent extraction plant shall be of flameproof construction.



- II. 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 energised shall be properly bonded together and connected to earth so as to avoid accidental rise in the electrical potential of such parts above the earth potential.
4. **Restriction on smoking** - Smoking shall strictly prohibited within 15 meters distance from solvent extraction plant. For this purpose, "No smoking" signs shall be permanently displayed in the area.
5. **Precautions against friction** -
 - I. All tools and equipment including ladders, chains and other lifting tackle required to be used in solvent extraction plant shall be of nonsparking type.
 - II. No machinery or equipment in any solvent extraction plant shall be belt driven, unless the belt used is of such a type that it does not permit accumulation of static electricity to a dangerous level.
 - III. No person shall be allowed to enter and work in the solvent extraction plant if wearing clothes made of nylon or such other fibre that can generate static electrical charge, or wearing footwear which is likely to cause sparks by friction.
6. **Fire fighting apparatus** -
 - I. Adequate number of portable fire extinguishers suitable for use against flammable liquid fires shall be provided in the solvent extraction plant.
 - II. 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 the automatic cutting off of steam in the event of power failure and also for emergency overhead watersupply 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 conveyer through a hopper and a magnetic separator shall be provided to remove any pieces of iron during pressure in the event of fire.
9. **Venting** -
 - I. Tanks containing solvents shall be protected with emergency venting to relieve excessive internal pressure in the event of fire.
 - II. 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 not 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. **Housekeeping** -
 - I. 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.
 - II. 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.
 - III. 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** -
 - I. The solvent extraction plant shall be examined by the competent person to determine any weakness or corrosion and wear once in every 12 months. Report of such examination shall be supplied to the Inspector with his observation as to whether or not the plant is in safe condition to work.
 - II. No repairs shall be carried out to the machinery or plant except under the direct supervision of the competent person.
 - III. Facility shall be provided for purging the plant with inert gas or steam before opening for cleaning or repairs and before introducing solvent after repairs.
14. **Operating personnel** - The operation of 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. **Employment of women and young persons** - No woman or young person shall be employed in the solvent extraction plant.
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 shall be drawnout and entered in a register maintained for the purpose.
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 reason, all or any of the provisions of this schedule is not necessary for the protection of the workers 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 conditions, if any, as he may specify therein.

Schedule B-XIX

Manufacture or manipulation of manganese and its compounds

1. **Definitions** - For the purposes of this schedule -
 - a) "manganese process" means processing, manufacture or manipulations of manganese or any ore or any mixture containing manganese;
 - b) "first employment" means first employment in any manganese process and includes also re-employment in any manganese process followed any cessation of employment for continuous period of 3 calendar months.
 - c) "manipulations" means mixing, blending, filling, emptying, grinding, sieving, drying, packing, sweeping, or otherwise handling of manganese, or mixture containing manganese; and
 - d) "efficient exhaust ventilation" means localised ventilation effected by mechanical means for the removal of dust or fume or 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 on.
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 persons employed on other processes may not be affected by the same.
5. **Ventilation of process** - No process in which any dust, vapour or mist containing manganese is generated, shall be carried out except under an efficient exhaust ventilation which shall be applied as near to the point of generation as practicable.
6. **Medical facilities and records of examinations and tests.**
 - I. The occupier of every factory to which this schedule applies, shall-
 - a) employ a qualified medical practitioner for medical surveillance of the workers employed therein whose employment shall be subject to the approval of the Chief Inspector of Factories; and
 - b) Provide to the medical practitioner all the necessary facilities for the purpose referred to in clause (a).
 - II. The record of medical examinations and appropriate tests carried out by the said medical practitioner shall be maintained in a separate, register approved by the Chief Inspector cum facilitator, which shall be kept readily available for inspection by the Inspectorcum facilitator.
7. **Medical examination by certifying Surgeon** -
 - I. Every worker employed in any manganese process shall be medically examined by a Certifying Surgeon within 15 days of his first employment. Such examinations shall include tests for detection of serum calcium, serum phosphate and manganese in blood and urine and also include steadiness tests and other neuro-muscular coordination tests. No worker shall be allowed to work after 15 days of his first employment in the factory unless certified for such employment by the Certifying Surgeon.
 - II. Every worker employed in a manganese process shall be re-examined by a Certifying Surgeon at least once in every three calendar months and such examination shall, wherever the Certifying Surgeon considers appropriate, include all the tests in sub-paragraph (I).
 - III. The Certifying Surgeon after examining a worker shall issue a Certificate of Fitness in Form XXIII. 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 (I) and (II), including the nature and the results of this test, shall also be entered by the certifying Surgeon in a health register in Form XXIV.
 - IV. The Certificate of Fitness and the health register shall be kept readily available for inspection by the Inspectorcum facilitator.
 - V. If at any time the Certifying Surgeon is of the opinion that a worker 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 worker, he shall make a record of his findings in the said certificate and the health register. The entry of his findings in those

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- documents should also include the period for which he considers that the said person is unfit to work in the said process shall be provided with alternate placement facilities unless he is fully incapacitated in the opinion of the Certifying Surgeon, in which case the person affected shall be suitably rehabilitated.
- VI. 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 Certifying Surgeon, after further examination, again certifies him fit for employment in those processes.
8. **Personal protective equipment –**
- I. The occupier of the factory shall provide and maintain in good and clean condition suitable overalls 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.
 - II. The occupier of the factory shall provide suitable respiratory protective equipment for use by works 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.
 - III. 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 equipment.
9. **Prohibition relating to women and young persons** - No women or young persons shall be employed or permitted to work in any manganese process.
10. **Food, drinks, etc. prohibited in the work rooms** - No food, drink, pan and supari or tobacco shall be allowed to be brought into or consumed by any worker in any workroom in which any manganese process is carried on.
11. **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.
12. **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) 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 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;
 - 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 water; and
 - b) Sufficient supply of soap or other suitable cleaning material and nail brushes and clean towels.
13. **Cloakroom** - If the Chief Inspectorcum facilitator so requires there shall be provided and maintained for the use of persons employed in manganese process a cloakroom for clothing put off during working hours with adequate arrangements for drying the clothing.
14. **Cautionary placard and instructions** - Cautionary notices in the form specified in appendix and printed in the language of the majority of the workers and employed, shall be affixed in prominent places in the factory where they can be easily and conveniently read by the workers and arrangement shall be made by the occupier to instruct periodically all workers 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.

APPENDIX CAUTIONARY NOTICE

Manganese and Manganese Compounds

1. Dust free and mists of manganese and its 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 equipment provided.
6. When required to work in situations where dusts, fumes or mists are likely to be inhaled, use respiratory protective equipment provided for the purpose.
7. If you get severe head-aches, prolonged sleeplessness or abnormal sensation on the body, report to the manager who would make arrangements for your examination and treatment.

Schedule B-XX
Manufacture or manipulation of dangerous pesticides



1. **Application** - This schedule shall apply in respect of all factories or any part thereof in which the process of manufacture or manipulation of dangerous pesticide hereinafter referred to as the said manufacturing process is carried on.
2. **Definitions** - For the purpose of this Part -
 - a) "dangerous pesticides" means any product proposed or used for 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 and the rules made there under and any other product, as may be notified from time to time by the State Government;
 - b) "manipulation" includes mixing, blending, formulating, filling, emptying, packing or otherwise handling;
 - c) "efficient exhaust draught" means localised mechanical ventilation for removal of smoke, gas, vapour, dust, fume or mist so as to prevent them from escaping into 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.
3. **Instruction to workers** - Every worker 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 to this schedule and printed in the language of the majority of the workers 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 workers. Arrangements shall be made by the occupier and the manager of the factory to periodically instruct the workers regarding the health hazards arising to in the said manufacturing process and methods of protection. Such notices shall include brief instructions regarding the periodical clinical tests required to be undertaken for projecting health of the workers.
5. **Prohibition relating to employment of women or young persons** - No woman or young person shall be employed or permitted to work in any room in which the said manufacturing process is carried on or in any room in which dangerous pesticide is stored.
6. **Food, drinks, and smoking prohibition** -
 - I. No food, drink, tobacco, pan or supari shall be brought into or consumed by any worker in any workroom in which the said manufacturing process is carried out.
 - II. Smoking shall be prohibited in any workroom in which the said manufacturing process is carried out.
7. **Protective clothing and protective equipment** -
 - I. Protective clothing consisting of long pants and shirts or overalls with long sleeves and head coverings shall be provided for all workers employed in the said manufacturing process.
 - II.
 - a) Protective equipment consisting of rubber gloves, gum boots, rubber aprons, chemical safety goggles and respirators shall be provided for all workers employed in the said manufacturing process.
 - b) Gloves, boots, aprons shall be made from synthetic rubber where a pesticide contains oil.
 - III. Protective clothing and equipment shall be worn by the workers supplied with such clothing and equipment.
 - IV. Protective clothing and equipment shall be washed daily from inside and outside if the workers handle pesticides containing nicotine or phosphorous and shall be washed frequently if handling other pesticides.
 - V. Protective clothing and equipment shall be maintained in good condition.
8. **Floors and work-benches** -
 - I. Floors in every workroom where dangerous pesticides are manipulated shall be of cement or other impervious material giving a smooth surface.
 - II. Floors shall be maintained in good repair, provided with adequate slope leading to a drain and thoroughly washed once a day with the hose pipe.
 - III. 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.
9. **Spillage and waste** -
 - I. If a dangerous pesticide during its manipulation splashes or spills on the work-bench, floor or on the protective clothing worn by a worker, immediate action shall be taken for through decontamination of such areas or articles.
 - II. Cloth, rags, paper or other material soaked or soiled with a dangerous pesticide shall be deposited in a suitable receptacle with tight fitting cover. Contaminated waste shall be destroyed by burning at least once a week.
 - III. Suitable deactivating agents, where available, shall be kept in a readily accessible place for use while attending to a spillage.
 - IV. Easy means of access shall be provided to all parts of the plant for cleaning, maintenance and repairs.

10. **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.
11. **Manual handling** -
- I. A dangerous pesticide shall not be required or allowed to be manipulated by hand except by means of a long handled scoop.
 - II. Direct contact of any part of the body with a dangerous pesticide during its manipulation shall be avoided.
12. **Ventilation** -
- I. In every workroom or area where a dangerous pesticide is manipulated, adequate ventilation shall be provided at all times by the circulation of fresh air.
 - II. 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; and
 - d) Changing or filling a dangerous pesticide into a container, tank hopper or machine or small sized containers.
 - III. In the event of a failure of the exhaust draught provided on the above operation, the said operations shall be stopped forthwith.
13. **Time allowed for washing** -
- I. 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 worker engaged in the manipulation of dangerous pesticide.
 - II. Every worker 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.
14. **Washing and bathing facilities** -
- I. There shall be provided and maintained in a clean state and in good repair for the use of all workers 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 5 persons employed.
 - II. The washing places shall have standpipes placed at intervals of not less than one meter.
 - III. Not less than one half of the total number of washing places shall be provided with bathrooms.
 - IV. Sufficient supply of clean towels made of suitable material shall be provided:
Provided that such towels shall be supplied individually for each worker is so ordered by the Inspector.
 - V. Sufficient supply of soap and nail brushes shall be provided.
15. **Cloakroom** - There shall be provided and maintained for the use of all workers employed in the factory where the said manufacturing process is carried on -
- a) a cloakroom 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 7.
16. **Mess room** -
- I. There shall be provided and maintained for the use of all workers employed in the factory in which the said manufacturing process is carried on and remaining on the premises during the rest intervals, suitable mess room which shall be furnished with -
 - a) sufficient tables and benches with back rest, and
 - b) Adequate means for warming food.
 - II. The mess room shall be placed under the charge of responsible person and shall be kept clean.
17. **Manipulation not be undertaken** - Manufacture or manipulation of a pesticides shall not be undertaken in any factory unless a certificate regarding its dangerous nature or otherwise is obtained from the Chief Inspector cum Facilitator.
18. **Medical facilities and records of examinations and tests** -
- I. The occupier of every factory to which this schedule applies, shall -
 - a) employ a qualified medical practitioner for medical surveillance of the workers employed therein whose employment shall be subject to the approval of the Chief Inspector of Factories; and
 - b) Provide to the medical practitioner all the necessary facilities for the purpose referred to in clause (a).
 - II. The record of such examinations carried out by the medical practitioner shall be maintained in a separate, register approved by the Chief Inspector of Factories, which shall be kept readily available for inspection by the Inspector.
19. **Medical examination by certifying Surgeon** -
- I. Every worker employed in the processes specified in paragraph 1 shall be examined by a Certifying Surgeon within 15 days of his first employment. Such examinations in respect of Halogenated Pesticides, shall include tests for determination of chemical in blood and in fat tissues, E.E.G. abnormalities and memory tests. In respect of organic phosphate compounds, such examinations shall include tests for depression of cholinesterase in plasma and red

- blood cells. 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 Certifying Surgeon.
- II. Every worker employed in the said process shall be re-examined by a Certifying Surgeon at least once in every six calendar months. Such examination shall, wherever the Certifying Surgeon considers appropriate, include the tests specified in sub-paragraph (I). Further every worker employed in the said processes shall also be examined once in every three months by the factory medical officer.
 - III. The Certifying Surgeon after examining a worker, shall issue a Certificate of Fitness in Form XXIII. 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 subparagraph (I) and (II), including the nature and the results of these test, shall also be entered by the certifying Surgeon in a health register in Form XXIV.
 - IV. The Certificate of Fitness and the health register shall be kept readily available for inspection by the Inspector.
 - V. If at any time the Certifying Surgeon is of the opinion that a worker 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 worker, 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 shall be provided with alternate placement facilities unless he is fully incapacitated in the opinion of the Certifying Surgeon, in which case the person affected shall be suitably rehabilitated.
 - VI. No person who has been found unfit to work as said in sub-paragraph (V) shall be re-employed or permitted to work in the said processes unless the Certifying Surgeon, after further examination, again certifies him fit for employment in those processes.
20. Exemption - If in respect of any factory the Chief Inspector cum Facilitator is satisfied that owing to the exceptional circumstances or the infrequency of the said manufacturing process or for any other reason which shall record in writing all or any of the provisions of this Part are not necessary for the protection of workers 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

**APPENDIX
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 this 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 workbench 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 workers shall report for the prescribed medical tests regularly to protect their own health.

**Schedule B-XXI
*Manufacture, handling and usage of benzene and substances containing benzene***

1. **Application** - 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 workers atmosphere; and



- d) "efficient exhaust draught" means localised ventilated 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 workroom. No draught shall be deemed to be efficient if it fails to remove smoke generated at the point where such gases, vapours, fumes or dusts originate.
3. **Prohibition and substitution -**
- I. Benzene and substances containing benzene shall not be used as 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 manner. Use of benzene and substances containing benzene is prohibited in the following processes :
 - a) manufacture of varnishes, paints and thinners; and
 - b) Cleaning and degreasing operations.
 - II. Where suitable substitutes are available, they shall be used instead of benzene or substances containing benzene. This provision, however, shall not apply to the processes specified in **Appendix A**.
 - III. The Chief Inspector may, subject to confirmation by the State Government, permit exemptions from the percentage laid down in sub-paragraph 2(a) and also from the provisions of sub-paragraph (II) of this paragraph temporarily under conditions and within limits of time to be determined after consultation with the employers and workers concerned.
4. **Protection against installation -**
- I. The process involving the use of benzene or substances containing benzene shall be as far as practicable be carried out in an enclosed system.
 - II. Where, however, it is not practicable to carry out the process in an enclosed system, the workroom 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 to prevent their escape into the air of the workroom so that the concentration of benzene in the air does not exceed 10 parts per million by volume or 30 milligrams per cubicmeter.
 - III. Air analysis for the measurement of concentration of benzene vapours in air shall be carried out every 8 hours or at such intervals as may be directed by the Chief Inspector 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 10 parts per million by volume or 30 milligrams per cubicmeter, the Manager shall forthwith report the concentration to the Chief Inspector stating the reasons for such increase.
 - IV. Workers who for special reasons are likely to be exposed to concentration of benzene in the air of the workroom exceeding the maximum referred to in subparagraph (II) 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 -**
- I. Workers 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.
 - II. The protective wear referred to in sub-paragraph (I) shall be maintained in good condition and inspected regularly.
6. **Prohibition relating to employment of women and young persons -** No woman or young person shall be employed or permitted to work in any workroom involving exposure to benzene or substances containing benzene.
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 on benzene content, warning about toxicity and warning about infallibility of the chemical.
8. **Improper use of benzene-**
- I. The use of benzene substances containing benzene by workers for cleaning their hands or their work clothing shall be prohibited.
 - II. Workers shall be instructed on the possible dangers arising from such misuse.
9. **Prohibition of consuming food, etc. in workrooms -** No worker shall be allowed to store or consume food or drink in the workroom in which benzene or substances containing benzene are manufactured, handled or used. Smoking and chewing tobacco or pan shall be prohibited in such workrooms.
10. **Instructions as regards risks -** Every worker 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. Workers 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 printed in the language easily read and understood by the majority of the workers shall be displayed in prominent places in the workrooms where benzene or substances containing benzene are manufactured, handled or used.
12. **Washing facilities, cloakroom and mess room -** In factories in which benzene or substances containing benzene are manufactured, handled or used, the occupier shall provide and maintain in a clean state and in good repair -

- a) washing facilities under cover, of the standard of at least one tap for every 10 persons having constant supply of water with soap, and a clean towel provided individually to each worker if so ordered by the Inspector;
- b) cloakroom with lockers for each worker, 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 workers to take their meals, the requirements of mess room shall be dispensed with.

13. Medical facilities and records of examinations and tests -

- I. The occupier of every factory to which this schedule applies, shall-
 - a) employ a qualified medical practitioner for medical surveillance of the workers employed therein whose employment shall be subject to the approval of the Chief Inspector of Factories; and
 - b) Provide to the medical practitioner all the necessary facilities for the purpose referred to in clause (a).
- II. The record of such examinations carried out by the medical practitioner shall be maintained in a separate, register approved by the Chief Inspector of Factories, which shall be kept readily available for inspection by the Inspector.

14. Medical examination by Certifying Surgeon -

- I. Every worker employed in the processes specified in paragraph 1 shall be examined by a Certifying Surgeon within 15 days of his first employment. Such examinations shall include skin test for dermatitis and 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 Certifying Surgeon.
- II. Every worker employed in a manganese process shall be re-examined by a Certifying Surgeon at least once in every 12 months and such examination shall, wherever the Certifying Surgeon considers appropriate, include all the tests in subparagraph (I).
- III. The Certifying Surgeon after examining a worker, shall issue a Certificate of Fitness in Form XXIII. 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 (I) and (II), including the nature and the results of this test, shall also be entered by the Certifying Surgeon in a health register in Form XXIV.
- IV. The Certificate of Fitness and the health register shall be kept readily available for inspection by the Inspector.
- V. If at any time the Certifying Surgeon is of the opinion that a worker 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 worker, 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 shall be provided with alternate placement facilities unless he is fully incapacitated in the opinion of the Certifying Surgeon, in which case the person affected shall be suitably rehabilitated.
- VI. 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 Certifying Surgeon, after further examination, again certifies him fit for employment in those processes.

APPENDIX-A

- 1. production of benzene
- 2. process where benzene is used for chemical synthesis
- 3. motor spirits (used as fuel)

APPENDIX-B

[SEE PARAGRAPH 11 OF THIS SCHEDULE]
CAUTIONARY NOTICE

Benzene and substances containing benzene

1. Hazards:

- a) Benzene and substances containing benzene are harmful.
- b) Prolonged or repeated breathing of benzene vapours may result in acute or chronic poisoning.
- c) Benzene can also be absorbed through skin which may cause skin or other diseases.

2. Preventive measures:

- a) Avoid breathing of benzene vapours.
- b) Avoid prolonged or repeated contact of benzene with the skin.
- c) Remove benzene soaked or wet clothing promptly.
- d) If any time you are exposed to high concentration of benzene vapours and exhibit signs and symptoms such as dizziness, difficulty in breathing, excessive excitation and losing of consciousness, immediately inform your factory manager.

- e) Keep all the containers of benzene closed
- f) Handle, use and process benzene and substances containing benzene carefully in order to prevent their spillage on floor.
- g) Maintain good housekeeping.
- 3. *Protective equipment:*
 - a) Use respiratory protective equipment in places where benzene vapours are present in high concentration.
 - b) In emergency, use self generating oxygen mask or oxygen or air cylinder masks.
 - c) Wear hand gloves, aprons, goggles and gum boots to avoid contact of benzene with your skin and body parts.
- 4. *First-aid measures in case of acute benzene poisoning :*
 - a) Remove the clothing immediately if it is wetted with benzene.
 - b) If liquid benzene enters eyes, flush thoroughly for at least 15 minutes with clean running water and immediately secure medical attention.
 - c) In case of unusual exposure to benzene vapour, call a physician immediately. Until he arrives, do the following :-
 - i. If the exposed person is conscious -
 - Move him to fresh air in open.
 - Lay down without a pillow and keep him quiet and warm.
 - ii. If the exposed person is unconscious -
 - Lay him down preferably on the left side with the head low.
 - Remove any false teeth, chewing gum, tobacco or other foreign objects which may be in his mouth.
 - Provide him artificial respiration in case difficulty is being experienced in breathing.
 - In case of shallow breathing or cyanosis (blueness of skin, lips, ears, finger nail beds), he should be provided with medical oxygen or oxygen carbondioxide mixture. If needed, he should be given artificial respiration. Oxygen should be administered by a trained person only.

Schedule B-XXII

Manufacturing process or operation in carbon disulphide plants

1. **Application** - This schedule shall apply to all electric furnaces in which carbon sulphide is generated and all other plants where carbon disulphide after generation, is condensed, refined and stored. This schedule is in addition to and not in derogation of any of the provisions of the Codes and Rules made there under.
2. **Construction, installation and operation-**
 - I. 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 of open type to ensure optimum ventilation and the plant layout shall be such that only a minimum number of workers are exposed to the risk of any fire or explosion at any one time.
 - II. 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 to and shall be so designed that carbon disulphide liquid and gas are in closed system during their normal working.
 - III. The electric furnace supports shall be firmly grouted about 60 centimetres in concrete or by other effective means.
 - IV. Every electric furnace shall be installed and operated according to manufacturers' instructions and these instructions shall be clearly imparted to the personnel in charge of construction and operation.
 - V. The instructions regarding observance of correct furnace temperature, sulphur dose, admissible current or power consumption and periodical checking of charcoal level shall be strictly complied with.
3. **Electrodes -**
 - I. Where upper ring electrodes 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.
 - II. The arrangement for cooling water referred to in sub-paragraph (I) 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 to stop the further supply of water. The alarm system and the actuating device shall be checked every day.
4. **Charcoal level indicator and vibrator** - Means shall be provided on each electric furnace for indicating the correct level of charcoal in the furnace and vibrating the charcoal. This mean shall employed often as necessary to maintain correct charge and level of charcoal.
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 and piping.
6. **Rupture discs and safety seal -**

- I. 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.
- II. A safety water seal shall be provided and tapped from a point between the charcoal separator and the sulphur separator.
- 7. Pyrometer and manometers -**
 - I. Each electric furnace shall be fitted with adequate number of pyrometers to give an indication of the temperature as correctly as reasonably practicable at various points in the furnace. The dials for reading the temperatures shall be located in the control room.
 - II. Manometers or any other suitable devices shall be provided for indicating pressure -
 - a) In the off take pipe before and after the sulphur separator; and
 - b) 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 any electric furnace in the event of its shut down.
- 9. Inspection and maintenance of electric furnaces -**
 - I. Every electric furnace shall be inspected internally by a competent person.
 - a) Before being placed in service after installation;
 - b) Before being placed in service after reconstruction or repairs; and
 - c) Periodically every time the furnace is opened for cleaning or de- or for replacing electrodes.
 - II. When an electric furnace is shut down for cleaning or de--
 - a) The brick lining shall be checked for continuity and any part found defective removed;
 - b) After removal of any part of the lining referred to in (a) the condition of the shell shall be closely inspected; and
 - c) Any plates forming shall 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,
 - a) Manometer readings at the points specified in sub-paragraph 7(2);
 - b) Gas temperature indicated by pyrometers and all other vital points near the sulphur separator and primary and secondary condensers;
 - c) Water temperature and flow of water through the siphon in the electrodes; and
 - d) 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 naked light or spark in buildings in which carbon disulphide is refined or stored, and a notice in the language understood by a majority of the workers 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 staircases 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 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 electrically and in case of failure of electricity by some mechanical means.
- 15. Fire-fighting equipment -**
 - I. Adequate number of suitable fire extinguishers or other fire-fighting equipment shall be kept in constant readiness for dealing with risks involved and depending on the amount and nature of materials stored.
 - II. Clear instructions as to how the extinguishers or other equipment should be used printed in the language which the majority of the workers employed understand, shall be affixed to each extinguisher or other equipment and the personnel trained in their use.
- 16. Bulk Sulphur -**
 - I. 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 locomotives, 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
 - II. All enclosures for bulk sulphur shall be of non-combustible construction, adequately ventilated and so designed as to provide a minimum of ledges on which dust may lodge.
 - III. 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 shovelled or otherwise removed by hand.

- IV. 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** -
 - I. All electric furnaces and all plants in which carbon disulphide is condensed, refined or stored shall be under adequate supervision at all times while the furnaces and plant are in operation.
 - II. Workers in charge of operation and maintenance of electric furnaces and the plants shall be properly qualified and adequately trained.
19. **Washing facilities** -
 - I. 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 stand-pipes 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 worker if so ordered by the Inspector.
 - II. All the workers employed in the sulphur storage, handling and melting operations shall be provided with a nail brush.
20. **Personal protective equipment** -
 - I. Suitable goggles and protective clothing consisting of overalls without pockets, gloves and foot-wear shall be provided for the use of operatives -
 - a) when operating valves or cocks controlling fluids etc.,
 - b) drawing off a molten sulphur from sulphur pots;
 - c) handling charcoal or sulphur.
 - II. Suitable respiratory protective equipment shall be provided and stored in the appropriate place for use during abnormal conditions or in an emergency.
 - III. Arrangements shall be made for proper and efficient cleaning of all such protective equipment.
21. **Cloakrooms** - There shall be provided and maintained for the use of all persons employed in the processes a suitable cloakroom for clothing put off during work hours and a suitable place separate from the cloakroom for the storage of overalls or working clothes. The accommodation so 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 operation and those accompanied by authorized persons shall be admitted into the plant.

Schedule B-XXIII

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 process of manufacturing or manipulation of a carcinogenic Dye Intermediates (here in referred to as the said manufacturing processes) is carried on.
 Provided that Paragraphs 25 and 26 shall only to the a process involving manufacturing, manipulation of compounds mentioned in Appendix B (here in referred to as the said manufacturing processes B)

PART-I

2. **Definition** -
 - a) For the purpose of this schedule a nitro or amino compounds means a nitrated or aminated compound of aromatic hydrocarbons mentioned in Appendix A or B attached there to.
 - b) "Approved" means approved by Chief Inspector cum facilitator.
 - c) "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 originates; and
 - d) Manipulation shall include mixing, blending, filling, emptying, grinding, sieving, drying, packing, sweeping, handling, using or chemical processing of a nitro-amino compound.
 - e) "Air line respirator" means a helmet or face piece with necessary connections by means of which a person using it in a poisonous or irritant atmosphere breathes ordinary air or any suitable apparatus approved in writing by Chief Inspector cum facilitator.
3. **Cautionary placards** - Cautionary placards in the form specified in appendix attached to this schedule and printed in the language of the majority of the workers employed in the said processes shall be affixed in prominent places frequented by

them in the factory, where the placards can be conveniently read. Arrangements shall be made by the manager to instruct periodically all such workers regarding the precautions contained in the cautionary placards.

4. **Prohibition relating to employment of women and young persons** - No woman or young person shall be employed or permitted to work in any room in which the said processes are carried on.
5. **Air space**- in every room in which the said manufacturing process is carried on there shall at least 15 cubic-meters of air space excluding any space occupied by machinery equipments or any other article for each person employed there in and in computing this air space no height over 4.25 meters shall be taken into account.
6. **Efficient exhaust draught**- unless the said process is completely enclosed so as to not to give rise to dust or fume it shall not be carried on without the use of an efficient exhaust draught when a nitro or amino compound;
 - a) Is introduced into a tank, hopper, machine, or container or filled into cartridge; or
 - b) Is ground, crushed, mixed, sieved, or blended.
7. **Floors of workroom** - The floor of every workroom in which the said 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.
8. **Work benches**- work benches on which a nitro or amino compound is manipulated shall-
 - a) Have a smooth impervious surface preferably of stainless steel; and
 - b) Be washed daily with hose-pipe or cleaned by means of suction cleaning apparatus at the time when no other work is carried on there at.
1. **Waste disposal** -
 - I. There shall be provided a suitable receptacle made of non-absorbable material with a tightly fitting cover for depositing waste material like cloth paper or other material soiled with a nitro or amino compound.
 - II. Such receptacle shall be destroyed by burning or using other suitable methods under the supervision of a responsible person.
2. **Disposal of empty containers** - Empty containers used for holding compounds included under Appendix_A shall be thoroughly cleaned of their contents and treated with an inactivating agent before being discarded.
3. **Decontamination of Pits, Tanks etc.**-
 - a) Before a worker enters a pit, tank, kettle or any other confined space which contains a nitro or amino compound it shall be thoroughly washed and cleaned.
 - b) No part of the plant which contains nitro or amino compounds shall be repaired or opened for repairs unless it has been emptied of such compounds and thoroughly cleaned & decontaminated.
 - c) Records of such treatments shall be maintained in a register approved by the Chief Inspector and the register shall be made available for inspection when required by Inspector.
4. **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
5. **Protective wears**- the occupier shall provide, maintain clean and in good condition protective clothing and other equipments as specified in the table below:-

TABLE
Process Protective clothing and other equipments

For manipulation of compounds Mentioned in Appendix-A

(A) Long trousers and shirts or overalls with full sleeves and head coverings. The shirt or overall shall cover the neck completely; and

(B) rubber hand gloves, rubber aprons, rubber gum boots and airline

For manipulation of compounds Mentioned in Appendix-B

(A) White clean clothing mentioned in (A) as above in addition to white clean shirts.

Singlet and protective equipments as mentioned in (B) above

(B) White long sleeve apron

6. **Instructions regarding risk** - Every worker 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. Workers shall also be instructed on the measures to be taken to deal with an emergency.
7. **Medical facilities and records of examinations and tests** -
- I. the occupier of every factory to which this schedule applies, shall -
 - a) employ a qualified medical practitioner 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 medical practitioner all the necessary facilities for the purpose referred to in clause (a).
 - II. The record of such examinations carried out by the medical practitioner 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.
8. **Medical examination by certifying Surgeon** -
- I. every worker employed in the processes specified in paragraph 1 shall be examined by a Certifying Surgeon within 15 days of his first employment. Such examinations shall include skin test for dermatitis and 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 Certifying Surgeon.
 - II. Every worker employed in a manganese process shall be re-examined by a Certifying Surgeon at least once in every three calendar months and such examination shall, wherever the Certifying Surgeon considers appropriate, include all the tests in sub-paragraph (I).
 - III. The Certifying Surgeon after examining a worker shall issue a Certificate of Fitness in Form XXIII. 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 (I) and (II), including the nature and the results of this test, shall also be entered by the Certifying Surgeon in a health register in Form XXIV.
 - IV. The Certificate of Fitness and the health register shall be kept readily available for inspection by the Inspector.
 - V. If at any time the Certifying Surgeon is of the opinion that a worker 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 worker, 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 shall be provided with alternate placement facilities unless he is fully incapacitated in the opinion of the Certifying Surgeon, in which case the person affected shall be suitably rehabilitated.
 - VI. 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 Certifying Surgeon, after further examination, again certifies him fit for employment in those processes.
9. **Washing and bathing facilities** -
- I. The following washing and bathing facilities shall be provided and maintained in a clean state and in good repair for the use of all workers employed in the said processes :-
 - a) a wash place under cover having constant supply of water and provided with clean towels, soap and nail brushes and with at least one stand pipe for every five such workers;
 - b) 50 percent 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 worker; and
 - 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.
 - II. Arrangement shall be made to wash factory uniforms and other work clothes everyday.
10. **Washing and bathing-**
- a) all the workers employed in the said manufacturing process shall carefully wash their hands and faces before taking food or leaving factory,
 - b) Bath register- the workers employed in the said manufacturing process shall take bath at factory premises and will enter their names in the bath register as token of having done so.
11. **Food, drinks, etc. prohibited in workroom** - No worker shall consume food, drink, pan, supari or tobacco or shall smoke in any workroom in which the said processes are carried on and no worker shall remain in any such room during intervals for meals or rest.
12. **Cloakroom** - There shall be provided and maintained in a clean state and in good repair for the use of the workers employed in the said processes
- a) a cloakroom with lockers having two compartments - one for street clothes and the other for work clothes, and



- b) a place separate from the locker room and the messroom, for the storage of protective equipment provided under paragraph 7. The accommodation so provided shall be under the care of a responsible person and shall be kept clean.
- 13. **Mess room** - There shall be provided and maintained for the use of workers 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. The mess room shall be placed under the charge of a responsible person and shall be kept clean.
- 14. **Time allowed for washing** - Before each meal and the end of the day at least 10 minutes addition to the regular interval shall be allowed for washing to each person who has been employed in the said process.
- 15. **Drying stoves-**
 - a) every drying stove shall be efficiently ventilated to the out side air in such a manner that hot air from stove shall not be drawn into any work room.
 - b) No person shall enter into stove to remove the contents until a free current of air has been passed through by mechanical means.
- 16. **Non-sparking tools-** non sparking tools shall be provided for the purpose of cleaning or repairing machinery or or operating any process where vapours of betanaphthyl amine are evolved.
- 17. **Testing of atmosphere-** Amines in the atmosphere of the work room where the manufacturing process is carried on shall be estimated once in every week and records of such estimations shall be made available when required by an Inspectorcum facilitator.

PART-II

- 18. **Separation of process-** the said manufacturing process 'B' shall be carried on in rooms which shall not communicate with the other rooms except through a passage open entirely to outside atmosphere.
- 19. **Limitation of exposure-**
 - a) no worker under the age of 40 years shall be engaged in the factory for the said manufacturing process 'B' for the first time after the date on which these rules come into force.
 - b) before the end of the day at least one hour shall be allowed for bathing to each person who is employed in the said manufacturing process 'B' including the time allowed under paragraph 22.
- 20. **Exemptions** - If in respect of any factory, the Chief Inspector 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 the protection of the workers in the factory, the Chief Inspector may be 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-A
[SEE PARAGRAPH 2, 10, 13]

The benzenes, Toulenes, Xylenes, having undergone nitration once or several times (nitro, dinitro and trinitro benzene and its homologues) and chlorinated compounds, naphalenes, having undergone nitration once or several times, anilinos and its homologues(toluidine, Xlidine, cuminide) anisidine, phenetidine and their chlorinated nitrated and alkylated compounds(dimethyliline, tolylendiamine, toluidine phenylhydrazine, tolylhydrazine)

APPENDIX-B
[SEE PARAGRAPH 2 & 13]

- 1. Alphanaphthylamine
- 2. Betanaphthylamine
- 3. Benzidine and its salts
- 4. Dianisidine
- 5. Toluidine
- 6. Dichlorobenzidine

APPENDIX - C
CAUTIONARY PLACARD/NOTICE
Carcinogenic dye intermediates

- 1. Nitro and amino compounds are aromatic hydro carbons are dangerous .In this factory you have to handle them carefully.
- 2. All items of protective wear provided should be made use of to safeguard your health.



3. Maintain cleanliness at all times .Before meals wash hands and feet . A bath before leaving the factory is essential taking care to wash the hands well.
4. If any chemicals falls on your body wash it off immediately with soap and water. Change clothing at once .If soap with a cynotienitromino compound contact the appointed doctor immediately.
5. Do not handle any nitro or amino compounds bare hand .Use a long handle scoop .
6. Avoid alcoholic drinks as these can cause risk of poisoning .
7. In case of illness contact the factory manager and the appointed doctor
8. Don't chew, eat, drink or smoke in the work room or with soiled hands .Keep food and drinks away from te work place
9. If you work with betanaphthylamine or benzedine or its salt alphanaphthylamine or dianisidine :-
 - a) Remember the serious effects will follow after a number of year if great care is not taken to observe absolute cleanliness of body , close , missionary and tools
 - b) At meal time wash face and hands twice with soap and water to remove all chemicals; wear a long sleeve clean apron while eating
 - c) Before leaving the factory take a bath using soap and water twice after this put on your home clothes

Schedule B-XXIV

Operations involving high noise levels

1. **Application** - This 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 90 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 the of 10 of this ratio. The noise level (or the sound pressure level) 6 corresponds to a reference pressure of 20×10^{-6} Newton per square meter or 0.0002 dynes per square centimetre 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 net work 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, suitable, a suitable engineering control or administrative measures shall be taken to ensure, so far as is reasonably practicable, that no worker 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 dBA
Sound pressure level in or a per day, in hours
number of short term exposures)

8 90
6 92
4 95
3 97
2 100
1 ½ 102
1 105
¾ 107
½ 110
¼ 115

- Notes:** 1. No exposure in excess of 115 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

Note:

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.
3. 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.
4. 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 $C1/T1 + C2/T2 + \dots + Cn/Tn$ exceeds unity, - 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.
5. Where it is not possible to reduce the noise exposure to the levels specified in Point (1) of the Note 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 worker so exposed shall be provided with suitable ear protectors so as to reduce the exposure to noise to the levels specified in Point (1) of the Note.
6. Where the ear protectors provided in accordance with sub-paragraph (2) and worn by a worker 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 point (1) of the Note.
7. a) In all cases where the prevailing sound levels exceed the permissible levels specified in point (1) of the Note 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 workers exposed to noise exceeding the permissible levels, and rehabilitation of such workers 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 worker employed in areas where the noise exceeds the maximum permissible exposure levels specified in point (1) of the Note shall be subjected to any auditory examination by a Certifying Surgeon within 14 days of his first employment and thereafter, shall be re-examined at least once a every 12 months. Such initial and periodical examinations shall include tests which the Certifying Surgeon 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.

Schedule B-XXV

Manufacture of Rayon by viscose process

1. **Definitions** - For the purpose of this Part -
 - a) "approved" means approved for the time being in writing by the Chief Inspector;
 - 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 with carbon disulphide;
 - d) "dumping" means transfer of cellulose xanthate from a dry churn to a dissolver;
 - e) "efficient exhaust draught" means localised 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) "fume 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 strong to sustain the weight of a man;
 - h) "protective equipment" means apron, goggles, face shields, footwear, gloves and overalls made of suitable materials.
2. **Ventilation** -



- I. In all workrooms where a fume 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.
- II. Notwithstanding the requirements in sub-paragraph (I) an efficient exhaust draught shall be provided and maintained to control the concentration of carbon-disulphide and hydrogen sulphide in the air at the following locations :-
 - a) dumping hoppers of dry churns;
 - b) spinning machines;
 - c) trio rollers and cutters used in staple fibre spinning;
 - d) gydro-extractors for yarn cakes;
 - e) after treatment processes; and
 - f) spin baths.
- III. In so far as the spinning machines and trio rollers and cutters used in 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 (I), 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-dulphide escaping to the work environment.
- IV. 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 and efficient arrangement for exhausting the vapours which shall be continued to be operated as long as the churn is kept opened.
- V. Whenever any ventilation apparatus normally required for the purpose of meeting the requirements in sub-paragraphs (II), (III), and (IV) is ineffective, fails, or is stopped for any purpose whatsoever, all persons shall be required to leave the work areas where the equipment or 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.
- VI.
 - a) All ventilating systems provided for the purposes as required in sub-paragraphs (II), (III) and (IV) 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 12 months. Any defects found by such examinations or test shall be rectified forthwith.
 - b) 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.
3. **Waste from spinning machines-** Waste yarn from the spinning machines 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 nonsticky 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 -**
 - I. To ensure the effectiveness of the control measures, monitoring of carbon-disulphide and hydrogen sulphide in air shall be carried out once atleast in every shift and the record of the results so obtained shall be entered in a register specially maintained for the purposes.
 - II. For the purpose of the requirement in sub-paragraph (1), instantaneous gas detector tubes shall not be used. Samples shall be collected over 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.
 - III. If the concentration of either carbon disulphide or hydrogen sulphide exceeds the permissible limits for such vapour or gas as laid down in Rule 66, suitable steps shall be taken for controlling the concentrations in air of such contaminants. A report of such occurrences shall be sent to the Chief Inspector forthwith.
6. **Prohibition to remain in fume process room -** No person during his intervals for meal, or rest shall remain in any room wherein fume process is carried on.
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 -**
 - I. 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.

No.	Process	Table	Protective equipment
1.	Dumping		Overalls, face-shields, gloves and footwear - all made of suitable material
2.	Spinning		Suitable aprons, gloves and footwear
3.	Process involving or likely to involve		Suitable gloves and footwear

Cautionary Notice

- i. Carbon disulphide (CS₂) and Hydrogen Sulphide (H₂S) which may be present in this room are hazardous to health.
- ii. Follow safety instructions.
- iii. Use protective equipment and breathing apparatus as and when required.
- iv. Smoking is strictly prohibited in this area."

This notice shall be in a language understood by the majority of the workers and displayed where it can be easily and conveniently read. If any worker is illiterate, effective steps shall be taken to explain carefully to him the contents of the notice so displayed.

- ii. Arrangements shall be made to instruct each worker 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.
 - iii. Simple and special instructions shall be framed to ensure that effective measures will be carried out in case of emergency involving escape of carbondi- sulphide and hydrogen sulphide. Those instructions shall be displayed in the concerned areas and workers shall be instructed and trained in the actions to be taken in such emergencies.
15. **Medical facilities and records of examinations and tests -**
- I. The occupier of every factory to which this schedule applies, shall-
 - a) employ a qualified medical practitioner for medical surveillance of the workers employed therein whose employment shall be subject to the approval of the Chief Inspector of Factories; and
 - b) Provide to the said medical practitioner all the necessary facilities for the purpose referred at (a).
 - ii. The record of such examinations carried out by the medical practitioner shall be maintained in a separate, register approved by the Chief Inspector of Factories, which shall be kept readily available for inspection by the Inspector.
16. **Medical examination by certifying Surgeon -**
- I. Every worker employed in the processes specified in paragraph 1 shall be examined by a Certifying Surgeon within days of his first employment. Such examinations shall include skin test for dermatitis and 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 Certifying Surgeon.
 - II. Every worker employed in a manganese process shall be re-examined by a Certifying Surgeon at least once in every three calendar months and such examination shall, wherever the Certifying Surgeon considers appropriate, include all the tests in sub-paragraph (I).
 - III. The Certifying Surgeon after examining a worker shall issue a Certificate of Fitness in Form XXIII. 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 manger of the factory. The record of each examination carried out under sub-paragraph (I) and (II) including the nature and the results of these test, shall also be entered by the Certifying Surgeon in a health register in Form XXIV.
 - IV. The Certificate of Fitness and the health register shall be kept readily available for inspection by the Inspector.
 - V. If at any time the Certifying Surgeon is of the opinion that a worker 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 worker, 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 shall be provided with alternate placement facilities unless he is fully incapacitated in the opinion of the Certifying Surgeon, in which case the person affected shall be suitably rehabilitated.
 - VI. No person who has been found unfit to work as said in sub-paragraph (V) shall be re-employed or permitted to work in the said processes unless the Certifying Surgeon, after further examination, again certifies him fit for employment in those processes.
17. **Exemptions -** If in respect of any factory, the Chief Inspector 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 the protection of the workers in the factory, the Chief Inspector may be 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 B-XXVI

Highly Flammable Liquids and Flammable Compressed Gases

1. **Application** - These schedule will be applicable to all factories where highly flammable liquids or flammable compressed gases are manufactured, stored, handled or used.
2. **Definition** - 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, (30 of 1934) gives off flammable vapours at a temperature less than 32 degree centigrade;
 - b) "flammable compressed gas" means flammable compressed gas as defined in section 2 of the Static and Mobile Pressure Vessels (Unfired) Rules 1981 framed under the Explosive Act, 1884.
3. **Storage** -
 - I. 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 open or in a store room of adequate fire resistant construction.
 - II. Except as necessary for use, operation or maintenance, every vessel or tank which contains or had contained highly flammable liquid or flammable compressed gas shall be always kept closed and all reasonably practicable steps shall be taken to contain or immediately drain off to a suitable container any spill or leak that may occur.
 - III. 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 marked "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** - Wherever there is a possibility for leakage or spill of highly flammable liquid or flammable compressed gas from any 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.
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 foot wear 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; and
 - f) all other precautions, as are reasonably practicable, shall be taken to prevent initiation of ignition from all other possible sources such as open flames, frictional sparks, overheated surfaces of machinery or plant, chemical or physical-chemical reaction and radiant heat.
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 a risk of life. 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. **Fire Fighting** - In every factory where highly flammable liquid or flammable compressed gas is manufactured, stored, handled or 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 fire fighting, shall be to the standards and levels prescribed by the Indian Standards applicable.
9. **Exemptions** - If in respect of any factory, the Chief Inspector 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 the protection of the workers in the factory, the Chief Inspector may be 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 B-XXVII

Operations in Foundries

1. **Application** - Provisions of this Schedule shall apply to all parts of factories where any of the following operations or processes are carried on:
- a) the production of iron castings 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; and
 - c) the melting and casting of non-ferrous metal for the production of ingots, billets, slabs or other similar products, and the stripping thereof;
- But shall not apply with respect to -
- a) Any process with respect to the smelting and manufacture of lead and the Electric Accumulators;
 - b) Any process for the purpose of a printing works; or
 - c) Any smelting process in which metal is obtained by a reducing operation or any process incidental to such operation; or
 - d) The production of steel in the form of ingots; or
 - e) Any process in the course of the manufacture of solder or any process incidental to such manufacture; or
 - f) the smelting 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:
 - i. 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
 - ii. Any operation which is knock-out operation within the meaning of this schedule;
 - d) "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 shell moulding or by centrifugal casting in metal moulds lined with sand, or die casting including pressure die casting, 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 course of, such production, namely, the preparation and preparation of moulds and cores, knock out operations and dressing or fettling operations;
 - e) "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;
 - f) "pouring aisle" means an aisle leading from a main gangway or directly from a cupola or furnace to where metal is poured into moulds.
3. **Prohibition of use of certain materials as parting materials** -
- I. A material shall not be used as a parting material if it is a material containing compounds of silicon calculated as silica to the extent more than 5 percent 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) Sillimanite
 - e) Calcined or fused alumina
 - f) Olivine
 - g) Natural sand
 - II. 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 of floors -

- I. Floors of indoor workplaces in which the processes are carried on, other than parts which are of sand, shall have been surface of hard material.
- II. 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.
- III. 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.

6. Cleanliness of indoor workplaces.-

- I. 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 metres 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.
- II. 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 keep in good order.

7. Manual operations involving molten metal -

- I. 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?
- II. 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.

8. Gangways and pouring aisles -

- I. 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 gangway 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, shall be at least 920 millimetres in width;
 - d) if used for carrying molten metal shall be -
 - i. Where truck ladles are used exclusively, at least 600 millimetres wider than the overall width of the ladle;
 - ii. Where hand shanks are carried by not more than two men, at least 920 millimetres in width;
 - iii. Where hand shanks are carried by more than two men, at least 1.2 metres in width; and
 - iv. Where used for simultaneous travel in both directions by men carrying hand shanks, at least 1.8 metres in width.
- II. 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 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 bulk ladles by not more than two men per ladle, shall be at least 460 millimetres wide, but where any moulds alongside the aisle are more than 510 millimetres above the floor of the aisle, the aisle shall be not less than 600 millimetres wide;
 - d) if molten metal is carried in hand ladles or bull ladles by more than two men per ladle, shall be at least 760 millimetres wide;
 - e) if molten metal is carried in crane, trolley or truck ladles, shall be of a width adequate for the safe performance of the work.



- III. Requirements of sub-paragraph (I) and (II) 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.
- IV. 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.
9. **Work near cupolas and furnaces** - No person shall carry out any work within a distance of 4 metres from a vertical line passing through the delivery end of any spout of a cupola or furnace, being a spout used for delivering molten metal, or within a distance of 2.4 metres 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.
10. **Dust and fumes.**-
- I. 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.
- II. No open coal, coke or wood fires shall be used for drying moulds except in circumstances in which the use of such fires is unavoidable.
- III. 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.
- IV. All knock-out operations shall be carried out -
- a) in a separate part of foundry suitably partitioned off, being a room or part in which, so far as reasonably practicable, effective and suitable local exhaust ventilation and a high standard of general 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.
- V. All dressing or fettling operations shall be carried out -
- a) In a separate room or in a separate part of 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.
11. **Maintenance and examination of exhaust plant** -
- I. All ventilation plant used for the purpose of extracting, suppressing or controlling dust or fumes shall be properly maintained.
- II. All ventilating 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 at least once in every such examination and test shall be entered in an approved register which shall be available for inspection by an Inspector. Any defect found on any such examination and carrying out the examination and test to the occupier or manager of the factory.
12. **Protective equipment** -
- I. The occupier shall provide and maintain protective equipment specified for the protection of workers,
- a) suitable gloves to 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 dust concentration which cannot be dispelled quickly and effectively by the existing ventilation arrangements.
- II. No respirator provided for the purposes mentioned in I (b) has been worn by a person shall be worn by another person if it has not since been thoroughly cleaned and disinfected.
- III. 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;
- e) 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.
- IV. 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).
- V. 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.
- VI. Every person shall make full and proper use of the equipment provided for his protection in pursuance of sub-paragraph (I) and (IV) and shall without delay report to the occupier, manager, or other appropriate person any defect in, or less of, the same.
- 13. Washing and bathing facilities -**
- I. 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 at least 60 centimetres 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 60 centimetres or
- ii. at least one tap or stand pipe for every 10 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 metres apart; and
- b) Not less than one half of the total number of washing places provided at (a) shall be in form of bath rooms.
- c) A sufficient supply of clean towels made of suitable material changed daily, with sufficient supply of nail brushes and soap.
- II. The facilities provided for the purposes of sub-paragraph (I) shall be placed in charge of a responsible person or persons and maintained in a clean and orderly condition.
- 14. Disposal of dross and skimming -** Dross and skimming removed from molten metal or taken from a furnace shall be placed forthwith in suitable receptacles.
- 15. 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.
- 16. 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 as reasonably practicable, such access shall be by roadways or pathways 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.
- 17. Medical facilities and records of examinations and tests -**
- I. The occupier of every factory to which this Schedule applies, shall-
- a) employ a qualified medical practitioner 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 medical practitioner all the necessary facilities for the purpose referred to at (a).
- II. The record of such examinations carried out by the medical practitioner 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.
- 18. Medical examination by certifying Surgeon -**
- I. every worker employed in the processes specified in paragraph 1 shall be examined by a Certifying Surgeon within 15 days of his first employment. Such examinations shall include skin test for dermatitis and 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 Certifying Surgeon.
- II. Every worker employed in a manganese process shall be re-examined by a Certifying Surgeon at least once in every 12 months and such examination shall, wherever the Certifying Surgeon considers appropriate, include all the tests in subparagraph (I).
- III. The Certifying Surgeon after examining a worker, shall issue a Certificate of Fitness in Form XXIII. 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 (I) and (II) including the nature and the results of these test, shall also be entered by the Certifying Surgeon in a health register in Form XXIV.
- IV. The Certificate of Fitness and the health register shall be kept readily available for inspection by the Inspector.
- V. If at any time the Certifying Surgeon is of the opinion that a worker 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 worker, 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 shall be provided with alternate placement facilities unless he is fully incapacitated in the opinion of the Certifying Surgeon, in which case the person affected shall be suitably rehabilitated.

- VI. No person who has been found unfit to work as said in sub-paragraph () shall be re-employed or permitted to work in the said processes unless the Certifying Surgeon, after further examination, again certifies him fit for employment in those processes.
19. **Exemptions** - If in respect of any factory, the Chief Inspector 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 Part is not necessary for the protection of the workers in the factory, the Chief Inspector may be 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 C

(See sub rule 2 of rule 60)

Material Safety Data Sheet

SAMPLE MODEL

SECTION I – MATERIAL IDENTIFICATION AND USE

Material Name/Identifier	
Manufacturer's Name	Supplier's Name
Street Address	Street Address
City State	City State
Postal Code Emergency Telephone No.	Postal Code Emergency Telephone No.
Chemical Name Chemical Identity Trade Name and Synonyms	Product Use

SECTION II – HAZARDOUS INGREDIENTS OF MATERIAL

Hazardous Ingredients	Approximate Concentration %	C.A.S. or UNNumbers	LD 50 (Specify Species and Route)	LC 50 (Specify Species and Route)
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SECTION III - PHYSICAL DATA FOR MATERIAL

Physical State --Gas -- Liquid -- Solid	Odour and Appearance	Odour Threshold (p.p.m)	Specific Gravity	
Vapour Pressure	Vapour density (Air=1)	Evaporation Rate	Boiling point (oC)	Freezing (oC)
Solubility in water (20°C)	pH	Density (g/ml)	Coefficient of water / oil distribution	

SECTION IV - FIRE AND EXPLOSION HAZARD OF MATERIAL

Flammability

_____ Yes _____ No. If yes, under what conditions

Means of Extinction

Special Procedures

Flash Point (°C) and Method	Upper Explosion Limit (% by Volume)	Lower Explosion Limit (% by Volume)
Anti-ignition Temperature (°C)	TDG Flammability Classification	Hazardous Combustion Products
Explosion Data-Sensitivity Chemical Impact	Sensitivity to Static Discharge	

SECTION V - REACTIVITY DATA

Chemical Stability



_____ Yes _____ No. If no, under what conditions

Incompatibility to other substances

_____ Yes _____ No. If yes, which ones

Reactivity and under what conditions

Hazardous Decomposition Products

Material
Name / Identifier

SECTION VI – TOXICOLOGICAL PROPERTIES OF MATERIAL

Route of Entry

-----Skincontact -----SkinAbsorption----- Eye Contact
-----InhalationAcute -----InhalationChronic ----- Ingestion

Effects of Acute Exposure to Material

Effects of Chronic Exposure to Material

Exposure Limit(s)	Irritancy of Material

Sensitization to

Material Carcinogenicity, Reproductive
 Effects, Teratogenicity,
 Mutagenicity

Synergistic Materials

SECTION VII – PREVENTIVE MEASURES

Personal Protective Equipment

Gloves(specify) Respiratory(specify) Eyes(specify)

Footwear(specify) Clothing(specify) Other(specify)

Engineering Controls (e.g. ventilation, enclosed process, etc.)
Please specify



Leak and Spill Procedures

Waste Disposal

Handling Procedures and Equipment

Storage Requirements

Special Shipping Information

SECTION VIII – FIRST AID MEASURE

First Aid Measure

Sources used

Additional information

SECTION IX – PREPARATION DATE OF M.S.D.S.

Prepared by (Group, Department, etc.) (Phone No.) Date

NOTES:

1. CAS or UN Number – Chemical Abstract Service or United Nations (UN) Number.
2. LD 50 – Lethal Dose – 50% (LD50 – Specify species and route).
3. LC 50 – Lethal Concentration – 50% (LC50 – Specify species and route).
4. TDG Flammability – Transport of Dangerous Goods Flammability Classification by United Nations.

SCHEDULE D

(See rule 64)

Equipments for Occupational Health Centre in Factories

1. A glazed sink with hot and cold water always
2. A table with a smooth top at least 180 cm x 105 cm.
1. Means for sterilizing instruments
4. Acough
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 ammoniac aromaticus (120ml.)

4. 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 (120 ml) measuring glasses
15. One wash bottle (1000 cc) for washing eyes
16. One bottle (one litre) carbolic lotion 1 to 20.
17. Three chairs
18. One screen
19. One electric hand torch
20. An adequate supply of tetanus toxoid
21. Coramine liquid (60ml)
22. Tablets - antihistaminic, antispasmodic (25 each)
23. Syringes with needles - 2cc, 5 cc and 10cc
24. Two needle holders, big and small suturing needles and materials
25. Suturing needles and materials
26. One dissecting forceps
27. One dressing forceps
28. One scalpel
29. One stethoscope
30. Rubber bandage - pressure bandage
31. Oxygen cylinder with necessary attachments
32. One Blood Pressure apparatus
33. One Patellar Hammer
34. One Peak-flow meter for lung function measurement
35. One stomach wash set
36. Any other equipment recommended by the Factory Medical Officer according to specific need relating to manufacturing process.

37. In addition-

(1) For factories employing 51 to 200 workers-

1. Four plain wooden splints 900 mm x 100mm x 6mm
2. Four plain wooden splints 350 mm x 75mm x 6mm
3. Two plain wooden splints 250 mm x 50mm x 12mm
4. One pair artery forceps
5. Injections - morphia, pethidine, atropine, adrenaline, coramine, novocain (2each)
6. One surgical scissors

(2) For factories employing above 200 workers-

1. Eight plain wooden splints 900 mm x 100mm x 6mm
2. Eight plain wooden splints 350 mm x 75mm x 6mm
3. Four plain wooden splints 250 mm x 50mm x 12mm
4. Two pairs artery forceps
5. Injections - morphia, pethidine, atropine, adrenaline, coramine, novocain (2each)
6. One surgical scissors

AMBULANCE VAN

- 80) 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 a Helper trained in first aid, for the purposes of transportation of serious cases of

accidents or sickness. The ambulance van shall not be used for any purpose other than the purpose stipulated herein and will normally be stationed at or near to the Occupational Health Centre.

Provided that a factory employing less than 200 workers, may make arrangements for procuring such facility at short notice from a nearby hospital or other places, to meet any emergency.

81) The Ambulance should have the following equipment:

a. General

- i. A wheeled stretcher with folding and adjusting devices; with the head of the stretcher capable of being tilted upward;
- ii. Fixed suction unit with equipment;
- iii. Fixed oxygen supply with equipment;
- iv. Pillow with case; - Sheets; - Blankets; - Towels;
- v. Emesis bag; - Bed pan; - Urinal; - Glass

b. Safety equipment

- i. Flares with life of 30 minutes; - Floodlights;
- ii. Flash lights; - Fire extinguisher dry powder type;
- iii. Insulated gauntlets

c. Emergency Care Equipment

(i) Resuscitation

- Portable suction unit; Portable oxygen units;
- Bag-valve-mask, hand operated artificial ventilation unit;
- Airways; - Mouth gags; - Tracheostomy adapters;
- Short spine board; I.V. Fluids with administration unit;
- B.P. Manometer; - Curn; - Stethoscope

(ii) Immobilization

- Long and short padded boards; - Wire laddersplints;
- Triangular bandage; - Long and short spineboards

(iii) Dressings

- Gauze pads - 4" x 4"; - Universal dressing 10" x 36";
- Roll of aluminum foils; - Soft roller bandages 6" x 5 yards; - Adhesive tape in 3" roll; - Safety pins;
- Bandage sheets; - Burns sheet.

(iv) Poisoning

- Syrup of Ipecac; - Activated Charcoal Pre packeted in dozes; - Snake bite kit;
- Drinking water

(v) Emergency Medicines

- As per requirement (under the advice of Medical Officer only)

DECONTAMINATION FACILITIES

In every factory, carrying out 'hazardous process', the following provisions shall be made to meet emergency :-

- iv. fully equipped first aid box;
- v. readily accessible means of water for washing by workers as well as for drenching the clothing of workers who have been contaminated with hazardous and corrosive substance; and such means shall be as per the scale shown in the Table below;

TABLE

	<u>No. of persons employed atanytime</u>	<u>No. of drenching showers</u>
(i)	Upto 50workers	2
(ii)	Between 51 to200workers	2 + 1 for every additional 50 or partthereof.
(iii)	<i>Between 201 to 500 workers</i>	5 + 1 for every additional 100 or part thereof.



(iv) 501 workers and above

8 + 1 for every additional 200 or part thereof.

- vi. a sufficient number of eye wash bottles filled with distilled water or suitable liquid, kept in boxes or cupboards conveniently situated and clearly indicated by a distinctive sign which shall be visible at all times.

SCHEDULE E

(See rule 66)

1. Definitions.- for the purpose of this schedule-

(a) "mg/m³" means milligrams of a substance per cubic metre of air;

(b) "mppcm" means million particles of a substance per cubic metre of air;

(c) "ppm" means parts of vapour or gas per million parts of air by volume at 25 degrees centigrade and 760 mm of mercury pressure;

(d) "Time weighted average concentration" means the average concentration of a substance in the air at any work location in a factory computed from evaluation of adequate number of air samples taken at that location, spread over the entire shift on any day, after giving weightage to the duration for which each such sample is collected and the concentration prevailing at the time of taking the sample.

$$\text{Time weighted average concentration} = \frac{C_1 T_1 + C_2 T_2 + \dots + C_n T_n}{T_1 + T_2 + \dots + T_n}$$

Where C_1 represents the concentration of the substance for duration T_1 (in hours);

C_2 represents the concentration of the substance for duration T_2 (in hours); and

C_n represents the concentration of the substance for duration T_n (in hours).

(e) "Work location" means a location in a factory at which a worker works or may be required to work at any time during any shift on any day.

2. Limits of concentration of substances at work location.- (1) The time weighted average concentration of any substance listed in table 1 or 2 of the schedule, at any work location in a factory during any shift on any day shall not exceed the limit of the permissible time weighted average concentration specified in respect of that substance:

Provided that in the case of a substance mentioned in Table 1 in respect of which a limit in terms of short term maximum concentration is indicated, the concentration of such a substance may exceed the permissible limit of the time weighted average concentration for the substance for short periods not exceeding 15 minutes at a time, subject to the condition that-

(a) such periods during which the concentration exceeds the prescribed time weighted average concentration are restricted to not more than 4 per shift;

(b) the time interval between any two such periods of higher exposure shall not be less than 60 minutes; and

(c) at no time the concentration of the substance in the air shall exceed the limit of short term maximum concentration.

(2) In the case of any substance given in Table 3, the concentration of the substance at any work location in a factory at any time during any day shall not exceed the limit of exposure for that substance specified in the table.

(3) In the cases where the word "skin" has been indicated against certain substance mentioned in Tables 1 and 3, appropriate measures shall be taken to prevent absorption through cutaneous routes particularly skin, mucous membranes, and eyes as the limits specified in these Tables are for conditions where the exposure is only through respiratory tract.

(4) (a) In case, the air at any work location contains a mixture of such substances mentioned in Table 1, 2 or 3, which have similar toxic properties, the time weighted concentration of each of these substances during the shift should be such that when these time weighted concentration divided by the respective permissible time weighted average concentration specified in the above mentioned tables, and the fractions obtained are added together, the total shall not exceed unity.

$$\text{i.e. } \frac{C_1}{L_1} + \frac{C_2}{L_2} + \dots + \frac{C_n}{L_n} \text{ should not exceed unity}$$

Where C_1, C_2, \dots, C_n are the time weighted concentration of toxic substances 1, 2, ..., and n respectively, determined after measurement at work location;

and L_1, L_2, \dots, L_n are the permissible time weighted average concentration of the toxic substances 1, 2, ..., and n respectively.

(b) In case the air at any work location contains a mixture of substances, mentioned in Table 1, 2, 3 and these do not have similar toxic properties, then the time weighted concentration of each of these substances shall not exceed the permissible time weighted average concentration specified in the above mentioned tables, for that particular substance.

(c) The requirement in clauses (a) and (b) shall be in addition to the requirements in paragraphs 2 (1) and 2(2).

3. Sampling and evaluation procedures.-

(1) Notwithstanding provisions in any other paragraphs, the sampling and evaluation procedures to be adopted for checking compliance with the provisions in the schedule shall be as per standard procedures in vogue from time to time.

(2) Notwithstanding the provisions in paragraph 5, the following conditions regarding the sampling and evaluation procedures relevant to checking compliance with the provisions in the schedule are specified.

(a) For determination of the number of particles per cubic metre in item 1 (a)(i)(1) in Table 2, samples are to be collected by standard or midjet impinger and the counts made by light-field technique.

(b) The percentage of quartz in the 3 formulae given in item 1(a)(i) of Table 2 is to be determined from air borne samples.

(c) For determination of number of fibres as specified in item 2(a) of Table 2, the membrane filter method at 430 x magnification (4mm objective) with phase contrast illumination should be used.

(d) Both for determination of concentration and percentage of quartz for use of the formula given in item 1(a)(i)(2) of Table 2, the fraction passing through a size-selector with the following characteristics should only be considered.

<u>Aerodynamic diameter</u> <u>(unit density sphere)</u>	<u>Percentage allowed</u> <u>by size-selector</u>
2.0	90
2.5	75
3.5	50
5.0	25
10.0	0

4. Power to require assessment of concentration of substances.- (1) An Inspector may, by an order in writing, direct the occupier or manager of a factory to get before any specified date, the assessment of the time weighted average concentration at any work location of any of the substances mentioned in Table 1, 2 or 3 carried out.

(2) The results of such assessment as well as the method followed for air sampling and analysis for such assessment shall be sent to the Inspector within 3 days from the date of completion of such assessment and also a record of the same kept readily available for inspection by an Inspector.

5. Exemption.- If in respect of any factory or a part of a factory, the Chief Inspector is satisfied that, by virtue of the pattern of working time of the workers at different work locations or an account of other circumstances, no worker is exposed, in the air at the work locations, to a substance or substances specified in Tables 1, 2 or 3 to such an extent as is likely to be injurious to his health, he (the Chief Inspector) may by an order in writing, exempt the factory or a part of the factory from the requirements in paragraph 2, subject to such conditions, if any, as he may specify therein.

TABLE 1

Substances	<u>Permissible limits of exposure</u>			
	<u>Time-weighted average concentration</u>		<u>Short-term maximum concentration</u>	
	<u>ppm</u>	<u>mg/m³</u>	<u>ppm</u>	<u>mg/m³</u>
Acetic acid	10	25	15	37
Acrolein	0.1	0.25	0.3	0.8

Aldrin-skin	-	0.25	-	0.75
Ammonia	25	18	35	27
Aniline-skin	2	10	5	20
Anisidine (o-poisoners)-skin	0.1	0.5	-	-
Arsenic & compounds (as)	-	0.2	-	-
Benzene	10	30	-	-
Bromine	0.1	0.7	0.3	2
2 Butanone Methyl ethyl Ketone - MEK	200	590	300	885
n-Butyl acetate	150	710	200	950
sec/tert. Butyl acetate	200	950	250	1190
Cadmium-dust and salts (as Cd)	-	0.05	-	0.2
Calcium Oxide	-	2	-	-
Carbaryl (Sovin)	-	5	-	10
Carbofuran (Furadan)	-	0.1	-	-
Carbon disulphide-skin	2	60	30	90
Carbon monoxide	50	55	400	440
Carbon tetrachloride-skin	10	65	20	130

Substances	Permissible limits of exposure			
	Time-weighted average concentration		Short-term maximum concentration	
	ppm	mg/m ³	ppm	mg/m ³
Carbonyl chloride (Phosgene)	0.1	0.4	-	-
Chlordane-skin	-	0.5	-	2
Chlorobenzene (mono chloro- benzene)	75	350	-	-
Chlorine	1	3	3	9
bis-Chloromethylether	0.001	-	-	-
Chromic acid andchromates (as Cr.)	-	0.05	-	-
Chromium, Sel-Chromic, Chromous salts (as Cr)	-	0.5	-	-
Copper fume	-	0.2	-	-
Cotton dust, raw	-	0.2	-	0.6
Cresol, all isomers-skin	5	22	-	-
Cyanides, (as CN)-skin	-	5	-	-
Cyanogen	10	20	-	-
DDT (Dichlorodiphenyl-trichlore-ethane)	-	1	-	3
Demeton-skin	0.01	0.1	0.03	0.3
Diazin-skin	-	0.1	-	0.3
Dibutyl phthalate	-	5	-	10
Dichlorves (DDVP)-skin	0.1	1	0.3	3
Dieldrin-skin	-	0.25	-	0.75
Dinitrobenzene (all isomers) skin	0.15	1	0.5	3
Dinitrotoluene-skin	-	1.5	-	5
Diphenyl	0.2	1.5	0.6	4
Endosulfan (Thiodan)-skin	-	0.1	-	0.3
Endrin-skin	-	0.1	-	0.3
Ethyl acetate	400	1000	-	-
Ethyl alcohol	1000	1900	-	-
Ethyl amine	10	18	-	-
Flourides (as F)	-	2.5	-	-
Flourine	1	2	2	4
Hydrogen Cyanide-skin	10	11	15	16
Hydrogen sulfide	10	15	15	27
Iron oxide fume (Fe2O3 as Fe)	-	5	-	10
Isoamyl acetate	100	525	125	655

Isoamyl alcohol	100	360	125	450
Isobutylalcohol	50	150	75	225
Lead, inorg. fumes and dusts (as Pb)	-	0.15	-	0.45
Lindane-skin	-	0.5	-	1.5
Mala thion-skin	-	10	-	-
Manganese fume (as Mn)	-	1	-	3
Mercury (as Hg)	-	0.05	-	0.15
Mercury (alkyl compounds)-skin (as Hg)	0.001	0.01	0.003	0.03

Substances	Permissible limits of exposure			
	Time-weighted average concentration		Short-term maximum concentration	
	ppm	mg/m ³	ppm	mg/m ³
Methyl alcohol (methanol) skin	200	260	250	310
Methyl cellosolve-skin (2-methoxy ethanol)	25	80	35	120
Methyl isobutyl ketone-skin	100	410	125	510
Naphthalene	10	50	15	75
Nickel carbonyl (as Ni)	0.05	0.35	-	-
Nitric acid	2	5	4	10
Nitric oxide	25	30	35	45
Nitrobenzene-skin	1	5	2	10
Oil mist-mineral	-	5	-	10
Parathion-skin	-	0.1	-	0.3
Phenel-skin	5	19	10	38
Phorate (Thimet)-skin	-	0.05	-	0.2
Phosgene (Carbonyl chloride)	0.1	0.4	-	-
Phosphine	0.3	0.4	1	1
Phosphorous (yellow)	-	0.1	-	0.3
Phosphorous pentachloride	-	1	-	3
Phosphorous trichloride	0.5	3	-	-
Picric acid-skin	-	0.1	-	0.3
Pyridine	5	15	10	30
Silane (silicon tetrahydride)	0.5	0.7	1	1.5
Styrene, monomer (phenyl-ethylene)	100	420	125	525
Sulphur dioxide	5	13	-	-
Sulphuric acid	-	1	-	-
Toluene (toluol)-skin	100	375	150	560
o-Toludine	5	22	10	44
Trichloroethylene	100	535	150	800
Vinyl chloride	5	10	-	-
Welding fumes (NOC)	-	5	-	-
Xylene (o-m-isomers)-skin	100	435	150	655

TABLE 2

Substance Permissible time weighted average concentration

I. Silica

(a) Crystalline

(i) Quartz

(1) In terms of dust count:-

% Quartz + 10

1000 mppcm

(2) In terms of respirable dust

10

% respirable quartz + 2 mg/m³

(3) In terms of total dust:
30



.....mg/m³
% quartz + 3



(ii) Cristobalite	Half the limits given against quartz
(iii) Tridymite	Half 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) Amorphous	705 mppcm
2. Silicate having less than 1% free silica by weight	
(a) Asbestos (fibres longer than 5 microns)	2 fibres/cubic centimetre
(b) Mica	705 mppcm
(c) Mineral Wool fibre	10 mg/m ³
(d) Perlite	1060 mppcm
(e) Portland cement	1060 mppcm
(f) Soapstone	705 mppcm
(g) Talc (non fibrous form)	705 mppcm
(h) Talc (fibrous)	Same limit as for asbestos
(i) Tremolite	Same limit as for asbestos
3. Coal dust	
(1) For airborne dust having less than 5% silicon dioxide by weight	: 2 mg/m ³
(2) For airborne dust having over 5% silicon dioxide	: Same limit as prescribed by formula in item (2) against quartz.

TABLE 3

Substance	Permissible limit of exposure	
	ppm	mg/m ³
Acetic anhydride	5	20
O-Dichlorobenzene	50	300
Formaldehyde	2	3
Hydrogen Chloride	5	7
Manganese & compounds (as Mn)	-	5
Nitrogen dioxide	5	9
Nitroglycerin-skin	0.2	2
Potassium hydroxide	-	2
Sodium hydroxide	-	2
2,4,6 - Trinitrotoluene (TNT)	-	0.5

SCHEDULE F
(See rule 68)

1. Managers
2. Assistant managers
3. Engineers
4. Foremen
5. Weaving masters and spinning masters in textile mills.
6. Head electricians
7.
8.

- Persons defined to hold confidential positions.- All timekeepers employed in a factory shall be deemed to be employed in a confidential position in the factory.

- **List to be maintained of persons holding confidential position or position of supervision of management.**-A list showing the names and designations of all persons to whom the provisions of sub-section (1) of section 91 have been applied shall be maintained in every factory.
- **Exemption of certain adult workers.**- Adult workers engaged in factories specified in column 2 of the schedule hereto annexed on the work specified in column 3 of the said schedule shall be exempted from the provisions of the sections specified in the column 4 subject to the conditions, if any, specified in column 5 of the said schedule.

SCHEDULE G

(See rule 69)

Section of the code empowering grant of exemption	Class of factory	Nature of exempted work	Extent of exemption	Remarks
1	2	3	4	5
91(1)(b)	All factories	Urgent repairs	Sections 25, 26 & 31	(i) No worker shall be employed on such repairs for more than 15 hours on any one day, 39 hours during any three consecutive days, or 66 hours during each period of seven consecutive days commencing from his first employment on such repairs. (ii) Within 24 hours of the commencement of the work, notice shall be sent to the Inspector describing the nature of the urgent repairs and the period probably required for their completion. (iii) Exemption from the provisions of section 25 shall apply only in the case of adult male workers.
91(1)(b)	All factories	(a) Work in the machine shop, the smithy or the foundry or in connection with the mill gearing, the electric driving or lighting apparatus, the mechanical or electrical lifts or the steam or water pipes or pumps of a factory. (b) Work of examining or repairing any machinery or other part of the plant which is necessary for carrying on work in the factory. (c) Work in boiler houses engine rooms such as lighting fires in order generate gas	Sections 25, 26 & 31 -do- -do-	The limits of work inclusive of overtime shall not exceed those mentioned in section 91. -do- -do-

		preparatory to the Commencement of regular work in the factory.		
91(1) (b)	All factories	(a) Work performed by drivers on lighting, ventilating and humidifying apparatus. (b) Work performed by fire pumpmen.	Sections 25, 26 & 31 -do-	-do- -do-
91(1) (b)	(1) Oil tank installations	Work performed by workers connected with pumping operations	Sections 25, 26 & 31	In the absence of a worker who has failed to report for duty, a shift worker shall be allowed to work the whole or of a subsequent shift provided that – (i) the next shift of the shift worker shall not commence before a period of 16 hours has elapsed; (ii) within 24 hours of the commencement of the subsequent shift, notice shall be sent to the Inspector describing the circumstances under which the worker is required to work in the subsequent shift; (iii) the exemption will be restricted to only male adult workers; and (iv) the limits of work inclusive of overtime shall not exceed those mentioned in section 91.
	(2) Public hydro-electric supply factories	Operation and Maintenance of Prime movers and auxiliaries, transformers and switches.	Sections 25 & 26	-do-
	(3) Public electric supply companies generating electricity from oil in internal combustion engines.	Work of engine drivers and assistants, generator attendants, oilers and greasers, switch board operators and pumpmen.	-do-	-do-
	(4) Electrical transforming factories	Work of operation and maintenance of the transforming plant, switches and synchronous condensers.	-do-	-do-
	(5) Distilleries	Work on the extraction of sugar from various bases, fermentation of sugar juice and distillation of fermented wash.	-do-	-do-
	(6) Sugar factories	Extraction of the juice from the cane, clarification, evaporation and	-do-	-do-

		Boiling of the juice; curing of the massecuite; and bagging.		
	(7) Chemical factories	Work on the sulphur burners, chambers, concentrators, and pumps; roasting furnaces, manufacture of hydrochloric and nitric acid, sulphates sulphides, nitrates, superphosphates and chlorides; and work on the steam service.	-do-	-do-
	(8) Vegetable factories.	Work on refining, hydrogenation bleaching, filtering, generation of hydrogen; hydrogenating; deodorizing processes; compression of oxygen and cylinder filling; and work on the electrical power plant.	-do-	-do-
	(9) Ice factories	Work on the engine and compressor drivers and assistants and oilers.	-do-	-do-
	(10) Oil mills	All work.	Section 25	-do-
	(11) Flour mills	All work.	Sections 25 and 26	-do-
	(12) Glass factories	(a) Work in attending to furnace.	Sections 25 & 26	-do-
		(b) All work and processes from mixing of batch to removal of the manufactured glassware from the lears.	Section 25	-do-
	(13) Paper factories	(a) All work on paper making machinery and on the generation and supply of power connected therewith.	Sections 25	-do-
		(b) Work on choppers, digesters, kneaders, strainers and washers, beaters, paper making machines, pumping plant reelers, cutters and power plant.	Sections 25 & 26	-do-
	(14) Rubber tyre	All work on curing process.	Section 25	-do-
	(15) Iron and steel	All work on steel furnaces.	Sections 25 & 26	-do-
	(16) All factories	Work on automatic	Sections 25, 26	(1) The limits of work inclusive of overtime

		equipment engaged in galvanizing, anodizing and enamelling.	& 29	shall not exceed those mentioned in section 91. (2) The exemption shall be granted only in respect of adult male workers.
64 (2) (i)	Newspaper printing factories	Teleprinter service	Sections 25 & 26	-do-
64 (2) (j)	All factories	Loading and unloading of railway wagons Lorries or trucks	Sections 25 & 26	-do-
64(2)(k)	Any factory or class or description of factories as may be notified by the J&K Government in the Official Gazette.	Work of national importance as may be notified by the J&K Government in mentioned in the Official Gazette.	Sections 25, 26 and 29	(1) The limit of work and inclusive of overtime shall not exceed those mentioned in section 91. (2) The exemption shall be limited to adult male workers.

✱

FORM-1

(See sub rule-(1) & sub rule (10) of Rule 6.

Application for Registration for existing establishments/ New Establishment/ Amendment to certificate of Registration

A. Establishment Details.

1. Retrieve details of Establishment through LIN/ registration no. ;

2. Name of Establishment:

3. Location and Address of the Establishment:

4. Others details of Establishment:

a. Total Number of employees engaged directly in the establishment:

Male: Female:

b. Total Number of the contract employees engaged:

Male: Female:

c. Total Number of Inter-State Migrant workers employed:

Male: Female:

5 (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
1	2	3	4

5 (b) For building and other construction work:

Type of Construction work	Probable period of commencement of work	Expected period for completion of work	Details of approval of the local authority
1	2	3	4

5 (c) For Motor Transport Undertaking

Name of Motor Transport undertaking	Type of Transport (Freight/passenger services)	Maximum number of vehicle attached	Maximum number of workers engaged			
			Permanent		Contract	
			Male	Female	Male	Female
1	2	3	4			

6. Ownership Type/Sector:

7. Activity as per National Industrial Classification:

8. Details of Selected NIC Code:

9. Identification of the establishment e-sign/ digital sign of employer/representative:

B. Details of Employer:-

1. Name & Address of Employer / Occupier / Owner/Agent/ Chief Executive etc:

2. Designation

3. Father's/ Husband's Name of the Employer:

4. Email Address, Telephone & Mobile No:



C. Manager/ Agent Details

1. Full name & Address of Manager/ Agent or person responsible for supervision and control of the Establishment

2. Address of Manager/Agent:

3. Email Address, Telephone & Mobile No :

D. Contractor Details

Name and Address of Contractor	Email address, PAN no. & Mobile of Contractor	Name of Work	Maximum No. of Contract labour engaged	Date of Commencement / Probable date of Completion of work
1	2	3	4	5

E. Others Details:-

Dated:-
Place:-



Signature/E-sign/digital sign of employer

FORM I-A

[See sub rule (9) of rule 56]

APPLICATION FOR REGISTRATION AND GRANT OF RENEWAL OF LICENCE FOR THE YEAR AND NOTICE OF OCCUPATION:

1. (a) Full name of the factory :
 (b) Factory licence number
 if already registered before :

- 2.(a) Full postal address and
 situation of the factory :
 (b) Full postal address to which communications
 relating to factory should be sent :

3. Nature of
 manufacturing
 process or
 processes -
 (a) carried on in the factory in the last twelve
 months (in the case of factories already in
 existence); and :
 (b) to be carried on in the factory during the next
 twelve months (in the case of all the factories) :

4. Names and values of principal products manufactured during the last twelve months (in the case of factories already in existence)	Name		Value
	1.
	2.
	3.

5. (a) Maximum number of workers
 proposed to be employed in any
 one day during
 the year :

- (b) Maximum number of workers employed
 on any one day during the last twelve
 months (in the case of factories already in
 existence) :

- (c) Number of workers to be ordinarily
 employed in the factory :

6. (a) Nature and total amount of power (kilowatts) -
 (i) installed; or :
 (ii) proposed to be installed :
 (c) (b) Maximum amount of power (kilowatts)
 proposed to be used :

7. Full name and residential address
 of the person who shall be the
 manager of the
 factory for the purposes of the Code :

8. Full name and residential address of the occupier, that is -
 (a) the proprietor of the factory in case of a
 private firm or proprietary concern ; :

- (b) the directors in case of
 a public limited liability
 company or firm
1.
 2.
 3.
 4.
 5.

(c) (i) the managing agent in case where a managing agent is employed ;

(ii) the directors of the above managing agent :

1.
2.
3.
4.

(d) the shareholders in case of a private company where no managing agent is employed; or :

1.
2.
3.
4.

(e) the chief administrative head in case of a Government or local fund factory ;

9. Full name and address of the owner of the premises or building (including the precincts thereof) referred to in section 80. ;

10. In the case of a factory constructed or extended after the date of commencement of the rules -

(a) reference number and date of approval of the plans for site whether for old or new building and for construction or extension of factory by the State Government/ Chief Inspector; and ;

(b) reference number and date of approval of the arrangements, if any, made for the disposal of trade waste and effluents and the name of the authority granting such approval ;

Signature of occupier ;

Date ;

Signature of manager ;

Date ;



FORM- II
[See sub rule-(4) of rule 6]
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 3 of the Occupational Safety, Health and Working Conditions Code, 2020 (....of 2020) to _____ (Name of the establishment)

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

(a) Factory

(b) Contract Work

(c) Building and Other Construction Works

(d) any other work (not covered above)

2. Details of the establishment:

a. Total Number of employees engaged directly in the establishment:

Male: _____ Female: _____

b. Total Number of the employees engaged through contractor.....

Male: _____ Female: _____

c. Total Number of Contractors and their details:

Male: _____ Female: _____

d. Number of inter-state migrant workers engaged:

Male: _____ Female: _____

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 and manager	Maximum number of workers to be employed on any day
1	2	3	4

3 (b) For building and other construction work

Type of Construction work	Probable period of commencement of work	Expected period for completion of work	Details of approval of the local authority
1	2	3	4

3 (c) For Motor Transport Undertaking

Name of Motor Transport undertaking	Type of Transport (Freight/passenger services)	Maximum number of vehicle attached	Maximum number of workers engaged			
			Permanent		Contract	
			Male	Female	Male	Female
1	2	3	4			

4. Amount of registration fee paid.....

5. Remarks of registering officers

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

Place: _____

Date: _____

Conditions of Registration

(1). Every certificate of registration issued under rule 6 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 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 30 days
 - (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) 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 sub rule-(12) of rule 6)

Register of Establishment

Sl. No	Nature of work	Registration No. and Date	Name and Address, location of the establishment registered	Name, Address and Contact Details of Employer	Total number of Workers and Total Horse power (if any)		Total number of contract Workers		Remarks
					Male	Female	Male	Female	
1	2	2	3	4	5		6		
	(a) Factories (b) Building and other Construction work (c) Contract work (d) Interstate Migrant Work (e) Motor Transport Undertaking (f) Any other work								



FORM-IV

(See sub rule-(13) of rule- 6 and rule-8)

A- Notice of Commencement / cessation of Establishment:

1. Registration No:
2. Name and Address of Establishment:-
3. Name & Designation of employer (who has ultimate control over the affairs of the establishment):-
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 cessation, the date of 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 has 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

(See rule-9)

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

A. Demographics:

Question	Answer	Remarks
Date:		
Name of the Worker:		
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 Dermatitis):	Contact Contact	
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:		

FORM-V

(See rule-9)

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

A. Demographics:

Question	Answer	Remarks
Date:		
Name of the Worker:		
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		

Pulse:		
SpO ₂ :		
Respiratory Rate:		
Examination of Breast of female-employee		
F. Investigation Report		

- Routine Blood Investigation: Attach the photocopy of thereport
- Blood Grouping & Rh Typing and HB Electrophoresis Once in allifetime

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 thereport

Date:

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

H. Eye Examination: attach the photocopy of thereport

Date:

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



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

I. 12 lead ECG and Echo cardiography:

Final Report:

J. 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

d) 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

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

FORM-VI

[See sub rule-(1), sub rule-(2) and sub rule-(3) of rule 11]

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 employer :

2. Address of works / premises
where the accident or
dangerous
Occurrence took place :

3. Nature of industry and
LIN/ registration no. of
the establishment:

4. Branch or department and
exact place where the accident or
dangerous occurrence took place :

5. Name and address of the injured person :

6. (a) Sex :

(b) Age (at the last birthday) :

(c) Occupation 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 :

(c) State exactly what the injured person
was doing at the time of accident
or dangerous occurrence :

(d) 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?

(e) 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 trade or business.

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 work;

(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 witnesses : (1)
(2)

15. (a) Nature and extent of injury (e.g. fatal, loss of finger, fracture of leg, scald, scratch followed by-sepsis, etc.) :

(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 :

(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 owner/ employer /manager/agent



FORM VII
(See Rule 21)

Notice of Period of Work

Name of the Establishment Place District

Periods of work Group s, Relay s	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 or agent :

Date :



FORM-VIII

[See sub rule-(1) of Rule 22]

REGISTER OF WORKERS EMPLOYED IN AN ESTABLISHMENT, WAGES, OVERTIME, FINE, DEDUCTION FOR DAMAGE OR LOSS

Register of Wages, Overtime, Fine, Deduction for damage and Loss

Name of the Establishment:

Name of the Owner:

Name of the Employer:

PAN/TAN of the Employer:

Labour Identification Number (LIN/registration no.):

Sr. no. in Employee Register	Name of the employee	Designation / Department	Duration of Payment of Wages (Monthly/Fortnightly /Weekly/Daily/Piece rated)	Wage Period From - To	Total no. of days worked during the period	Total overtime (hoursworked or production in case of piece workers)	Rates of wages		
							Basic	DA	Allowances
1	2	3	4	5	6	7	8	9	10

Overtime earning	Nature of acts and omissions for which fine imposed with date	Amount of fine imposed	Damage or loss caused to the employer by neglect or default of the employee	Amount of deduction from wages	Total amount of wages paid	Date of Payment	Attendance	
							Date	Signature
11	12	13	14	15	16	17	18	19

FORM-IX
 (See sub rule-(1) of Rule 24)
ANNUAL RETURN
UNIFIED ANNUAL RETURN FORM

FOR THE YEAR ENDING.....

Single Integrated Return to be filed On-line under the Occupational Safety, Health and Working Conditions Code, 2020, the Code on Industrial Relations, 2020, the Code on Social Security, 2020, and the Code on Wages, 2020

Instructions to fill up the Annual Return

- (1) This return is to be filled-up and furnished on or before 28th or 29th February every year.
- (2) The return has two parts i.e. Part-I to be filled up by all establishments.

- (3) The terms Establishment and Mines shall have the same meaning as under the Occupational Safety, Health and Working Conditions Code, 2020.
- (4) This return is to be filled-up in case of Contractor or manpower supplier who have engaged more than 50 workers and in case of Mines even if there is one worker employed in the relevant period.

Applicable to All Establishments -

A. General Information:

Sl. No.				Instructions for filling the column
1.	Labour Identification Number/Registration no.			EPFO, ESIC, MCA, MoLE (LIN)
2.	Period of the Return	From	-To-	Period should be calendar year
3.	Name of the Establishment			
4.	Email ID			
5.	Telephone No.			
6.	Mobile number			
7.	Premise name			
8.	Sub-locality			
9.	District			
10.	State			
11.	Pin code			
12.	Geo Co-ordinates			
B(a).	Hours of Work in a day			
B(b).	Number of Shifts			

C. Details of Manpower Deployed

Detail	Directly employed				Employed through Contractor				Grand Total
	Highly Skilled	Skilled	Semi-Skilled	Un-Skilled	Highly Skilled	Skilled	Semi-Skilled	Un-Skilled	
Skill Category									

(i) Maximum No. of employees employed in the establishment in any day during the year	Male	Female	Transgender	Total	Male	Female	Transgender	Total
(ii) Average No. of employees employed in the establishment during the year	Male	Female	Transgender	Total	Male	Female	Transgender	Total
(iii) Migrant Worker out of (ii) above	Male	Female	Transgender	Total	Male	Female	Transgender	Total
(iv) Number of fixed term employee engaged	Male	Female	Transgender	Total	Male	Female	Transgender	Total

D. Details of contractors engaged in the Establishment:

Sl. No.	Name with LIN/ registration no. 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.	Crèches (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
3.	Ambulance Room (as per section 24(2)(i) of OSH Code, 2020)	Tick yes or no in the box	Applicable to mine, building and other construction work wherein more than five hundred 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 establishments and factories employing 500 workers or more, factory carrying on hazardous process and BoCW employing 250 workers or more, and mines employing 100 or more workers.
5.	Safety Officer (as per section 22(2) of OSH Code, 2020)	No. of safety officers appointed	In case of mine 100 or more workers and 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.

F. The Industrial Relations:

Sl. No.	Question	Yes/No	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 are employed
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 theyear:				
	Discharged	Dismissed	Retrenched	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 term of money
(a)	Strike			
(b)	Lockout			

8. Details of retrenchment / lay off

Sl. No.	No. of persons retrenched during the	Details of payment paid to retrenched	No. of workers laid off during	No. of man-days lost due to lay-off
	period	employees	the period	

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. Mandays and Production Lost due to accidents / dangerous occurrence

Sl. No.	Accident/Dangerous Occurrence	Mandays lost	Production Lost

Certified that the tables in prescribed format are duly filled in and information and/ figures given in all the tables are

correct to the best of my knowledge.

Place:
Dated:

A handwritten signature consisting of several overlapping, stylized lines.

Signature of Owner/Agent/Manager with seal

FORM-X

[See Sub Rule-(2) of Rule 24]

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-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 sub rule-(3) of rule 24]

REGISTER FOR LEAVE WITH WAGES

Part I - Adults

Part II - Adolescents

Establishment:

Department:

Name of worker:

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

FORM -XII

(See sub rule- (1) of rule 27)

IMPROVEMENT NOTICE AND PROHIBITION ORDER

PART I
PROHIBITION ORDER

Inspector - Cum- Facilitator's Notice on Inspection of Establishment, Lifting Appliance, Loose Gears and other such gears, Equipment, Ladders and Staging. Inspector - Cum- Facilitator's notice to the occupier, employer, owner, master, Officer-in-charge, Owner of lifting appliances, loose gears and lifting devices or the person, scaffold who, by himself, his agents, or his employers as the case may be.

Name of the establishment, lifting appliance, lifting device, transport equipment, ladders and staging	Where situated lying/used/location	Registration no. of the establishment	L/N/registration No. of the establishment
1	2	3	4

An inspection of the above named establishment, lifting appliance, lifting device, transport equipment, ladders and staging was made on _____

The activities connected with establishment-which are being carried on by you/about to be carried on by you/under your control involve a risk or danger to the life. Safety and health of employee and involve the following contraventions :

CONTRAVENTIONS

Therefore, I hereby direct that the said activities shall not be carried on by you or under your control unless the said contraventions and matters mentioned have been remedied to the satisfaction of the Inspector - Cum- Facilitator. This order is being issued without prejudice or any legal action which may be taken for these contraventions.

On hearing from you that the requirements have been complied with the establishment, lifting appliance, loose gear or similar gear/transport equipment/ladders/ staging, scaffold shall again be visited with a view to the inspection being completed.

No. _____

Dated at _____ this _____ day of 20 _____

Inspector - Cum- Facilitator under the Occupational Safety, Health and Working Conditions Code, 2020

REQUIREMENTS

On compliance with all or any of the above contraventions, the Inspector - Cum- Facilitator shall be informed in the manner prescribed overleaf, of the date and place at which the establishment, lifting appliance, loose gears or similar gear transport equipment, ladders and staging, scaffold can be re-inspected.

Sir,

The contravention notified by you have been effectively attended to. The establishment, lifting appliance, loose gears or similar gear, transport equipment, ladders and staging, scaffold shall be ready for inspection on the date _____

Sir,

The contravention notified by you have been effectively attended to. The establishment, lifting appliance, loose gears or similar gear, transport equipment, ladders and staging, scaffold shall be ready for inspection on the date and place named below:

Date of Inspection	Place
Dated at _____ this _____ day of _____ 20 _____	Employer, Occupier, Owner, Manager, Master, Officer-in-charge or Agents, owner of machinery and gear or the person, who by himself, his agents or his employers, carried on the establishment.

To

The Inspector - Cum- Facilitator under the Occupational Safety, Health and Working Conditions Code, 2020

PART - II

Improvement Notice

Inspector - Cum- Facilitator notice to the employer, Owner, Master, Manager, Officer-in-Charge or Agents, Owner of lifting appliances, loose gears lifting devices, scaffold or the person, who, by himself, his agents or his employers, carries on the establishment, as the case may be.....

Name of the establishment, lifting appliances, loose gear, lifting device, transport, equipment, ladders and stagings, scaffold;	Where situated/lying used/location	Port of Registry	Official no.(if any) of the ship

An inspection of the above-named establishment, dock, ship, lifting appliances, loose gears, lifting devices, transport equipment, ladders and stagings, scaffold was made on

The following contraventions were observed. You are required to remedy the said contraventions and send the compliance report in writing within..... days.

This notice is being issued without prejudice to any legal action which may be taken for these contraventions on hearing from you that the requirements have been complied with the establishment, lifting appliance/loose gear or similar other gear/transport equipment/ladders/ staging, scaffold will again be visited with a view to the inspection being completed.

Contraventions No. _____ Dated _____ this _____ day of _____
20____ Inspector - Cum- Facilitator under the Occupational Safety, Health and Working Conditions Code, 2020

Requirements. On compliance with all or any of the requirements, the Inspector - Cum- Facilitator should be informed in the manner prescribed overleaf of the date and place at which the establishment, lifting appliance, loose gear, transport equipment, ladders and staging, scaffold can be re-inspected.

The requirements noted by you have been effectively fulfilled. The establishment, lifting appliance, loose gear, lifting devices, transport equipment, ladders and staging, scaffold will be ready for inspection on the date and place named below:

Date of Inspection	Place
Dated at _____ this day of _____ 20_____	Employer, occupier, Owner, Master, Manager, Officer-in-charge or Agents, owner of machinery and gear or the person, who, by himself, his agents or his employers, carried on the establishment.

To

The Inspector - Cum- Facilitator under the Occupation Safety, Health and Working Conditions Code, 2020.



FORM-XIII
{See rule-38 and rule 75}

**APPLICATION FOR
LICENSE**

On Line Application for License/ Renewal of License/Amendment of License (including Common/single license)

Department of Labour, Government of Jammu and Kashmir

ESTABLISHMENT PROFILE:

Labour Identification Number/Licence no. _____ Date _____

Acknowledgement Number: Date of Application:

I. Particulars of Establishment for which licence 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 of the Establishment : (Select) : esign/digital sign

II. Details of Employer:

1. Full Name of Employer: relationship with establishment.

2. Full Address of Employer:

3. Email Id of employer:

4. Mobile No. of employer:

III. Particulars of the Contract Labour to be employed / is employed (If licence is required workwise)

Locations of worksites	Name of works	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 Incharge
1	2		3	4	5	6

5. Maximum number of workmen proposed to be employed on the Establishment on any date:

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

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

IV. DETAILS OF ESTABLISHMENTS FOR WHICH COMMON LICENCE REQUIRED , (IF APPLYING FOR)

Type of Establishments	Name & Address of establishment	(i) Nature of work carried out in the establishment (ii) Activity as per National Ind'l classification	Date of commencement	Permanent establishment or probable date of completion	Maximum number of employees employed/ proposed to	Maximum number of employees employed/ propose

					be employed	d to be employed
1	2	3	4	5	6	7

V. DETAILS OF ESTABLISHMENTS FOR WHICH SINGLE LICENCE IS REQUIRED (IF APPLYING FOR)

Name of District in which the establishment is situated	Name of each work	Maximum number of labour will be/is employed	Date of commencement	Permanent establishment or probable date of completion	Maximum number of employees employed/ proposed to be employed	Registration number, if obtained, then details thereof
1	2	3	4	5	6	7

Signature of Contractor

(eSign/DSC)

Note: This is an online application summary applied on (www.jklabour.com).

APPLICATION FOR RENEWAL OF LICENCE

1. Licence No.

Date :

2. LIN & PAN

2. Name and address of the establishment:

3. Date of expiry of previous licence :

4. Whether the licence of the employer/contractor was suspended or revoked:

5. Details of Fees paid : (Enclose e-payment receipt): Amount.... date of payment:

E-sign /digital sign of the employer/contractor: date:

APPLICATION FOR AMENDMENT OF LICENCE :

1. Licence No

Date:

2. LIN & PAN

3. Name and address of the establishment:

4. Details for which amendment is sought :

(a). Maximum number of worker presently employed : (If there is increase in the maximum number of workers to be employed, then additional fees/security deposit as per law needs to be deposited;

(b). Details of fees paid through e payment date on which made :

©. Other details requiring amendment in the licence issued (Necessary documents may be uploaded in support of change required)

E-sign /digital sign of the employer/contractor

date of application.

FORM-XIV

[(See rule- 38 and sub rule (2) of rule 39 and rule 76)]
PROFORMA OF LICENSE

LicenceNo.-----

Reg.No.-----

Date of Reg.-----

Licence is hereby granted to _____
 for the premises known as _____
 situated at _____

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

Sl.No.	Period of issue	Valid For	Fee	Date of Payment	Excess fee for late payment	Date of payment	Licence valid upto	Signature of the Issuing Authority
		Maximum number of Contract labour /workers on any one day						

AMENDMENTS:

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



FORM-XV
(See rule-47)

EXPERIENCE CERTIFICATE OF CONTRACT EMPLOYEE

<u>To whom so ever concerned</u>	
1.	Name of contractor/employer*:
2.	LIN/Registration no. /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/Registration no./ 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 / AadhaarNo.:
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-XVI

(See rule-53)

Agreement between Producer and Audio-visual worker

This agreement is made on this day month year..... between Messers.....having office at.....(here in after referred to as the "Producer" on the First part and Shri- i/Smt/Kum/.....Son/Daughter of Shri.....residing at.....(here in after 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 authorised 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 there of 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.
8. That the Producer shall provide transport and food or pay traveling 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.
9. 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.
10. 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.

11. 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 I 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.

12. 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.

13. 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' Organisation and the audio-visual worker's Organisation 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.

14. 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.

15. 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.

16. 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.

17. That the Producer shall also pay for all traveling 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.

18. 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.

19. 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 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.

20. 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 entitled to employ another audio-visual worker in his/her place.

21. 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 provide before a forum comprising equal number of representatives of the Producers' Organisation and the audio-visual worker's Organisation 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 favor of such termination and the audio-visual worker has been paid all his dues.

22. 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.

23. 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.

24. 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.

25. That the audio-visual worker shall comply with all the regulations of the studio, location or work place as the case may be.

26. 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.

27. That the provisions of the Employees' Provident Funds and Miscellaneous Provisions Act, 1952 shall be applicable to this agreement.

28. That the Producer shall not utilise 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-XVII

[Sec-sub rule (3) of rule 28]

Application for grant of certification of competency to an institution

1. Name and full address of the organization.
2. organization's status (specify whether Government, autonomous, co-operative, corporate or private)
3. Purpose for which competency certificate sought (specify the section of the Code)
4. whether the organization has been declared as a competent person under any other statute (if so furnish details)
5. Particulars of persons employed and possessing qualification as experience as set out in Schedule B

S.No.	Name of the Organization	Qualification	Experience	Section(s)/rule(s) Under which competency sought
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1. _____
2. _____

6.
 - i. Details of facilities (examination, testing etc.)
 - ii. Arrangements of calibrating and maintaining the accuracy of these facilities)
7. any other relevant information

8. Declaration:

I, _____ hereby declare that the information furnished above are correct to the best of my knowledge. I undertake to:

- a) To maintain the facilities in good working order calibrating periodically as per manufacturer's instructions or as per National standards; and
- b) to fulfill and abide by all conditions stipulated in the certificate of competency and instructions issued by Chief Inspector cum Facilitator from time to time.

Place:

Signature of the Head of the Institution or the person authorized to sign on his behalf

Date:



FORM-XVIII

[See sub rule (3) of rule 28]

Application for grant of certification of competency to a Person

1. Name:
2. Date of Birth:
3. Name of organization (if not self employed):
4. Designation:
5. Educational Qualification (Copies of testimonials to be attached):
6. Details of professional experience (in chronological order)

Name of the Organization.	Period of service	Designation	Area of Responsibility
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1. _____

2. _____

7. Membership if any, of professional bodies:

8.
 - i. Details of facilities (examination, testing etc.)
 - ii. Arrangements of calibrating and maintaining the accuracy of these facilities

9. Purpose for which competency certificate sought (specify the section of the Code)

10. whether the applicant has been declared as a competent person under any other statute (if so furnish details)

11. any other relevant information

12. Declaration by the applicant:

I _____ hereby declare that the information furnished above is true, I undertake to:

- a) That in the event of any change in the facilities at my disposal (either addition or deletion) or my leaving the aforesaid organization, I will promptly inform the Chief Inspector cum Facilitator;
- b) To maintain the facilities in good working order, calibrating periodically as per manufacturer's instructions or as per National standards; and
- c) to fulfill and abide by all conditions stipulated in the certificate of competency and instructions issued by Chief Inspector cum Facilitator from time to time.

Place:

Date:

Signature of the applicant.

Declaration by the Institution (if employed)

I _____, certify that Shri _____ whose details are furnished above, is in our employment and nominate him on behalf of the organization for the purpose of being declared as a competent person under the Code. I also undertake that I will

- a) Notify the Chief Inspector cum Facilitator in case the competent person leaves our employment;
- b) Provide and maintain in good order all facilities at his disposal as mentioned above;
- c) Notify the Chief Inspector cum Facilitator any change in the facilities (either addition or deletion)

Signature
Designation
Tel. No.
Official Seal

Date:



FORM-XIX

[See sub rule (3) of rule 28]

Form of certificate of competency issued to a person or an institution.

I _____ in exercise the power conferred on me under Occupational Safety Health and Working Condition's Code and the rules made there under, here by recognize _____ or shri _____ employed in _____ to be competent person for the purpose of carrying tests, examinations, inspections and certification for such buildings, dangerous machinery, lifts, tackles, pressure plants, confined space, ventilation or plant and equipment as the case may be in a factory located in _____ under section _____ and the rules made there under.

This certificate is valid from _____ to _____
This certificate is subject to the following conditions as stipulated there under-

1. tests, examinations and inspections shall be carried out in accordance with the provisions of the Code and the rules made there under.
2. tests, examinations and inspections shall be carried out under the direct supervision of competent person or a person authorized by institution recognized to be competent.
3. the certificate of competency shall stand cancelled if the person declared competent leaves the organization mentioned in his application
4. the institution recognizer as competent shall keep Chief Inspector cum Facilitator informed of the names, designations, qualifications of the persons authorized by it to carry out tests,examinations, inspections.

Station
Date

Official seal

Signature of Chief Inspector cum Facilitator

Note- a separate certificate should be issued under each relevant section. A person or institution may be recognized competent person for the purpose of more than one section of the code."



FORM XX
[See sub rule (3) of rule 56]

APPLICATION FOR PERMISSION TO CONSTRUCT, EXTEND OR TAKE INTO USE ANY BUILDING
AS A FACTORY

1. Applicant's name and address :
2. Full name and postal address of factory :
3. Situation of factory :
- (a) Province :
- (b) District :
- (c) Town or village :
- (d) Nearest Police Station :
- (e) Nearest railway station
or steamer ghat :
4. Particulars of plant to be installed :

Signature of applicant:
Date :

Note :- This application shall be accompanied by the following documents :-

- (a) a flow chart of the manufacturing process supplemented by a brief description of the process in its various stages;
- (b) plans, in duplicate, drawn to scale showing -
 - (i) the site of the factory and (immediate surroundings including adjacent buildings and other structures, roads, drains, etc.; and
 - (ii) the plan, elevation and necessary cross-sections of the various buildings indicating all relevant details relating to natural lighting, ventilation and means of escape in case of fire. The plans shall also clearly indicate the position of the plant and machinery, aisles and passage-ways; and
- (c) such other particulars as the Chief Inspector cum Facilitator may require.



FORM-XXI
[See sub rule (8) of rule 56]

Certificate of Stability

1. Name of the Factory.
2. Village, Town, District
In which Factory is situated:
3. Full postal address of the Factory:
4. Name of the Occupier of the Factory:
5. Nature of manufacturing process
To be carried on in the factory:
6. Number of Floors on which
Workers will be employed:

I certify that I have inspected the building/buildings, the plans of which have been approved by the Chief Inspector cum Facilitator in his letter No. dated and examined the various parts including the foundations with special reference to the machine, plant etc., that have been installed, I am of the opinion that the building/buildings which has/have been constructed/reconstructed/extended/taken into use is/are in accordance with the plans approved by the Chief Inspector cum Facilitator in his letter mentioned above, that it is/they are structurally sound and that its/their stability will not be endangered by its/their use as factory/part of a factory for the manufacture of for which the machinery, plant, etc. installed are intended.

Signature

Qualifications

Address

Date

If employed by a company or association,
name and address of the company or)
association)



Form No XXII
[See sub rule (10) & sub rule (11) of rule 56]
Registration and Licence to Work A Factory

Registration No.....

Fee Rs.....

Serial No.....

Licence is hereby granted tovide only for the premises described below for use as a factory employing not more than persons on any one day during the year and using motive power not exceeding.....HP.....subject to the provisions of The Occupational Safety, Health & Working Conditions Code, 2020 and the Rules made thereunder.

This Licence shall remain in force till the 31st day of December,

Chief Inspector cum Facillitator

The
Description of the Licensed Premises

The licensed premises shown on Plan No.....dated..... are situated inand consist of.....

Date of renewal

Date of expiry

Signature of Licensing Authority



FORM XXIII
 (See Schedule B and rule 58)
CERTIFICATE OF FITNESS

Serial number :

I certify that I have personally examined (name)
 Son of (father's name)..... residing at (address).....
 Who is desirous of being employed as (designation)..... in (process, department
 and factory)..... and that his age, as nearly
 as can be ascertained from my examination, is years, and that he is, in my opinion, fit/unfit for
 employment in the above mentioned factory as mentioned above.

2. He may be produced for further examination after a period of.....

3. The serial number of the previous certificate is.....

Signature or left hand thumb
 impression of person examined:

Signature of Certifying Surgeon:
 Date :

I certify that I examined the person mentioned above on	I extend this certificate until (if certificate is not extended, the period for which the worker is considered unfit for work is to be mentioned)	Signs and symptoms Observed during Examination	Signature of the certifying surgeon



FORM-XXV
(See sub rule (3) of rule 59)
APPLICATION FOR THE SITE APPRAISAL COMMITTEE

1. **Name and address of the applicant.**
2. **Site Ownership Data:**
 - 2.1. Revenue details of the site such as Survey No., Plot No.
 - 2.2. Whether the proposed site attracts the provisions of section 3 of Environment Protection Act, 1986, if so the nature of the restrictions; and
 - 2.3. Local authority under whose jurisdiction the site is located.
3. **Site Plan :**
 - 3.1. Site plan with clear identification of boundaries and total area proposed to be occupied and showing details nearby the proposed site
 - a) Name of adjoining manufacturing units and human habits, educational and training institutions, petrol installations, storages liquified Petroleum Gas and other hazardous substances, if any, *within one kilometer from the proposed unit.*
 - b) Water sources (rivers, streams, canal dams, water filtration plants) in the vicinity.
 - c) Nearest hospitals, Fire-stations, Civil Defence Stations and Police Station and their distances.
 - d) Details of high tension electrical transmission lines, pipe lines for oil, gaseverage, if any, passing through the site, and
 - e) Location of railway stations, railway lines, Scheduled road, byepass, if any near the site.
 - 3.2. Plot Plan of the factory, showing entry and, exitpoints, roads.
4. **Project Report.**
 - 4.1. A summary of the salient features of Project.
 - 4.2. Maximum number of persons like be working in the factory.
 - 4.3. Maximum amount of power and requirements and source of supply.
 - 4.4. Block diagrams of the buildings installations, in the proposed and
 - 4.5. Details of housing colony, hospital, school and other infrastructural facilities proposed.
5. **Organisation structure of the proposed manufacturing unit/factory :**
 - 5.1. Person responsible for protection of safety, health and environment.
 - 5.2. Proposed health and safety policy of the proposed enterprise.
6. **Manufacturing Process Information :**
 - 6.1. Process flow diagrams.
 - 6.2. Brief write up on process and technology.
 - 6.3. Critical Process parameters such as pressure buildup, temperature rise and run-away reaction.
 - 6.4. Other external effections critical to the process having safety implications such as ingress of moisture or water, contact with incompatible substances sudden power failure ; and
 - 6.5. High lights of the built-in-safety/pollution control devices or measures incorporated in the manufacturing technology.
7. **Information of Hazardous Materials :**
 - 7.1. Raw materials, intermediates, products and byproducts and their quantities (enclosed Material Safety Data Sheet in respect of each hazardous substances).
 - 7.2. Main and intermediate storages proposed for raw material /intermediates/products/Bye Products (maximum quantities to be stored at any time)
 - 7.3. Transportation methods to be used for materials inflow and out flow, their quantities to be stored at anytime ; and
8. **Safety measures proposed for :**
 - Handling of materials.
 - internal and external transportation, and
 - Disposal (packing and forwarding of finished products).
9. **Information on Dispersal/Disposal of wastes and pollutants :**
 - 9.1. Major Pollutants (gas, liquids, solid) their characteristics and quantities (average and at peak loads).
 - 9.2. Quality, And quantity of solid wastes generated, methods of their treatment and disposal.
 - 9.3. Air, Water and Soil Pollution problems anticipated and the proposed measures to control the same, including treatment and disposal of effluents.
10. **Process Hazards Information :**
 - 10.1. Enclose a copy of the report on environmental impact assessment.
 - 10.2. Enclosed a copy of the report on Risk Assessment Study ; and
 - 10.3. Published (open or classified) reports if any, on accident situation/occupational health hazards or similar plants (within or outside the country).
11. **Information of proposed Safety and Occupational Health Measure ;**
 - 11.1. Details of fire fighting facilities and minimum quantity of water cart/or di- oxide and other fire fighting measures needed to meet the emergencies ;
 - 11.2. Details of in-house medical facilities Proposed.
12. **Information on Emergency preparedness :**
 - 12.1. On Site Emergency Plan : and
 - 12.2. Proposed arrangements, if any for mutual aid scheme with the group of neighboring factories.

I certify that the information furnished above is correct to the best of my knowledge and nothing has been concealed while furnishing it.

Date



Signature

Designation