

The

Kolkata Gazette
सत्यमेव जयते

Extraordinary
Published by Authority

ASADHA 22]

MONDAY, JULY 13, 2026

[SAKA 1948

PART I—Orders and Notifications by the Governor of West Bengal, the High Court, Government Treasury, etc.

GOVERNMENT OF WEST BENGAL

Labour Department

New Secretariat Buildings (12th Floor), Kolkata-700 001

NOTIFICATION

No. Labr/105/Law dated, Kolkata, the 13th July, 2026. The following draft rules which the Governor, in exercise of the power conferred by sections 133 and 135 of the Code on the Occupational, Safety, Health and Working Conditions Code, 2020 (37 of 2020) (hereinafter referred to as the said Code) is hereby published, as required by section 137 of the said Code for the information of persons likely to be affected thereby and notice is hereby given that the said draft will be taken into consideration on or after the expiry of a period of forty-five days from the date of publication of this notification in the *Official Gazette*.

Objections and suggestions, if any may be sent to the Secretary, Labour Department through e-mail ID labourcode.osh.ruleswb@gmail.com in the proforma containing columns (i) specifying the name and address of the person/organization 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 substituted and reasons therefor.

Objections or suggestions with respect thereto, which may be received within that period, shall be duly considered.

Draft Rules

CHAPTER I

PRELIMINARY

- 1. Short title and commencement.** - (1) These rules may be called the West Bengal Occupational Safety, Health and Working Conditions Rules, 2026.
- (2) They extend to the Whole of West Bengal.
- (3) They shall come into force on the date of their publication in the Official Gazette.

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

- (a) "Code" means the Occupational Safety, Health and Working Conditions Code, 2020 (37 of 2020);
- (b) "FORM" means FORMS appended to these rules;
- (c) "Officer in charge of canteen" means the person (other than manager) appointed by the employer for securing compliance with the provision in respect of canteen under the code.
- (d) "State Government" means the Government of West Bengal.

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

CHAPTER II

REGISTRATION

3. Application for registration.- (1) An employer seeking registration for an establishment shall apply electronically in **FORM-I** containing the particulars of the establishment, accompanied by documents relating to registration of the establishment, proof of identity and address on the Portal as may be designated by the State Government by giving details about the establishment.

(2) Where an application under sub-rule (1) is complete in all respects, the certificate of registration shall be issued in **FORM-III** electronically forthwith, but in any case not later than seven days from the date of submission of complete application:

Provided that if the certificate of registration is not issued within the period specified, the establishment shall be deemed to have been registered and the certificate of registration shall be auto-generated in **FORM-III**.

(3) The late fee for registration after expiry of sixty days from the date of notification of these rules, shall be specified through general or special order by the State Government issued from time to time.

(4) The certificate of registration shall be non-transferable and shall be displayed at conspicuous places within the premises of the establishment.

(5) Where an employer fails to comply with the requirements of sub-rule (1), the Registering Officer under the Code may, by order, direct such employer to comply with such requirements within the time specified in such order.

(6) An employer of an establishment already registered under any other Central labour laws for the time being in force shall within six months from the date on which rules come into force, update the registration particulars in **FORM-I**:

Provided that no such cancellation shall be made unless the establishment has been given an opportunity to show cause, within a period of thirty days, either electronically or by speed post, as to why the certificate of registration should not be cancelled.

(7) The employer shall quote the registration number on all documents prepared or completed by the employer in connection with the rules or the schemes, made thereunder and in all correspondence with the office concerned.

(8) Any change in the particulars furnished in **FORM-I** shall be updated on the portal by the employer within thirty days of such change and where the application for amendment is complete in all respects, the amended certificate of registration shall be issued electronically in **FORM-III** not later than seven days from the date of submission of complete application, failing which amended certificate of registration shall be auto generated.

(9) The registering officer shall maintain in **FORM-V** showing the particulars of establishment in relation to which certificates of registration have been issued.

(10) The employer shall within thirty days of the closing of the establishment, intimate to the Registering Officer and also to Inspector-cum-Facilitator having jurisdiction in the area where the establishment is situated intimating the actual date of closing of establishment in **FORM-II** along with certificate of payment of all dues and statutory returns to the workers employed in such establishments and such information shall be auto-shared to Employees' Provident Fund Organisation and Employees' State Insurance Corporation.

(11) On receipt of **FORM-II** complete in all respects, the registering officer shall cancel the certificate of registration and issue cancellation of certificate of registration in **FORM-IV** electronically within sixty days from the receipt of **FORM-II**. If registering officer fails to cancel the registration certificate of the establishment within sixty days then the cancellation of registration certificate shall be auto generated in **FORM-IV**.

4. **Notice of commencement and cessation of operation.**-(1) The employer of establishment relating to factories, contract labour or building or other construction work shall within thirty days of the commencement or cessation of operation of the establishment, submit a notice in **FORM-VI** to the registering officer and also to the Inspector-cum-Facilitator having jurisdiction in the area where the establishment is situated.

(2) The notice of cessation of operation under sub-rule (1) shall be accompanied by a certificate stating 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

5. **Annual health examination of employees.**-(1) Every employer of factory or plantation or beedi and cigar works or building or other construction work shall arrange to conduct free of cost, medical examination for employee, who has completed forty years of age.

(2) The medical examination shall be conducted by a qualified medical practitioner and a certificate shall be provided **FORM-VII** to both the employer and employee:

Provided that an employer may avail the facility for medical examination of the employees through the Employees' State Insurance Corporation:

6. **Letter of appointment to employee.**-No employee shall be employed in any establishment unless an appointment letter has been issued to such employee in the format given below:

Format

- (i) Name of employee;
- (ii) Date of birth;
- (iii) Father's/Mother's name;
- (iv) Aadhaar number (after obtaining consent);
- (v) Labour Identification Number of the establishment;
- (vi) Universal Account Number and/or Insurance Number (if available);
- (vii) Designation;
- (viii) Type of Employment (Regular/Fixed-term employment/Contractual);
- (ix) Category of skill;
- (x) Date of joining;
- (xi) Wages/Basic/Pay and Dearness Allowance;
- (xii) Other allowance including accommodation which ever is/are applicable;

- (xiii) Applicability of social security [Employees' Provident Fund Organisation and Employees' State Insurance Corporation] benefits:
- (xiv) Broad Nature of duties to be performed:
- (xv) Benefits available under Chapter VI (Maternity Benefit) of the Code on Social Security, 2020 (36 of 2020) (in case of women employee):
- (xvi) Any other information:

Signature/Digital Signature
of Employer

7. Notice of accidents and dangerous occurrences.— (1) Where at any place in an establishment, an accident occurs resulting to death, the employer of the establishment shall inform to the Inspector-cum-Facilitator forthwith in a notice in **FORM-VIII** and inform electronically and by telephone to the Chief Inspector-cum-Facilitator(s), Inspector-cum-Facilitator(s), District Magistrate or Sub-divisional Officer and the officer-in-charge of the jurisdictional police station and the family members or kin of the victim.

(2) Where at any place in an establishment, an accident occurs which results in bodily injury by reason of which the person injured is prevented from working for a period of forty eight hours or more immediately following the accident, the employer of the establishment shall inform in **FORM-VIII** within twelve hours after the completion of forty-eight hours, electronically to the Inspector-cum-Facilitator(s).

(3) Where in any establishment, dangerous occurrence as specified in sub-rule (4), whether causing any bodily injury or disability or not, the employer shall within twelve hours send an intimation to-

- (i) the Inspector-cum-Facilitator; and
- (ii) the District Magistrate or Sub-divisional Officer:

Provided that if in case of an accident or dangerous occurrence, death occurs to any person injured by such accident or dangerous occurrence after the notices referred to in the foregoing subrules have been sent, the employer of the establishment shall forthwith send a notice thereof by telephone and electronically to the authorities and persons mentioned in sub-rules (1) and (2) and also have this information confirmed in writing within twelve hours of the death:

Provided further that, if the period of disability from working for forty-eight hours or more referred to in sub-rule (2) does not occur immediately following the accident, or the dangerous occurrence, but later on occurs in more than one spell, the report there of shall be sent to the Inspector cum- Facilitator and District Magistrate or Sub-divisional Officer; in the **FORM-VIII** within twenty four hours following the hours when the actual total period of disability from working resulting from the accident or the dangerous occurrence becomes forty-eight hours.

Provided that where loss of life has immediately resulted from an accident, the place where the accident occurred shall be left as it was immediately after the accident until the expiration of at least three days after the time when the notice required under this rule was given or the visit to the place by an Inspector-cum-Facilitator, whichever is earlier, unless compliance with this provision would tend to increase or continue the danger.

(4) The following classes of dangerous occurrences, whether or not they result in bodily injury or disablement:

- (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, 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 hoists 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;
- (vi) collapse or subsidence of 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 a height of any excavation, loading or transport machinery, falling of objects from a height;
- (x) an instantaneous failure of a pillar, part of a pillar or several pillars in working below ground;
- (xi) a rock-burst in working below ground; a premature collapse of any part of the working;
- (xii) a breakage, fracture or failure of a part of any machinery or apparatus including any derrick, draw-works, casing line or failure of emergency brake, whereby the safety of persons may be endangered;
- (xiii) failure of dump or side in opencast working;
- (xiv) a failure of any structure or installation whereby the safety of persons may be endangered;
- (xv) an uncontrolled chemical spillage;
- (xvi) spark generated due to electrical flash-over causing burn injury to any person; or
- (xvii) any other occurrence as specified through general or special order by the State Government issued from time to time.

8. **Notice of disease.**— (1) Where in any establishment, a worker contracts any disease specified in the Third Schedule to the Code, the employer of the establishment shall send a notice forthwith either electronically or by speed post, to the Inspector-cum Facilitator or Chief Inspector-cum-Facilitator in the following format namely:—

NOTICE OF DISEASE

- (a) Name and address of the employer;
- (b) Name and address of establishment;
- (c) Nature of establishment;
- (d) Details of Patient:
 - (i) Name of Patient;
 - (ii) Worker number of Patient;
 - (iii) Address of patient;
 - (iv) Precise occupation of patient;
- (e) Nature of disease from which patient is suffering;
- (f) Date of detection of disease;

- (g) Details of qualified medical practitioner:
- (h) Has the case been reported to the Medical Officer:

Date:

Signature of employer

(2) Where qualified medical practitioner attends to 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 to the Code, the medical practitioner shall forthwith send the report in writing to the Chief Inspector-cum-Facilitator stating-

- (a) the name and full postal address of the patient;
- (b) the disease from which qualified medical practitioner believes the patient to be suffering;
- and
- (c) the name and address of the establishment in which the patient is or was last employed.

9. Duties of employee.- (1) Where any employee becomes aware of an unsafe or unhealthy condition in the establishment, such employee shall as soon as practicable report the matter to the employer or health and safety representative or safety officer or official for their workplace.

(2) The representative, safety officer, official, as the case may be, shall thereupon report the matter to the employer immediately.

10. Rights of employee.- On receipt of information from any employee regarding the existence of an imminent danger to safety and health of employees in the establishment, the employer shall take immediate remedial action and whether employee is satisfied with the remedial measures or not, shall send a report of actions taken, to the Inspector-cum-Facilitator electronically or by speed post.

Chapter IV

Occupational Safety and Health

11. Provisions relating to State Advisory Board.- (1) The State Occupational Safety and Health Advisory Board constituted under section 17 of the code shall consist of the following, namely:-

- (a) Minister-In-Charge, Labour Department, Government of West Bengal- ex-officio Chairperson;
- (b) Additional Chief Secretary /Principal Secretary/ Secretary of Labour Department, Government of West Bengal- Vice-Chairperson, ex-officio;
- (c) Two officers from Department of Micro, Small and Medium enterprises and Pollution Control Board nominated by the State Government, not below the rank of Joint Secretary one of whom shall be a women- member;
- (d) Chairman, the West Bengal Pollution Control Board, Kolkata -Member, ex-officio;
- (e) Labour Commissioner-Member ex-officio
- (f) Chief Inspector-cum-Facilitator of Factories, Government of West Bengal- Member-Secretary, ex-officio;
- (g) Director-General, Health and family welfare, Government of West Bengal- Member, ex-officio;
- (h) Secretary, West Bengal Building and Other Construction Workers Welfare Board - Member, ex-officio;
- (i) Secretary, West Bengal Unorganized Workers Social Security Welfare Board - Member, ex-officio;
- (j) Secretary, West Bengal Labour Welfare Board- Member, ex-officio;

- (k) Director, ESICS, Govt. of West Bengal- Member, ex-officio;
- (l) Joint Director /Joint Chief Inspector-cum-Facilitator of Factories, Government of West Bengal- Member;
- (m) A representative of professional body associated with the matter for which standards, rules, policies being framed to be nominated by State Government- member;
- (n) Two representatives of employers to be nominated by State Government- Members ;
- (o) Two representatives from registered trade unions or Federation to be nominated by State Government - Members;
- (p) Two eminent persons from the field of occupational health and safety having a graduation degree in engineering and experience not less than ten years nominated by the State government- members:

Provided that adequate representation of women shall be given for members to be nominated under clause (n), (o) and (p) of this rule;

Provided further that, the State Government may invite any person in any meeting of the Board as special invitee, for whom State Government is satisfied that such person is an expert for any such matter which has to be discussed or have arisen before the Board for decision;

Provided also that, such special invitee shall not be entitled to vote in Board's meetings.

(2) Term of Office-

- (a) The term of office of the non-official members of the Board shall be three years.
- (b) The non-official members of the Board shall hold office at the pleasure of the Government of West Bengal.
- (c) The non-official members shall be removed from the Board if they cease to represent the interest for which they were nominated.
- (d) All nominated members shall not be eligible for re-nomination for more than two terms.

(3) Resignation of a member of State Advisory Board -

- (a) Any non-official member may resign by a letter addressed to State Government signed under his hand.
- (b) The seat of such member shall fall vacant from the date on which his resignation is accepted or on the expiry of thirty days from the date of receipt of intimation of resignation, whichever is earlier.

(4) Filling of casual vacancies.-

- (a) A nominated member appointed to fill a casual vacancy arising due to death, resignation or otherwise of the member shall hold office for the remaining period of the tenure of office of the member, in whose place he is appointed.
- (b) When a vacancy occurs for any reason or is likely to occur in the membership of the Board, the Member-Secretary shall submit a report to the State Government who shall take steps to fill the vacancy from amongst the category of persons, to which the person vacating membership belongs and the person so nominated shall hold office for the remainder of the term of the office of the member in whose place he is appointed.

(5) 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 the Board, for such absence, he shall cease to be a member of the Board:

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

(6) Disqualification for membership.- A person shall be disqualified for being a member of the Board-

- (i) if he is declared to be of unsound mind and stands so declared by a Competent authority;
- (ii) if he is an un-discharged insolvent;
- (iii) if he has been convicted for an offence, having imprisonment of three months or more or which in the opinion of the State Government, involves moral turpitude; or

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

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

(8) Travelling Allowance for members. –

- (a) The travelling allowance and daily 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.
- (b) Non-Official Members of the Board shall be paid travelling allowance and daily allowance for attending the meetings of the Board at such rates as are admissible to lowest of 'Group "A" Officer of the State Government.
- (c) Special invitees in Board's meetings shall get travelling allowances and daily allowances to attend such meetings of the Board as other non-official members of the Board are entitled to receive.

(9) Notice of meeting of the Board and list of business- (a) The State Board shall meet at least once in every six months:

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

- (b) No business shall be transacted at any meeting unless at least half of the members are present:

Provided that if at any meeting less than one-third members are present the Chairperson may adjourn the meeting to another date informing members present and giving notice to the other members that he proposes to dispose of the business at the adjourned meeting whether there is a prescribed quorum or not, and it shall thereupon be lawful for him to dispose of the business at the adjourned meeting irrespective of the member or members attending:

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

- (c) No business, except which is included in the list of business for a meeting of the Board, shall be considered at such meeting without the permission of the Chairperson of the Board..

(10) Disposal of business.-

- (a) Every matter which the Board is required to take into consideration, shall be considered at the meeting of the Board, or if the Chairperson of the Board so directs by sending the necessary papers to every member for opinion and the matter shall be disposed of in accordance with the decision of the majority:

Provided that where there is no opinion of majority on a matter and the members of the Board are equally divided, the Chairperson of the Board shall have a second or a casting vote.

- (b) No act or proceedings of the Board shall be invalid merely for the reason of any vacancy in or any defect in constitution of the Board.

(11) Chairperson to preside at meetings.-

- (a) The Chairperson shall preside over all meetings of the Board, and if the Chairperson is, for any reason, unable to attend a meeting of the Board, any member nominated by the Chairperson in this behalf, and in the absence of such nomination, any other member elected by the members present from amongst themselves at the meeting, shall preside at the meeting.
- (b) Every decision taken at the meeting of the Board shall be recorded in a Minutes Book, which shall be a permanent record.

(12) Quorum of the meetings.- No business shall be transacted at any meeting unless at least one-third members are present:

Provided that if at any meeting less than one-third members are present, the Chairperson may adjourn the meeting to another date informing members present and giving notice to the other members that he proposes to dispose off the business at the adjourned meeting whether there is a prescribed quorum or not and it shall thereupon be lawful for him to dispose of the business at the adjourned meeting irrespective of the number of members attending.

(13) Appointment of officers and other staff of the State Advisory Board.-

- (a) The State Government may appoint as many Gazetted officers of the state Government and such other staff, being in the service of the state Government, as it may think necessary to enable the Board to carry out its functions and duties.
- (b) The remuneration payable to such officers and staff shall be such as may be decided by the State Government from time to time.
- (c) The officers and staff appointed thereunder shall assist the Chairperson of the Board in convening meetings of the Board.
- (d) The officers and staff appointed thereunder, may attend the meetings of the Board, but shall not be entitled to vote at such meetings.
- (e) The officers and staff appointed thereunder, shall keep a record of the minutes of the meetings of the State Advisory Board.
- (f) The officers and staff appointed thereunder, shall take necessary measures to carry out the decisions taken at the meetings of the Board.

12. Technical Committee or Advisory Committee of the State Advisory Board.- (1) The State Government may constitute as many technical committees or Advisory committees on the recommendation of the board to assist the State Government or the State advisory Board in discharge of their functions, as it deems fit.

(2) The Technical committees may be multi-members committee, and consist of members from Government, public, autonomous or private institution/industries.

(3) The members of the committee shall have Bachelor's degree in engineering with Diploma/post-graduate diploma in industrial safety or Master's Degree in (Physics/Chemistry) or MBBS with Associate Fellow of Industrial Health (AFIH), with an experience of not less than 20 years in the relevant field/industry.

(4) The Chairman of the Technical Committee shall be the ex-officio member as nominated by the State Government.

(5) The Technical Committee may constitute sub-committees to meet the specific requirements.

(6) The Technical Committee shall follow such rules and procedure including its transaction or the Board from time to time,

(7) Non-official members of the Technical Committee or advisory Committee shall be entitled for the same travelling and dearness allowances as the non-official members of the Board are entitled to receive.

- (8) (a) The Technical Committees or Advisory Committee shall frame, formulate and review standards, rules and regulations on Occupational Safety, Health and Working Conditions under the Code.
- (b) The Technical Committee shall meet regularly on need basis and not less than once in a six month.
- (9) (a) A member of the Technical Committee or Advisory Committee not being an ex-officio member, may resign his office by a letter in writing addressed to the State Government through the Chairperson of the Technical Committee or Advisory Committee.
- (b) A Chairman of the Technical Committee may resign his office by a letter in writing addressed to the Additional Chief Secretary/ Principal Secretary, Labour Department, Government of West Bengal.
- (c) The seat of such a member or Chairman as case may be shall fall vacant from the date on which his resignation is accepted by the State Government, or on the expiry of thirty days from the date of receipt of the letter of resignation by State Government, whichever is earlier.

(10) If any member of the Technical Committee or Advisory Committee, not being an ex-officio member, fails to attend two consecutive meetings of such Committee, without obtaining the permission of the Chairperson of such Committee for such absence he shall cease to be a member of such Committee:

Provided that the State Government may, if it is satisfied that such member was prevented by sufficient cause from attending two 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 such Committee.

- (11) (a) A person shall be disqualified for being a member of the Technical Committee.-
 - (i) if he is of unsound mind and stands so declared by a competent court; or
 - (ii) if he is an undischarged insolvent; or
 - (iii) if he has been convicted of an offence which, in the opinion of the State Government, involves moral turpitude.
- (b) Where a question arises as to whether a disqualification has been incurred under sub-rule (1), the State Government shall decide such question, should be treated as final.

(12) The State Government may remove any member or Chairman of the Technical Committee, if in its opinion such member has ceased to represent the interest which he purports to represent on such Committee:

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.

13. Safety Committee.- (1) Every establishment employing five hundred or more workers shall constitute a Safety Committee consisting of representatives of employers and workers.

(2) The State Government may by general or special order specify varying threshold of workers for different classes of establishments issued from time to time.

(3) The tenure of the Safety Committee shall be for three years and it shall meet at least once in every quarter.

Provided that in the case of factories, the Safety Committee shall meet at least once in a quarter.

(4) The Safety Committee shall be adequately and suitably informed of—

- (a) potential safety and health hazards to which the workers may be exposed at workplace; and
- (b) data on accidents as well as data resulting from surveillance of the working environment and of the health of employees of such establishments.

(5) The employer shall, within fifteen days from the date of receipt of the recommendations of the Safety Committee take action to implement such recommendations.

14. Composition of Safety Committee. - (1) The representatives of the management on Safety Committee shall consist of—

- (i) a senior official, who by their position in the organisation can contribute effectively to the functioning of the Committee, shall be the Chairman;
- (ii) a Safety Officer and qualified medical practitioner wherever available and the Safety Officer shall act as Secretary of the Committee; and
- (iii) One representative from the production, maintenance and purchase departments.

(2) The Safety Committee shall consist of an equal number of members representing the employer and the workers, which shall not exceed twenty;

(3) the representatives of the employer in the Safety Committee shall be nominated by the employer and shall, as far as possible, be officials directly associated with the working of the establishment, preferably the heads of major departments of the establishment;

(4) the representative of the workers in the Safety Committee shall be chosen in the following manner, namely:-

- (a) where there is a sole negotiating union or a negotiating council or negotiating union, shall nominate the worker's representatives on the Safety Committee and in the case of the negotiating council, the nomination shall be in the manner that every registered Trade Union representing in negotiating council shall be represented in the Safety Committee in proportion to the number of workers of the industrial establishment who are members of such Trade Unions;
- (b) where there is no sole negotiating union or negotiating union or negotiating council as referred in the clause (a), the workers of the establishment shall choose amongst themselves;

Provided that the employer may, deploy an electronic process for choosing representative of workers:

Provided further that there shall be adequate representation of women and such representation shall not be less than the proportion of women workers to the total number of workers employed:

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

- (c) the tenure of the members of the Safety Committee shall be three years.

(5) The minutes of the meeting of the Safety Committee shall be recorded.

(6) The function and duties of the Safety Committee in an establishment shall include —

- (i) assisting and cooperating with the management in achieving the aims and objectives outlined in the 'Safety and Health Policy of the establishment;
- (ii) dealing with all matters concerning health, safety and environment and to arrive at practicable solutions to problems encountered;
- (iii) creating safety awareness amongst all workers;
- (iv) undertaking educational, training and promotional activities;
- (v) discussing reports on safety, environmental and occupational health surveys, safety audits, risk assessment, emergency and disaster management plans and implementation of the recommendations made in the reports;
- (vi) looking into the matters likely to cause danger to the safety and health of the workers and suggesting corrective measures; and
- (vii) reviewing the implementation of the recommendations made by it.

15. Safety officer for Building or Other Construction Work.-(1) In every building or other construction work wherein two-hundred and fifty or more workers are ordinarily employed, the employer shall employ safety officer as per the scale mentioned below:-

- (i) up to 500 workers- one safety officer;
- (ii) up to 1000 workers – two safety officers;
- (iii) up to 2000 workers – three safety officers;
- (iv) up to 5,000 workers –four safety officers ;
- (v) for every additional 2000 workers or part thereof- one safety officer.

(2) A person shall not be eligible for appointment as a safety officer relating to building or other construction work unless possesses –

- (a) a recognised degree in any branch of engineering or technology and has had practical experience of working in a supervisory capacity for a period of not less than two years; or
- (b) a recognised degree in physics or chemistry and has had practical experience in a supervisory capacity for a period of not less than five years; or
- (c) a recognised diploma in any branch of engineering or technology and has had practical experience in a supervisory capacity for a period of not less than five years;
- (d) possesses a degree or diploma in industrial safety recognised by the Central or State Government; or post-graduate diploma in industrial safety from Central Labour Institute or Regional Labour Institutes under Directorate General of Occupational Safety and Health.

(3) Notwithstanding anything contained in sub-rules (1) and (2), any person who –

- (a) possesses a recognised degree or diploma in engineering or technology and has had experience of not less than five years in a department of the Central Government or the State Government which deals with the administration of legislations pertaining to the factories or building or other construction works or dock works;
- (b) possesses a recognised degree or diploma in engineering or technology and has had experience of not less than five years in training, education, consultancy, or research in the field of accident prevention in industry or in any institution; shall be eligible for appointment as a Safety Officer.

16. Duties of Safety Officers in case of building or other construction work.—The duties of a Safety Officer shall be to advise and assist in the fulfilment of statutory obligations, concerning prevention of personal injuries and maintenance of a safe working environment and shall include the following, namely:-

- (a) advising the concerned departments in planning and organising measures necessary for the effective control of personal injuries;
- (b) advising on safety aspects in all job studies and to carry out detailed job safety studies of selected jobs;
- (c) to check and evaluate the effectiveness of the action taken or proposed to be taken to prevent personal injuries;
- (d) to provide advice on matters related to carrying out safety inspections;
- (e) to carry out plant safety inspections observe the physical conditions of work and the work practices and procedures followed by workers and to render advice on measures to be adopted for removing the unsafe physical conditions and preventing unsafe actions by workers;
- (f) to render advice on matters related to reporting and investigation of accidents, dangerous occurrences and diseases;

- (g) to investigate selected accidents and dangerous occurrences ;
- (h) to investigate the cases of notifiable diseases listed in the Third Schedule to the Code;
- (i) to organise in association with the concerned departments, campaigns, competitions, contests and other activities which will develop and maintain the interest of the workers in establishing and maintaining safe conditions of work and procedures;
- (j) to design and conduct either independently or in collaboration with the training department, suitable training and educational programme for the prevention of personal injuries; and
- (k) the safety officer shall maintain in a bound paged book or in retrievable and non-editable electronic form a detailed record of the work performed by safety officer.

17. Safety officer in case of factories- (1) In every factory-

- (a) wherein five hundred workers or more; or
- (b) carrying on hazardous process wherein two hundred fifty workers or more; or
- (c) Major Accident Hazard installation;

not less than one safety officer shall be appointed by the employer:

Provided that

- (i) for factories specified in clause (a), one additional safety officer shall be appointed if number of workers employed are more than one thousand but not exceeding one thousand five hundred and one more safety officer shall be appointed for every additional one thousand workers or part thereof;
- (ii) for factories specified in clause(b) and clause(c), one additional safety officer shall be appointed if number of workers employed are more than five hundred but not exceeding one thousand and one more safety officer shall be appointed for every additional one thousand workers or part thereof.

(2) The occupier of the factory shall inform the concerned Chief Inspector-cum-Facilitator having jurisdiction and the Inspector-cum-Facilitator having jurisdiction about the appointment of the Safety Officer or Chief Safety Officer within seven days from such appointment.

18. Qualification of Safety Officer in a Factory. - A person shall not be eligible for appointment as a Safety Officer in a factory unless he-

- (a) possesses a degree of a recognized University or its equivalent in any branch of engineering or technology with two years experience in a position of supervision or management in a factory in either the production or the maintenance or the safety department, or a degree of recognized University in Physics and Chemistry with five years' experience in a position of supervision, or management in a factory in either the production or the maintenance or the safety department, or a diploma in any branch of engineering or technology recognized by the State Government with five years experience in a position of supervision or management in a factory in either the production or the maintenance or the safety department;
- (b) possesses a degree or diploma or certificate in industrial safety recognized by the Central or State Government or post-graduate diploma in industrial safety from Central Labour Institute or Regional Labour Institutes under Directorate General of Occupational Safety and Health;
- (c) has thorough knowledge of Bengali acquired through an institution under a Board of Secondary Education or recognized by the State Government;
- (d) can speak Hindi; and
- (e) is not less than 23 years of age :

Provided that the Chief Inspector cum Facilitator, West Bengal, may exempt from the requirement of clause (b) and (c) of this rule any person (i) who has not less than five years' experience in a department of the Central or a State Government which deals with the administrations of the OSHW Code 2020 or Factories Act 1948 (ii) who has not less than five years' experience on a full-time basis in training or education or consultancy or research in the field of accident prevention in any industry or in any institution :

Provided further that the Chief Inspector cum Facilitator, West Bengal, may exempt from all or any of the prescribed qualification any person who has been working as a Safety Officer in any factory for a period of not less than ten years and who, in his opinion, possesses the requisite practical experience

19. **Duties of Safety Officer in case of factories**—The duties of the Safety Officers shall be to advise and assist the factory management in the fulfilment of its obligations, statutory or otherwise, concerning prevention of personal injuries and maintaining a safe working environment. These duties shall also include the following, namely—

- (a) to advise the departmental heads, supervisors and other such officers in planning and organising measures necessary for the effective control of personal injuries;
- (b) to advise on safety aspects in all job studies, and to carry out detailed job safety studies of selected jobs;
- (c) to check and evaluate the effectiveness of the action taken or proposed to be taken to prevent personal injuries;
- (d) to advise the personnel of store purchase department in ensuring high quality and availability of personal protective equipment etc.;
- (e) to advise on matters relating to carrying out plant safety inspections;
- (f) to carry out plant safety inspections in order to observe the physical conditions of work and the work practice procedures followed by the employees and to render advice on measures to be adopted for reducing the unsafe physical conditions and preventing unsafe conditions by employees;
- (g) to render advice on matters relating to reporting and investigation of industrial accidents and diseases;
- (h) to investigate fatal and serious accidents and to suggest remedial measures to the management;
- (i) to investigate the reportable cases of industrial disease contracted and dangerous occurrences;
- (j) to advise on the maintenance of such records as are necessary relating to accidents, dangerous occurrences and industrial diseases;
- (k) to promote setting up of Safety Committees and to act as an adviser and catalyst to such committees;
- (l) to organise in association with the concerned department, campaign, competitions, contests and other activities which will develop and maintain the interest of the employees in establishing and maintaining safety conditions of work and procedure;
- (m) to design and conduct either independently or in collaboration with the organisations, departments imparting industrial safety training, suitable training and educational programme for the prevention of personal injuries and to hold safety seminars at least once in a year;
- (n) to prepare an annual report of accidents and industrial diseases suggesting their remedial measures and to put it up before the annual meeting of the Board of Directors;
- (o) to submit a quarterly report electronically or otherwise to the concerned Inspector-cum-Facilitator having jurisdiction through his employer in respect of the works in promoting safety, health, hygiene and better working conditions of workers in the establishment conducted by the Safety Department for the previous quarter; and

CHAPTER VII**HOURS OF WORK AND ANNUAL LEAVE WITH WAGES**

- 20. Working Hours.**-(1) No worker shall be required or allowed to work in an establishment for more than 48 hours in any week.
- (2) In case of transport vehicle, a maximum of fifteen minutes interruption shall be allowed any time during which the running of the transport vehicle is interrupted.
- 21. Weekly holiday.** - (1) The employer shall post a notice at conspicuous places of workplace of every establishment, showing the weekly holiday including digital means like electronic notice boards.
- (2) Where the weekly holiday is not the same day for all persons employed in the establishment, the notice shall show the holiday allowed to each relay or set of persons or individual in Hindi or English and in local language.
- 22. Compensatory holidays.** - (1) Except in the case of worker engaged in any work which for technical reasons must be carried on continuously throughout the day, the compensatory holidays to be allowed and shall be so spaced that not more than two compensatory holidays are given in one week.
- (2) The employer of the establishment shall display on or before the end of the month in which holidays are lost, a notice in respect of workers allowed compensatory holidays during the following month and of the dates thereof, at the place at which the notice of periods of works is displayed.
- (3) 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 to which a worker is entitled shall be given to them before discharged or dismissed and shall not be reckoned as part of any period of notice required.
- 23. Wages for overtime.** - (1) Where in an establishment-
- (a) a worker works for more than eight hours in any day as daily wager or
 - (b) a worker, other than daily wager, for more than forty-eight hours in any week
- Worker shall in respect of such overtime work be entitled to wages at the rate of twice the rate of their 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 thirty minutes and in case of more than thirty 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 their 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 hours of work mentioned in Rule 20 may exceed under the followings works and circumstances in respect of factories and building or other construction work, namely:-
- (a) urgent repairs;
 - (b) work in the nature of preparatory or complimentary work;
 - (c) work which is necessarily so intermittent that the intervals during which they do not work while on duty ordinarily amount to more than the intervals for rest;
 - (d) work which for technical reasons must be carried on continuously;
 - (e) engaged in making or supplying articles of prime necessity which must be made or supplied every day; engaged in a process which cannot be carried on except during fixed seasons;

- (f) engaged in a process which cannot be carried on except at times dependent on the irregular action of natural forces;
- (g) engaged in an engine-rooms or boiler-houses or in attending to power-plant or transmission machinery;
- (h) engaged in process on account of the break-down of machinery;
- (i) engaged in the loading or unloading of railway wagons or lorries or trucks or ships;
- (j) exceptional press of work; and
- (k) engaged in any work, which is notified by the State Government in the Official Gazette as a work of national importance;

Provided that no worker shall be allowed to work overtime exceeding one hundred forty-four hours in any quarter of a year:

Provided further that for overtime, a worker shall be paid wages as per section 27 of the Code at the end of each wage period.

- 24. Restriction on double employment in Factories.-** Circumstances for exemption from restriction on double employment in Factories shall be specified by general or special order issued by the State Government issued from time to time.
- 25. Notice of periods of work.-** The notice referred to in sub-section (2) of section 31 of the Code shall be displayed at conspicuous places on a notice board or electronic board of the establishment and maintained in **FORM-IX** and a copy of such notice shall be sent to Inspector-cum-Facilitator electronically or by speed post.

CHAPTER VIII

MAINTENANCE OF REGISTER, RECORDS AND RETURNS

26. Maintenance and production of reports, registers and other records.-

- (1) Every employer of establishment shall maintain:-
 - (i) employee register in **FORM X**;
 - (ii) attendance register-cum-muster roll in **FORM XI**
 - (iii) register for wages, over time and deduction in **FORM XII**;
 - (iv) registers under this rule shall be maintained electronically or otherwise;
 - (v) entries in the registers shall be made in English or Hindi and in local language;
 - (vi) every employer shall produce records and registers, on demand before the Inspector-cum Facilitator or any person authorised by the State Government;
 - (vii) all the registers and other records shall be preserved in original for a period of five calendar years from the date of last entry made therein.
- (2) Every employer shall issue wage slips, electronically to the employees in **FORM XIII** on or before the day of payment of wages to the employee.
- (3) In respect of establishment which are required to maintain register under the rules framed under the Code on Wages 2019, the above registers and wage slips required to be maintained by the employer of the establishment under Code on Wages, 2019 and rules made thereunder shall be deemed to be maintained by the employer under these rules.

(4) All registers and other records required to be maintained under the Code shall be maintained complete and up-to-date and unless otherwise provided for, shall be kept at an office or the nearest convenient building within the precincts of the work place or at a place within a radius of three kilometers.

(5) The employer to which the provisions of this Code applies, on or before the 28th or 29th day of February following the end of each Calendar year, upload a return in **FORM-XIV** and **FORM-XV** on the designated portal and provided that during inspection, the Inspector-cum-Facilitator may require the production of accounts, books, register and other documents maintained in electronic form.

Explanation – For the purposes of this sub-rule, the expression “electronic form” shall have the same meaning as assigned to it in clause (r) of section 2 of the Information Technology Act, 2000 (21 of 2000).

(6) Where the employer to which the provisions of this Code applies sells, abandons or discontinues the working of the establishment, then such employer shall, within one month of the date of such sale or abandonment or four months of the date of such discontinuance as the case may be, upload online, on the designated portal, a further return in **FORM-XIV** and **FORM-XV** referred to in sub-rule

(5) in respect of the period between the end of the preceding year and the date of the sale, abandonment or discontinuance.

(7) In case of manual registers and other records,

- (i) be legibly entered in ink in English, or Hindi and in local language and signed by employer;
- (ii) be preserved in original for a period of five years after the date of the last report or entry;

Provided that when the original record is lost or destroyed before the expiry of five years period, true copies thereof, if available, shall be preserved for a specified period;

- (iii) be produced, electronically or by speed post, on demand before the Chief Inspector-cum Facilitator or an Inspector-cum-Facilitator or any person authorised in that behalf of the State Government.

(8) Every establishment to which Chapter III (Employees' Provident Fund) and Chapter IV (Employees' State Insurance Corporation) of the Code on Social Security, 2020 applies shall submit a self-declaration in PART-III of **FORM-XIV** electronically.

27. Register of accident and dangerous occurrences.– The registers of accident and dangerous occurrences required by sub-clause (v) of clause (a) of section 33 of the Code shall be maintained in **FORM-XVI**.

28. Register of leave with wages.– (1) The employer of every establishment shall maintain in respect of every employee thereof a record of leave with wages electronically or otherwise in **FORM-XVII** and shall share the leave records of the respective employee, once in a Calendar year, on demand.

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

29. Display on notice board .– Every employer shall display or caused to be display at conspicuous places of the workplace of the establishment under their control, notices owing 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 or Hindi and in the local language.

30. Annual Return.– Every employer of an establishment shall send an annual return relating to such establishment in **FORM-XIV** related to category of employees, health and welfare facilities, retrenchment or layoffs, bonus, maternity benefits etc. to the Inspector-cum-Facilitator having jurisdiction so as to reach on or before the last day of February following the end of each Calendar year electronically.

CHAPTER-IX**INSPECTOR-CUM-FACILITATOR AND OTHER AUTHORITY**

- 31. Power to take samples of any articles or substances.-** (1) An Inspector-cum-Facilitator shall take samples or substances in an establishment as per the inspection scheme under the Code after informing the employer of the establishment, taken in the manner herein after provided a sufficient sample of any substance used or intended to be used in the establishment, such use being—
- (a) in the belief of the Inspector-cum-Facilitator in contravention of any of the provisions of the code or the rules made there under; 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.
- (2) Where the Inspector-cum-Facilitator takes a sample under sub-rule (1), the Inspector-cum Facilitator shall, in the presence of the person informed under that sub-rule (1) unless such person willfully absents themselves, divide the sample into three portions and effectively seal and suitably mark them and shall permit such person to add their own seal and mark thereto.
- (3) The person informed as aforesaid shall, if the Inspector-cum-Facilitator requires, provide the appliance for dividing, sealing and marking the sample taken under this rule.
- (4) The Inspector-cum-Facilitator shall—
- (a) forthwith give one portion of the sample to the person informed under sub-rule (1);
 - (b) forthwith send the second portion of the sample to a Government Analyst or to a Laboratory accredited by National Accreditation Board for Testing and Calibration Laboratories for analysis and report thereon;
 - (c) retain the third portion of the sample for production to the Court before which proceedings are instituted in respect of the substance.
- (5) Any document purporting to be a report under the hand of any Government Analyst or to a Laboratory accredited by National Accreditation Board for Testing and Calibration Laboratories upon any substance submitted for analysis and report under this rule, may be used as evidence in any proceeding instituted in respect of the substance.
- 32. Powers and duties of Inspector-cum-Facilitator.-** (1) Inspector-cum-Facilitator shall, after every inspection, as may be deemed necessary, issue improvement notice in the **FORM- XVIII** pointing out the non-compliance of provisions of safety, health and working conditions under the Code or rules or regulations or standards made there under, to the employer or occupier or manager or owner or master or officer-in-charge of the ship 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 and their findings and any shortcomings which may come to light during the inspection, together with any order passed by them under the Code or rule or the regulations or standards made thereunder shall be recorded and maintained.
- 33. Qualifications and experiences, duties and responsibilities of experts.-** The scheme will be notified for empaneling experts for third party audit and certification. The qualifications and experiences, duties and responsibilities of experts to be empaneled will be notified through general or special order by the State Government issued from time to time.
- 34. Appointment of Medical officer.-**
- (1) The Medical Officer shall be a medical practitioner who possesses any recognised medical qualification as defined in the National Medical Commission Act, 2019 (30 of 2019), enrolled on a State medical register defined in National Medical Commission Act, 2019.

- (2) The Medical Officer shall be trained in Occupational Health course including International Labour Organisation classification of chest radiograph duly recognised by the Central Government or State Government, as the case may be.

35. Duties of medical officer.-

- (1) On receipt of a reference under clause (c) 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 worker sent for such examination, prepare the age and fitness certificate and deliver the same to the manager of the establishment and the worker concerned after retaining a copy thereof.
- (2) The medical officer may seek opinion of specialists like radiologist, dentist and orthopedic surgeon as the case may be, for the purpose of determination of age.
- (3) Medical Officer shall carry out such examination and furnish such report as State Government may direct-
 - (a) for examination and certification of workers in an establishment in such hazardous processes as specified in the First Schedule to the Code;
 - (b) for medical supervision of any establishment or class of establishment where cases of chronic occupational illness have occurred due to hazardous nature of any process carried on or hazardous condition of work;
 - (c) 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;
 - (d) 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 specified in the Third Schedule to the Code;
 - (e) to assess the age and issue fitness of adolescent for employment in an establishment or class of establishment.

CHAPTER X

SPECIAL PROVISION RELATING TO EMPLOYMENT OF WOMEN

- 36. Employment of Women in establishment.-**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:-

- (a) the consent of woman employee shall be taken in writing;
- (b) no women shall be employed against the maternity benefit provisions laid down under the Code on Social Security, 2020 (36 of 2020);
- (c) adequate transportation facilities shall be provided to women employee to pick- up and drop such employee at her residence;
- (d) the workplace including passage towards conveniences or facilities concerning toilet, washrooms, drinking water, entry and exit of women employee should be well-lit; the toilet, washroom and drinking facilities should be near the workplace where such women employee are employed and suitable provisions of closed-circuit television surveillance on the way to these facilities shall be provided;
- (e) provide safe, secure and healthy working condition is provided so that no women employee is disadvantaged in connection with her employment;
- (f) dedicated telephone numbers of the establishment shall be displayed at conspicuous places both at the establishment as well as inside the vehicles, so that any women employee can utilise them, in case of any exigency or emergency;

- (g) in case of below ground mine not less than three women employees shall be on duty at any place; and
- (h) 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.

37. Adequate safety of employment of women in dangerous operations.- The State Government may declare from time to time by notification, the class of establishments and the standard for safeguarding of women employed in hazardous processes as specified in the First Schedule to the Code.

CHAPTER XI

PART I

CONTRACT LABOUR

38. Conditions of License.- (1) The contractor shall ensure that:-

- (i) the hours of work shall conform to rules relating to section 25 of the Code;
- (ii) the wages shall be paid in accordance with the Code on Wages, 2019 (29 of 2019);
- (iii) if the contract labour of the contractor is working at the premises of the principal employer, then it shall be the responsibility of the principal employer to provide the facilities or amenities such as toilet, washroom, drinking water, bathing facilities if required, changing room, first aid box, canteen and crèche; and
- (iv) all other facilities and entitlements shall be provided by the contractor.

(2) In case the contractor fails to make payment of minimum wages to the contract labour, then, the Labour Commissioner, West Bengal, or their representative, shall cause such payment to be made to the contract labours who have not been paid, out of the security deposit referred to in rule 41 including by invoking the bank guarantee.

(3) The contractor shall intimate within fifteen days of the receipt of a contract work order about the details of the contract work order in the manner as specified in rule 45.

39. Form and manner of application for contractor license.- Every application by a contractor within a state for the grant of a license shall be made on-line electronically through Portal designated by the State Government in **FORM-XXI**.

40. Forms, terms and conditions of licence.-(1) Every licence granted shall be in **FORM-XXII**.

(2) Every licence granted or renewed is subject to the following conditions, namely:—

- (i) the licence shall be non-transferable;
- (ii) the number of contract labour employed by the contractor shall not, on any day, exceed the maximum number specified in the licence;
- (iii) the fees paid for the grant or renewal of the licence shall be non-refundable;
- (iv) the rates of wages payable to the contract labours by the contractor shall not be less than the rates fixed under the Code on Wages, 2019 and where the rates have been fixed by agreement, settlement or award, shall not be less than the rates so fixed.

41. Procedure for issue of licence.- (1) Before a licence is issued, bank guarantee for an amount of security calculated at the rate of Rs. 1000/- for each of the contract labours to be employed, in respect of which the application for licence has been made, shall be deposited by the contractor with the authority for performance of the conditions of the license and compliance with the provisions of the Code.

(2) If contractor proposes to engage one lakh or more but less than one lakh fifty thousand contract labours an amount of security shall be Rs. 10 Crore and engages one lakh fifty thousand but less than two lakhs contract

labour an amount of security shall be Rs. 15 Crores and engages two lakh or more contract labour an amount of security shall be Rs. 20 Crores.

(3) Wherein the issued contract license had expired, based on the request of the applicant in **FORM-XXII**, the authority may adjust the security deposit under sub-rule (1) in respect of their application for new license.

(4) The fees to be paid for the grant of a license shall be as specified in the Table:

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

42. Renewal of licence of Contractor.-(1) Every contractor shall apply electronically on the Portal designated by the State Government to the licensing authority for renewal of the licence.

(2) Every such application shall be submitted on the Portal referred to in sub-rule (1) at least thirty days prior to expiry of licence period but not before ninety days of such expiry of licence.

(3) The fee chargeable for renewal of the licence shall be the same as for the grant of licence under **rule 41**:

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

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

43. Refund of security deposit.-(1) On expiry of the period of licence the contractor may, if not intends to have their licence renewed further, make an application electronically to the licensing authority for the refund of the security deposited by them along with copy of licence so expired and notice of completion of work and bank details in which amount is required to be refunded.

(2) Where the authority is satisfied that there is no breach of the conditions of licence or there is no order for the forfeiture of security deposit or any portion thereof, authority shall direct the return of the security deposit to the contractor.

(3) If there is any order directing the forfeiture of any portion of security deposit, the amount to be forfeited shall be deducted from the security deposited and balance, if any, shall be refunded to the contractor within thirty days from the making of application.

(4) Any application for refund shall, be disposed of within thirty days of the making of such application.

44. Responsibility of contractor.-(1) The rates of wages payable to the workers by the contractor shall not be less than the rates fixed under the Code on Wages, 2019 and where the rates have been fixed by agreement, settlement or award, not less than the rates so fixed.

(2) In case where the contract labour employed by the contractor performs the same or similar kind of work as the worker directly employed by the principal employer of the establishment, the holidays, hours of work and other conditions of service of the contract labour 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.

(3) In case of any dispute whether the work is of similar kind, the matter be referred to the concerned Deputy Labour Commissioner whose decision shall be final.

(4) All contract labour shall be made member of Employees' Provident Fund Organisation and Employees' State Insurance Corporation subject to applicability as under respective provisions of the Code on Social Security, 2020 (36 of 2020).

(5) The contractor shall notify any change in the number of contract labours or conditions of work on the Portal designated by the State Government.

45. Intimation of work order and time limit for intimation.- (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 through portal designated by the State Government.

(2) The details of work order shall be sent under sub-rule (1) by the contractor or their authorized representative.

(3) The intimation under sub-rule (1) shall be sent electronically on portal designated by the State Government.

46. Revocation and suspension of license.- (1) If the authority is satisfied that the licence has been obtained by misrepresentation or suppression of any material fact or if the contractor has failed to comply with the conditions subject to which licence was granted or the contractor has contravened any provision of Part-I of Chapter-XI of the Code or rules made there under, the Authority shall issue a show cause notice of fifteen days to the contractor electronically.

(2) Upon receipt of the reply from the contractor within 15 days of the receipt of the notice, the Licensing Authority shall examine the same and in case the licensing authority is of the opinion that the continuation of contract business by the contractor is going to lead to grave harm to the contract labours, the authority may pass a speaking order recording the reasons for revocation or suspension or otherwise and communicate the order to the contractor electronically or by speed post.

(3) A copy of the order shall also be endorsed to the Labour Commissioner and Inspector-cum-Facilitator concerned..

(4) If the contractor has complied with the concerned provisions of the Code and rules made there under within the stipulated time period, the Licensing Authority shall revoke the suspension giving a speaking order or else the suspension may be continued.

(5) If the contractor fails to comply with the order in sub-rule (1), the authority may forthwith pass an order of revocation of license, recording the reasons thereof and communicate to the contractor electronically or by speed post and the copy of the order shall be endorsed electronically to Labour Commissioner, and the Inspector-cum-Facilitator concerned.

47. Amendment of Licence.- (1) The contractor seeking amendment in licence shall apply electronically in **FORM-XXI** on portal designated by the State Government by giving details about the amendment and uploading documents related to license issued, proof of Identity and address of the employer as specified in the said Form.

(2) The Form shall be signed digitally or in any other manner as may be required on the portal.

(3) The applicant shall be responsible for veracity of all information submitted in the application.

(4) The fees to be paid for the amendment of Licence as specified in sub rule (4) of Rule 41.

(5) The amended licence shall be issued electronically immediately, if the application is complete in all respect but not later than seven days from the date of submission of complete application, failing which such licence shall be deemed to have been amended and the amended licence shall be auto generated.

(6) After issuance of amended licence, proportionate security deposit will be returned if number of contract labour decreases and an additional amount of security deposit, shall be deposited, if number of contract labour increases.

- 48. Appeal.** – (1) The appellate authority under sub-section (1) of section 52 of the Code shall be notified by the State Government, issued from time to time.
- (2) The form and the fees for this purpose will be specified by general or special order by the State Government issued from time to time.
- 49. Responsibility of payment of wages.**– (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 principal employer shall settle the bills of contractor related to dues of contract worker within timeline as per the terms and conditions agreed between principal employer and contractor.
- (4) The wages shall be disbursed through bank transfer or electronically.
- Provided that where it is not practicable to disburse wages through bank transfer or electronically, the wages shall be disbursed in current coins or currency.
- (5) The wages of contract labours shall be paid without any deductions of any kind, except those specified by the State Government.
- (6) A notice showing wage period and date and time of disbursement of wages of contract labour shall be displayed at the place of work and a copy sent by the contractor to the principal employer electronically.
- (7) Every contractor shall send half-yearly return in **FORM-XV** electronically to the Deputy Labour Commissioner concerned not later than thirty days from the close of the half year, that is to say January to June, July to December.
- (8) In case contractor fails to make payment of wages to the contract labour within seven days of completion of wage period, then the principal employer shall take necessary action and make payment of wages in full or the unpaid balance dues, as the case may be, to the concerned contract labour employed by the contractor within fifteen days and recover the amount so paid from the contractor either by deduction from any amount payable to the contractor under any contract or as debt payable by the contractor or from the security deposit lying with the principal employer.
- (9) Every principal employer of an establishment shall submit annual return in **FORM-XIV** (Part- II) electronically to the authority and concerned Deputy Labour Commissioner so as to reach on or before last day of February following the end of each Calendar year electronically, except in cases of contract which undertakes to produce given result.
- 50. Making payment of wages from the security deposit amount.**– (1) If the contractor or principal employer does not pay the wages to the contract labour employed by them, the Labour Commissioner, West Bengal, 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.
- (2) The contractor shall re-furnish the security deposit within a period of fifteen days or else license will be liable to be suspended.
- 51. Experience Certificate.**– Every concerned contractor shall issue on demand, experience certificate in **FORM-XXIII** to the contract labour giving details of the period, work performed, experience gained in various fields performed by such contract labour.
- 52. Prohibition of employment of contract labour.**– 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 State Government, which may refer such application to the designated authority, notified by the State Government. The form of application, manner and time period shall be as per general or special order by the State Government issued from time to time:
- Provided that no adverse action will be taken during the pendency of proceedings so that the operation of the activity is not affected.

PART II**INTER-STATE MIGRANT WORKER**

- 53. Journey allowance to inter-State migrant worker.-** (1) The employer shall pay a lump sum amount on account of fare for to and fro journey to inter-state migrant worker by train not less than II Class sleeper or by bus or any other mode of passenger transport from the place of employment to the place of residence in the home-state in the event, if such worker has worked for a period of not less than one hundred and eighty days in the concerned establishments in preceding twelve months:

Provided that the journey allowance shall be given to an inter-state migrant worker once in twelve months.

(2) In the event of change of employer by the inter-State migrant worker during the middle of the employment period and such worker has not availed the journey allowance from their previous employer, then on the basis of a certificate to be given by inter-State migrant worker, the employer where the inter-State migrant worker is presently working and such worker has completed one hundred and eighty days in preceding twelve months including the period spent with the previous employer, then the present employer shall pay journey allowance.

- 54. Setting up of a Toll Free helpline number to the inter-state migrant worker.-** A Toll- Free help-line number shall be established by Labour Commissioner, West Bengal in the manner as may be determined by general or special order by the State Government issued from time to time, to address queries and safety of the inter-State migrant workers.

- 55. Study of inter-State migrant workers.-** The State Government may identify the studies to be carried out to promote safety, health and welfare of inter-State migrant workers as specified by general or special order by the State Government issued from time to time.

Wherever required the State Government may also consult expert organizations involved in the safety, health and welfare of inter-State migrant workers.

PART III**AUDIO- VISUAL WORKER**

- 56. Agreement for audio-visual worker.-** The agreement for the audio-visual worker with the producer shall be registered in **FORM-XXIV**.
- 57. Procedure for reference of disputes to a Conciliation Officer or a Tribunal.-** The procedure for reference of dispute to a conciliation officer or a tribunal shall be as per the procedure prescribed in the Industrial Relations Code, 2020 (35 of 2020) and rules made thereunder.

PART-IV**Beedi and Cigar Workers**

- 58. Form of application for grant of license** (1) Every application under sub-section(2) of section 74 for a license to use or allow to be used any place or premises as an industrial premises shall be made in **Form-XXV** electronically on the portal designated by the State Government.

(2) The application shall be accompanied by plans showing:

- (a) the site of such place or premises, the areas therein to be used for manufacturing processes and the immediate surroundings of such place or premises, including adjacent buildings, structures, roads, drains, and the like; and
- (b) the plan, elevation and necessary cross-sections of, the details relating to natural lighting, ventilation, means of escape in case of fire, position of the plant and machinery, if any, used, aisles and passage-ways in or in relation to, the various buildings which are intended to be used for manufacturing processes.

(3) Before granting licence the Authority shall also take into consideration whether the site of an industrial premises is proposed to be altered or whether industrial premises has been closed by the applicant during the period of twelve months immediately preceding the date of the application with a view to causing prejudice to the interests of the labour.

(4) The fee for license shall be paid electronically through the portal.

(5) The application shall be accompanied with a affirmative declaration of the employer under sub-section (4) of Section 74 in **Form-XXVI** .

59. Fee for grant or renewal of licence.- (1) The fees to be paid for grant or renewal of license shall be as specified in table below.-

	Number of employees proposed to be employed on any day during the Financial year	Fee (in Rs.)
(a)	Does not exceed twenty	500
(b)	More than twenty but does not exceed fifty	1000
(c)	More than fifty but does not exceed hundred	1500
(d)	More than hundred	2000

(2) Fee to be paid for grant of duplicate license shall be rupees one hundred.

(3) If the Authority refuses to grant or renew any licence under section 74 the fees paid thereof shall not be refunded.

60. Information and site plan regarding application for license.- If the Occupier / employer of the of the beedi and cigar establishment wishes to obtain a licence under the provision of section 119 of the code, then he shall mention the maximum number of employees proposed to be employed at any time of the day in the place of premises and shall enclose the plan of the place or premises to be used with the application of the licence.

61. Terms and conditions of licence.- Every license granted or renewed under section 74 shall be subject to the following conditions namely:

- the manufacturing process shall be carried on only in that part of the industrial premises specified for the purpose in the license;
- the maximum number of employees employed in the industrial premises shall not on any date exceed the number specified in the license;
- power driven machinery, not specified in the license, shall not be used in the manufacturing process in the premises;
- except with the prior permission in writing of the Authority the industrial premises shall not be extended and except with the like permission no structural alteration shall be made in any building on such premises;
- the licensee shall not be transferable;
- except as provided in the rules the fee paid for grant, or as the case may be, renewal of licence shall be non-refundable.

62. Grant of licence and renewal.- If the Authority is satisfied regarding particulars of application for grant of licence he shall issue the certificate of licence on **Form-XXVII** electronically within such period as specified in the West Bengal Right to Public Service Act, 2013 failing which such licence shall be deemed to have been granted and the certificate of grant of licence shall be auto generated by the portal.

63. Welfare measures.- (1) While granting or renewing a licence, the Licensing Authority shall ensure that the occupier of the beedi and cigar establishment provides adequate measures as prescribed by the Central Government

under section 23 & 24 of the code for ensuring the general welfare, health and safety of the labourers in the locality and safeguarding the interests of the public.

(2) All record of the dates on which white-washing, colour washing, varnishing, painting or cleaning was carried out shall be entered by the employer in a register maintained in **Form-XXVIII**.

64. Disputes relating to issue of raw materials by the employer under clause (c) of sub-section (4) of section 74.-

(1) Any dispute between employer and employee or employees in relation to,-

- (a) the issue by the employer of raw materials to the employee;
- (b) the rejection by the employer of beedi or cigar, or both rejected by an employee; or
- (c) the payment of wages beedi or cigar or both, rejected by an employer;

may be referred in writing by the employer or the employee or employees to the Inspector—cum-Facilitator, who shall, after making such enquiry as he may consider necessary and after giving the parties an opportunity to represent their respective cases, decide the dispute and record the proceedings with the details of dispute, plea of parties, documents and evidences and finding thereof

(2) Any party to the dispute aggrieved by the decision thereon under sub-rule (1) may prefer an appeal within a period of thirty days from the date of the decision to the Licensing Authority:

Provided that the Appellate Authority may admit an appeal after the said period if the appellant satisfies such Authority that he has sufficient cause for not preferring the appeal within that period.

65. Limit with regard to the rejection of beedi or cigars under clause (e) of sub-section (4) of section 74. - (1) No employer or contractor shall ordinarily reject a sub-standard or chhar or otherwise more than five percent of the beedis or cigars, or both, received from a worker including a home-worker.

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

66. Renewal of License under sub-section (6) of section 74.- (1) Every application for renewal of licence shall be made on the portal designated by the State Government along with required fees as prescribed under rule-59.

(2) The application shall be accompanied with affirmative declaration of the employer as prescribed under sub-rule (5) of rule 58 in **Form-XXVI**.

(3) If the Authority is satisfied that the licence complies with the provisions of the Code and rules made thereunder, he shall renew the certificate of licence on **Form-XXVII** electronically within such period as specified in the West Bengal right to Public Service Act, 2013 failing which such licence shall be deemed to have been renewed and the certificate of renewal of license shall be auto generated by the portal.

67. Appeals under section 75.- (1) Labour Commissioner, West Bengal shall be the Appellate Authority for the purposes of section 75 of the Code.

(2) Fees payable in respect of appeal under section 75 shall be rupees one thousand only which shall be non-refundable.

(3) An appeal against the order of the Licensing Authority refusing grant or renewal of licence shall be, -

- (a) made electronically within a period of thirty days from the date of receipt of the order sought to be appealed against;
- (b) accompanied by a copy of the order appealed against;
- (c) accompanied by a memorandum containing grounds and facts of such appeal;
- (d) accompanied by a treasury challan as a proof of payment of fees for such appeal.

68. Maintenance of records of outside workers under sub-section (2) of section 76.- (1) The record to be maintained by the employer, of the work permitted under sub-section (J) of section 76 to be carried on outside the industrial premises, shall be maintained electronically in **Form-XXIX**.

(2) The employer shall, in respect of the employees who are permitted to work in their houses (hereinafter referred to as the home-workers), maintain an up-to-date register/ log-book in **Form-XXX** electronically.

Part VII

Factories

69. Submission and approval of factory plans and site plan.- (1) No site shall be used for the location of a factory and no building on such site or in a factory shall be constructed, amended or modified, extended or taken into use as a factory or part of a factory unless previous approval is obtained from the Chief Inspector-cum-Facilitator or concerned Licencing Authority of Factories, West Bengal.

Provided that the occupier of a factory belonging to such class as may be specified by The State Government may submit plans certified by a third party having such qualification and experience, in such manner and recognition as may be notified by the State Government, and such plans shall be accepted by the Chief Inspector-cum-Facilitator.

Provided further that the Chief Inspector-cum-Facilitator may require amendments, if any, to such third-party-certified plans, for reasons to be recorded in writing, for the compliance with the provisions of the Code, rules, and regulations

(2) Application for approval of plan or permission in **Form-XXXI** for site on which the factory is to be situated, for the construction or extension thereof and for license shall be made by the applicant electronically or otherwise on the portal designated by the State Government to the concerned Inspector-cum-Facilitator having jurisdiction at least thirty days before he begins to occupy, or use, the premises as a factory.

(3) The application shall be accompanied by the following documents:

- (a) **Form-XXXII** duly filled by the applicant;
- (b) The Process Flow Diagram of manufacturing process indicating safety devices, fittings and mountings on each plant and machinery, the various processes and their design conditions, supplemented by a brief description of process and safety devices in its various stages and also indicating the names of raw materials, intermediates and products with their inventories and the name of chemicals if used in the process;
- (c) Plans shall be drawn to scale showing-
 - (i) the site plan of the factory and immediate surroundings including adjacent building, hospitals, educational institutions, petrol pumps, storage of inflammable and explosive materials and other structures, roads, water sources, drains etc, and location of nearest residential area, village, town settlement with its distance from the site.; and
 - (ii) the detail plan, elevation and necessary cross sections of the various buildings indicating all relevant details relating to all natural lighting, ventilation and means of escape route in case of fire. Details of Fire Fighting Systems and Description of Hazard Area. The Plans shall also clearly indicate the position of the plant and machines, aisles and passage-ways in isometric view also of machines and hazard are and machines having hazard shall shown separately in 3D view;
 - (iii) particulars in connection with the maximum number of workers to be employed in each workroom, together with the area of ventilating openings and cubic space available per worker to be employed in each room;
 - (iv) particulars in connection with other requirements of the code and the rules and the schedule there under applicable to the proposed factory;

- (v) such other particulars as the Chief Inspector-cum-Facilitator of factories may require.
- (vi) the applicant shall submit the Process Flow Diagram of the manufacturing process, site plans, and detailed plans electronically or otherwise in a legible format These documents shall be prepared and signed by a person possessing the qualifications and experience as prescribed in Serial Number I of Schedule I to Rule 4, using efficient software such as AutoCAD, etc.

Provided that if due to technical reasons, such soft copy of detailed plans or site plans is not legible, documents drawn to suitable scale may be additionally submitted in triplicate.

- (d) Replies to the questionnaires annexed to the **Form-XXXII**;
- (e) A letter of no objection for the location of the factory from Municipality, Panchayat or notified area, as the case may be along with a copy of Trade licence if applicable;
- (f) A letter of no objection from State Pollution Control Board,
- (g) A letter of no objection from Fire Department;
- (h) License / NOC issued under the Petroleum Rules, 1976 for storage of petroleum as defined in the Petroleum Rules, 1976 if applicable;
- (i) Certificate of stability in **Form-XXXIII** duly signed by the applicant;
- (j) Payment of license fee prescribed in sub-rule (2) of Rule-120 through online payment.

(4) The internal height of a workroom, other than those intended for storage, godowns and like purposes and also rooms intended solely for office purposes, where only clerical work is done, shall be not less than 14 feet 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 or lining of heat-resisting material with an air space of at least four inches between it and the corrugated iron, the internal height shall be not less than 20 feet:

Provided that these provisions shall not be applicable in case of factory which proposes to employ fifty or less workmen: Provided further that in case of buildings having a brick or concrete roof, or a combination of the two, the minimum height may be 12 feet:

Provided further that in case of all factories registered under Section 2(1)(w)(i), and factories registered under Section 2(1)(w)(ii) of the Code employing up to 150 employees, the Chief Inspector-cum-Facilitator may, where he is satisfied that the conditions of work are reasonably good, exempt such factories from the provisions of this sub-rule.

(5) 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 of floor space exclusive of that occupied by machinery and a breathing space of at least 500 cubic feet.

(6) Particulars of each of the rooms, verandahs and other enclosures of the factory shall be entered in **Form-XXXII**.

(7) No manufacturing process shall be started or carried on in any building, or part of a building until a Certificate of Stability of the building, or part of building in **Form-XXXIII** signed by a competent person/person possessing the qualifications, has been delivered online to the Chief Inspector-cum-Facilitator and accepted by him. No extended portion of any factory shall be used as a part of the factory any time after the extension or any plant or machinery shall be added in any factory or brought into use as any factory, nor brought into use any time after such addition until a certificate in respect of such extension or plan has been delivered to the Chief Inspector-cum-Facilitator or concerned Licencing Authority and accepted by the Chief Inspector-cum-Facilitator or concerned Licencing Authority electronically.

(8) The Certificate of Stability accepted under this rule shall be valid for five years from the date of acceptance if there is no change.

- (9) The Competent Person signing the **Form-XXXIII** shall possess the same qualification and experience as prescribed in the Schedule to **Rule 130** for this purpose.
- (10) No person except in the case of a building occupied by Government shall be authorized to sign a certificate of stability, who is in the employment of the owner or the builder of the building in respect of which the certificate is given.
- (11) The site-plan of a factory, after receiving online application at the portal designated by the State Government, if the Chief Inspector-cum-Facilitator or the concerned Licencing Authority, as the case may be, is satisfied that the plans are in consonance with the requirement of Code, he shall, subject to such conditions or such no objection certificate, as he may specify, approve them and the site-plan approval certificate shall be issued by Chief Inspector-cum-Facilitator or concerned Licencing Authority within such period in **Form-XXXIV**, including site visit, as notified in West Bengal Right to Public Service Act failing which such plan shall be deemed to have been approved and the certificate of approval of factory shall be auto generated by the portal.
- (12) Plans which have already been approved by the Chief Inspector-cum-Facilitator under the Factories Act, 1948 before the coming into force of these Rules, shall be deemed to have been approved under these Rules.
- (13) In case, the Chief Inspector-cum-Facilitator or the concerned Licencing Authority, having jurisdiction, as the case may be, is not satisfied with the application or the application is incomplete, he shall raise his objections on the portal, within such period as notified in West Bengal Right to Public Service Act.
- (14) The approval granted under this rule may be revoked by the Chief Inspector-cum-Facilitator, if it is found that such approval has been obtained by the occupier or manager by misrepresentation of material facts or fraudulent document have been submitted along with the application or otherwise or the majority of construction is not being done in accordance with the approval granted.
- (15) Every proposed approval shall become null and void if no construction started within 6 months from approval date.

70. Application for license and prescribed fees under clause (c) of sub-section (1) of section 79.- (1) The occupier of every factory shall submit an application in **Form-XXXV** for grant of a license on portal designated by the State Government accompanied by a registration certificate as per section 3 of the Code.

- (2) Such application can be made for a period upto the maximum of 15 consecutive years.
- (3) If the site-plan is approved under rule-69 and then employer/ occupier of the, factory complies with all the provisions of the Code and rules' made thereunder, the factory shall be registered and the license for the factory in **Form XXXVI** shall be issued electronically by Chief Inspector-cum-Facilitator or concerned Licencing Authority as the case may be, on payment of the fees specified in Schedule A,B and C, as the case may be, subject to compliance with such conditions as are specified in the license:
- (4) Every licence granted under this rule shall remain in force for a period upto the maximum of 15 consecutive years.
- (5) The Chief Inspector-cum-Facilitator of factories may refuse to grant of license of the factory, if he is satisfied:—
- that an application is not accompanied by plans: - (a) of the site on which the factory is to be situated, (b) for the construction or extension of the factory, or
 - that the application is accompanied by plans which have not been approved or the condition subject to which they are approved have not been complied with, or
 - that material requirements of the relevant provisions specified in Schedule to sub-rule (1) of these rules in relation to the factory concerned have not been complied with, or
 - that there is imminent danger to life in the factory due to explosive or inflammable dust, gas or fumes and effective measures, in his opinion have not been taken to remove the danger

(6) Prohibition of use of premises as factory without License. -

(a) Occupier shall not use any premises as a factory or carry on any manufacturing process in a factory, unless a factory plan is approved by the Chief Inspector-cum-Facilitator of and license has been issued in respect of such premises and is force for the time being.

(b) It shall be the responsibility of occupier himself of the factory to get a valid license.

71. Renewal of license.- (1) An application for the renewal of license for period of up to fifteen years shall be made online to the Chief Inspector cum facilitator in **Form-XXXV** not less than thirty days before the date on which the license expires. The application shall be accompanied by stability certificate in **Form-XXXIII** issued by Competent Person and duly signed by occupier and fees deposited electronically on the State Government web-portal into the head of account specified therein, as a proof of the payment of the amount of requisite fees for every year.

(2) The fee that shall be charged for the renewal of a licence shall be subject to the scale of fees laid down in Schedule A or Schedule B or Schedule C as may then be applicable to the factory in respect which application for renewal of licence is submitted to the Chief Inspector cum facilitator; Provided that if the application for renewal of licence along with requisite fee is not submitted before the date of expiry of the licence, then, notwithstanding any other action which may be taken in accordance with law, the amount of the fee payable for renewal of the licence shall be 50 percent in excess of the amount which would otherwise be payable, if the application with requisite fee is made within 90 days of the time specified and shall be 100 percent in excess of the amount which would otherwise be payable for further default beyond 90 days.

(3) Such application can be made for a period upto the maximum of 15 consecutive years

(4) The Chief Inspector cum facilitator may call for such other particulars as he may require before renewing a licence.

(5) The Chief Inspector cum facilitator may, on application being made to him under sub rule (1) and on payment of fees prescribed in sub-rule (2), and on being satisfied with the requirement of the act and the rules made thereunder renew a licence in the **Form XXXVI** subject to compliance with such conditions as he may think fit.

(6) Where the application for renewal of licence along with requisite fee is submitted and is complete in all respect and there is no change in information as recorded in the previous application licencing period then the licence shall be auto renewed in **Form XXXVI** subject to the conditions specified in the licence.

Provided that the State Government may by notification allow auto renewal of licence for any kind of changes as may be specified in the notification from time to time. Provided further that if a valid application for renewal of licence has been submitted and the requisite fee has been paid the premises shall be deemed to be licensed until such date as the Chief Inspector cum facilitator renews the licence or refuse in writing to renew the licence.

(7) Every licence renewed under this rule shall remain in force for a period upto the maximum of 15 consecutive years

(8) Refusal of licence - The Chief Inspector may refuse the renewal of licence on the ground that the applicant has been guilty of repeated contravention of safety provisions of the Code or Rules or both or the applicant has obtained the licence by fraud or by misrepresentation:

Provided that before refusing any licence, the applicant shall be given an opportunity to show cause as to why the licence shall not be refused.

(9) Revocation of licence - The Chief Inspector may, at any time before expiry of the period for which the licence has been granted or renewed, revoke the licence on any of the grounds specified in sub-rule (8) above or if:-

- (i) there is imminent danger to life and property in the factory due to explosive or inflammable dust, gas or fumes, and effective measures in his option have not been taken to remove the danger; and/or;
- (ii) employment of child worker below 14 years of age noticed;

Provided that before revoking the licence, the applicant shall be given an opportunity to show cause as to why the licence shall not be revoked.

72. Amendment of License.-(1) A licence granted or and renewed may be amended by the Chief Inspector cum facilitator.

(2) A licence whose licence requires to be amended shall submit to the Chief Inspector cum facilitator an application in **Form XXXV** electronically in the portal designated by the State Government.

(3) The Chief Inspector cum facilitator may call for such other particulars as he may require for amendment of licence.

(4) A licensee whose licence requires to be amended by virtue of increase in the number of workers to be employed or additional power to be installed shall pay a fee of rupees one thousand plus the amount by which the fee payable for the amended licence exceeds the fee already paid for the licence:

Provided that if the application together with the requisite fee for amendment under this sub-rule is not submitted prior to the date on which the licence requires to be amended, then, notwithstanding any other action which may be taken, the amount of fee payable for such amendment shall be rupees one thousand plus 100 per cent in excess of the amount by which the fee payable for the amended licence exceeds the fee already paid for the licence.

73. Transfer of license.- (1) The holder of a license may, at any time before the expiry of the licences, apply for permission to transfer his license to another person. In case, if a licensee dies or becomes insolvent or otherwise disabled, this application may be made by the person carrying on the business of such licensee.

(2) Such application shall be made on portal designated by the State Government along with notice of occupation in **Form-XXXVII** and such other documents as may be required.

(3) The Chief Inspector-cum-Facilitator shall, if he approves the transfer, enter upon the licence, under his signature/ Digital Signature, an endorsement to the effect that the licenses, have been transferred to the person named in **Form-XXXVI**.

(4) A fee of one thousand rupees shall be charged on each such application.

(5) The person to whom the licence is so transferred shall enjoy the same powers, and be subject to the same obligations under the licences as the original holder.

74. Procedure on death or disability of licensee.- If a licensee dies or becomes insolvent or otherwise disabled, the person carrying on the business of such licensee shall not be liable to any penalty, under the Code or these rules for exercising the powers granted to the licensee by the licences during such time as may reasonably be required to allow him to make an application for the transfer of the licenses in his own name for the unexpired portion of the original licences:

Provided that, this period shall not exceed two months from such date when cause of action arises:

Provided further that, Chief Inspector-cum-Facilitator or Licencing Authority may further extend this time limit to one month, if the person in whose favour transfer of license has to be done shows sufficient causes for such delay and the Chief Inspector-cum-Facilitator or Licencing Authority is satisfied with given causes on a penalty of rupees five thousand.

75. Cancellation of licenses.- If at any time an occupier notifies of his intention showing causes in details, on the portal designated by the State Government that the premise, in respect of which licences is issued will not be used for the working of the factory, the Chief Inspector-cum-Facilitator shall cancel the licences granted in respect of such factory and will be communicated to the occupier/ employer through the portal:

Provided that such application shall be submitted at least two months before the date of cessation of use of premises as a factory;

Provided further that, the employer shall give an undertaking that before the period of two months, he shall clear all his dues, payments to be made to his employees and shall remove all the hazardous substances and wastage from the premises.

76. Notice of occupation.- The notice of occupation shall be in **Form-XXXVII**.

77. Notice of change of Manager.-(1) The occupier needs to appoint a manager of factory. In case, manager of factory has not been appointed, the occupier shall be deemed to be the manager of the factory.

(2) The notice of change of manager shall be in **Form-XXXVIII**. The application for change of manager shall be submitted online on the portal designated by the State Government.

(3) The approval of change of manager shall be made online on the licences by the Chief Inspector-cum-Facilitator or concerned Licencing Authority

78. Liability of owner of premises in certain circumstances.- (1)Where in any premises separate buildings are leased to different occupiers for use as separate factories, the owner of the premises shall be responsible for the provision and maintenance of common facilities and services such as approach roads, drainage, water supply, lighting and sanitation.

(2) The Chief Inspector-cum-Facilitator shall have power to issue orders to the owner of the premises in respect for the carrying out the provisions of sub-rule(1).

(3) 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 a factory, of any contravention of the provisions of this Code in respect of-

- (i) latrines, urinals and washing facilities in so far as the maintenance of the common supply of water for these purposes is concerned;
- (ii) fencing of machinery and plant belonging to the owner and not specifically entrusted to the custody or use of an occupier;
- (iii) safe means of access to the floors of flats, and maintenance and cleanliness of staircases and common passages;
- (iv) precautions in case of fire;
- (v) maintenance of hoists and lifts; and
- (vi) maintenance of any other common facilities provided in the premises.

(4) The provisions relating to the liability of the owner shall apply where in any premises independent rooms with common latrines, urinals and washing facilities are leased to different occupiers for use as separate factories;

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

(5) The Chief Inspector-cum-facilitator shall have the power to issue orders to the owner of the premises referred to in section 80 of the Code.

(6) Where in any premises portions or room or a shed are leased to different occupiers for use as separate factories, the owner of the premises shall be liable for any contravention of the provisions of above rule.

79. Dangerous manufacturing process of operations.- (1)The following manufacturing process or operation when carried on in any factory are declared to be dangerous manufacturing process or operation under clause (a) of section 82, as specified in Scheduled I-XXXVII:-

- (i) Manufacture of Aerated Waters and processes incidental thereto.-Schedule- I
- (ii) Phosphating, 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, Gold Etc.- Schedule- II

- (iii) Manufacture and Repair of Electric Accumulators- Schedule- III
- (iv) Glass Manufacture- Schedule- IV
- (v) Grinding or Glazing of Metals and Processes Incidental Thereto- Schedule V
- (vi) Manufacture and Treatment of Lead and Certain Compounds of Lead-Schedule VI
- (vii) Generation of Gas from Dangerous Petroleum as Defined in the Petroleum Act, 1934- Scheduled VII
- (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- Scheduled VIII
- (ix) Liming and Tanning of Raw Hides and Skins and Processes Incidental Thereto - Scheduled IX
- (x) Chemical Works- Scheduled X
- (xi) Manufacture of Pottery - Scheduled XI
- (xii) Printing Presses and Type Foundries – Certain Lead Processes Carried Therein - Scheduled XII
- (xiii) Manufacture of Bangles and Other Articles from Cinematograph Film and Toxic and Inflammable Solvents - Scheduled XIII
- (xiv) Compression of Oxygen and Hydrogen Produced by the Electrolysis of Water- Scheduled XIV
- (xv) Handling and Processing of Asbestos, Manufacture of Any Article or Substance of Asbestos and Any Other Processes of Manufacture or Otherwise in Which Asbestos Is Used in Any Form - Scheduled XV
- (xvi) Manipulation of Stone, or Any Other Material Containing Free Silica -Scheduled XVI
- (xvii) Handling and Manipulation of Corrosive Substances -Scheduled XVII
- (xviii) Manufacture or Manipulation of Carcinogenic Dye Intermediates- Scheduled XVIII
- (xix) Solvent Extraction Plants, Process of Extracting Vegetable Oil from Oil Cakes in Solvent Extraction Plants- Scheduled XIX
- (xx) Manufacture or Manipulation of Manganese and its Compounds- Scheduled XX
- (xxi) Manufacture, Handling and Use of Benzene -Scheduled XXI
- (xxii) Carbon Di-sulphide Plants- Scheduled XXII
- (xxiii) Manufacture and Manipulation of Dangerous Pesticides- Scheduled XXIII
- (xxiv) Operations Involving High Noise Levels-Scheduled XXIV
- (xxv) Manufacture of Rayon by Viscose Process-Scheduled XXV
- (xxvi) Highly Flammable Liquids and Flammable Compressed Gases- Scheduled XXVI
- (xxvii) Operations In Foundries, Furnaces & Induction Furnaces-Scheduled XXVII
- (xxviii) Manufacturing of Green Fire Crackers- Scheduled XXVIII
- (xxix) Operations involving Biomedical waste treatment- Scheduled XXIX
- (xxx) Manufacturing of Paper, Paper Boards and Allied Products- Scheduled XXX
- (xxxi) Forging, Forming, Heat Treatment and Incidental Processes- Scheduled XXXI
- (xxxii) Processing of Rubber and Plastic Compounds- Scheduled XXXII
- (xxxiii) Painting, Powder Coating and process incidental thereto-Scheduled XXXIII
- (xxxiv) Manufacture of chromic acid or manufacture or recovery of the bichromate of sodium, potassium or ammonium- Scheduled XXXIV
- (xxxv) Manufacture, use of cellulose solutions- Scheduled XXXV
- (xxxvi) Processes involving exothermic chemical reactions- Scheduled XXXVI

(xxxvii) Lifting, stacking, storing and shipping of bales in and from finished goods godowns of jute mills-
Scheduled XXXVII

(2) The provisions specified under clause (b), (c) and (d) of section 82 and in the Schedules annexed hereto shall apply to any class or description of factories wherein dangerous manufacturing process or operation specified in each Schedule are carried out.

(3) Notwithstanding the provision specified in the schedules appended to this rule, the Inspector-cum-Facilitator may, by issue of orders in writing to the manager or occupier or both, direct them to carry out such measures, and within such time, as may be specified in such order with a view to removing conditions dangerous to the health of the workers, or to suspend any process, where such process constitutes, in the opinion of the Inspector-cum-Facilitator, imminent danger of poisoning or toxicity.

(4) Any register or record of medical examination and tests connection therewith required to be carried out under any of the schedules annexed hereto in respect of any workers shall be kept readily available to the Inspector-cum-Facilitator and shall be preserved till the expiry of one year after the workers ceases to be in employment of the factory or for the time period specifically prescribed in any of the Schedule below, whichever is higher.

(5) No pregnant woman and adolescent shall be employed in any part of a factory wherein or near thereby a dangerous manufacturing process or operation is carried out.

(6) 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 persons 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 resurrection 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) adequate rescue arrangements wherever considered 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 a regular process;
- (h) 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 the schedules made under this rule.

(7) There shall be provided and maintained in a cleanly state and in good repair for the use of all persons employed in dangerous operation process,-

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

- (i) a trough with a smooth impervious surface fitted with a waste pipe, without plug and of sufficient length to allow of at least 60 cms. for every ten such persons employed at any one time and having a constant supply of water taps of jets above the trough at intervals of not more than 60 cms.; or
 - (ii) at least one wash basin for every ten such persons employed at any one time, fitted with a waste pipe and plug and having a constant supply of clean water;
 - (iii) a sufficient supply of clean towels made of suitable materials renewed daily;
 - (iv) a sufficient supply of soap or other suitable cleansing materials.
- (b) there shall in addition be provided means of washing facilities if required by notice in writing from the Chief Inspector-cum-Facilitator.
- (8) 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 worker or employee:
- Provided that if there be one basin or 60 cms. of trough for each such person this sub- rule shall not apply.
- (9) Sufficient bath accommodation to the satisfaction of the Chief Inspector-cum-Facilitator shall be provided along with sufficient supply of soap and clean towels.
- (10) No food, drink, Paan and supari or tobacco shall be consumed or brought by any worker into any work-room in which any dangerous operation process is carried on.
- (11) The occupier of all the factories carrying out processes covered under section 82, shall provide,-
- (a) for all the workers working in a shift, mess room facility, which are well ventilated and provided with sitting facilities along with the provision of drinking water; and
 - (b) such facilities shall include suitable arrangements for cleaning and washing and shall be maintained in clean and hygienic conditions.
- (12) The occupier of every factory carrying out any process covered under section 82 shall provide,-
- (a) for all the workers employed in the process, cloak room facilities with lockers.
 - (b) the cloak room facilities shall be located as far as possible near to the facilities provided for washing. If it is not possible to locate the washing facilities the cloak room facilities shall have adequate and suitable arrangements for cleaning & washing.
- (13) The occupier of every factory having licence of more than 100 workers and to which this rule applies, shall,-
- (a) employ a qualified medical practitioner having qualification, training and experience in conducting a thorough Medical check-up against the hazards likely to creep in such type of process; and
 - (b) provide to the said medical practitioner the necessary facilities for the purpose referred to in clause (a);
- (14) The record of medical examination and appropriate tests carried out by the said medical practitioner shall be maintained in a Health Register, which shall be kept readily available for Inspection by the Inspector-cum-Facilitator.
- (15) Workers employed in processes covered under this rule shall be medically examined by a Medical Practitioner or 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 12 months or less as defined in the schedule, to ascertain the health status of the workers;
 - (c) The details of pre-employment and periodical medical examinations carried out as aforesaid shall be recorded in Health Register and maintained;

- (d) Any finding of the Medical Practitioner revealing any abnormality or unsuitability of any person employed in the process shall immediately be reported to the occupier. If the Factory Medical Practitioner is of the opinion that the worker so examined is required to be suspended from the process for health protection, he will advise the occupier accordingly, who shall not employ the said worker in the same process. However, the worker so suspended from the process shall be provided with alternate placement facilities unless he is fully incapacitated in the opinion of the Medical Practitioner, in which case the person affected shall be suitably rehabilitated;

Provided that the Medical Officer on his own may examine any other workers whom he feels necessary to be examined for ascertaining the suitability of his employment in the processes covered under this rule or for ascertaining the health status of any other worker and his opinion shall be final.

- (e) No person shall be newly appointed without the Certificate of Fitness granted by the Medical Practitioner. If the Medical Practitioner declares a person unfit for being appointed to work in the process covered in sub-rule (1) then such person shall have a right to appeal to the Medical Officer, whose opinion shall be final in this regard;
- (f) The worker suspended from the process owing to the circumstances covered in sub-para (d) shall be employed again in the same process only after obtaining the Fitness Certificate from the Medical Officer and after making entries to that effect in the health register.

(16) In every factory carrying out dangerous operations,-

- (a) Every worker employed in any of these processes to which this rule applies shall be examined by a Medical Officer within 15 days of his first employment. Such examination shall include such medical tests as mentioned in the Schedule related to the processes. 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 Medical Officer.
- (b) Every worker employed in the said processes shall be re-examined by a Medical Officer at least once in every twelve months. Such re-examination shall, wherever the Medical Officer considers appropriate include tests as specified in Schedules appended to this rule.
- (c) The Medical Officer after examining a worker, shall issue a Certificate of Fitness. The record of examination and re-examinations carried out shall be entered in the Certificate and the Certificate shall be kept in the custody of the manager of the factory. The record of each examination carried out under clause (a) and (b) above, including the nature and results of the tests, shall also be entered by the Medical Officer in a health register.
- (d) The Certificate of fitness and the health register shall be kept readily available for Inspection by the Inspector-cum-Facilitator.
- (e) If at any time the Medical Officer 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.
- (f) No person who has been found unfit to work as said in clause (e) above shall be re-employed or permitted to work in the said processes unless the Medical Officer, after further examination again, certifies him fit for employment in those processes.

80. Power to prohibit employment on account of serious hazard.- (1) Where it appears to the Inspector-cum-Facilitator that conditions in a factory or part thereof are such that they may cause serious hazard by way of injury or death to the persons employed therein or to the general public in the vicinity, he may, by order in writing to the occupier of the factory, state the particulars in respect of which he considers the factory or part thereof to be the

cause of such serious hazard and prohibit such occupier from any person in the factory or any part thereof other than the minimum number of persons necessary to attend to the minimum tasks till the hazard is removed.

(2) Any order issued by the Inspector-cum-Facilitator under sub-section (1) shall have effect for a period of three days until extended by the Chief Inspector-cum-Facilitator by a subsequent order.

(3) Any person aggrieved by an order of the Inspector-cum-Facilitator under sub-section (1), and the Chief Inspector-cum-Facilitator under sub-section (2), shall have the right to appeal to the State Government.

(4) Any person whose employment has been affected by an order issued under sub-section (1), shall be entitled to wages and other benefits and it shall be the duty of the occupier to provide alternative employment to him wherever possible and in the manner prescribed.

(5) The provisions of sub-section (4) shall be without prejudice to the rights of the parties under the Industrial Relations Code, 2020.

81. Site Appraisal Committee.- (1) The State Government may, for purposes of advising it to consider applications for grant of permission for the initial location of a factory involving a hazardous process or for the expansion of any such factory, appoint a Site Appraisal Committee consisting of-

- (a) the Chief Inspector cum Facilitator of the State who shall be its Chairman;
- (b) a representative of the Department of West Bengal Pollution Control Board in the State;
- (c) A representative of the Directorate of Fire Services, West Bengal;
- (d) A representative of the Directorate of Industries, West Bengal; and
- (e) an expert in the field of occupational health;
- (f) a scientist having specialised knowledge of the hazardous process which will be involved in the factory,
- (g) a representative of the local authority within whose jurisdiction the factory is to be established, and
- (h) not more than three other persons as deemed fit by the State Government.

(2) The State Government may appoint a senior official of the Directorate of Factories to be the Secretary of the Committee.

(3) No member unless required to do so by a court of law shall disclose otherwise than in connection with the purpose of the Code, 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 the Committee.

(4) Applications for appraisal of sites in respect of the factories covered under section 2(1)(za) of the Code shall be submitted to the Chairman of the Committee along with 15 copies in **Form-XXXIX**. The Committee may dispense with the furnishing of the information on any particular item in the application under consideration.

(5) Where any of the process relates to a factory owned or controlled by the Central Government or to a Corporation or a Company owned or controlled by the Central Government, the State Government shall co-opt in the Site Appraisal Committee, a representative nominated by the Central Government, as a member of that committee.

(6) The Site Appraisal Committee shall have power to call for any information from the person making an application for the establishment or expansion of a factory involving a hazardous process.

82. Functions of the Site Appraisal Committee.- (1) The Secretary of the Committee shall arrange to register the applications received for appraisal of site in a separate register and acknowledge the same within a period of 7 days.

(2) The Secretary of the Committee shall fix the time and date of meeting with the prior approval of the Chairman and shall refer to committee all the applications received and registered, for decision.

(3) The Committee may adopt a procedure for its working keeping in view the need for expeditious disposal of

applications.

(4) The Committee shall examine the application for appraisal of a site with reference to the prohibitions and restrictions on the location of factory and the carrying on the process and operations in different areas as per the provisions of the Environment Protection Code, 1986 and rules made thereunder.

(5) The Committee may call for documents, examine experts, inspect the site, if necessary, and take other steps for formulating its view in regard to the suitability of the site.

(6) Wherever the proposed site requires clearance by the Ministry of Industry or the Ministry of Environment, Forest and Climate change of the Government of India, site appraisal shall be considered by the Committee only after such clearance has been received.

(7) The application for grant of permission for the initial location of a factory involving a hazardous process or for the expansion of such factory, shall contain the following particulars:-

- (a) Name and address of the applicant;
- (b) Site ownership data;
- (c) Revenue details of site such as Survey number, plot number, Allotment /Registration number, etc;
- (d) Details as to whether the site is classified as forest and if so, whether approval of the Central Government under section 5 of the Indian Forests Act, 1927 has been obtained;
- (e) Details as to whether the proposed site attracts the provisions of section 3(2)(V) of the Environment Protection Code, 1986, if so, the nature of the restrictions;
- (f) Local authority under whose jurisdiction the site is located;
- (g) Documentary evidence of ownership;
- (h) Site Plan with clear identification of boundaries total area proposed to be occupied and showing the following details nearby the proposed site:-
 - (i) historical monument, if any, in the vicinity;
 - (ii) names of neighbouring manufacturing units and human habitats, educational and training institutions, petrol installations, storages of liquified petroleum gas and other hazardous substances in the vicinity and their distances from the proposed unit;
 - (iii) water sources (river, streams, canals, dams and water filtration plants etc.) in the vicinity;
 - (iv) nearest hospitals, fire-stations, civil defence stations and police stations and their distances from the proposed unit;
 - (v) high tension electrical transmission lines, pipelines for water, oil, gas or sewerage ;
 - (vi) railway lines, roads, stations, jetties gas and other similar installations in the vicinity;
 - (vii) details of soil conditions and depth at which hard strata can be obtained;
 - (viii) contour map of the factory showing nearby hillocks and difference in levels; and
 - (ix) plot plan of the factory showing the entry and exit points roads within, water drains, etc.
- (i) Project Report stating the following details :-
 - (i) a summary of the salient features of the project;
 - (ii) status of the organisation (government, semi-government, public or private etc.);
 - (iii) maximum number of persons likely to be employed in the factory;

- (iv) maximum requirement of power and water and sources of their supply;
- (v) block diagram of the buildings and installations, in the proposed unit; and
- (vi) details of the proposed housing colony, hospital, school and other infrastructural facilities.
- (j) Organizational structure for proposed manufacturing unit/factory showing :-
 - (i) organization diagram of proposed enterprise in general, and health, safety and environment protection departments and their linkage to the operation and technical department;
 - (ii) proposed health and safety policy;
 - (iii) area allocated for treatment of wastes and effluents; and
 - (iv) percentage of outlay on safety, health and environment protection measures.
- (k) Meteorological data relating to the site showing :-
 - (i) average, minimum and maximum of temperature, humidity and wind velocities during the previous ten years;
 - (ii) seasonal variations of wind direction;
 - (iii) highest water level reached during the floods in the area recorded so far; and
 - (iv) lightening and seismic data of the area.
- (l) Communication Links showing :-
 - (i) availability of telephone/telex/wireless and other communication facilities for outside communication; and
 - (ii) proposed internal communication facilities.
- (m) Manufacturing Process Information showing :-
 - (i) process flow diagram in detail indicating process parameters, e.g. temperature, pressure, etc. at various stages of manufacturing process;
 - (ii) brief write-up on process and technology;
 - (iii) critical process parameters such as pressure build-up, temperature rise and runaway reconditions;
 - (iv) other external effects critical to the process having safety implications, such as ingress of moisture or water, contcode with incompatible substances, sudden power failure; and
 - (v) highlights of the built - in safety/pollution control devices or measures incorporated in the manufacturing technology.
- (n) Information on Hazardous Materials showing :-
 - (i) raw materials, intermediates, products and by-products and their quantities (enclosed with material safety data sheet in respect of each hazardous substance);
 - (ii) main and intermediates, storages proposed for raw materials/ intermediates/ products (maximum quantities at any time to be stored);
 - (iii) transportation methods to be used for inflow and outflow of materials, their quantities and likely routes to be followed; and
 - (iv) safety measures proposed for handling of materials, internal and external transportation, and disposal (packing and forwarding of finished products).
- (o) Information of dispersal / disposal of wastes and pollutants showing:-
 - (i) major pollutants (gas, liquid, solid), their characteristics and quantities (average and at peak loads);

- (ii) quality and quantity of solid wastes generated, methods of their treatment and disposal; and
 - (iii) air, water and soil pollution problems anticipated and the proposed measures to control the same, including treatment and disposal of effluents.
- (p) Process Hazards Information along with:-
- (i) a copy of the report on Environmental Impact Assessment;
 - (ii) a copy of the report on Risk Assessment study; and
 - (iii) published (open or classified) reports, if any, on accident situations / occupational health hazards or similar plants elsewhere (within or outside the country).
- (q) Information of proposed Safety and Occupational Health Measures along with :-
- (i) details of fire fighting facilities and minimum quantity of water, carbon dioxide and/or other fire fighting measures needed to meet the emergency; and
 - (ii) details of the proposed in house medical facilities.
- (r) Information on emergency preparedness showing :-
- (i) on-site emergency plan and detailed disaster control measures; and
 - (ii) proposed arrangements, if any, for a mutual aid scheme with the group of neighbouring factories.
- (s) Any other relevant information.
- (8) Application mentioned in sub-rule (7) shall be certified by the applicant in the following manner:
- "I certify that the information furnished above is correct to the best of my knowledge and nothing of importance has been concealed while furnishing it.

Signature of the Applicant

Applicant's full name and address"

83. Form for submission of report of site appraisal committee.- The site appraisal committee shall examine application for the establishment of a factory involving hazardous process and make its recommendations to the State Government within a period of ninety days of the receipt of such application in the prescribed **Form-XL**.

84. Obtaining or developing information of hazardous substances on Material Safety Data Sheet.- Collection, development and dissemination of information-

(1) The occupier of every factory carrying on a hazardous process shall arrange to obtain or develop information in the form of Material Safety Data Sheet (MSDS) in respect of every hazardous substance or material handled in the manufacture, transportation and storage in the factory. It shall be accessible, upon request, to a worker for reference.

(a) Every such Material Safety Data Sheet shall include the following information:

- (i) the identification mark used on the label;
- (ii) hazardous ingredients of the substance;
- (iii) physical and chemical characteristics of the hazardous substance;
- (iv) the physical hazards of the hazardous substance, including the potential for fire, explosion and reactivity;
- (v) the health hazards of the hazardous substance, including signs and symptoms of exposure, and any

- medical condition which are generally recognized as being aggravated by exposure to the substance;
- (vi) the primary route or routes of entry;
 - (vii) the permissible limits of exposure prescribed in Standard framed by the Central Government under section 18 of the Code ;
 - (viii) any generally applicable precautions for safe handling and use of the hazardous substance, which are known, including appropriate hygienic practices, protective measures during repairs and maintenance of contaminated equipment, procedures for cleanup of spills and leaks;
 - (ix) any generally applicable control measures, such as appropriate engineering controls, work practices, or use of personal protective equipment;
 - (x) emergency and first-aid procedures;
 - (xi) the date of preparation of the Material Safety Data Sheet, or the last change in it;
 - (xii) 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 required.
- (b) The occupier while obtaining or developing a Material Safety Data Sheet in respect of a hazardous substance shall ensure that the information, recorded accurately, reflects the scientific evidence used in making the hazard determination. If he becomes newly aware of any significant information regarding the hazards, the new information shall be added to the Material Safety Data Sheet as soon as practicable.
- (2) Every container of a hazardous substance shall be clearly labelled or marked to identify:-
- (a) The contents of the container;
 - (b) The name and address of the manufacturer or importer of the hazardous substances;
 - (c) The physical and health hazards; and
 - (d) The recommended personal protective equipment needed to work safely with the hazardous substance.

85. Disclosure of information to the employees.- (1) The occupier of every factory carrying on a hazardous process shall supply to all employees, the following information in relation to handling of hazardous materials or substances in the manufacture, transportation, storage and other process:

- (a) requirements of sections 84, 85 and 89 of the Code;
- (b) a list of hazardous process carried on in the factory;
- (c) location and availability of all material safety data sheets as per Rule- 84;
- (d) Physical and health hazards arising from the exposure to or handling or, substances;
- (e) measures taken by the occupier to ensure safety and control of physical and health hazards;
- (f) measures to be taken by the employees to ensure safe handling, storage and transportation of hazardous substances;
- (g) personal protective equipment required to be used by employees employed in hazardous process of dangerous operations;
- (h) meaning of various labels and markings used on the containers of hazardous substances as provided under these rules ;
- (i) signs and symptoms likely to manifest on exposure to hazardous substances and to whom to report ;
- (j) measures to be taken by the employees in case of any spillage or leakage of a hazardous substance ;
- (k) role of employees vis-a-vis the emergency plan of the factory, in particular the evacuation procedures;

- (1) any other information considered necessary, by the occupier to ensure safety and health of employees.
- (2) The information required by sub-rule (1) shall be compiled and made known to employees individually through supply of booklets or leaflets and display of cautionary notices at the workplaces.
- (3) The booklets, leaflets and the cautionary notices displayed in the factory shall be in the language understood by the majority of the employees and shall also be explained to them.
- (4) The Inspector-cum-Facilitator or the Chief Inspector-cum-Facilitator may direct the occupier to supply further information to the employees as deemed necessary.

86. Disclosure of information to the Chief Inspector-cum-Facilitator, local authority.- (1) The occupier of every factory carrying on a hazardous process shall furnish, in writing, to the Chief Inspector-cum-facilitator a copy of all the information furnished to the employees under sub-section (1) of section 84.

- (2) A copy of compilation of Material Safety Data Sheets in respect of hazardous substances used, produced or stored in the factory shall be furnished to the Chief Inspector-cum-facilitator and the local Inspector-cum-facilitator.
- (3) A copy of the information furnished under sub-rule (1) and sub-rule (2) shall also be sent to the District Magistrate and Sub-divisional Magistrate of the area where the establishment is situated.
- (4) The occupier of hazardous process industry shall also furnish information to the Chief Inspector-cum-Facilitator and Inspector-cum-Facilitator electronically every year on following points:
 - (a) Name of the factory:
 - (b) Address:
 - (c) Product
 - (d) Manufacturing process:
 - (i) Raw Material:
 - (ii) Name and maximum storage capacity:
 - (e) Finished product - Name and maximum storage capacity:
 - (f) Intermediate product - Name and maximum storage capacity:
 - (g) Hazards associated with the factory:
 - (h) Safety measures observed:
 - (i) Fire and explosion risk:
 - (j) Details for disposal of hazardous waste:

87. Disclosure of information to the general public living in vicinity.- (1) The occupier of every factory carrying on a 'hazardous process' shall in consultation with the District Emergency Authority designated by the State Government, take appropriate steps to inform the general public who are likely to be in the area which might be affected by an accident like warning posters, photos and on transportation vehicles in that area.

- (2) 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 Directorate and State 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.

88. Health and Safety Policy.-(1) Occupier of every factory, at the time of registration, shall prepare and submit a written statement of his policy in respect of safety and health of workers at work containing such details as may be prescribed by Central Government in standards framed under section 18 of the Code.

89. Information on industrial wastes under sub-section (7) of section 84.- (1)The information furnished under Rules 85 to Rule 87 shall include the quantity of the solid and liquid wastes generated per day, their characteristics and the methods of treatment such as incineration of solid wastes, chemical and biological treatment of liquid wastes and arrangements for their final disposal.

(2) It shall also include information on the quality and quantity of gaseous waste discharge through the stacks or other openings and arrangements such as provisions of scrubbers, cyclone separators, electrostatic precipitators of similar such arrangements made for controlling pollution of the environment.

(3) The occupier shall also furnish the information prescribed in the sub-rule (1), and (2) to the State Pollution Control Board.

90. Onsite Emergency Plan.-(1)The occupier of a factory carrying on a hazardous process shall submit a draft on-site emergency plan, prepared by competent person and submit to Inspector-cum-Facilitator for the approval of the Chief Inspector-cum-Facilitator.

91. Intimation to Chief Inspector-cum-Facilitator by the occupier of the factory proposed to be engaged in hazardous process.-(1) The occupier/ employer shall disclose the information of the factory involving hazardous process under sub-section (5) of section 84, namely:

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

(2) Information to be furnished by Occupier of Hazardous Process Industry:

- (a) Name of Factory:
- (b) Address
- (c) Manufacturing process details (in case of chemical factory material balance of all the reactions shall be enclosed)
- (d) Raw Materials used (Name, Mode of storage, Maximum storage Capacity)
- (e) Finished Products (Name& Maximum storage Capacity)
- (f) Intermediate Products (Name& Maximum storage Capacity)
- (g) Hazards identified (process hazards, storage and handling of chemicals based on HAZOP shall be enclosed in case of chemical factory)
- (h) Remedial measures (inbuilt safety systems for equipment, process control, engineering controls and administrative controls):

- (i) Details for disposal of hazardous waste:

Signature of Occupier with name

(3) The above information shall be revised and updated immediately after change of any of the above information, technological advancement or once in three years through online.

(4) Any further information sought by the Chief Inspector-cum-Facilitator or Inspector-cum-Facilitator for compliance of the above provisions shall also be furnished.

92. Information to employees and general public.- (1) Information under Rule-85 to Rule-87 of these rules shall be publicised by displaying the same on Notice Board at the gate or gates of the factory and such information shall also be given to District Magistrate and Chief Inspector-cum-Facilitator.

(2) It shall be the responsibility of the occupier/ employer to widely publicise such information to the general public.

93. Confidentiality of information.- (1) The occupier of a factory carrying on a 'Hazardous Process', shall disclose all information needed for protecting safety and health of the employees to-

- (a) his workers, and
- (b) Chief Inspector-cum-Facilitator or Inspector-cum-Facilitator having jurisdiction, as required under these rules. 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 reason for withholding such information. The Chief Inspector-cum-Facilitator shall pass an order on the representation after giving an opportunity to the occupier of being heard.

(2) An occupier aggrieved by an order of the Chief Inspector-cum-Facilitator may prefer an appeal to the State Government within a period of thirty days and the State Government may after giving an opportunity to the occupier of being heard shall pass an order and the order of the State Government shall be final.

94. Medical Examination under sub-section (a) of section 85.- (1) Employees employed in a 'hazardous process' shall be medically examined by a qualified medical practitioner, hereinafter referred to a Factory Medical Officer, in the following manner:

- (a) once before employment, to ascertain physical fitness of the person to do a particular job ;
- (b) once in a period of 6 months, to ascertain the health status of all the workers in respect of occupational health hazards to which they are exposed, and at a shorter interval in respect of a worker in whose case the Factory Medical Officer is of the opinion that it is necessary to do so;
- (c) the details of pre-employment and periodical medical examinations carried out as aforesaid shall be recorded in the Health Register in **Form-VII**.

(2) No person shall be employed for the first time without a certificate of fitness in Form-8 granted by the Factory Medical Officer. If the Factory Medical Officer declares a person unfit for employment in a process covered under sub-rule (1), he shall have the right to appeal to the Inspector-cum-Facilitator of the area who after consultation with a Medical Officer shall decide the appeal which shall be final in this regard.

(3) Any finding of the Factory Medical Officer revealing any abnormality or unsuitability of any person employed in the process shall, in turn, examine the concerned worker and communicate his findings to the occupier within 30 days. If the Medical Officer 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 alternative placement unless he, in the opinion of the Medical Officer is fully incapacitated in which case the worker affected shall be suitably rehabilitated.

(4) A medical officer on his own motion or on a reference from an Inspector-cum-Facilitator may conduct a medical examination of a worker to ascertain the suitability of his employment in a hazardous process or to ascertain his health status. The opinion of the Medical Officer in such a case shall be final. The requisite fee 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 Medical Officer and after making entries to that effect in the Health Register.

(6) The worker required to undergo medical examination under these rules and for any medical survey conducted by or on behalf of the Central or the State Government shall not refuse to undergo such medical examination.

(7) A copy of the medical records and reports shall be provided to the concerned worker free of cost.

95. Qualification and experience of the qualified persons.- (1) All persons who are required to supervise the handling of hazardous substances shall possess the following qualification and experience:

- (a) a degree in Chemistry or Diploma in Chemical Engineering or Technology with five years experience; or
- (b) A Master's Degree in Chemistry or a degree in Chemical Engineering or Technology with two years experience;

(2) The experience stipulated in sub-rule (1) above shall be in process operation and maintenance in a chemical industry.

(3) The Chief Inspector-cum-Facilitator may require the supervisor to undergo training in Health and Safety. The syllabus and duration of the said training and the organisations conducting the training shall be approved by the Director General, Factory Advice Service and Labour Institutes (DGFASLI) or the State Government in accordance with guidelines issued by the Director General, Factory Advice Service and Labour Institutes.

96. Occupational Health Centres.- (1) In respect of any factory carrying on 'hazardous process' there shall be provided and maintained in good order, an Occupational Health Centre with the services and facilities as may be prescribed by Central Government in standards framed under section 18 of the Code.

97. Ambulance van.- (1) In every factory carrying on a 'hazardous process' there shall be provided and maintained in good condition, a suitably constructed ambulance van equipped with items as may be prescribed by Central Government in standards framed under section 18 of the Code

98. Decontamination facilities.- In every factory carrying out hazardous process the following provisions shall be made to meet an emergency:

(a) fully equipped first aid box;	
(b) readily accessible means of water for washing by employees as well as for drenching of clothing of employees who have been contaminated with hazardous and corrosive substance; and such means shall be as per the scale shown in the table below:	
Number of persons employed at any time	Number of drenching showers
(i) Up to 50 employees	2
(ii) Between 51 and 200 employees.	2+1 for every additional 50 or part thereof
(iii) Between 201 and 500 employees	5+1 for every additional 100 or part thereof
(iv) 501 employees and above.	8+1 for every additional 200 or part thereof.
(c) sufficient number of eye wash bottles filled with distilled water or suitable liquid, kept in boxes or cupboards conveniently placed and clearly indicated by a distinctive sign which shall be easily available at all times.	

99. Availability of health records to employees.- (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 the hazardous process or, as the case may be, the medical records of any worker for his perusal under the following conditions:

- (a) once in every six months or immediately after the medical examination, whichever is earlier ;
- (b) if the Factory Medical Officer or the Medical Officer, as the case may be, is of the opinion that the worker has manifest signs and symptoms of any noticeable disease as specified in the Third Schedule to the Code;
- (c) if the worker leaves the employment ;
- (d) if any one of the following authorities, so direct -
 - (i) the Chief Inspector-cum-Facilitator ;
 - (ii) the Health Authority of the Central or State Government ;
 - (iii) Commissioner of Workmen's Compensation ;
 - (iv) the Director General, Employees' State Insurance Corporation ;
 - (v) the Director, Employees State Insurance Corporation (Medical Benefits) ; and
 - (vi) the Director General, Factory Advice Service and labour Institute.

(2) A copy of the updated health records including the record of employees exposed 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.

100. Permissible limits of exposure of chemical and toxic substances.- 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 as declared by the Central Government in the notification, standards on occupational safety and health code under **THE SECOND SCHEDULE** prescribed under Section 18 (2)(f) of the said code.

101. Appeal.- Occupier of any factory aggrieved by an order made by Inspector-cum-Facilitator may, within thirty days from the date on which the order is communicated to him, make an appeal, 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, to the Chief Inspector-cum-Facilitator who shall, after giving the appellant an opportunity of being heard to both the parties as the case may be, dispose of the appeal as expeditiously as possible:

Provided that the Appellate Authority may entertain the appeal after the expiry of the said period of fifteen days if he is satisfied that the appellant was prevented by sufficient cause from filing the appeal in time.

102. Persons in supervisory, managerial or confidential positions.- (1) The following persons in factories, other than sugar factories, shall be deemed to hold positions of supervision or management, provided they are not required to perform manual labour as regular part of their duties:-

- (a) Manager;
- (b) Labour Officer;
- (c) Security Officer;
- (d) Heads of Technical Department;
- (e) Engineers;
- (f) Supervisors;
- (g) Shift Officer;
- (h) Shift In-charge;
- (i) Head Storekeepers provided they are employed solely in a supervisory capacity; and
- (j) any other person, who in the opinion of the State Government holds a position of supervision or management and is so declared by it in writing by way of an order.

- (2) In sugar factories, the following persons shall be deemed to hold positions of supervision or management:-
- (a) The General Manager;
 - (b) The Manager;
 - (c) The Mill Secretary;
 - (d) The Cane, Manager;
 - (e) The Cane Superintendent, where there is no Cane Manager;
 - (f) The Chief Chemist;
 - (g) The Labour Welfare Officer;
 - (h) The Chief Engineer;
 - (i) The Secretary to the Managing Agent or the Personal Assistant to the General Manager;
 - (j) The Cane Development Officer;
 - (k) Heads of Commercial Department, like accounts, purchase, store, legal catering, etc.; and
 - (l) any other person who, in the opinion of the State Government, holds a position of supervision or management and is so declared by it in writing by way of an order.
- (3) The following persons shall be deemed to hold confidential positions in a factory:
- (a) Stenographers;
 - (b) Personal Assistants;
 - (c) Personal Secretaries;
 - (d) Office Superintendent;
 - (e) Head Clerk, where there is no Office Superintendent;
 - (f) Head Munim where there is no Office Superintendent or Head Clerk;
 - (g) Head Accountant;
 - (h) Head Cashier;
 - (i) Cashier;
 - (j) Head Time-keeper;
 - (k) Telephone Operator;
 - (l) Receptionist; and
 - (m) any other person, who in the opinion of the State Government, holds a confidential position and is so declared in writing by it by way of an order.
- (4) The list of all persons mentioned in sub-rules (1), (2) and (3) shall be kept and maintained in a register in **Form-XLI**.
- (5) For continuous process factories, provisions of Section 26 and Section 27 and rules made thereunder, shall be exempted to such an extent as prescribed in Schedule II.

103. Safety Precautions relating to fencing of particular machinery and methods of work for securing safety of the workers under clause (zzq) of sub-section (2) of section 133.- (1) Notwithstanding anything contained in

standards on Occupational Safety and health declared by Central Government, the further precautions specified in the Schedule D to N annexure hereto shall apply to the machinery and methods of work noted in each schedule. The provisions specified in the schedule shall be in addition to the standards declared by the Central Government under Section 18(2)(f).

(2) Moreover, any provisions specified in the said schedules, if found contrary to the said standards, the standards declared by the Central Government shall prevail.

Part VIII

PLANTATION

104. Housing accommodation.- (1) Every employer shall provide for every worker and his family residing in a plantation, rent free housing accommodation as near as possible to the place of work. It shall be open to an employer to provide such accommodation in the course of several years provided that houses shall be built at least twenty-five per cent of the resident workers every year.

(2) All housing accommodation for workers in a plantation shall have separate rooms for women employees. Effective and suitable provisions shall be made in every room for securing and maintaining adequate ventilation by the circulation of fresh air and there shall also be provided and maintained sufficient and suitable natural or artificial lighting. The rooms or other suitable alternative accommodation shall be of such dimensions so as to provide at least a floor area of ten square meters, excluding area of the kitchen and toilets, for each person making use of the room. The accommodation shall be so constructed as to afford adequate protection against heat, wind, rain and shall have smooth, hard and impervious floor surface.

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

(4) Adequate lighting arrangements shall be provided in and around the area in which housing accommodation is provided.

(5) The employer shall maintain in good condition the approach roads and paths to the area where houses are located as also the sewers and drains in that area.

(6) The employer shall not deny to the public free access to those parts of the plantation where the workers are housed.

(7) The employer shall cause the vicinity of all houses to be kept clear of refuse and excreta and the latrines and drains to be cleaned out daily and all refuse in or near them to be collected, removed and disposed of hygienically.

105. Housing Scheme under clause.-(1) Within six months of the date of publication of these rules, every employer of Plantation shall necessarily provide accommodation and shall submit to the Chief Inspector-cum-Facilitator for approval a scheme in regard to the provision by him of housing accommodation for workers, who shall with his remarks forward the same to State Government for approval within thirty days. The State Government will decide the housing scheme as proposed by the employer within a period of three months.

(2) The scheme shall provide for the following matters:-

- (a) specification* of the period during which housing accommodation is proposed to be provided in respect of all resident workers in a plantation, such period being not later than the period referred to in Rule-104;
- (b) the type design which is proposed to be adopted for the construction of houses,* such design being in conformity with the standards and specification as may be approved by the State Government, under sub-rule (1);

- (c) time frame, plan and site-plan, in duplicate, of the buildings to be constructed or remodelled for use as workers' houses.

(3) All houses shall be built in accordance with the scheme as approved in writing by the State Government.

(4) With a view to showing the progress made in providing houses according to the approved scheme every employer shall submit to the Chief Inspector-cum-Facilitator of Plantations a report in **Form- XLII** by July 31st of every year.

106. Maintenance of houses under clause (a) of sub-section (1) of section 92.-(1) The employer shall, at his own expense, execute such repairs to the houses as may be required from time to time and maintain the houses in fit and safe condition for occupation.

(2) A worker occupying a house may, and an Inspector-cum- Facilitator appointed under the Code and rules made thereafter, shall bring to the notice of the employer any defect in the condition of a house which made it dangerous to the health and safety of the workers. Where an Inspector-cum-Facilitator so brings such defects to notice, it shall be the duty of the employer to rectify them without any delay.

(3) The employer shall get all the houses lime-washed at least once every year and all the doors, windows and other wooden structure varnished or painted once in three years. A record of dates on which lime-washing or painting was carried out shall be maintained by the employer as specified by State Government by general or special order.

107. Allotment and occupation of houses under clause (a) of sub-section (1) of section 92.-(1) No rent shall be charged by an employer for the housing accommodation provided to workers and their families residing in his plantation.

(2) Houses shall be allotted on the basis of one house for a worker having a family for the use of the worker and his family-

Provided that if there are two or more workers in a family only one house shall be allotted in respect of any such family in the name of any worker in the family:

Provided further that in case, of termination of services of a worker in whose name a house is allotted under the preceding proviso, the house shall be allotted in (he Dame of any other member of his family who is a worker.

(3) The employer may allot houses to workers not having families at the rate of one house for not more than four such workers.

(4) The occupant of a house shall not make any unauthorised additions to or alterations in the house.

(5) The occupant of a house shall not exchange the house with the occupant of another house except with the written permission of the employer.

(6) The occupant shall not let the house or any portion thereof to any person

(7) All workers and members of their families occupying the houses shall use the latrines provided and shall not pollute the soil and shall keep the houses and the precincts thereof clean and tidy and shall not waste drinking water.

(8) No cattle or goats shall be kept in the living rooms or verandahs and no windows or air spaces shall be blocked up.

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

108. Occupation of accommodation after termination of employment clause (a) of sub section (1) of section 92.-

(1) When a worker dies in the service of the employer or retires or goes on transfer, or resigns, or goes on leave or when his services are terminated, he or his family may retain the house up to the period as detailed below:

- (a) in the case of death, transfer or termination of service, for a period not exceeding two months;
- (b) in the case of retirement or resignation, for a period not exceeding one month;

(c) in the case of leave., for the period of leave, and

(d) in the case where discharge or dismissal of a worker results in an industrial dispute, for so long as the case is not finally disposed of.

(2) If, on the application made to Inspector-cum-Facilitator having jurisdiction of the area where such housing accommodations are located, the Inspector-cum-Facilitator is satisfied that a worker or any member of his family refuses to vacate the house allotted to such worker after the expiry of the period specified in sub-rule (1), he may, notwithstanding any other law for the time-being in force, by notice served, (a) by post; or

(b) by affixing a copy of it on (be outer door or some other conspicuous part of such house; or

(c) by any other means of serving the notice as prescribed under the Bhartiya Nagrik Suraksha Sanhita, 2023 (Act No. 46 of 2023) after giving proper opportunities of being heard from such worker or a member of his family or any other person who may be in occupation of the whole or any part of the house, shall pass an order to vacate it within one month of the date of service of such order,

(3) In the event of the failure of the worker or any other person who is in occupation of the house to comply with the order under sub-rule (2), the Inspector-cum-Facilitator may make written requisition to the officer not below the rank of a sub-divisional magistrate, having jurisdiction over the area to evict such worker, member or other person from the house.

(4) On receipt of requisition under sub-rule (3), the sub-divisional magistrate specified in sub-rule (3) shall execute the order passed by Inspector-cum-Facilitator and shall ensure the eviction of such member or other person and shall handover the possession of the house to the employer. The sub-divisional magistrate may for this purpose, use such force as may be necessary;

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

109. Drinking Water under clause (a) of sub-section (i) of section 92.- (1) An adequate supply of drinking water shall be made available in every plantation at every sites, at all times during working hours as may be prescribed by Central Government under section 23 of the Code.

110. Urinal facility under clause (a) of sub-section (1) of section 92.- (1) Urinal facility shall be provided on the scale as may be prescribed by Central Government under section 23 of the Code

111. Construction and maintenance of drains under clause (a) of sub-section (1) of section 92.- All drains carrying waste or sullage water shall be constructed in masonry or other impermeable materials and shall be regularly flushed, and the effluent shall be disposed of by connecting such drains with a suitable drainage line :

Provided that where there is no such drainage line, the effluent shall be deodorized and rendered innocuous and then disposed of in a suitable manner to the satisfaction of the Health Officer.

112. Creches under clause (b) of sub-section (1) of section 92.- (1) In every plantation wherein fifty or more workers are employed or were employed on any day of the preceding twelve months, the employer shall provide and maintain a creche or creches for the use of their children as may be prescribed by Central Government under section 24 of the Code.

113. Educational facilities for workers children under clause (c) of sub-section (1) of section 92.- (1) Every employer shall, if the number of workers' children between the ages of 6 and 12 in his plantation exceeds 25, provide and maintain a primary school or schools for imparting primary education to the children

Provided that an employer may not provide and maintain a primary school if there is one under the direct management of the State Government or of any local body for imparting free education to the children up to the primary or higher standard, with enough seats to admit the children between the ages of six and twelve of the workers in his plantation and within a distance of one mile from the place where workers reside in his plantation, or if under any other law he is required to pay a cess or tax for primary education:

Provided further that subject to the provisions of these rules, a group of employers may jointly provide and

maintain a primary school and share its expenses.

(2) Every school to be provided and maintained under these rules, shall be conveniently situated within a distance of one mile from the workers' quarters.

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

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

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

(5) The employer or employers, as the case may be, shall provide for every primary school maintained under these rules, such educational and other equipment as may be considered necessary by the State Government,

(6) The employer or employers concerned shall appoint one teacher for every forty children attending the primary school. The teacher shall possess the qualifications prescribed by the State Government for teachers in Government primary schools:

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

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

(8) No fees shall be charged from die workers' children attending the primary school.

114. Health facilities under clause (d) of subsection (1) of section 92.- The plantation workers shall be provided with adequate medical facilities as notified by the State Government in consultation with the Department of Medical Heath and Family Welfare from time to time

115. Recreational facilities under clause (e) of sub- section (1) of section 92.-(1) Every employer shall provide and maintain:-

(a) a recreation centre or centres for workers with provision for indoor games suitable for workers;

(b) where adequate flat open space is available within a reasonable distance, a playground or playgrounds for adult and child workers with necessary sports equipment for outdoor games;

Provided that subject to the provisions of these rules, a group of employers may with the approval of the Chief Inspector-cum-Facilitator, provide and maintain joint recreation centres and playgrounds and share their expenses.

(2) Every recreation centre to be provided and maintained under these rules, shall be conveniently situated as near as possible to the worker's quarters.

116. Use and handling of hazardous chemicals, insecticides, pesticides and toxic substances in the plantation under sub-section (2) of section 93.-(1) No adolescent worker shall be engaged in any activity or work where, they are likely to be exposed to the use, handling, storage and transportation of hazardous chemicals, insecticides, pesticides, hazardous substances and other toxic substances:

Provided that women workers may be employed with their consent to work subject to the following conditions-

(a) International Safely standards shall be adopted by the occupier for providing Occupational Safety and Health (OSH).

(b) The occupier shall, as far as possible, modernise the above processes/places from time to time and will use modem equipments.

(c) Women workers those are feeding mother shall be exempted from the Employment.

(2) The employer shall ensure the regular health checkup of all women and adolescent worker engaged in any activity or work of plantation as prescribed under Rule-75 and shall keep the records as mentioned in Rule-75 of these rules.

117. Appointment and qualification of supervisors under sub-section (3) of section 93.- (1) For the purposes of sub-section (3) of section 93, the employer shall appoint one or more persons as supervisors, having the following qualifications to supervise the use, handling, storage and transportation of insecticides, chemicals and toxic substances in his plantation

(2) The supervisors appointed under sub-rule (1) shall have the following qualifications, namely-

- (a) he shall be a graduate in agriculture or in any science or he shall possess a certificate course on handling of chemicals and toxic substances conducted by the institute recognised by the Government of West Bengal or having an equivalent degree conferred by any institution established and recognised under the law;
- (b) he shall be given training from a designated training institute; and
- (c) he shall also possess valid certificate from Indian Red Cross Society (IRCS) or St. John's Ambulance Association or any other institution as recognised by the State Government for this purpose, for giving first aid treatment to workers

(3) The supervisor shall-

- (a) advise the employer on health and safety issues;
- (b) be responsible for storage of equipment's, chemicals, insecticides etc;
- (c) be responsible for co-ordination and transportation of chemicals, insecticides and personnel involved in the above process;
- (d) be responsible for reporting any incident and/or accident involving chemicals due to use of insecticide spraying;
- (e) ensure good relation with the workers and their representatives;
- (f) ensure the correct use of chemicals and its spraying where spraying of chemical scours;
- (g) ensure that protective clothing and dust mask are provided to the spraying personnel and make sure that they are using it during their duty time;
- (h) ensure correct use of safety procedure and control of quality spraying;
- (i) keep people, especially children away from danger of exposure to spraying;
- (j) note the quantity of chemicals and insecticides prepared as and when it issued;
- (k) monitor storage, usage and disposal of chemicals by the labourers of plantations.

118. Training of workers under sub-section (4) of section 93.- The employer shall organize training in handling chemicals, insecticides and toxic substances and also adopt safety precautions in handling equipment's provided to the workers. The training programme shall be organized on the following matters, namely,-

- (a) procedure involved in handling mixing, blending and applying of insecticides, chemical and toxic substances;
- (b) control the quality of the spraying and the quality of the solution used;
- (c) to see that the equipment is well maintained and cleaned after work;
- (d) method of transferring the insecticide to the spraying machine;
- (e) Keeping people, especially children away at the time of spraying;
- (f) manner in which the chemicals and insecticides are to be stored;

- (g) manner of mixing the chemicals to prepare the insecticide solution;
- (h) the use of protective clothing and mask at the time of spraying;
- (i) training on the hazards involved in different operations;
- (j) the procedure regarding the spillage of insecticides, chemicals and toxic substances.

119. Medical examination of plantation workers under sub-section(5) of section 93.-(1) Every employer of a plantation shall arrange to conduct free of cost medical examination compulsory for all the employees, who are exposed to insecticides, pesticides, chemicals and toxic substances which are used, handled, stored or transported in a plantation, at an interval of not more than ninety days by a Medical Officer or Medical practitioner appointed under the Code;

Provided that if any person shows symptoms of poisoning or symptoms of any contagious disease shall be immediately examined and properly treated.

- (2) The employer shall report immediately to the Medical Officer of any accident caused due to use, handling, mixing, blending, storage and transportation of such substances immediately.
- (3) In all cases of poisoning, first-aid treatment shall always be given before the physician is called. The Indian Standard Guide for handling cases of pesticide poisoning Part-1, First-Aid Measures [LS 4015 (Part-II) - 1967] shall be consulted for such first-aid treatment in addition to any other book on the subject The workers shall also be educated on the effects of poisoning and the first-aid treatment to be given.
- (4) Workers engaged in spraying work shall be changed and replaced by another batches of workers after they have worked for a period of three months.

120. Records of Medical examination of plantation workers under sub-section (6) of section 93.-(1)The records of medical examination conducted under Rule-119 shall be kept in accordance with the provisions and forms as laid down under Form-VII.

(2) A copy of such medical report shall be provided to the concerned worker and medical records, as maintained under Form-VII, and the employer shall make such provisions that concerned workers may have the access to these registers easily.

121. Washing, bathing and cloak room, protective clothing and equipments Facilities under clause (a) and clause (b) of sub- section (7) of section 93.- The washing, bathing and clock room facilities shall be provided and maintained in a cleanly state and in good repair for the use of all persons employed as may be prescribed by Central Government under section 24 of the Code

122. Display of Notice indicating hazards of insecticides, pesticides, chemicals and toxic substances under sub-section (9) of section 93.- Every employer of a plantation shall exhibit precautionary notice at or near the place where the insecticides, chemicals and toxic substances are handled-

- (a) Use protective clothing like overalls, gloves rubber gum- boots and wide brimmed hats.
- (b) Do not wear clothes contaminated with insecticides and pesticides.
- (c) Clean the protective clothing by washing with soap and > water.
- (d) Do not allow children, sick persons and pregnant women and nursing mothers to handle insecticides and pesticides.
- (e) Do not eat, drink, smoke or chew while handling insecticides and pesticides.
- (f) Never blowout clogged nozzles with your mouth.
- (g) Do not use leaking sprayers. Avoid contamination of the skin, mouth and eyes.
- (h) Do not inhale the insecticides unattended in the fields.
- (i) Never spray insecticides and pesticides against the wind.

- (j) Do not leave insecticides and pesticides unattended in the fields.
- (k) Do not allow humans and livestock to enter the insecticides and pesticides sprayed fields for a period of time suggested by the manufacturers.
- (l) Do not wash insecticides and pesticides containers near a well or running stream.
- (m) Keep clean water, soaps and towels ready for use.
- (n) Wash hands and exposed skin thoroughly with soap and water before eating, drinking or smoking or chewing after work.
- (o) Keep the insecticides and pesticides locked in the store room and out of reach of children and other unauthorised persons.
- (p) Do not enter the spread fields. Follow the re-entry periods for all insecticides and pesticides, including herbicides, suggested by the manufacturers.
- (q) Keep insecticides and pesticides in their original labelled containers.
- (r) Do not decant insecticides and pesticides into and label containers, except for immediate use.
- (s) Dispose the containers safely after thoroughly emptying and washing. They may be buried in a place away from the water source.
- (t) Never use the container for any other purposes, if it is impossible to remove the traces of insecticide and pesticides from the containers.

CHAPTER XII

OFFENCES AND PENALTY

- 123. Manner of holding enquiry.** - (1) When a complaint is filed before the officer appointed under sub-section (1) of section 111 in respect of the offences referred to in said sub-section, by an Inspector cum- Facilitator, the officer after considering such evidences as produced by the Inspector-cum- Facilitator, is satisfied that an offence has been committed, shall issue summons to the accused on the address specified in the complaint and fix a date for appearance.
- (2) The authorisation to appear on behalf of either of the parties, shall be presented to the officer under sub-rule (1) during the hearing of the complaint and shall form part of the record.
- (3) If the accused to whom the summons has been issued under sub-rule (1) appears or is produced before the officer, he shall explain the accused regarding the offence against which the enquiry has been initiated, and
- (a) If the accused pleads guilty, the officer shall impose penalty on him in accordance with the provisions of the Code and
 - (b) If the accused does not plead guilty, the officer shall proceed with the enquiry, issue summons to any person acquainted with facts and circumstances of the case, and appoint a specified date for next hearing.
- (4) On such appointed date, the officer shall record all evidences produced by the accused and the Inspector cum-Facilitator, whether documentary or by the witnesses on oath and provide opportunity of cross examination of the witnesses so produced.
- (5) The officer shall after hearing the parties and considering the evidence so produced whether oral and documentary, shall decide the complaint in accordance with the provisions of the Code.
- (6) The officer shall, while passing an order, record -
- (a) the particulars of the complaint;
 - (b) the details of the parties;

- (c) the nature of the offence with reference to relevant provisions of the Code;
- (d) the pleadings of the parties;
- (e) summary of evidence including cross-examination;
- (f) findings and reasons; and
- (g) penalty imposed, if any.

- (7) In case, the accused or his representative fails to appear without any sufficient cause on two consecutive dates, the officer may proceed to hear and determine the complaint ex-parte:

Provided, in case where Inspector-cum-Facilitator fails to appear or through his representative without any sufficient cause, on the specified date, the officer may dismiss the complaint.

- (8) Officer may allow for adjournment of the proceedings on receipt of application either from the Inspector cum- Facilitator or the accused:

Provided that not more than three adjournments shall be allowed:

Provided further that the officer may at his discretion permit hearing the parties or any of the party, as the case may be, through video conferencing.

- (9) The officer shall endorse or cause to be endorsed on each document, the date of its presentation or receipt, as the case may be, and if the documents are submitted electronically, endorsement shall be made electronically.

- (10) The parties to the issue or their authorised representative under sub-rule (2) shall be entitled to inspect any complaint or any other document filed with the officer.

- (11) The officer may refuse to entertain a complaint, if he is satisfied that the complaint is incomplete and may request the Inspector-cum-Facilitator to rectify such defects within the time specified by him for such purpose:

Provided that if the officer is of the opinion that it is not possible to rectify such defects in the complaint, he may return such complaint indicating the defects.

- (12) Where the complaint is presented after rectification of the defects, the date of such re-presentation shall be deemed to be the date of presentation for the purpose of sub-section (1) of section 111 of the code.

- (13) The officer may, after giving the Inspector-cum-Facilitator an opportunity of being heard, refuse to entertain a complaint, if he is satisfied for reasons to be recorded in writing, that-

- (a) The complainant has filed the complaint beyond six months from the date on which the offence complained is committed;
- (b) The complainant fails to comply with the directions given by the officer.

- (14) (i) any person aggrieved by an order made by the officer may prefer an appeal, in manner, form and with applicable fee as prescribed by State Government through general or special order, to the appellate authority to be appointed under sub-section (3) of section 111, within sixty days from the date on which the copy of the order referred under sub-rule (6) made by the officer is received by the aggrieved person.
- (ii) the appellate authority appointed under sub-section (3) of section 111, after giving the parties to the appeal an opportunity of being heard, pass such order as he thinks fit, confirming, modifying or setting aside the order appealed against, within a period of sixty days from the date of receipt of appeal.

124. Manner of compounding of offences by the authorised officer.-(1) The officer notified by the State Government for the purposes of compounding of offences under sub-section (1) of section 114 shall on an application in **Form-XIX** by an accused person desirous of making composition of a compoundable offence, before or after holding the enquiry or as the case may be, of institution of prosecution, issue electronically a compounding notice in **Form-XX** to such person for the offence for which is compoundable under sub-section (1) of section 114 of the Code.

- (2) The person so noticed under sub-rule (1) may apply to the officer in Part-III of **Form-XX**, electronically and deposit the entire compounding amount by electronic transfer or otherwise, within fifteen days of the receipt of the notice.
- (3) The officer referred to in sub-rule (1) shall issue a composition certificate in Part IV of **Form-XX** within ten 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 time specified, the prosecution shall be instituted after one month from the last date of specified time before the court against such person for the offences in respect of which the compounding notice was issued.
- (5) For compounding of an offence, where the prosecution has already been instituted in a court, the officer referred to in sub-rule (1) shall send a copy of such order for intimation to the concerned court for further action.

CHAPTER-XIII

SOCIAL SECURITY FUND

- 125. Social Security Fund.** - Social Security Fund set up under section 141 of the Code on Social Security, 2020 (36 of 2020) shall be deemed to have been set up under section 115 of the Code, including other sources of fund and the manner of administering and expending the fund for welfare of the unorganised workers.

CHAPTER XIV

MISCELLANEOUS

- 126. Grievance redressal mechanism for contract labour.**- (1) The contract labour may submit grievance relating to health, working conditions and wages, at the level of principal employer, who shall look into the matter and redress grievance.
- (2) A committee shall be constituted by the principal employer in whose establishment contract labour is employed and the committee shall comprise of a chairman, who shall be the authorized representative of the principal employer and shall have representative of principal employer and contractor.
 - (3) The committee shall hear and dispose of the grievance of the contract labour within a period of thirty days.
 - (4) In event the grievance is not redressed within thirty days, the principal employer shall forward the grievance to the concerned Inspector-cum-Facilitator electronically.
 - (5) The Inspector-cum-Facilitator, upon receipt of the grievance forwarded under sub-rule (4), shall inquire into the matter and take appropriate action for its disposal, and shall ensure that the grievance is resolved within a period not exceeding sixty days from the date of its receipt.
- 127. Annual increment of regular worker of a contractor.**- A worker who is regularly employed by the contractor for any activity and employment of such worker is governed by mutually accepted standards of the condition of employment shall be such that such worker gets an annual increment of not less than two percent of their wages.
- 128. Income from sources and quantity of hazardous substance.**- Income from sources under Explanation to clause (x) of sub-section (1) of section 2 and substance or quantity of substance under clause (zb) of said sub-section shall be specified through general or special order by State Government issued from time to time.
- 129. Appointment of Competent person under clause (I) of sub-section (1) of Section 2.**— (1) The Chief Inspector-cum-Facilitator may recognize any person as a competent person within such area and for such period as may be specified for the purposes of carrying out tests, examinations and inspections for such buildings, dangerous machinery, hoists and lifts, lifting machines and lifting tackles, pressure plants, confined spaces, ventilation systems and such other processes or plants and equipment as stipulated in the Code and the Rules made thereunder, located in a factory, if such a person possesses the qualifications, experience and other requirements as set out in Schedule-O annexed to this Rule:

Provided that the Chief Inspector-cum-Facilitator may relax the requirements of qualifications in respect of a Competent Person, if such a person is exceptionally experienced and knowledgeable, but not the requirements in respect of the facilities at his command:

Provided further that the Competent Person recognized under this provision shall not be more than 65 years of age and shall be physically fit for the purpose of carrying out tests, examinations and inspections.

- (2) The Chief Inspector-cum-Facilitator may recognize an institution of repute, having persons possessing qualifications and experience as set out in the Schedule-I annexed to the rule for the purpose of carrying out tests, examinations and inspections for buildings, dangerous machinery, hoists and lifts, lifting machines and lifting tackles, pressure plants, confined spaces, ventilation systems and such other process or plants and equipment as are stipulated in the Code and the Rules made thereunder, as a competent person, within such area and for such period as may be specified.
- (3) The Chief Inspector-cum-Facilitator may on receipt of an application electronically or otherwise in **Form-XLIII**, from a person or in **Form-XLIV** from an institution intending to be recognized as a Competent Person for the purposes of the Code and the Rules made thereunder, register such application and within a period of sixty days of the date of receipt of application, reject the application for reasons to be recorded in writing or if satisfied about the competence and facilities available at the disposal of the applicant, recognize the applicant as a Competent Person and issue a certificate of competency in **Form-XLV** electronically or otherwise.
- (4) The competent person or the institution shall send a monthly report to the Inspector-cum-Facilitator having jurisdiction by 10th day of every month. The report shall contain name and address of establishments where testing / examinations had been done, name of the persons who visited the establishment, date of visit and list of equipment with identification number so examined. The competent person shall also furnish any other information that an Inspector-cum-Facilitator may require for the purpose of satisfying himself whether any provision of the rule or instructions have been complied with or not. He shall also report immediately if during his visit he feels that existence of any imminent danger to life exists in the establishment.
- (5) The Chief Inspector-cum-Facilitator may, after giving an opportunity of being heard to the person recognized as a Competent Person revoke the certificate issued to him under sub rule (3):
 - (a) if he has reason to believe that the competent person:
 - (i) has violated any of the conditions stipulated in the certificate; or
 - (ii) has carried out a test, examination and inspection or has otherwise carried them in a manner inconsistent with the intent or the purpose of the Code or the Rules made thereunder; or
 - (iii) has omitted the act as required under the Code and the Rules made thereunder;
 - (b) for any other reason to be recorded in writing.

Explanation.—For the purpose of this Rule, an institution includes an organization.

The Chief Inspector-cum-Facilitator may, for reasons to be recorded in writing, require re-certification of lifting machines, lifting tackles, pressure plants or ventilation systems, as the case may be, which has been certified by a competent person outside the State of West Bengal.

130. Common licence in respect of a factory, industrial premises for beedi and cigar work and for engaging contract workers under Section 119(1)- (1) The form of application, manner of filing the application and the fee to be accompanied therewith to obtain a common licence in respect of a factory, an industrial premises for beedi and cigar work, or for engaging contract workers, or any combination thereof by any person shall be specified by the State Government through General or Special Order.

(2) On receipt of an application under sub-rule(1), the licencing authority may take such actions in such manner as may be specified by the State Government through General or Special Order;

(3) Any person aggrieved by an order passed under this rule by the licencing authority may file an appeal within thirty days in such form along with such the fees before the appellate authority as may be specified by the State Government in this regard through General or Special Order.

SCHEDULE I

Manufacture of Aerated Waters and processes incidental thereto.

1. **Fencing of machines.-** All machines for filling bottles or siphons shall be so constructed, placed or fenced, as to prevent, as far as may be practicable, a fragment of a bursting bottle or siphons from striking any person employed in the factory.
2. **Face guards and gauntlets.-** (1) The occupier shall provide and maintain in good condition for the use of all persons engaged in filling bottles or siphons-
 - a) Suitable face-guards to protect the face, neck and throat; and
 - b) suitable gauntlets for both arms to protect the whole hand and arms: Provided that,-
 - (i) provision of this clause shall not apply where bottles are filled by means of an automatic machine so constructed that no fragment of a bursting bottle can escape; and
 - (ii) where a machine is so constructed that only one arm of the bottle at work upon it is exposed to danger, a gauntlet need not be provided for the arm which is not exposed to danger.
- (2) The occupier shall provide and maintain in good condition for the use of all persons engaged in corking, crowning, screwing, wiring, foiling, capsuling, sighting or levelling bottles of siphons-
 - (a) Suitable face-guards to protect the face, neck and throat; and
 - (b) suitable gauntlets for both arms to protect the arm and at least half of the palm and the space between the thumb and forefinger.
3. **Wearing of face-guards and gauntlets.-** All persons engaged in any of the processes specified in clause 2 shall, while at work in such processes, wear the faceguard and gauntlets provided under the provisions of the said clause.

SCHEDULE II

Phosphating, 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, Gold Etc.

1. **Application.-** The provisions of this schedule shall apply to all factories in which phosphating, Electrolytic plating or oxidation of metal articles is carried on.
2. **Definitions.-** For the purposes of this schedule
 - (a) "electrolytic process" means the electrolytic plating or oxidation of metal articles by the use of an electrolyte containing acids, bases or salts of metals such as chromium, nickel, cadmium, zinc, copper, silver, gold, etc.
 - (b) "Phosphating process" means a chemical process for the surface treatment wherein soluble metal phosphate layers are formed.
 - (c) "bath" means any vessel used for an electrolytic process or for any subsequent process.
3. **Exhaust draught.-** An efficient exhaust draught shall be provided by mechanical means and shall operate on the vapour or spray given off in the process as near as may be at the point of origin. The exhaust draught appliance shall be so constructed, arranged and maintained as to prevent the vapour or spray entering into any room or place in which work is carried on.
4. **Floor or 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.-** (1) The occupier shall provide and maintain in good and clean condition the following articles of protective devices for the use of all persons employed on any process and such devices shall be worn by the persons concerned.
 - a. water proof aprons and bibs;
 - b. for persons actually working at a bath, loose-fitting rubber gloves and rubber boots or other waterproof footwear, and chemical goggles; and

- c. suitable and efficient respirator.
- (2) The occupier shall provide and maintain for the use of all persons employed suitable accommodation for the storage and drying of protective devices.
- 6. **Water facilities.-** (1) There shall be provided and maintained in good repairs for the use of all persons employed in electrolytic process and processes incidental to it
 - (a) a wash place under cover, with either
 - (i) a trough with a smooth impervious surface fitted with a waste pipe, and of sufficient length to allow atleast 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 intervals of not more than 60 cms; or
 - (ii) atleast 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.
- (2) In addition to the facility in sub-paragraph (1) an approved type of emergency shower with eye fountain shall be provided and maintained in good working order. Wherever necessary, in order to ensure continuous water supply, storage tank of 1,500 liters capacity shall be provided as a source of clean water for emergency use.
- 7. **Cautionary placard.-** A cautionary placard in the form specified below and printed in the language of the majority of the 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

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 maybe 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 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 atleast in every fortnight.
- (3) The record of the examinations referred to in sub-paragraph (2) shall be maintained in Health Register in Form VII which shall be kept readily available for inspection by the Inspector-cum-Facilitator.
9. **Medical examination by the Medical Officer.-**(1) Every worker employed in the electrolytic processes shall be examined by a Medical Officer before his first employment. Such examination shall include X-ray of the chest and
 - i. in case of chromium plating, include examination for nasal septum perforation and test for chromium in urine
 - ii. in case of nickel plating, test for nickel in urine; and

- iii. in case of cadmium plating, test for cadmium in urine and -2 micro globulin in urine.
- (2) No worker shall be employed in any electrolytic process unless certified fit for such employment by the Medical Officer.
- (3) Every worker employed in the electrolytic processes shall be re-examined by a Medical Officer atleast 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 re-examination shall, wherever the Medical Officer considers appropriate, include tests as specified under subparagraph (1) excluding the X-ray of the chest which shall not be required normally to be carried out earlier than once in three years.
- (4) The Medical Officer after examining a worker shall issue a Certificate of Fitness in Form 8. The record of examination and re-examinations carried out shall be kept in the custody of the Occupier of the factory. The record of each examination carried out under sub-paragraphs (1) and (2), including the nature and the results of the tests shall also be entered by the Medical Officer in a health register in **Form VII**
- (5) The certificate of fitness and the health register shall be kept readily available for inspection by the Inspector-cum-Facilitator.
- (6) If at any time the Medical Officer 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 Medical Officer, in which case the person affected shall be suitably rehabilitated.
- (7) No person who has been found unfit to work as said in sub-paragraph (6) shall be re-employed or permitted to work in the said processes unless the Medical Officer, after further examination again certifies him fit for employment in those processes.

SCHEDULE III

Manufacture and Repair of Electric Accumulators

1. **Savings.**-This Schedule shall not apply to the manufacture or repair of electric accumulators or parts thereof not containing lead or any compound of leads or to the repair on the premises, of any accumulator forming part of a stationery battery.
2. **Definitions.**- For the purposes of this Schedule.-
 - (a) "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.
 - (b) "Manipulation of raw oxide of lead" means any lead process involving any manipulation or movement of raw oxides of lead other than its conveyance in a receptacle or by means of an implement from one operation to another.
3. **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 process-
 - (a) Manipulation of raw oxide of lead;
 - (b) Pasting;
 - (c) Drying of pasted plates;
 - (d) Formation with lead burning ("tacking") necessarily carried on in connection therewith; and
 - (e) Melting down of pasted plates.
4. **Air space.**- In every room in which a lead process is carried on, there shall be at least 14 cubic metres of air space, for each person employed therein, and in computing this air space, no height over 3.5 metres shall be taken into account.

5. **Ventilation.**-Every work-room shall be provided with inlets and outlets of adequate size as to secure and maintain efficient ventilation in all parts of the room.
6. **Distance between workers in pasting room.**- In every pasting room, the distance between the center of the working position of any paster and that of the paster working nearest to him, shall not be less than 1.5 metres.
7. **Floor of work-rooms.**- (1) The floor of every room in which a lead process is carried on shall be,-
 - (a) of cement or similar material so as to be smooth and impervious to water;
 - (b) Maintained in sound condition; and
 - (c) Kept free from materials, plant, or other obstruction not required for, or produced in, the process carried on in the room.(2) In all such rooms other than grid casting shops, the floor shall be cleaned daily after being thoroughly sprayed with water at a time when no other work is being carried on in the room.
 - (3) In grid casting shops, the floor shall be cleaned daily.
 - (4) Without prejudice to the requirements of sub-clause (1), (2) and (3) 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 a hose pipe.
8. **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 on there at;
 - (c) all such work-benches other than those in grid castings hops shall be 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 there at;
 - (d) all such work-benches in grid ousting shops, shall be cleansed daily; and
 - (e) every work-bench used for pasting shall,-
 - (i) be covered throughout with sheet lead or other impervious material;
 - (ii) be provided with raised edges; and
 - (iii) be kept constantly moist while pasting is being carried on.
9. **Exhaust draught.**-The following processes shall not be carried on without the use of an efficient exhaust draught,-
 - (a) Melting of lead or materials containing lead;
 - (b) Manipulation of raw oxide of lead, unless done in an enclosed apparatus so as to prevent the escape of dust into the work-room;
 - (c) Pasting;
 - (d) Trimming, brushing, filing or any other abrading or cutting of pasted plates giving rise to dust;
 - (e) Lead burning, other than,-
 - (i) 'tacking' in the formation room;
 - (ii) chemical burning for the making of lead lining for cell cases necessarily carried on in such a manner that the application of efficient exhaust is impracticable.

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

10. **Fumes and gases from melting pots.**—The products of combustion produce in the heating of any melting pot shall not be allowed to escape into a room in which persons work.
11. **Container for dross.**—A suitable receptacle with tightly fitting cover shall be provided and used for dross as it is removed from every melting pot. Such receptacle shall be kept covered while in the work-room, except when dross is being deposited therein.
12. **Container for lead waste.**—A suitable receptacle shall be provided in every work-room in which old plates and waste material which may give rise to dust shall be deposited.
13. **Racks and Shelves in drying room.**— The racks or shelves provided in any drying room shall not be more than 240 cms. From the floor not more than 60cms in width.

Provided that as regards racks or shelves set or drawn from both sides the total width shall not exceed 120 cms. Such racks or shelves shall be cleaned only after being thoroughly damped unless an efficient suction cleaning apparatus is used for this purpose.

14. **Medical examination by Factory Medical Officer.**— 1. Every worker employed in lead processes shall be examined 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 steadiness test.

2. The Factory Medical Officer after examining a worker shall issue a Certificate of Fitness in Form VII. The record of examination and re-examinations carried out shall be kept in the custody of the Occupier of the factory. The record of each examination carried out as described in the paragraph (1) including the nature and the results of the tests shall also be entered by the factory Medical Officer in a health register in Form VII and the records after every examination and re-examinations shall be produced before the Medical Officer and on demand.

15. **Protective clothing.**— Protective clothing shall be provided and maintained in good repair for all persons employed in,—

- (a) Manipulation of raw oxide of lead;
- (b) pasting; or
- (c) the formation room;

and such clothing shall be worn by the persons concerned. The protective clothing shall consist of a water-proof apron and water-proof footwear, and, also, as regards persons employed in the manipulation of raw oxide of lead or in pasting, head coverings. The head coverings 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 (a) sufficient tables and benches, and (b) adequate means for warming food: Provided that this paragraph shall not apply where a canteen has been provided.

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 use of all persons employed in a lead process—

- (a) a cloak-room for clothing put off during working hours with adequate arrangement for drying the clothing if wet. Such accommodation shall be separate from any mess-room;
- (b) separate and suitable arrangements for the storage of protective clothing provided under paragraph 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) 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 one 61 cm. 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 61 cm.; or at least one wash basin for every five such persons employed at any one time fitted with a waste pipe and plug and having a constant supply of water laid on:

- (ii) a sufficient supply of soap or other suitable materials renewed daily, which supply, in the case of pasters and persons employed in the manipulation of raw oxide of lead, shall include a separate marked towel for each such worker; and
- (iii) a sufficient supply of soap or other suitable cleansing material and of nail brushes.
- (b) 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 to be allowed for washing.** - Before each meal and before the end of the day's work, at least ten minutes, in addition to the regular meal times, shall be allowed for washing, to each person who has been employed in the manipulation of raw oxide of lead or in pasting:

Provided that if there be one basin or 61 cm. 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 for all persons engaged in the manipulation of raw oxide of lead or in pasting, and a sufficient supply of soap and clean towels.
21. **Food, drink etc., prohibited in work-rooms.** - 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.

SCHEDULE IV

Glass Manufacture

1. **Exemption.**- If the Chief Inspector-cum-Facilitator is satisfied in respect of any factory or any class of process that, owing to the special methods of work or the special conditions in a factory or otherwise, any of the requirements of this Schedule can be suspended or relaxed without 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 authorise such suspension or relaxation as may be indicated in the certificate for such period and on such conditions as he may think fit.
2. **Definitions.**- For the purposes of this Schedule,-
- (a) "Efficient exhaust draught" means localised ventilation effected by mechanical means for the removal of gas, vapour, dust or fume 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 of soluble lead compound exceeding, when calculated as lead monoxide, five percent, of the dry weight of the portion taken for analysis.

Explanation: The method of treatment shall be as follows: -

A weight 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 percent, 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 weighted as lead sulphate.

3. **Exhaust draught.** - The following process shall not be carried on except under an efficient exhausted draught or under such other conditions as may be approved by the Chief Inspector- cum-Facilitator, -
- (a) The mixing of raw materials to form a "batch".
 - (b) The dry grinding, glazing and polishing of glass or any article of glass.

- (c) All processes in which hydrofluoric acid fumes or ammoniacal vapours are given off.
- (d) All processes in the making of furnace moulds or 'pots' including the grinding or crushing of used 'pots'.
- (e) All processes involving the use of a dry lead compound.

4. **Floors 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, -

The floors shall be, -

- (a) Of cement or similar material so as to be smooth and impervious to water;
- (b) Maintained in sound condition; and
- (c) cleansed daily after being thoroughly spread with water at a time when no other work is being carried on in the room.

The work-benches shall, -

- (a) have a smooth surface and be maintained in sound condition, and
- (b) be 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 there at.

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 work places shall be so enclosed in projecting hoods that openings required for bringing in the objects to be treated shall be as small as practicable; and
- (d) the efficient exhaust draught shall be so contrived that the gases are exhausted downwards.

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 sterilizing his blow-pipe.

8. **Protective clothing.** - The occupier shall provide, maintain in good repair and keep in clean condition for the use of all persons employed in the process specified in clause 3 suitable protective clothing footwear and goggles according to the nature of the work and such clothing footwear, etc. shall be worn by the persons concerned.

9. **Washing facilities.** - There shall be provided and maintained in a cleanly state and in good repair for the use of all persons employed in the processes specified in paragraph 3-

- (a) a wash place with either -(i) a trough with a smooth impervious surface fitted with a waste pipe without plug, and of sufficient length to allow of at least two feet for every five such person 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 2 feet; or (ii) at least one wash basin for every five such person employed at any one time, fitted with a waste pipe and plug and having an adequate supply of water laid on or always readily available; and (b) a sufficient supply of clean towels made of suitable material renewed daily with a 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 such stand pipes shall be to the satisfaction of the Chief Inspector cum Facilitator.

10. **Medical examination.** - 1. Every worker employed in processes specified in clause 2 shall be examined within 15 days of his first employment. Such examination shall include pulmonary function test and in suspected cases chest X-rays as well as test for lead in urine and such other tests prescribed by the Factory Medical Officer.

2. The Factory Medical Officer after examining a worker shall issue a Certificate of Fitness in Form VII. The record of examination and re-examinations carried out shall be kept in the custody of the Occupier of the factory. The record of each examination carried out as described in the paragraph (1) including the nature and the results of the tests shall also be entered by the factory Medical Officer in a health register in Form VII and the records after every examination and re-examinations shall be produced before the Medical Officer and on demand.

SCHEDULE V

Grinding or Glazing of Metals and Processes Incidental Thereto

1. Definitions

For the purposes of this Schedule-

- (a) "Grindstone" means a grindstone composed of natural or manufactured sandstone but does not include a metal wheel or cylinder into which blocks of natural or manufactured sandstone are fitted;
- (b) "Abrasive wheel" means a wheel manufactured of 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.

2. Exceptions

- (1) 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.
- (2) Nothing in this Schedule except clause 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.
- (3) The Chief Inspector-cum-Facilitator may, by certificate in writing, subject to such conditions as he may specify therein, relax or suspend any of the provisions of this Schedule in respect of any factory if, owing to the special methods of work or otherwise, such relaxation or suspension is practicable without danger to the health or safety of the persons employed.

3. Equipment for Removal of Dust

No 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-cum-Facilitator 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 processes of grinding or glazing upon a grindstone, abrasive wheel or glazing appliance:

Provided that this clause 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-

- (a) an adequate supply of water is laid on at the upper surface of the grindstone; or
- (b) adequate appliances for the interception of dust are provided in accordance with the requirements of clause 3.

7. Examination of Dust Equipment

- (a) All equipment for the extraction or suppression of dust shall at least once in every six months be examined and tested by a competent person, and any defect disclosed by such examination and test shall be rectified as soon as practicable.
- (b) A register containing particulars of such examination and test shall be kept in a form approved by the Chief Inspector-cum-Facilitator.

8. Medical Examination

Every worker employed in grinding or glazing of metal processes incidental thereto shall be examined within 15 days of his first employment. Such examination shall include pulmonary function tests and, in suspected cases, chest X-rays and such other tests as prescribed by the Factory Medical Officer.

The Factory Medical Officer after examining a worker shall issue a Certificate of Fitness in **Form VII**. The record of examination and re-examinations carried out shall be kept in the custody of the Occupier of the factory. The record of each examination carried out as described in the paragraph (1) including the nature and the results of the tests shall also be entered by the factory Medical Officer in a health register in **Form VII** and the records after every examination and re-examinations shall be produced before the Medical Officer and on demand.

SCHEDULE VI

Manufacture and Treatment of Lead and Certain Compounds of Lead

- 1. Exemptions.** - 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 therein.

- 2. Definitions.** - For the purposes 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 percent 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.

Explanation: The method of treatment shall be as follows:

A weighed quantity of the material which has been dried at 100°C 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 percent 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.

- (b) "Efficient exhaust draught" means localized ventilation effected by heat or mechanical means for the removal of gas, vapour, dust or fumes so as to prevent them (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, fumes or dust originate.

3. **Application.** - This Schedule shall apply to all factories or parts of factories in which any of the following operations are carried on:
- (a) Work at a furnace where the reduction or treatment of zinc or lead ores is carried on.
 - (b) The manipulation, treatment or reduction of ashes containing lead, the desilvering of lead or the melting of scrap, lead or zinc.
 - (c) The manufacture of solder or alloys containing more than ten percent of lead.
 - (d) The manufacture of any oxide, carbonate, sulphate, chromate, acetate, nitrate or silicate of lead.
 - (e) Handling or mixing of lead tetra-ethyl.
 - (f) Any other operation involving the use of a lead compound.
 - (g) The cleaning of work-rooms where any of the operations aforesaid are carried on.
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 clauses 5 to 9 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 so contrived as to operate on the dust, fume, gas or vapour as closely as possible to the point of origin.
6. **Certificate of Fitness.** - A person medically examined under clause 7 and found fit for employment shall be granted by a factory Medical Officer a Certificate of Fitness, and such certificate shall be in the custody of the Manager of the factory in prescribed **Form VII**.
- The certificate shall be kept readily available for inspection by any Inspector-cum-Facilitator, and the person granted such a certificate shall carry with him, while at work, a token giving reference to such certificate.
7. **Medical Examination.** - (1) The person so employed shall be medically examined by a factory Medical Officer within 15 days of his first employment in such process and thereafter shall be examined by the factory Medical Officer at intervals of not more than three months. A record of such examinations shall be entered by the factory Medical Officer in the special Certificate of Fitness granted under clause 6.
- (2) If at any time the Medical Officer is of opinion that any person is no longer fit for employment on the grounds that continuance therein would involve special danger to health, he shall cancel the special Certificate of Fitness of that person.
 - (3) No person whose special Certificate of Fitness has been cancelled shall be employed unless the Medical Officer, after re-examination, again certifies him to be fit for employment.
8. **Protective Clothing.** - Suitable protective overalls and head coverings shall be provided, maintained and kept clean by the factory occupier, and such overalls and head coverings shall be worn by the persons employed.
9. **Cleanliness of Work-Rooms, 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.
10. **Washing Facilities.** - (1) 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 at least two feet for every ten persons employed at any one time, and having a constant supply of clean water from taps or jets above the trough at intervals of not more than two feet; or
 - (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,

(2) The facilities so provided shall be placed under the charge of a responsible person and shall be kept clean.

11. **Mess-Room or Canteen.** - The occupier shall provide and maintain for the use of the persons employed suitable and adequate arrangements for taking meals. The arrangements shall consist of the use of a room separate from any work-room which shall be furnished with sufficient tables and benches and, unless a canteen serving hot meals is provided, adequate means of warming 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.

12. **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.

SCHEDULE VII

Generation of Gas from Dangerous Petroleum as Defined in the Petroleum Act, 1934

1. **Flame Traps.** - The plant for generation of gas from dangerous petroleum as defined in the Petroleum Act, 1934, and associated piping and fittings shall be fitted with at least two efficient flame traps so designed and maintained as to prevent a flashback 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.
2. **Generating Building or Room.** - All plants for generation of gas from dangerous petroleum as defined in the Petroleum Act, 1934, erected after the coming into force of the provisions specified in this Schedule, shall be erected outside the factory building proper in a separate well-ventilated building (hereinafter referred to as the "generating building").

In the case of such 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.

3. **Fire Extinguishers.** - An efficient means of extinguishing petrol fires shall be maintained in an easily accessible position near the plant for generation of gas from dangerous petroleum as defined in the Petroleum Act, 1934.
4. **Plant to be approved by Chief Inspector-cum-Facilitator.** - Petrol gas shall not be manufactured except in a plant for generating petrol gas, the design and construction of which has been approved by the Chief Inspector-cum-Facilitator.
5. **Escape of Petroleum.** - Effective steps shall be taken to prevent petrol from escaping into any drain or sewer.
6. **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 generating room or building or in the vicinity thereof.

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.

7. **Access to Petroleum or Container.** - No unauthorized person shall have access to any petrol or to a vessel containing, or having actually contained, petrol.
8. **Electric Fittings.** - All electric fittings shall be of flame-proof construction, and all electric conductors shall either be enclosed in metal conduits or be lead-sheathed.
9. **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, obstructed or fastened in 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.
10. **Repair of Containers.** - No vessel that has contained petrol shall be repaired in a generating room or building, and no repairs to any such vessel shall be undertaken unless live steam has been blown into the vessel and until the interior is thoroughly steamed out, or other equally effective steps have been taken to ensure that it has been rendered free from petrol or inflammable vapour.

SCHEDULE 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****1. Definitions**

For the purposes of this Schedule-

- (i) "Blasting" means cleaning, smoothing, roughening, or removing any part of the surface of any article by the use, as an abrasive, of a jet of sand, metal shot, grit or other material propelled by a blast of compressed air or steam;
- (ii) "Blasting enclosure" means a chamber, barrel, cabinet or any other enclosure designed for the performance of blasting therein;
- (iii) "Blasting chamber" means a blasting enclosure in which any person may enter at any time in connection with any work or otherwise; and
- (iv) "Cleaning of castings", where done as an incidental or supplemental process in connection with the making of metal castings, means the freeing of the casting from adherent sand or other substance and includes the removal of cores and the general smoothing of a casting, but does not include fettling 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.**3. Precautions in Connection with Blasting Operations, -** (1) Blasting to be Done in Blasting Enclosure- Blasting shall not be done except in a blasting enclosure, and no work other than blasting and any work immediately incidental thereto, and cleaning and repairing of the enclosure including the plant and appliances situated therein, shall be performed in a blasting enclosure. Every door, aperture and joint of a blasting enclosure shall be kept closed and air-tight while blasting is being done therein.

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

- (3) **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.

No such abrasive shall be introduced into any blasting apparatus and used for blasting until it has been so separated.

- (4) **Provision of Ventilating Plant, -(a)** 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

- (b) Every bag, filter or other filtering or settling device situated in a room in which persons are employed, other than persons attending to such bag, filter or settling device, shall be completely separated from the general air of that room in an enclosure ventilated to the open air.

- (5) **Operation of Ventilating Plant-** The ventilating plant provided for the purpose of sub-clause (4) shall be kept in continuous operation whenever the blasting enclosure is in use, whether or not blasting is actually taking place therein.

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 or carrying out repair work.

- (5) **Inspection and Examination, -** (1) Every blasting enclosure shall be specially inspected by a technical person employed in the factory at least once every week in which it is used for blasting.

Every blasting enclosure, the apparatus connected therewith and the ventilating plant shall be thoroughly examined and, in the case of a ventilating plant, tested by a competent person at least once every six months.

- (2) Particulars of the result of every such inspection, examination and test shall forthwith be entered in a register, which 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.

- (6) **Provision of Protective Helmets, Gauntlets and Overalls, -** (1) There shall be provided and maintained for the use of all persons who are employed in a blasting chamber, whether in blasting or any work connected therewith, or in cleaning such a chamber, protective helmets of National or International Standard.

Every such person shall wear the helmet provided for his use whilst he is in the chamber and shall not remove it until he is outside the chamber.

- (2) 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.
- (3) Each protective helmet, when in use, shall be supplied with clean and not unreasonably cold air at a rate of not less than 0.17 cubic metres per minute.
- (4) 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 gauntlets and overalls provided.
- (7) **Precautions in Connection with Cleaning and Other Work,-** (1) Where any person is engaged upon the 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 arising from blasting, suitable respiratory protective equipment shall be provided and worn.
- (2) In connection with any cleaning operation referred to in sub-clause (1), and with the removal of dust from filtering or settling devices, all practicable measures shall be taken to dispose of the dust in such a manner that it does not enter the air of any room.

Vacuum cleaners shall be provided and used wherever practicable for such cleaning operations.

- (8) **Medical Examination,-** Every worker employed in the processes referred to in clause 1 shall be examined within 15 days of his employment.

Such examination shall include tests for:

- a) Lead in blood and urine;
- b) ALA (Aminolevulinic Acid) in urine;
- c) Haemoglobin content;
- d) Stippling of cells; and
- e) Steadiness test.

- (9) **Maintenance of Vacuum Cleaning Plant,-** Vacuum cleaning plant used for the purposes of this Schedule shall be properly maintained.

- (10) **Power to Exempt or Relax,-** If the Chief Inspector-cum-Facilitator is satisfied that, in any factory or 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 a process incidental or supplemental to the making of metal castings), and that the manufacture or process cannot be carried on without the use of such abrasive, or that owing to special conditions, special methods of work, or otherwise, any requirement of this Schedule can be suspended either temporarily or permanently, or can be relaxed without endangering the health of the persons employed, or that the application of any such requirement is for any reason impracticable or inappropriate, he may, with the previous sanction of the State Government, by an order in writing, exempt the said factory or

class of factory from such provisions of this Schedule to such extent, and subject to such conditions and for such period, as may be specified in the said order.

SCHEDULE IX

Liming and Tanning of Raw Hides and Skins and Processes Incidental Thereto

1. Cautionary Notices

- (1) Cautionary notices as to anthrax shall be affixed in prominent positions in the factory where they may be easily and conveniently read by the persons employed.
- (2) A copy of a warning notice as to anthrax shall be given to each person employed when he is engaged and subsequently, if still employed, every year.
- (3) Cautionary notices as to the effects of chrome on the skin shall be affixed in prominent positions in every factory in which chrome solutions are used, and such notices shall be so placed as to be easily and conveniently read by the persons employed.
- (4) Notices shall be affixed in prominent places in the factory stating the position of the First-Aid Box or Cupboard and the name of the person in charge of such box or cupboard.
- (5) If any person employed in the factory is illiterate, effective steps shall be taken to explain carefully to such illiterate person the contents of the notices specified in sub-clauses (1), (2), (3) and (4), and, where chrome solutions are used in the factory, the precautions to be observed.

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 the lime yard; and
- (c) Protective footwear, aprons and gloves for persons employed in processes involving the handling of hides or skins, other than in processes specified in sub-clauses (a) and (b):

Provided that the gloves, aprons, leg coverings or boots shall conform to National or International Standards.

3. Washing Facilities, Mess-Room and Cloak-Room, - There shall be provided and maintained in a cleanly state and in good repair for the use of all persons employed-

- (a) A trough with a smooth impervious surface fitted with a waste pipe without plug, and of sufficient length to allow at least two feet for every ten persons employed at any one time, and having a constant supply of water from taps or jets above the trough at intervals of not more than two feet; or
- (b) At least one wash basin for every ten such persons employed at any one time, fitted with a waste pipe and plug and having a constant supply of water, together with, in either case, a sufficient supply of nail brushes, soap or other suitable cleansing material, and clean towels;
- (c) A suitable mess-room, adequate for the number remaining on the premises during the meal intervals, which shall be furnished with-
 - (i) sufficient tables and benches; and
 - (ii) adequate means for warming food and for boiling water.

The mess-room shall-

- a) be separate from any room or shed in which hides or skins are stored, treated or manipulated;
- b) be separate from the cloak-room; and
- c) be placed under the charge of a responsible person.

Provided that this clause shall not apply where a canteen has been provided under Rule 67.

- (d) Suitable accommodation for clothing not worn during working hours, with adequate arrangements for drying the clothing if wet. The accommodation so provided shall be placed under the charge of a responsible person.

4. **Food, Drinks, etc. Prohibited in Work-Room,** - No food, drink, pan, supari or tobacco shall be brought into or consumed by any worker in any work-room or shed in which hides or skins are stored, treated or manipulated.
5. **Medical Examination,** - (1) Every worker employed in any of the processes to which this Schedule applies shall be examined within 15 days of his first employment.

Such examination shall include-

- a) Skin test;
 - b) Examination for dermatosis; and
 - c) Detection of anthrax bacillus from local lesions by Gram stain.
- (2) The Factory Medical Officer, after examining a worker, shall issue a Certificate of Fitness in Form VII. The record of examination and re-examinations carried out shall be kept in the custody of the Occupier of the factory. The record of each examination carried out as described in paragraph (1), including the nature and the results of the tests, shall also be entered by the Medical Officer in a Health Register in Form VII.

SCHEDULE X

Chemical Works

Preliminary

PART - I

1. **Application,** - This Schedule shall apply to all manufacture and processes incidental thereto carried on in chemical works.
2. **Definitions,** - For the purposes of this Schedule-
 - (a) "Chemical Works" means any factory or such parts of any factory as are listed in Appendix 'A' to this Schedule;
 - (b) "Efficient exhaust draught" means localized 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;
 - (c) "Bleaching powder" means the bleaching powder commonly called chloride of lime;
 - (d) "Chlorate" means chlorate or perchlorate;
 - (e) "Caustic" means hydroxide of potassium or sodium;
 - (f) "Chrome process" means the manufacture of chromate or bichromate of potassium or sodium, or the manipulation, movement or other treatment of these substances;
 - (g) "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;
 - (h) "Toxic substances" means all those substances which, when they enter into the human body through inhalation, ingestion or absorption through the skin, in sufficient quantities cause fatality or exert serious affliction of health or chronic harmful effects on the health of persons exposed to them due to their inherent chemical or biological effects. In respect of substances whose TLV is specified in the Rules, exceeding the concentration specified therein would make the substance toxic;
 - (i) "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 a major fire, explosion or pollution to the workplace and outside environment, affecting the workers or neighbourhood in a serious manner and demanding immediate action;

- (j) "Dangerous chemical reactions" means high-speed reactions, runaway reactions, delayed reactions, etc., and are characterized by evolution of large quantities of heat, intense release of toxic or flammable gases or vapours, sudden pressure build-up, etc.; and
- (k) "Manipulation" means mixing, blending, filling, emptying, grinding, sieving, drying, packing, sweeping, handling, using, etc., of substances given in Appendix A.

PART II

General Requirements

Applying to all the works in Appendix 'A'

1. **Housekeeping.** - (a) Any spillage of materials shall be cleaned up before further processing.
(b) Floors, platforms, stairways, passages and gangways shall be kept free of any obstructions.
(c) There shall be provided easy means of access to all parts of the plant to facilitate cleaning.
2. **Improper use of chemicals.** - No chemicals or solvents or empty containers containing residual chemicals, solvents or vapours shall be permitted to be used by employees for any purposes other than in the processes for which they are supplied.
3. **Prohibition on the use of food, etc.,** - No food, drink, tobacco, pan or any edible item shall be stored or heated or consumed on or near any part of the plant or equipment.
4. **Cautionary notices and instructions.** - (a) Cautionary notices in a language understood by the majority of employees shall be prominently displayed in all hazardous areas drawing the attention of all employees about the hazards to health, hazards involving fire 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 employees' attention should be drawn for ensuring their safety and health.
(b) In addition to the above cautionary notice, arrangement shall be made to instruct and educate all the employees including illiterate employees about the hazards in the process including the specific hazards to which they may be exposed to, in the normal course of their work. Such instructions and education should also deal with the hazards involved in unauthorized and unsafe practices including the properties of substances used in the process under normal conditions as well as abnormal conditions and the precautions to be observed against each and every hazard. Further, an undertaking from the employees shall be obtained within one month of their employment, to the effect that they have read the contents of the cautionary notices and instructions, understood them and would abide by them. The training and instructions to all employees and all supervisory personnel shall include the significance of different types of symbols and colors used on the labels struck or painted on the various types of containers and pipelines.
5. **Evaluation and provisions of safeguards before the commencement of process.** - (a) Before commencing any process or any experimental work, or any new manufacture covered under Appendix 'A', the occupier shall take all possible scale manufacture. steps to ascertain definitely all the hazards involved both from the actual operations and the chemical reactions including the dangerous chemical reactions. The properties of the raw materials used, the final products to be made, and any by-products derived during manufacture, shall be carefully studied and provisions shall be made for dealing with any hazards including effects on employees, which may occur during manufacture.
(b) 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-paragraph (1) above should be sent to the Chief Inspector-cum-Facilitator at the earliest but in no case less than 15 days before commencing manufacture, handling, or storage of any of items covered under Appendix 'A' whether on experimental basis, or as pilot plant or as trial production, or as large-scale manufacture.
(c) 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.
(d) The requirements under the sub-paragraphs (1) to (3) shall not ad in lieu of or in derogation to, any other provisions contained in any Act governing the work.

6. **Authorised entry.** - Authorised persons only shall be permitted to enter any section of the factory or plant where any dangerous operations or processes are being carried on or where dangerous chemical reactions are taking place or where hazardous chemicals are stored.
7. **Examination of instruments and safety devices.** - (a) All instruments and safety devices used in the process shall be tested before taking into use and after carrying out any repair to them and examined once in a month, by a qualified person and once in every six months, by a competent person. Records of such tests and examinations shall be maintained in a register.
(b) 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 explosion, etc., and shall conform to the relevant ISI specifications governing their construction and use for that area.
9. **Handling and storage of chemicals.** - (a) The containers for handling and storage of chemicals shall be of adequate strength taking into consideration the hazardous nature of the contents. They shall also be provided with adequate labeling and colour coding arrangements to enable identification of the containers and their contents indicating the hazards and safe handling methods and shall conform to the respective BIS 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.
(b) 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 within stipulated limits.
(c) Without prejudice to the generality of the requirements in sub-paragraph (b) 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.
(d) (i) 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.
(ii) Whenever the quantities laid down in the above clause (i) are to be exceeded, the permission of the Chief Inspector cum-Facilitator shall be obtained.
(iii) Notwithstanding anything contained in clauses (i) and (ii) 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.
(e) 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 containers resulting in the release of toxic substances.
(f) Any storage facility constructed using non-metallic material such as Fiber glass Reinforced Plastics (FRP), all glass vessels, etc., shall have adequate strength to withstand the stress, if any, exerted by the contents and shall be properly anchored. Working platforms, access ladders, pipe lines, etc., used in such storage facility shall not have any support on the structure of the storage facility and shall be independently supported.
10. **Facility for isolation.** - The plant and equipment shall be so constructed and maintained as to enable quick isolation of plant or part of plant or equipment, with appropriate indication. One copy of the layout plan indicating the isolation facilities shall always be available with the security personnel, the maintenance and the Health and Safety personnel and these isolation facilities shall be checked for its effectiveness once in a month.
11. **Personal protective equipment.** - (a) All employees 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.
(b) The occupier shall arrange to inform, educate and supervise all the employees in the use of personal protective equipment while carrying out the job.

- (c) 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.** - (a) Suitable alarm 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.
- (b) The Chief Inspector-cum-Facilitator may direct such systems to be installed in case of plants or processes where toxic materials are being used and spillage or leakage of which may cause widespread poisoning in or around the plant.
- 13. Control of escape of substances into the work atmosphere.** - (a) Effective arrangements such as enclosure, or bypass 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 equipments, 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.
- (b) 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.
- (c) The substances that would have escaped into the work atmosphere before taking immediate steps as required in subparagraph (b), shall be rendered innocuous by diluting with air or water or any other suitable agent or by suitably treating the substances.
- (d) The level of concentration of toxic substances in the work atmosphere shall be monitored by suitable devices and shall not exceed the permissible levels.
- 14. Control of dangerous chemical reactions.** - Suitable provisions, 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, repair and maintenance of plant and equipment.** - (a) 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 procedure. In carrying out the test as mentioned above in respect of pressure vessels or reaction vessels the following precautions shall be observed, namely:
- (i) before the test is carried out, each vessel shall be thoroughly cleaned and examined externally, and as far as practicable, internally also for surface defects, corrosion and foreign matter. During the process of cleaning and removal of sludge, if any, all due precautions shall be taken against fire or explosion, if such sludge is of pyrophoric nature or contains spontaneously combustible chemicals;
- (ii) 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
- (iii) 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.
- (b) All parts of plant, equipment, machinery which in the likely event of failure may give rise to an emergent situation shall be examined once in a month by a qualified person and tested by a competent person once in every six months.
- (c) Records of testing and examination referred to in paragraphs (a) and (b) shall be maintained as long as that part of the plant, equipment and machinery are in use.
- (d) 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 qualified 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, but welding of joints shall be preferred. Wherever necessary, the qualified person shall regulate the aforesaid work through a 'permit to work system'.

- (e) No machinery, plant or equipment shall be operated or maintained in such a manner as to cause risk of bodily injury.
- 16. Staging.** - (a) 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.
- (b) 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.
 - (c) All the staging constructed for the purpose of this paragraph shall have appropriate access which are safe and shall be fitted with proper hand rails to a height of one meter 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 space.** - (a) The occupier of every factory to which the provision of this schedule apply, shall ensure the observance of the following precautions before permitting any person to enter or work inside the confined spaces:
- (i) 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;
 - (ii) 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 (i) above;
 - (iii) before testing the confined space for entry into or work, the place shall be rendered safe by washing or cleaning with neutralizing agents or purging with steam or inert gases and making adequate forced ventilation arrangements or such measure which will render the confined space safe;
 - (iv) 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;
 - (v) shall arrange to educate and train the personnel who would be required to work in confined spaces about the hazards involved in the work. He shall also keep in readiness the appropriate and approved personal protective equipment including arrangements for rescue, resuscitation and first aid, and shall arrange supervision of the work at all times by a responsible and knowledgeable person.
- (b) The Occupier 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 safety and health of the persons assigned for this work. The log book so maintained shall be retained as long as the concerned employees are in service and produced to the Inspector-cum-Facilitator when demanded.
- 19. Maintenance work, etc.-** (a) 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.
- (b) 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 pre-determined work procedures which integrate safety with the work. Such procedures shall be reviewed whenever any change occurs in material or equipment so that continued safety is ensured;
 - (d) persons who are assigned to carry out the permit 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 procedure 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 resurrection 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.** - (1) The occupier of every factory carrying out the works covered in Appendix 'A', shall arrange to identify all types of possible emergencies that could occur in the processes during the course of work or while carrying out maintenance work or repair work. The emergencies so identified shall be reviewed every year.
- (2) The occupier shall formulate a detailed plan to meet all such identified emergencies including arrangements for summoning outside help for rescue and fire-fighting and arrangements for making available urgent medical facilities.
 - (3) The occupier shall send the list of emergencies and the details of procedures and plans formulated to meet the emergencies to the Chief Inspector-cum-Facilitator.
 - (4) The occupier shall arrange to install distinctive and recognizable warning arrangements to caution all persons inside the plant as well as the neighboring 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 arrangement and their meaning. The arrangement must be checked for its effectiveness every month.
 - (5) Alternate power supply arrangements shall be made and inter-locked 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.
 - (6) The occupier shall arrange to suspend the further process work in a place where emergency is established and shall forthwith evacuate all persons in the area except employees who have been assigned emergency duties.
 - (7) All the employees of the factory shall be trained about the action to be taken by them including evacuation procedures during emergencies.

- (8) All emergency procedures must be rehearsed every three months and deficiencies, if any, in the achievement of the objectives shall suitably be corrected.
 - (9) The occupier shall arrange to have ten percent of the employees trained in the use of First-Aid Fire Fighting appliances and in the rendering of specific First-Aid measures taking into consideration the special hazards of the particular process.
 - (10) The occupier shall furnish immediately on request the specific chemical identity of the hazardous substances to the treating physician when the information is needed to administer proper emergency or first-aid treatment to exposed persons.
- 24. Danger due to effluents,-** (1) Adequate precautions shall be taken to prevent the mixing of effluents from different processes and operations which may cause dangerous or poisonous gases to be evolved
- (2) Effluents which contain or give rise in the presence of other effluents to poisonous gases shall be provided with independent drainage systems to ensure that they may be trapped and rendered safe.

PART III

Fire and Explosions Risks

- 1. Source of ignition including lighting installation,-** (a) No internal combustion engine and no electric motor or other electrical equipment and fittings and fixtures capable of generating sparks or otherwise causing combustion or any other source of ignition or any naked light, shall be installed or permitted to be used in the process area where there could be fire and explosion hazards.
- (b) All hot exhaust pipes shall be installed outside a building and other hot pipes or hot surface or surfaces likely to become hot shall be suitably protected.
 - (c) 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.
 - (d) Where flammable atmosphere may be prevalent or could occur, the soles of footwear worn by employees shall have no metal on them, and the wheels of trucks or conveyers shall be conductive type.
 - (e) All tools and appliances used for work in this area shall be of non-sparking type.
 - (f) Smoking in process areas where there are risks of fire and explosion shall be prohibited, and warning notices in the language understood by majority of employees shall be posted in the factory prohibiting smoking in the specified areas.
- 2. Static Electricity, -** (a) 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.
- (b) Mobile Tanker-wagons shall be earthed during filling and discharge; precautions shall be taken to ensure that earthing is effective before such filling or discharge takes 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, -** (a) Provision shall be made to confine by means of suitable bund walls, dykes, sumps, etc., possible leakages from storage vessels containing flammable liquids.
- (b) Waste material in contact with flammable substances shall be disposed off suitably under the supervision of knowledgeable and responsible person.
 - (c) Adequate and suitable firefighting appliances shall be installed in the vicinity of such vessels.

6. **Safety valves,** - Every still and every closed vessel in which gas is evolved or into which gas is passed, and in which the pressure is liable to rise above the atmospheric pressure, shall have attached to it a pressure gauge and a proper safety valve or other equally efficient means to relieve the pressure. These appliances shall be maintained in good condition.
7. **Installation of pipe lines, etc.,** - All pipe lines carrying flammable or explosive substances shall be protected from mechanical damage and shall be examined by a responsible person once in a week to detect any deterioration or defects, or accumulation of flammable or explosive substances, and record kept of any defects found and repairs made.
8. **Firefighting system,** - (a) Every factory employing 500 or more persons and carrying out processes listed in Appendix 'A' shall provide
 - (i) Trained and responsible firefighting 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 eight such trained persons to be available at any time. The squad shall consist of watch and ward personnel, fire pump man and departmental supervisors and operators trained in the operation of fire and emergency services.
 - (ii) Squad leaders shall preferably be trained in a recognized Government institution and their usefulness enhanced by providing residence on the premises.
 - (iii) Squad personnel shall be provided with clothing and equipment including helmets, boots and belts.
- (b) 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.
- (c) 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 brought to the notice of squad leader.
- (d) 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 interlinked and placed in a convenient location near such areas.
- (e) Fire hydrant system shall be capable of supplying a minimum of 4,500 liters per minute at a pressure of not less than 7 kilograms per square cm.
- (f) Adequate provision of water supply for firefighting shall be made with static storage capacity of not less than 2 hours aggregate pumping.

PART-IV

RISKS OF TOXIC SUBSTANCES

1. **Leakage:** (1) All plants shall be so designed and constructed as to prevent the escape of toxic substance. Where necessary, separate buildings, rooms, or protective structures shall be used for the dangerous stages of the process and the buildings shall be so designed as to localize any escape of toxic substances.
 - (2) Catch pits, band 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 neutralized, treated or otherwise rendered safe before it is discharged into public drains or sewers.
3. **Covering of vessels,** - (1) Every fixed vessel or structure containing any toxic substance and not so covered as to eliminate all reasonable risk of accidental contact of any portion of the body of a worker, shall be so constructed as to avoid physical contact.
 - (2) Such vessel shall, unless its edge is at least 90 centimeters above the adjoining ground or platform, be securely fenced to a height of at least 90 centimeters above such adjoining ground or platform.

- (3) Where such vessels adjoin and the space between them, clear of any surrounding brick or other work is either less than 45 centimeters in width or is 45 or more centimeters in width, but is not securely fenced on both sides to a height of at least 90 centimeters, secure barriers shall be so placed as to prevent passage between them:

Provided that sub-paragraph (2) of this paragraph shall not apply to--

- (a) Saturators used in the manufacture of sulphate of ammonia; and
 - (b) That part of the sides of brine evaporating pans which require raking, drawing or filling.
4. **Continuous exhaust arrangement,** - (1) Any process evolving toxic vapour, gas, fume and substance shall have efficient continuous exhaust draught. Such arrangement shall be interlocked in the process control wherever possible.
- (2) In the event of failure of continuous exhaust arrangement, means shall be provided to automatically stop the process.
5. **Workbench,** - All the work benches used in process involving the manipulation of toxic substances, shall be waded properly and shall be made of smooth impervious surface which shall be washed daily after the completion of work
6. **Waste disposal,** - (1) There shall be provided a suitable receptacle made of non-absorbable material with a tightly fitting cover for depositing waste material soiled with toxic substances and the contents of such saturators shall be destroyed by burning or using other suitable receptacle methods under the supervision of a responsible person.
- (2) During the course of manufacture, whenever any batch or intermediate products having toxicity is rejected on considerations of quality, sufficient precautions shall be taken to render them innocuous or otherwise treat them or inactivate them, before disposal.
- (3) The empty containers of toxic substances shall be cleaned thoroughly before disposal under the supervision of a responsible person

PART-V SPECIAL PROVISIONS

1. **Special precautions for Nitro or Amino Processes,-** (1) Unless the crystallized nitro or amino substances or any of its liquor is broken or agitated in a completely enclosed process so as not to give rise to dust or fume, such process shall be carried on under an efficient exhaust draught or by adopting any other suitable means in such a manner as to prevent the escape of dust or fume in the working atmosphere.
- (2) No part of the plant or equipment or implements which was in contact with nitro or amino compounds shall be repaired, or handled unless they have been emptied and thoroughly cleaned and decontaminated.
- (3) Filling of containers with nitro or amino compounds shall be done only by using a suitable scoop to avoid physical contact and the drying of the containers in the stove shall be done in such a manner that the hot and contaminated air from the stove is not drawn into the work room.
- (4) Processes involving 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.
- (5) Suitable antidotes such as methylene blue injections shall always be available at designated places of work for use during emergency involving the poisoning with nitro or amino compounds.
2. **Special precautions for chrome processes,** - (1) Grinding and sieving of raw materials in chrome processes shall be carried on in such a manner and under such condition as to secure effective separation from any other processes and under an efficient exhaust draught.
- (2) There shall be washing facilities located very near to places where wet chrome processes such as leaching, acidification, sulphate settling, evaporation crystallization, centrifugation or packing are carried out, to enable quick washing of affected parts of body with running water.
- (3) Weekly inspection of hand and feet of all persons employed in chrome processes shall be done by a qualified nurse and record of such inspections shall be maintained in a form approved by the Chief Inspector-cum Facilitator.

- (4) There shall be always available at designated places of work, suitable ointment such as glycerine, Vaseline, etc., and water proof plaster in a separate box readily accessible to the workers so as to protect against perforation of nasal septum.
3. **Special precautions for processes carried out in all glass vessels**,- (1) Processes and chemical reactions such as manufacture of vinyl chloride, benzyl chloride, etc., which are required to be carried out in all glass vessels shall have suitable means like substantial wire mesh covering to protect persons working nearby in the event of breakage of glass vessel.
- (2) Any spillage or emission of vapour from all glass vessel due to breakage, shall be immediately inactivated or rendered innocuous by suitable means such as dilution with water or suitable solvents so as to avoid the risk of fire or explosion or health hazards.
4. **Special precautions for processes involving chlorate manufacture**,- (1) Crystallization, grinding or packing of chlorate shall not be done in a place used for any other purpose and such places shall have hard, smooth and impervious surface made of non-combustible material. The place shall be thoroughly cleaned daily.
- (2) The personal protective equipment like overall, etc., provided for the chlorate workers shall not be taken from the place of work and they shall be thoroughly cleaned daily.
- (3) Adequate quantity of water shall be available near the place of chlorate process for use during fire emergency.
- (4) Wooden vessels shall not be used for the crystallization of chlorate or to contain crystallized ground chlorate
5. **Special precautions in the use of plant and equipment made from reinforced plastics**,- (1) All plant and equipments shall conform to appropriate Indian or any other National Standard.
- (2) Care shall be taken during storage, transport, handling and installation of plant and equipments to avoid accidental damage.
- (3) All plant and equipments shall be installed in such a way as to ensure that loads are distributed as intended in design or as per the recommendations of the manufacturers.
- (4) All pipe work shall be supported so that total loads local to the branches on the vessel or tank do not exceed their design values.
- (5) After erection, all plant and equipments shall be subjected to a pressure test followed by a thorough examination by a competent person. The test and examination shall be as per relevant standard. A certificate of test and examination by competent person shall be obtained and kept available at site.
- (6) All plant and equipments shall be subjected to periodical test and examination and record maintained as per paragraph 15 in Part II of this schedule.
- (7) Plant and equipments during their use shall not be subjected to over filling or overloading beyond rated capacity.
6. **Special precautions for fumigation process**,- The Occupier shall ensure the health and safety of the workers required to enter into the confined space where Fumigation process is carried on, which includes personal protective equipments, supervision, testing procedures to ensure the suitability of the workspace for human health and safety

PART-VI MEDICAL REQUIREMENTS

1. **Decontamination facilities**, - In all places where toxic substances are used, 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, part 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:

Number of persons employed Number at any time	Number 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 center,- In all the factories carrying out chemical works, there shall be provided and maintained in good order an occupational health center with facilities as per scale laid down hereunder

(1) For factories employing up to 50 workers

- (a) the services of a Factory Medical Officer, available on retainer ship basis, in his notified clinic near to the factory for seeking medical help during emergency. He will also carry out the pre-employment and periodical medical 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.

(2) 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 overall 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.

(3) For factories employing above 200 workers

- (a) There shall be one full-time Factory Medical Officer for factories employing up to 500 workers and one more Factory Medical Officer for every 1,000 workers or part thereof.
- (b) The occupational health center in this case shall have a minimum of 2 rooms each having a minimum floor area of 15 square meter with floors and walls made of smooth, hard and impervious surface and shall be adequately illuminated, ventilated and equipped.
- (c) There shall be one trained nurse, one dresser-Cum-compounder and one sweeper-cum-ward boy throughout the working period.
- (d) The occupational Health Centre in this case shall be suitably equipped to manage medical emergencies.

3. Ambulance Van,- (1) In every factory carrying out chemical work there shall be provided and maintained in good condition, a suitably constructed and fully equipped ambulance van manned by a fulltime 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 center.

- (2) The relaxation to procure Ambulance Van from nearby places provided for in sub-paragraph (1) above will not be applicable to factories if the chemical work is also covered by hazardous process and for factories carrying chemical works by employing more than 500 workers.

4. Medical examination, - (1) Workers employed in chemical works 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 workers; and
- (2) The details of pre-employment and periodical medical examinations carried out as aforesaid shall be recorded in the Health register in **Form VII**

- (3) No person shall be employed for the first time without a Certificate of Fitness in Form:8 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-cum-Facilitator who shall refer the matter to the Medical Officer whose opinion shall be final in this regard. If the Inspector-cum-Facilitator is also a Medical Officer, he may dispose of the application himself.
- (4) 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 Medical Officer who shall in turn, examine the concerned worker and communicate his findings to the occupier within thirty days. If the Medical Officer is of the opinion that the workers 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 Medical Officer, fully incapacitated in which case the worker affected shall be suitably rehabilitated.
- (5) A Medical Officer on his own motion or on a reference from an Inspector cum- Facilitator may conduct medical examination of a worker to ascertain the suitability of his employment in the scheduled Process/ operation or for ascertaining his health status. The opinion of the Medical Officer in such a case shall be final. The fee required for this medical examination shall be paid by the occupier. (6) 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 Medical Officer and after making entries to that effect in the Health Register.

PART-VII

ADDITIONAL WELFARE AMENITIES

1. **Washing facilities,** - (1) There shall be provided and maintained in every factory for the use of all the workers taps for washing, at the rate of one tap for 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.
 - (2) 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,** - (1) The occupier of all the factories carrying out chemical works 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.
 - (2) Such facilities shall include suitable arrangements for cleaning and washing and shall be maintained in a clean and hygienic condition.
3. **Cloak room facilities,** - (1) The occupier of every factory carrying out chemical works 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.
 - (2) The cloak room facilities so provided in pursuance of sub-paragraph (1) shall be located as far as possible near to the facilities provided for washing in pursuance of paragraph 1 (1). If it is not possible to locate the washing facilities, the cloak room facilities shall have adequate and suitable arrangements for cleaning and washing.
4. **Special bathing facilities,** - (1) The occupier of any factory carrying out the following processes 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.
 - I. Nitro or amino processes.
 - II. All chrome processes.
 - III. Processes of distilling gas or coal tar or processes of chemical manufacture in which tar is used.
 - IV. Processes involving manufacture, manipulation, handling or recovery of cyanogen compound, cyanide compound, cyanate compounds.
 - V. Processes involving manufacture of bleaching powder or production of chlorine gas in chloro alkali plants.

- VI. Manufacture, manipulation or recovery of nickel and its compounds.
- VII. All processes involving the manufacture, manipulation or recovery of aliphatic or aromatic compounds or their derivatives or substituted derivatives.
- (2) The occupier shall insist all the workers employed in the processes listed in sub rule (1) above 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.
- (3) Notwithstanding anything contained in sub-paragraph (1) above, the Chief Inspector-cum-Facilitator may require in writing the occupier of any factory carrying out any other process for which in his opinion bathing facilities are essential from the health point of view, to provide special bathing facilities.

PART VIII

1. **Duties of workers,** - Every worker employed in a factory carrying chemical work shall always co- operate in all respects with the management while carrying out any work or any emergency duty assigned to them in pursuance of provisions of this code and building occupational Safety & Health culture. In particular, the workers shall carry out the following duties.

- I. Every worker who comes to know about existence of any of unsafe or unhealthy conditions in the establishment shall report to the employer or health and safety representative or safety officer or concerned Supervisor as soon as practicable, electronically or in writing or telephonically.
- II. Every worker 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.
- III. Before commencing any work, all workers shall check their workplace as well as the machinery, equipment or appliance used and report any malfunction or defect immediately to the supervisor or any responsible person of the management.
- IV. All workers shall always use all the personal protective equipment issued to them in a careful manner.
- V. All workers shall not remain in unauthorised place or carryout unauthorised work or improvise any arrangements or adopt short cut method or misuse any of the arrangements in the manner against to the interest of Occupational Safety & Health.
- VI. The workers shall not refuse undergoing medical examination as required under these rules.

PART IX Exemptions

1. **Power of Exemption,**-The State Government or subject to the control of the State Government, the Chief Inspector cum Facilitator may exempt from the compliance with any of the requirements of this schedule partly or fully, any factory carrying out Chemical Works, 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, hydroiodic, hydrosulphuric, hydrobromic, boric;
 - (iv) cyanogen compounds, cyanide compounds, cyanate compounds;
 - (v) Phosphorous and its compounds, other than organic phosphorous 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 chloroalkali 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, benzyl, chloride, phenol, methyl ethyl ketone peroxide, cobalt carbonyl, tungsten carbide etc., are manufactured, manipulated or recovered.

APPENDIX 'B'

Concerning Special Bathing Accommodation in Pursuance of Paragraph 4 of Part VII

1. Nitro or amino 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 cyanogen compound, cyanide compound, cyanate compounds.
5. Processes involving manufacture of bleaching powder or production of chlorine gas in chloroalkali plants.
6. Manufacture, manipulation or recovery of nickel and its compounds.
7. All processes involving the manufacture, manipulation or recovery of aliphatic or aromatic compounds or their derivatives or substituted derivatives.

APPENDIX 'C'

Ambulance - Ambulance should have the following equipments

General -

- (i) A wheeled stretcher with folding and adjusting devices, head of the stretcher must be capable of being tilted upwards;
- (ii) Fixed suction unit with equipments;
- (iii) Fixed oxygen supply with equipments;
- (iv) Pillow with case;
- (v) Sheets;
- (vi) Blankets;
- (vii) Towels;
- (viii) Emesis bag;
- (ix) Bed pan;
- (x) Urinal;
- (xi) Glass.

Safety equipment-

- (i) Flares with life of 30 minutes;
- (ii) Flood lights;
- (iii) Flash lights;
- (iv) Fire extinguisher dry powder type;
- (v) Insulated gauntlets

Emergency care equipments -

Resuscitation -

- (i) Portable suction unit;
- (ii) Portable oxygen unit;
- (iii) Bag valve-mask, hand operated artificial ventilation unit;
- (iv) Airways;
- (v) Mouth gags;
- (vi) Tracheostomy adaptors;
- (vii) Short spine board;
- (viii) I.V. Fluids with administration unit;
- (ix) B.P. Manometer;
- (x) Cuff;
- (xi) Stethoscope

Immobilization -

- (i) Long and short padded boards ;
- (ii) Wire ladder splints ;
- (iii) Triangular bandage;
- (iv) Long and short spine boards.

Dressings -

- (i) Gauze pads - 4 inches x 4 inches;
- (ii) Universal dressing 10 inches x 36 inches;
- (iii) Roll of aluminum foils;
- (iv) Soft roller bandages 6 inches x 5 yards;
- (v) Adhesive tape in 3 inches roll;
- (vi) Safety pins;
- (vii) Bandage sheets;
- (viii) Burn sheet

Poisoning -

- (i) Syrup of Ipecac and Activated charcoal Pre-packeted in doses
- (ii) Snake bite kit;

(iii) Drinking water.

Emergency medicines -

As per requirement (under the advice of Medical Practitioner only).

SCHEDULE XI

Manufacture of Pottery

1. Definitions, - For the purposes of this Schedule-

- (a) "pottery" includes earthenware, stoneware, porcelain, china tiles, and any other articles made from such clay or from a mixture containing clay and other materials such as quartz, flint, feldspar, and gypsum;
- (b) "Efficient exhaust draught" means localized ventilation effected by mechanical or other means for the removal of dust or fume so as to prevent it from escaping into the air of any place in which work is carried on. No draught shall be deemed efficient which fails to remove effectively dust or fume generated at the point where dust or fume originates;
- (c) "Fettling" includes scalloping, towing, sandpapering, sand-sticking, brushing or any other process of cleaning pottery ware in which dust is given off;
- (d) "Leadless glaze" means a glaze which does not contain more than 1 percent by 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 percent 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°C and thoroughly mixed shall be continuously shaken for one hour, at ordinary temperature, with 1,000 times its weight of an aqueous solution of hydrochloric acid containing 0.25 percent 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) "Ground or powdered flint or quartz" does not include natural sands; and
- (g) "Potters' 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.

2. Efficient Exhaust Draught, -The following processes shall not be carried on without the use of an efficient exhaust draught:

- (a) All processes involving the manipulation or use of a dry and unfritted lead compound;
- (b) The fettling operations of any kind, whether on greenware or biscuit; provided that this shall not apply to wet fettling and the occasional finishing of pottery articles without the aid of mechanical power;
- (c) The shifting of clay dust or any other material for making pottery or other articles by pressure, except where:
 - (i) this is done in a machine so enclosed as to effectually prevent the escape of dust; or
 - (ii) the material to be shifted is so damp that no dust can be given off;
- (d) The pressing of tiles from clay dust, an exhaust opening being connected with each press. This sub-clause shall also apply to the pressing from clay dust of articles other than tiles, unless the material is so damp that no dust is given off;
- (e) The fettling of tiles made from clay dust by pressure, except where the fettling is done wholly on, or with, damp material. This sub-clause shall also apply to the fettling of other articles made from clay dust unless the material is so damp that no dust is given off;
- (f) The process of loading and unloading of saggars where handling and manipulation of ground and powdered flint, quartz, alumina or other materials are involved;

- (g) The brushing of earthenware biscuit, unless the process is carried on in a room provided with efficient general mechanical ventilation or other ventilation certified by the Inspector-cum-Facilitator of Factories as adequate, having regard to all the circumstances of the case;
 - (h) Fettling of biscuit ware which has been fired with powdered flint or quartz, except where this is done in machines so enclosed as to effectually prevent the escape of dust;
 - (i) Ware cleaning after the application of glaze by dipping or other process;
 - (j) 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 unless the material is so damp that no dust can be given off;
 - (k) Sieving or manipulation of powdered flint, quartz, clay grog or mixtures of these materials, unless the material is so damp that no dust can be given off;
 - (l) Grinding of tiles on a power-driven wheel, unless an efficient water spray is used on the wheel;
 - (m) Lifting and conveying of materials by elevators and conveyors unless they are effectively enclosed and so arranged as to prevent the escape of dust into the air in or near any place at which persons are employed;
 - (n) The preparation or weighing out of flow material, lawning or dry colours, colouring, dusting and colour blowing;
 - (o) Mould making, unless the bins or similar receptacles used for holding plaster of Paris are provided with suitable covers; and
 - (p) The manipulation of calcined material, unless the material has been made and remains so wet that no dust is given off.
3. **Separation of Processes.**— Each of the following processes shall be carried on in such a manner and under such conditions as to secure effective separation from one another and from other wet processes:
- (a) Crushing and dry grinding or sieving of materials, fettling, pressing of tiles, drying of clay and greenware, loading and unloading of saggars; or
 - (b) All processes involving the use of dry lead compounds.
4. **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.
5. **Potter's Wheel.** - The potter's wheel (jolly and jigger) shall be provided with screens or be so constructed as to prevent clay scrapings from being thrown off beyond the wheel.
6. **Measures to be Taken to Prevent Dust Flying.** - (1) All practicable measures shall be taken by damping or otherwise to prevent dust arising during the cleaning of floors.
- (2) Damp sawdust or other suitable material shall be used to render the moist method effective in preventing dust from rising into the air during the cleaning process, which shall be carried out after work has ceased.
7. **Cleaning of Floors.** - The floors of potters' shops, slip houses, dipping houses and ware-cleaning rooms shall be hard, smooth and impervious and shall be thoroughly cleaned daily by a moist method.
8. **Medical Examination by the Medical Officer.** - (1) Every worker employed in any process mentioned under clause 3 shall be examined by a Medical Officer 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
- Pulmonary function tests.

Chest X-rays shall be conducted for workers engaged in processes mentioned in clauses (a) and (n) of clause 2, and pulmonary function tests and chest X-rays shall be conducted for other workers as required.

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 Medical Officer.

9. Protective Equipment,- (1) The occupier shall provide and maintain suitable overalls and head coverings for all persons employed in the processes mentioned in clause 2.

(2) The occupier shall provide and maintain suitable aprons of waterproof or similar material, capable of being sponged daily, for the use of dippers, dippers' assistants, throwers, jolly workers, casters, mould makers, filter press workers and pug mill workers.

(3) Aprons provided under sub-clause (2) shall be thoroughly cleaned daily by the wearer by sponging or other wet process.

All overalls and head coverings shall be washed, cleaned and mended at least once a week, and such washing, cleaning or mending shall be provided by the occupier.

(4) No person shall be allowed to work in emptying sacks of dusty materials, weighing out and mixing dusty materials, or charging ball mills and blungers without wearing a suitable and efficient dust respirator.

10. Application.- The provisions contained in this Schedule 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.

11. Exemptions,- If, in respect of any factory, the Chief Inspector-cum-Facilitator is satisfied that all or any of the provisions of this Schedule are not necessary for the protection of the persons employed in such factory, he may, by a certificate in writing, exempt such factory from all or any of such provisions, subject to such conditions as he may specify therein.

Such facilities may at any time be revoked by the Chief Inspector-cum-Facilitator without assigning any reasons.

SCHEDULE XII

Printing Presses and Type Foundries - Certain Lead Processes Carried Therein

1. Exemptions,- 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 of such provisions, subject to such conditions as he may specify therein.

Such certificate may at any time be revoked by the Chief Inspector-cum-Facilitator.

2. Definitions,- For the purposes of this Schedule-

(1) "Lead material" means material containing not less than five percent of lead.

(2) "Lead process" means-

(a) the melting of lead or any lead material for casting and mechanical composing;

(b) the re-charging of machines with used lead material;

(c) any other work including removal of dross from melting pots and cleaning of plungers; and

(d) the manipulation, movement or other treatment of lead material.

(3) "Efficient exhaust draught" means localized ventilation effected by heat or mechanical means for the removal of gas, vapour, dust or fumes so as to prevent them from escaping into the air of any place in which work is carried on.

No draught shall be deemed efficient which fails to remove gas, vapour, fume or dust at the point where they originate.

- 3. Exhaust Draught,-** None of the following processes shall be carried on except with an efficient exhaust draught-
- (a) melting lead material or slugs; and
 - (b) heating lead material so that vapour containing lead is given off;
- or unless carried on in such a manner as to prevent the free escape of gas, vapour, fumes or dust into any place in which work is carried on, or unless carried on in electrically heated and thermostatically controlled melting pots.
- Such exhaust draught shall be affected by mechanical means and so contrived as to operate on the dust, fume, gas or vapour given off as closely as possible to its point of origin.
- 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 effective separation from one another and from any other process-
- (a) melting of lead or any lead material;
 - (b) casting of lead ingots; and
 - (c) mechanical composing.
- 5. Container of Dross, -** A suitable receptacle with a 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 a lead process is carried on shall-
- (a) be of cement or similar material so as to be smooth and impervious to water;
 - (b) be maintained in sound condition; and
 - (c) be cleansed throughout daily after being thoroughly damped with water, at a time when no other work is being carried on in the place.
- 7. Medical Examination by Medical Officer,-** Every worker employed in a lead process shall be examined by a Medical Officer within 15 days of his first employment.

Such examination shall include tests for-

- a) Lead in urine and blood;
- b) ALA (Aminolevulinic Acid) in urine;
- c) Stippling of cells; and
- d) 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 Medical Officer.

SCHEDULE XIII

Manufacture of Bangles and Other Articles from Cinematograph Film and Toxic and Inflammable Solvents

- 1. Definitions,-** For the purposes of this Schedule-
- (a) "Toxic and Inflammable Solvents" means- (i) Solvents such as acetone, tetrachloroethene, alcohol, denatured spirit, phenol, amyl acetate, butyl acetate, di-acetone alcohol and such other substances as, in the opinion of the Chief Inspector-cum-Facilitator, are toxic and inflammable;
 - (ii) "Bangle polish", "bangle mixture" and such other solvents, by whatever trade name they are known, used in the manufacture of bangles and other articles from cellulose films.
 - (b) "Suspension" means suspension from employment in any process in which toxic and inflammable solvents are used, by written certificate entered in the Health Register and signed by the Medical Officer, who shall have the power of suspension in respect of all persons employed in any such process.

- (c) "Approval" means approval by the Chief Inspector-cum-Facilitator.
- (d) "First employment" means first employment in any manufacturing process referred to in this Schedule and also re-employment in such manufacturing process following any cessation of employment for a continuous period of three calendar months.

2. **Application.**—This Schedule shall apply to all factories or any part thereof in which the process of manufacture of bangles and other articles from cinematograph film, toxic and inflammable solvents, or both (hereinafter referred to as "the said manufacturing processes") is carried on.
3. **Protective Clothing.**—Protective clothing shall be provided and maintained in good repair for all workers employed in the factory, and such clothing shall be worn by the workers concerned.

The protective clothing shall consist of—

- A suitable apron; and
- Head coverings, if so required by the Chief Inspector-cum-Facilitator.

The head coverings so provided shall be washed daily.

4. **Ventilation.**—Every workroom in which cinematograph film, toxic and inflammable solvents, or both are handled, manipulated or used shall be provided with inlets and outlets of adequate size so as to secure and maintain efficient ventilation in all parts of the room during working hours.

Provided that the preparation of cylinders from cinematograph film and toxic and inflammable solvents, cutting of such cylinders into bangles and heat treatment of the bangles shall be carried out in an open space under cover, unless specially exempted by the Chief Inspector-cum-Facilitator.

5. **Drying of Cinematograph Film.**—(1) Drying of cinematograph film shall not be carried out except under such conditions as will prevent the film from coming into contact or proximity with any source of heat or heated surface in a manner that would render the film liable to ignition or decomposition.

- (2) Loose unwound cinematograph film shall be enclosed during drying in such a manner that persons in the room are protected, as far as practicable, from an outburst of flame.
- (3) The temperature in any part of a drying enclosure for loose unwound cinematograph film, other than safety acetate film, shall not at any time exceed 110°F.

A thermometer shall be kept available in every room in which such drying is carried out.

- (4) Boiling of raw films, either alone or in conjunction with other chemicals, or heating of bangles and other articles made of film shall be carried out in an open space.
 - (5) A sufficient number of buckets filled with water shall be provided near places where bangles are subjected to heat treatment.
6. **Storage of Raw Materials.**—(1) Each roll or package of cinematograph film used in any of the said manufacturing processes shall, except when required to be exposed for the purpose of the work carried on, be kept in a separate box properly closed and constructed of metal or other approved material.
 - (2) Without prejudice to the provisions of the Cinematograph Film Rules, 1948, Municipal Rules and other rules in force, all cinematograph film not being actually used or manipulated shall be kept in a room, chamber or similar enclosure approved by the Chief Inspector-cum-Facilitator.

Stocks of toxic and inflammable solvents shall be stored in approved places or containers.

7. **Disposal of Waste Films.**—(1) All waste and scrap cinematograph film shall be collected at frequent intervals during each day and placed in strong metal receptacles fitted with self-closing lids and clearly marked with the words: "FILM WASTE"
- (2) No material liable to ignite spontaneously, nor anything likely to ignite or decompose cinematograph film, shall be placed in the receptacle.
- (3) At the end of each day's work, waste and scrap films shall either be transferred to a storeroom or removed from the factory premises.

- (4) Waste films and shavings shall be destroyed by burning in an open place under controlled conditions. They shall not be thrown or scattered in or about the factory premises.
8. **Prohibition of Smoking,-** (1) No person shall be allowed to smoke in any room in which cinematograph film is manipulated, used or stored.
- (2) No open fire, naked light, smoking material, matches, or anything likely to ignite or decompose cinematograph film shall be permitted in any storeroom or room where cinematograph film, toxic and inflammable solvents, or both are stored, manipulated or used.
9. **Precautions Regarding Electrical Installations,-** All electrical installations and fittings shall be of flame-proof type.
10. **Floor of Workrooms,-** The floor of every workroom in which any of the said manufacturing processes are carried on shall-
- (a) be of cement or similar material so as to be smooth and impervious to water;
 - (b) be maintained in sound condition;
 - (c) be kept free from materials, plant or other obstructions not required for, or produced in, the process carried on in the room; and
 - (d) be cleaned daily after being thoroughly sprayed with water at a time when no other work is being carried on in the room.
11. **Time to be Allowed for Washing,-** Before each meal and before the end of the day's work, at least ten minutes, in addition to the regular meal times, shall be allowed for washing to every person employed in any of the said manufacturing processes.
12. **Facilities for Bathing,-** The Chief Inspector-cum-Facilitator may require the occupier of any factory to provide-
- Bathing accommodation for all persons engaged in all or any of the said manufacturing processes; and
 - A sufficient supply of soap and clean towels.
13. **Fire-Fighting Appliances, -** (1) Adequate means for extinguishing fires, having regard to the amount of celluloid present in the room at any time, shall be constantly provided for each workroom and storeroom.
- (2) The fire-fighting appliances shall be maintained in good condition and kept in a position that is readily accessible.
14. **Means of Escape in Case of Fire, -** Adequate means of escape in case of fire shall be provided in every room in which cinematograph film is manipulated, used or stored.
- Such means of escape shall not be deemed adequate unless-
- (a) at least two separate exits are provided from every such room and two safe means of escape from the building are available for all persons employed in the factory; and
 - (b) all doors and windows provided in connection with the means of escape are constructed to open outward readily.
15. **Cautionary Notices,-** (1) Cautionary notices explaining the dangers to which workers are exposed due to any of the said manufacturing processes shall be affixed in prominent positions in the factory where they may be easily and conveniently read by the persons employed.
- Such notices shall be printed in the language or languages understood by the majority of workers employed in the factory.
- (2) Where any person employed in the factory is illiterate, effective steps shall be taken to explain carefully to such person the contents of the notices.
16. **Exemptions,-** If, in respect of any factory, the Chief Inspector-cum-Facilitator is satisfied that, owing to exceptional circumstances, infrequency of the process, or for any other reason, all or any of the provisions of this Schedule are not necessary for the protection of the persons employed, he may, by a certificate in writing, exempt such factory from all or any of the provisions of this Schedule, 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 reason.

SCHEDULE XIV**Compression of Oxygen and Hydrogen Produced by the Electrolysis of Water**

1. The room in which the electrolyser plant is installed shall be separate from the plant for storing and compressing oxygen and hydrogen and also from the electric generator room.
2. The purity of oxygen and hydrogen shall be tested by a competent person at least once in every shift at the following points:
 - (i) In the electrolysis room;
 - (ii) At the gas-holder inlet; and
 - (iii) At the suction end of the compressor.

The purity figures shall be entered in a register and signed by the person carrying out such tests.

Provided that, if the electrolyser plant is fitted with an automatic recorder of purity of oxygen and hydrogen with alarm lights, it shall be sufficient if the purity of the gases is tested only at the suction end of the compressor.

3. The oxygen and hydrogen gases shall not be compressed if their purity, as determined under Clause 2, falls below 98 percent at any time.
4. The bell of any gas-holder shall not be permitted to go within 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 this limit is reached.
5. There shall be at least two gas-holders for each kind of gas compressed, and the gas-holders for the same gas shall be provided with suitable arrangements to ensure that-
 - (a) no gas-holder is connected to both the compressor and the electrolyser at the same time; and
 - (b) only one gas-holder is connected to the compressor line at any one time.
6. The water and caustic soda or potash used for making electrolytes shall be of a standard suitable for electrolysis.
7. Electrical connections at the electrolyser cells and at the electric generator terminals shall be so constructed as to preclude the possibility of wrong connections leading to reversal of polarity.

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 switchboard or at the electric generator terminals.

8. Oxygen and hydrogen gas pipes shall be painted with distinguishing colours.

Whenever a hydrogen pipe is opened for repairs or any other work, on reconnection the pipe shall be purged of all air before hydrogen is allowed to pass through it.

9. All electrical wiring and apparatus in the electrolyser room and hydrogen compression room shall be of flame-proof construction or enclosed in flame-proof fittings.

No naked light or flame shall be permitted in the electrolyser room or in any place where compression and filling of the gases are carried on.

Suitable warning notices shall be exhibited in prominent places.

10. No part of the electrolyser plant, gas-holder or 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 it safe for such operations.

After completion of such operations, no explosive substance shall be allowed to enter that part until the metal has cooled sufficiently to prevent the risk of explosion.

11. No work of operation, repair or maintenance shall be undertaken except under the direct supervision of a person who, by training, experience and knowledge of the necessary precautions against the risk of explosion, is competent to supervise such work.

No electric generator after erection or repairs shall be switched on to the electrolyzers unless certified by the competent person under whose direct supervision the erection or repairs were carried out to be in a safe condition, and unless the terminals have been checked for polarity as required under Clause 7.

Every part of the electrolyser plant, gas-holders and compressors shall be subjected to a regular schedule of overhaul and checking, and every defect noticed shall be rectified forthwith.

SCHEDULE XV

Handling and Processing of Asbestos, Manufacture of Any Article or Substance of Asbestos and Any Other Processes of Manufacture or Otherwise in Which Asbestos Is Used in Any Form

1. **Application,-** (1) This Schedule shall apply to all manufacturing processes as defined under clause (zi) of sub-section (1) of Section 2 of the Code, carried on in a factory involving exposure of workers to asbestos and/or products containing asbestos.
 - (2) The Government may, at any time, for the purpose of giving effect to any scientific proof obtained from specialised institutions or experts in the field, by notification in the Official Gazette, make suitable changes to this Schedule.
 - (3) The provisions of this Schedule shall apply to all workers exposed to asbestos in the factory, and it shall be the responsibility of the occupier of the factory to comply with these provisions.
 - (4) (a) The occupier of a factory wherein asbestos or substances containing asbestos are used shall prepare work procedures and practices, in the light of scientific research and technological progress, for approval by the Chief Inspector-cum-Facilitator and shall follow only such approved procedures.
(b) Notwithstanding anything contained in sub-clause (1), the use of asbestos is prohibited in such manufacturing processes as may be notified by the Government.
 - (c) (i) Spraying of all forms of asbestos is prohibited in any factory.
(ii) The prohibition regarding spraying of asbestos may be exempted by the Chief Inspector-cum-Facilitator if the occupier represents that such spraying is unavoidable for specific purposes and adequate measures are undertaken to ensure the safety and health of workers to the satisfaction of the Chief Inspector cum-Facilitator.
2. **Definitions,-** For the purposes of this Schedule-
 - (a) "Asbestos" means any fibrous silicate mineral and any admixture containing actinolite, amosite, anthophyllite, chrysotile, crocidolite, tremolite or any mixture thereof, whether crude, crushed or opened;
 - (b) "Asbestos textiles" means yarn or cloth composed of asbestos or asbestos mixed with any other material;
 - (c) "Approved" means approved in writing by the Chief Inspector-cum-Facilitator;
 - (d) "Breathing apparatus" means a helmet or face piece with necessary connections by means of which a person breathes air free from dust, or any other approved apparatus;
 - (e) "Efficient exhaust draught" means localized ventilation by mechanical means for the removal of dust so as to prevent dust from escaping into the air of any place in which work is carried on. No draught shall be deemed efficient if it fails to control dust at the point where it originates;
 - (f) "Preparing" means crushing, disintegrating and any other process incidental to the opening of asbestos;
 - (g) "Protective clothing" means overalls and head coverings which, when worn, exclude asbestos dust;
 - (h) "Asbestos dust" means airborne particles of asbestos or settled particles liable to become airborne in the factory;
 - (i) "Airborne asbestos dust" means, for the purpose of measurement, dust particles measured by gravimetric assessment or other equivalent method;
 - (j) "Respirable asbestos fibres" means asbestos fibres having a diameter of less than 3 micrometres and a length-to-diameter ratio greater than 3:1; and

- (k) "Exposure to asbestos" means exposure to airborne respirable asbestos fibres or asbestos dust, whether originating from asbestos itself or from minerals, materials or products containing asbestos in the factory.
3. **Tools and Equipment.** - Any tools or equipment used in processes to which this schedule applies, shall be such that they do not create asbestos dust above the permissible limit or are equipped with efficient exhaust draught.
4. **Exhaust draught.** - (1) An efficient exhaust draught shall be provided and maintained to control dust from the following processed 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, and
 - (iv) machines used for the sawing, grinding, turning, drilling, abrading or polishing, in the dry state, of articles composed wholly or partly of asbestos.
 - (b) cleaning and grinding of the cylinders or other parts of a carding machine;
 - (c) chambers, hoppers or other structures into which loose asbestos is delivered or passed;
 - (d) work-benches for asbestos waste sorting or for other manipulation of asbestos by hand ;
 - (e) work places at which the filling or emptying of sacks, skips, or other portable containers, weighting or other process incidental thereto which is effected by hand, is carried on ;
 - (f) sack cleaning machines;
 - (g) mixing and blending of asbestos by hand; and
 - (h) any other process in which dust is given off into the work environment.
- (2) Exhaust ventilation equipment provided in accordance with sub-paragraph (1) shall, while any work of maintenance or repair to the machinery, apparatus or other plant or equipment in connection with which it is provided is being carried on, be kept in use so as to produce an exhaust draught which prevents the entry of asbestos dust into the air of any work place.
- (3) Arrangements shall be made to prevent asbestos dust discharged from exhaust apparatus being drawn into the air of any work-room.
- (4) The asbestos being dust removed from any work-room 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 ventilating system.** - (1) All ventilating system 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 tests shall be rectified forthwith.
- (2) A register containing particulars of such examination and tests and the state of the plant and the repairs or alteration (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 by the hand, of asbestos, 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.** - (1) 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 within a factory except in such receptacles or in a totally enclosed system of conveyance.
8. **Asbestos sacks.** - (1) All sacks used as receptacles for the purpose of transport of asbestos within the factory shall be constructed of impermeable material and shall be kept in good repair.
- (2) A sack which has contained asbestos shall not be cleaned by hand beating but by a machine, complying with paragraph 3.

9. Maintenance of floors and work places. - (1) In every room in which any of the requirements of this schedule apply-

- (a) the floors, work-benches, machinery and plant shall be kept in a clean state and free from asbestos debris and suitable arrangements shall be made for the storage of asbestos debris and suitable arrangements shall be made for the storage of asbestos not immediately required for uses; and
- (b) the floors shall be kept free from any materials, plant or other articles not immediately required for the work carried on in the room, which would obstruct the proper cleaning of the floor.
- (2) The cleaning as mentioned in sub-paragraph (1) shall, so far as is practicable, be carried out by means of vacuum cleaning equipment so designed and constructed and so used that asbestos dust neither escapes nor is discharged into the air of any work place.
- (3) When the cleaning is done by any method other than mentioned in sub-paragraph (2), the persons doing cleaning work and any other person employed in that room shall be provided with respiratory protective equipment and protective clothing.
- (4) The vacuum cleaning equipment used in accordance with provisions of sub-paragraph (2), shall be properly maintained and after each cleaning operation its surfaces kept in a clean state and free from asbestos waste and dust.
- (5) Asbestos waste shall not be permitted to remain on the floors or other surfaces at the 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. - (1) An approved breathing apparatus and protective clothing shall be provided and maintained in good condition 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 offer cylinders, or other parts of a carding machine by means of hand-strickles;
- (d) in filling, beating, or leveling in the manufacture or repair of insulating mattresses; and
- (e) in any other operation or circumstance in which it is impracticable to adopt technical means to control asbestos dust in the work environment within the permissible limit.
- (2) Suitable accommodation in conveniently accessible position shall be provided for the use of persons when putting on or taking off breathing apparatus and protective clothing provided in accordance with this paragraph and for the storage of such apparatus and clothing when not in use.
- (3) All breathing apparatus and protective clothing when not in use shall be stored in the accommodation provided in accordance with sub-paragraph (2) above.
- (4) All protective clothing in use shall be de-dusted under an efficient exhaust draught or by vacuum cleaning and shall be washed at suitable intervals. The cleaning schedule and procedure should be such as to ensure the efficiency in protecting the wearer.
- (5) All breathing apparatus shall be cleaned and disinfected at suitable intervals and thoroughly inspected once in every month by a responsible person.
- (6) A record of the cleaning and maintenance and of the condition of the breathing apparatus shall be maintained in a register provided for that purpose which shall be readily available for inspection by an Inspector.
- (7) No person shall be employed to perform any work specified in sub-paragraph (1) for which breathing apparatus is necessary to be provided under that sub-paragraph unless he has been fully instructed in the proper use of that equipment.

- (8) No breathing apparatus provided in pursuance of sub-paragraph (1) which has been worn by a person shall be worn by another person unless it has been thoroughly cleaned and disinfected since last being worn and the person has been fully instructed in the proper use of that equipment.
- 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 (2) of paragraph 10 to prevent contamination of personal clothing.
- 12. Wash and bathing facilities.** - (1) There shall be provided and maintained in a clean state and in good repair for the use of all workers employed in the processes covered by the schedule, Adequate washing and bathing places having a constant supply of water under cover at the rate of one such place for every 15 persons employed.
- (2) The washing places shall have standpipes placed at intervals of not less than one metre.
- (3) Not less than one-half of the total number of washing places shall be provided with bathrooms.
- (4) Sufficient supply of clean towels made of suitable materials shall be provided :
- Provided that such towels shall be supplied individually for each worker if so ordered by the Inspector.
- (5) Sufficient supply of soap and nail brushes shall be provided.
- 13. Mess-room.** - (1) There shall be provided and maintained for the use of all workers employed in the factory covered by this schedule, remaining on the premises during the rest intervals, a suitable mess-room which shall be furnished with-
- (a) sufficient tables and benches with back rest, and
- (b) adequate means for warming food.
- (2) The mess-room shall be placed under the charge of a responsible person and shall be kept clean.
- 14. Prohibition of employment of adolescent persons.** - No adolescent person shall be employed in any of the processes 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 area.
- 16. Cautionary Notices.** - (1) Cautionary notices 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 of unauthorized persons, or authorised persons but without protective equipment.
- (2) 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.** - (1) The occupier of every factory or part of the factory to which the schedule applies, 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 cum Facilitator of Factories;
- (b) provide of the said medical practitioner all the necessary facilities for the purpose referred to in clause (a).
- (2) The record of medical examinations and appropriate tests carried out by the said medical practitioner shall be maintained in a separate register approved by the Chief Inspector cum Facilitator of Factories, which shall be kept readily available for inspection by the Inspector cum Facilitator at all times during working of the factory

- 19. Medical examination by Medical Officer.** - (1) Every worker employed in the processes specified in paragraph 1 shall be produced for examination by a Medical Officer within 15 days of his first employment. Such examination shall include pulmonary function test, tests for detecting asbestos fibres in sputum and chest X-ray. 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 Medical Officer.
- (2) Every worker employed in the process referred to in sub-paragraph (1) [shall be produced for re-examination by a Medical Officer at least once in every twelve calendar months. Such examinations shall, whatever the Medical Officer considers appropriate, including all the tests specified in sub-paragraph (1) except chest X-ray which will be carried out once in 3 years.
- (3) The Medical Officer after examining a worker, shall issue a Certificate of fitness in Form VII. The record of examination and re-examinations carried out shall be entered in the certificate and the certificate shall be kept in the custody of the manager of the factory. The record of each examination carried out under sub-paragraph (1) and (2) including the nature and the results of the tests, shall also be entered by the Medical Officer in a health register in Form VII.
- (4) The Certificate of Fitness and the health register shall be readily available for inspection by the Inspector cum Facilitator at all times during working of the factory
- (5) If at any time the Medical Officer is of the opinion that a worker is no longer fit for employment in the said process on the ground that continuance therein would involve special danger to the health register. The entry of his findings in those documents [shall also include] the period for which he considers that the said worker is unfit to work in the said processes.
- (6) No worker who has been found unfit to work as said in sub-paragraph (5) shall be allowed or required to work in the said processes unless the Medical Officer, after further examination, again certifies him fit for employment in those processes. The worker so suspended from the process shall be provided with alternate placement facilities unless he is fully incapacitated in the opinion of the Medical Officer, in which case the worker affected shall be suitably rehabilitated.
- 20. Exemptions.** - If in respect of any factory, the Chief Inspector cum Facilitator is satisfied that owing to the exceptional circumstances or infrequency of the processes or for any other reasons, all or any of the provisions of this schedule is not necessary for protection of the workers in the factory, the Chief Inspector cum Facilitator may by an order in writing, which may at his discretion revoke at any time, exempt such factory from all or any of such provisions subject to such conditions, if any, as he may specify therein.

SCHEDULE XVI

Manipulation of Stone, or Any Other Material Containing Free Silica

- 1. Application.** - (a) This Schedule shall apply to all factories or parts of factories in which the below-mentioned manufacturing activity containing free silica is carried on.
- (b) The following manufacturing processes shall be considered as manipulation of stone or other material containing free silica:
1. Stone Crushers
 2. Gem and Jewellery
 3. Slate Pencil Making
 4. Agate Industry
 5. Cement Industry
 6. Pottery
 7. Glass Manufacturing
- 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. Preventive Control Measures,- No manipulation shall be carried out in a factory or part of a factory unless the following preventive control measures are adopted, namely:-

(i) Engineering Control Measures

(1) Wet Methods

- (a) Airborne silica dust should be minimized or suppressed by applying water to the process or during cleaning operations.
- (b) Water should be provided during drilling or sawing of concrete or masonry.

(2) Ventilation

- (a) An effective local exhaust system shall be provided and maintained to control/remove silica dust from industrial processes.
- (b) Dilution ventilation may be used to reduce free silica dust concentration below the permissible limits in large areas.
- (c) Dust collectors/HEPA filters should be installed so that dust is removed from the source and all transfer points to prevent contamination of work areas.
- (d) Ventilation systems should be maintained in good working condition.

(3) Isolation

- (a) Containment methods should be used while carrying out sand blasting.
- (b) Cabins of vehicles or machinery used for cutting and drilling which may contain free silica should be enclosed and sealed.

(4) Dust Control

- (a) Vacuum systems with High Efficiency Particulate Air (HEPA) filters shall be used to remove dust from work areas and at all transfer points.
- (b) Belt conveyors transferring crushed material shall be totally enclosed throughout their length:

Provided that such control measures as mentioned above are not necessary if the process or operation itself is such that the level of dust created and prevailing does not exceed the permissible limit of exposure specified in the Rules.

(ii) Medical Control Measures

- (1) The occupier of every factory in which a worker is employed in the processes specified in Clause 1 shall ensure that every worker employed is examined by a Factories/Medical Officer within 15 days of his first employment.

Such medical examination shall include pulmonary function tests and chest X-ray - Posterior Anterior (PA) view - to be compared with standard ILO Radiographs of 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 Medical Officer.

- (2) Every worker employed in the processes shall be re-examined by a Medical Officer at least once every twelve months.

Such re-examination shall, wherever considered appropriate by the Medical Officer, include all tests specified in sub-clause (1), except chest X-ray, which shall be read by a radiologist specialized/trained in the field of reading ILO Radiographs on Pneumoconiosis. Chest X-ray shall be carried out at least once every three years.

- (3) Every worker employed in any of the aforesaid processes on the date on which this Schedule comes into force shall be radiologically examined by a qualified Radiologist at the cost of the occupier using standard size X-ray plates. The power of the X-ray machine shall be more than 300 milliamperere (mA).

The report of such X-ray shall be submitted to the /Medical Officer/Chief Inspector-cum-Facilitator within three months from the said date.

- (4) If at any time the Medical Officer is of the opinion that a worker is no longer fit for employment in the said process on the ground that continuance therein would involve special danger to the health of the worker, he shall record his findings in the Certificate and Health Register.

The entry of findings shall also include the period for which he considers the person unfit for work in the said processes.

The person suspended from the process shall be provided with alternate placement facilities unless he is fully incapacitated, in which case he shall be suitably rehabilitated.

- (5) No person found unfit to work as stated in sub-clause (4) shall be re-employed or permitted to work in the said processes unless the Medical Officer, after further examination, again certifies him fit for employment.
- (6) A worker already in employment and declared unfit by the /Medical Officer shall not be allowed to work in any process specified in sub-clause (1), unless he has been examined again along with a standard size chest X-ray plate from a qualified Radiologist at the cost of the occupier and certified fit to work in the said processes.
- (7) For medical supervision, the Factory Medical Practitioner/Medical Officer appointed by the occupier shall be provided an exclusive room in the factory premises, properly cleaned, adequately lighted, ventilated and furnished with a screen, table with office stationery, chairs, and other facilities including X-ray arrangements and other equipment prescribed by the Chief Inspector-cum-Facilitator.

The Medical Practitioner shall perform the following duties:

- (a) Maintain Health Register.
- (b) Undertake medical supervision of persons employed in the factory.
- (c) Look after health education and rehabilitation of sick, injured or affected workers.
- (d) Inspect workrooms where dangerous operations are carried out and advise management regarding measures for protection of workers' health.
- (8) Health records of workers exposed to silicosis shall be maintained for a minimum period of 40 years from the beginning of employment or 15 years after retirement or cessation of employment, whichever is later.

Such records shall be accessible to concerned workers or their representatives.

- (9) Records of medical examinations, tests carried out, certificates of fitness and health records shall be maintained in a separate register approved by the Chief Inspector-cum-Facilitator and shall be readily available for inspection.

(iii) Administrative Control Measures

(1) Workplace/Environment Monitoring

The occupier shall ensure workplace/environment monitoring to determine the magnitude of exposure/concentration, evaluate engineering controls, select respiratory protection, establish work practices and determine the need for medical surveillance.

- (a) Exposure/concentration measurements shall be made in the employee's actual breathing zone.
- (b) Total sampling time shall be at least 7 hours.
- (c) Workplace/environment monitoring shall be repeated quarterly.
- (d) Reports of dust sampling conducted by the occupier shall be made available to the public.

(2) Training/Awareness

Workers shall be trained regarding:

- (a) Health effects of free silica dust exposure.
- (b) Operations and materials producing free silica dust hazards.

- (c) Engineering controls and work practice controls for reducing dust concentration.
- (d) Importance of good housekeeping and cleanliness.
- (e) Proper use of personal protective equipment such as respirators.
- (f) Personal hygiene practices to reduce exposure.
- (3) Housekeeping: Maintenance of Floors
 - (a) All floors or places where fine dust is likely to settle and where persons have to work or pass shall be made of impervious material and maintained in such condition that they can be thoroughly cleaned by a moist method or any other method preventing airborne dust during cleaning at least once during each shift.
 - (b) Dry sweeping or compressed air shall not be used for cleaning dust. Wet methods or vacuum systems with HEPA filters shall be used.
 - (c) Dust on overhead ledges and equipment shall be removed before it becomes airborne due to vibration, traffic or random air currents.
- (4) Change Room and Washing Facilities
 - (a) Washing and bathing facilities shall be conveniently located and easily accessible to workers.
 - (b) Cloakrooms with individual lockers shall be provided for storing uncontaminated clothing.
 - (c) Workers shall take baths and change work clothes before leaving the workplace.
 - (d) Work clothes shall not be cleaned by blowing or shaking.
 - (e) Eating/lunch areas shall be located away from exposed areas.
- (5) Display of Notices
 - (a) Warning signs/posters shall be displayed prominently.
 - (b) Warning signs/posters shall contain information regarding hazards and precautions.
 - (c) Notices shall be displayed in the local language and in the language understood by the majority of workers.
- (6) Personal Protective Equipment

The occupier of every factory to which this Schedule applies shall provide PPEs as per relevant National Standards or International Standards applicable to the workplace:

- (a) Dust respirator.
- (b) HEPA filter respirator or fume respirator.
- (c) HEPA filter respirator with full facepiece.
- (d) Self-contained breathing apparatus (SCBA).
- (e) Supplied air respirator with full facepiece, helmet or hood.
- (f) SCBA with full facepiece.
- (g) Powered air purifying respirator with HEPA filter.

4. **Exemptions.**— If, in respect of any factory, the Chief Inspector-cum-Facilitator is satisfied that due to exceptional circumstances, infrequency of processes, or any other reason, all or any provisions of this Schedule are not necessary for protection of workers, the Chief Inspector-cum-Facilitator may, by a certificate in writing, exempt such factory from all or any provisions subject to such conditions as he may specify.

Such exemption may be revoked at any time at the discretion of the Chief Inspector-cum-Facilitator.

SCHEDULE XVII**Handling and Manipulation of Corrosive Substances****1. Definitions,-** For the purpose of this Schedule:

- (a) "Corrosive operation" means an operation of manufacturing, storing, handling, processing, packing, or using any corrosive substance in a factory.
- (b) "Corrosive substance" includes sulphuric acid, nitric acid, hydrochloric acid, hydrofluoric acid, carboic acid, phosphoric acid, liquid chlorine, liquid bromine, ammonia, sodium hydroxide, potassium hydroxide and mixtures thereof, and any other substance which the State Government may, by notification in the Official Gazette, specify to be a corrosive substance.

2. Flooring,- The floor of every workroom of a factory in which corrosive operations are carried out shall be made of impervious, corrosion-resistant and fire-resistant material and shall be constructed in such a manner as to prevent collection of any corrosive substance.

The surface of such flooring shall be smooth, 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 kept in clean and hygienic condition by suitably treating them to remove the harmful effects of any absorbed chemicals and by disinfecting them.

The occupier shall also provide suitable protective creams and other preparations wherever necessary.

- (b) The protective equipment and preparations provided shall be used by all persons employed in any corrosive operation.

4. Water Facilities,- Where any corrosive operation is carried out, there shall be provided as close as possible to the place of such operation, a source of clean water at a height of 210 cm. (7 ft.) from a pipe of 1.25 cm. (1/2 inch) diameter fitted with a quick-acting valve so that, in case of injury to a worker by any corrosive substance, the injured part can be thoroughly flooded with water.

Water sprinkler systems shall be provided over ammonia receivers.

Whenever necessary, to ensure continuous water supply, a storage tank having minimum length, breadth and height of 210 cm., 120 cm., respectively, or such dimensions as approved by the Chief Inspector-cum-Facilitator, shall be provided as a source of clean water.

5. Cautionary Notice,- A cautionary notice in the prescribed form and printed in the language understood by the majority of workers employed shall be displayed prominently close to the place where any operation mentioned in Clause 2 above is carried out.

The notice shall be displayed at a location where it can be easily and conveniently read by workers.

If any worker is illiterate, effective steps shall be taken to explain carefully the contents of the notice to such worker.

6. Transport,- (a) Corrosive substances shall not be filled, moved or carried except in containers or through pipes. When transported in containers, they shall be placed in crates of sound construction and sufficient strength.

- (b) A container having a capacity of 11.5 litres (2½ gallons) or more containing a corrosive substance shall be placed in a receptacle or crate and carried by more than one person at a height below the waistline unless a suitable rubber-wheeled truck is used.

- (c) Containers containing corrosive substances shall be clearly labelled.

7. Devices for Handling Corrosive Substances,- (a) Tilting, lifting or pumping arrangements shall be used for emptying jars, carboys and other containers containing corrosive substances.

- (b) Corrosive substances shall not be handled with bare hands but shall be handled using suitable scoops or other devices.

8. Opening of Valves,- Valves fitted to containers holding corrosive substances shall be opened with great care.

If the valves do not work freely, they shall not be forced open.

Such valves shall be opened only by a worker suitably trained for the purpose.

9. Cleaning of Tanks and Stills, etc.,- (a) While cleaning or removing residues from stills or other large chambers used for holding corrosive substances, suitable implements made of wood or other suitable material shall be used to prevent the production of arseniuretted hydrogen (Arsine).

(b) Whenever it is necessary for any worker to enter a chamber, tank, vat, pit or other confined space where corrosive substances have been stored for cleaning or maintenance work, all precautions required under sub-rules 33 and 34 of Rule 110 of these Rules shall be taken to ensure the worker's safety.

(c) Wherever possible, before repairs are undertaken to any equipment or part of equipment in which corrosive substances were handled, such equipment or parts shall be freed from adhering corrosive substances by adopting suitable methods.

10. Storage,- (a) Corrosive substances shall not be stored in the same room with chemicals such as turpentine, carbides, metallic powders and combustible materials, accidental mixing with which may cause violent reactions or release toxic fumes and gases.

(b) Pumping or filling overhead tanks, receptacles, vats or other containers for storing corrosive substances shall be arranged so that there is no possibility of overflow causing injury to any person.

(c) Every container having a capacity of twenty litres or more and every pipeline, valve and fitting used for carrying corrosive substances shall be thoroughly examined by a competent person every year to identify defects.

Any defects found shall be removed immediately.

A register shall be maintained for every such examination and produced before the Inspector-cum-Facilitator whenever required.

11. Safety Measures,- (1) All system pipelines shall have welded joints instead of flanged joints.

(2) ISI valves shall be provided in pipelines and periodic maintenance of valves shall be ensured.

(3) Any corrosive substance leaking from valves shall be taken to scrubbers for neutralisation through a closed circuit system.

(4) Sensitive devices shall be provided for early detection of leakage of corrosive substances.

(5) Absorbers of suitable capacity shall be provided.

(6) Standby generators of adequate capacity shall be provided in factories handling toxic gases.

12. Fire Extinguishers and Fire-Fighting Equipment,- An adequate number of suitable types of fire extinguishers or other firefighting equipment, depending upon the nature of chemicals stored, shall be provided. Such extinguishers or equipment shall be regularly tested and refilled. Clear instructions regarding the method of using extinguishers or other equipment, printed in the language understood by the majority of workers employed, shall be displayed near each extinguisher or equipment.

13. Exemption,- If, in respect of any factory, on an application made by the Manager, the Chief Inspector-cum-Facilitator is satisfied that due to exceptional circumstances, infrequency of the process, or any other reason recorded by him in writing, all or any provisions of this Schedule are not necessary for the protection of persons employed therein, he may, by a certificate in writing, exempt the factory from such provisions.

Such exemption may be revoked at any time and shall be subject to such conditions as may be specified therein.

SCHEDULE XVIII**Manufacture or Manipulation of Carcinogenic Dye Intermediates**

1. **Application.** - This Schedule shall apply in respect of all factories or any part thereof where processes in which the substances mentioned in Clauses 3 and 4 are formed, manufactured, handled or used, and the processes incidental thereto in the course of which these substances are formed, are carried on.

The processes indicated in these clauses shall be referred to hereinafter as "the said processes", and such reference shall mean any or all of the processes described in this clause.

2. **Definitions.** - For the purpose of this Schedule, the following definitions shall apply unless the context otherwise requires:

(a) "Controlled substances" means chemical substances mentioned in Clause 4 of this Schedule.

(b) "Efficient exhaust draught" means localized ventilation effected by 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 to be efficient which fails to remove smoke generated at the point where such gas, vapour, fume or dust originates.

(c) "Prohibited substances" means chemical substances mentioned in Clause 3 of this Schedule.

3. **Prohibited Substances.** - For the purpose of this Schedule, the following chemical substances shall be classified as "prohibited substances", except when these substances are present or formed as a by-product of a chemical reaction in a total concentration not exceeding one percent:

- (a) Beta-naphthylamine and its salts;
- (b) Benzedrine and its salts;
- (c) 4-aminobiphenyl and its salts;
- (d) 4-nitrodiphenyl and its salts; and
- (e) Any substance containing any of these compounds.

4. **Controlled Substances.** - For the purpose of this Schedule, the following chemical substances shall be classified as "controlled substances":

- (a) Alpha-naphthylamine or alpha-naphthylamine containing not more than one percent of beta-naphthylamine, either as a by-product of chemical reaction or otherwise, and its salts;
- (b) Ortho-tolidine and its salts;
- (c) Dianisidine and its salts;
- (d) Dichlorobenzidine and its salts;
- (e) Auramine; and
- (f) Magneta.

5. **Requirements for Processing or Handling Controlled Substances.** - (1) Wherever any of the controlled substances referred to in Clause 4 are formed, manufactured, processed, handled or used, all practical steps shall be taken to prevent inhalation, ingestion or absorption of the said controlled substances by workers while engaged in processing, storage, transport within the plant, cleaning or maintenance of concerned equipment, plant, machinery and storage areas.

(2) As far as possible, all operations shall be carried out in a totally enclosed system.

Where such enclosure is not possible, efficient exhaust draught shall be applied at the point where controlled substances are likely to escape into the atmosphere during the process.

(3) Controlled substances shall be received in the factory in tightly closed containers and shall be kept closed except when these substances are in process or in use.

Controlled substances shall leave the factory only in tightly closed containers of appropriate type.

All containers shall be clearly labelled to indicate their contents.

- 6. Personal Protective Equipment,-** (1) The following personal protective equipment shall be provided and issued to every worker employed in the said processes:

- (a) Long trousers and shirts or overalls with full sleeves and head coverings.

The shirt or overall shall completely cover the neck.

- (b) Rubber gum-boots.

- (2) The following personal protective equipment shall be provided in sufficient numbers for use by workers employed in the said processes whenever there is danger of injury during normal duties or emergency situations:

- (a) Rubber hand gloves;

- (b) Rubber aprons; and

- (c) Airline respirators or other suitable respiratory protective equipment.

- (3) It shall be the responsibility of the Manager to maintain all personal protective equipment in clean, hygienic condition and in good repair.

- 7. Floors of Workroom,-** The floor of every workroom in which the said processes are carried out 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) Provided with a suitable slope for easy drainage and equipped with gutters; and

- (d) Thoroughly washed daily, with drain water being led into a sewer through a closed channel.

- 8. Disposal of Empty Containers,-** Empty containers used for holding controlled substances shall be thoroughly cleaned of their contents and treated with an inactivating agent before disposal.

- 9. Manual Handling,-** Controlled substances shall not be mixed, filled, emptied or handled except by means of a scoop with a handle. Such scoop shall be thoroughly cleaned daily.

- 10. Instructions Regarding Risk,-** Every worker, on first employment in the said processes, shall be fully instructed regarding:

- (a) Properties of toxic chemicals to which he may be exposed;

- (b) Dangers involved;

- (c) Precautions to be taken; and

- (d) Measures to be adopted during emergencies.

- 11. Cautionary Placards,-** Cautionary placards in the form specified in the Appendix attached to this Schedule and printed in the language understood by the majority of workers employed in the said processes shall be displayed prominently at places frequented by workers.

The placards shall be displayed where they can be conveniently read.

The Manager shall arrange periodic instruction of workers regarding precautions contained in the cautionary placards.

- 12. Obligations of Workers,-** Persons employed in the said processes shall submit themselves for medical examination, including exfoliative cytology of urine, by a qualified medical practitioner as provided under these Rules.

- 13. Washing and Bathing Facilities,-** (1) The following washing and bathing facilities shall be provided and maintained in clean condition and good repair for workers employed in the said processes:

- (a) A covered washing place with continuous water supply, clean towels, soap and nail brushes, with at least one standpipe for every five workers.
 - (b) Fifty percent of the standpipes provided under Clause (a) shall be located in bathrooms where hot and cold water shall be available during working hours and for one hour thereafter.
 - (c) Washing and bathing facilities shall be located close to the area where the said processes are carried out.
 - (d) Clean towels shall be provided individually to each worker.
 - (e) In addition to taps mentioned under Clause (a), one standpipe with warm water shall be provided on each floor
 - (2) Arrangements shall be made for washing factory uniforms and work clothes every day.
- 14. Food, Drinks, etc. Prohibited in Workroom,-** No worker shall consume food, drink, pan, supari, tobacco or smoke in any workroom where the said processes are carried out. No worker shall remain in such room during meal or rest intervals.
- 15. Cloak Room,-** A clean and properly maintained cloakroom shall be provided for workers employed in the said processes with:
- (a) Lockers having two compartments, one for street clothes and the other for work clothes; and
 - (b) A separate place away from locker rooms and messrooms for storing protective equipment.
- The accommodation shall be under the care of a responsible person and kept clean.
- 16. Messroom, -** A messroom shall be provided and maintained for workers employed in the said processes who remain on the premises during meal intervals. The messroom shall be furnished with tables and benches and provided with suitable arrangements for warming food.
- 17. Time Allowed for Washing,-** Before the end of each shift, 30 minutes shall be allowed for bathing for every worker employed in the said processes. In addition, at least 10 minutes shall be allowed for washing before each meal apart from regular meal time.
- 18. 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 workers employed therein, subject to approval of the Chief Inspector-cum-Facilitator.
 - (b) Provide necessary facilities to the medical practitioner for carrying out medical surveillance.
 - (2) Records of examinations conducted by the medical practitioner shall be maintained in a separate register and kept readily available for inspection by the Inspector-cum-Facilitator.
- 19. Medical Examination,-** (1) Every worker employed in processes specified in Clause 1 shall be examined by a medical practitioner within 15 days of first employment.
- The examination shall include skin tests for dermatitis.
- No worker shall be permitted to work after 15 days of first employment unless certified fit by the medical practitioner.
- (2) Every worker employed in a manganese process shall be re-examined by a medical practitioner at least once every three calendar months.
- The examination shall include all tests specified in sub-clause (1), wherever considered necessary.
- (3) After examination, the medical practitioner shall issue a Certificate of Fitness in Form 23.
- Records of examinations and re-examinations shall be entered in the Certificate and kept in the custody of the Manager.
- Details of examinations, including nature and results of tests, shall also be entered in the Health Register in Form 24.

(4) The Certificate of Fitness and Health Register shall be readily available for inspection by the Inspector-cum-Facilitator.

(5) If the medical practitioner considers that a worker is no longer fit for employment in the said processes due to special danger to health, he shall record his findings in the Certificate and Health Register.

The worker shall be provided alternate employment unless fully incapacitated, in which case suitable rehabilitation shall be provided.

(6) No person declared unfit under sub-clause (5) shall be re-employed unless the medical practitioner, after further examination, certifies him fit for employment.

20. Exemptions,- If the Chief Inspector-cum-Facilitator is satisfied that due to exceptional circumstances, infrequency of processes or any other reason recorded in writing, any provision of this Schedule is not necessary for protection of workers, he may exempt such factory from all or any provisions subject to conditions specified by him.

APPENDIX

Cautionary Placard/Notice

Carcinogenic Dye Intermediates

1. Dye intermediates which are nitro amino derivatives or aromatic hydrocarbons are toxic. You may have to handle these chemicals frequently in this factory.
2. Use the various items of protective wear provided to safeguard your health.
3. Maintain strict cleanliness at all times. Thoroughly wash hands and feet before meals. It is essential to take a bath before leaving the factory.
4. Wash off any chemical falling on your body with soap and water. If splashed with a chemical solution, remove contaminated clothing immediately. These chemicals are known to produce cyanosis. Contact the Medical Officer or appointed doctor immediately and obtain advice.
5. Handle dye intermediates only with long-handled scoops and never with bare hands.
6. Alcoholic drinks should be avoided as they increase the risk of poisoning by these chemicals.
7. Keep food and drinks away from the workplace. Consumption of food, drinks or tobacco in any form at the workplace is prohibited.
8. Serious effects from working with toxic chemicals may occur after many years. Great care must be taken to maintain absolute cleanliness of body, clothes, machinery and equipment.

SCHEDULE XIX

Solvent Extraction Plants

Process of Extracting Vegetable Oil from Oil Cakes in Solvent Extraction Plants

1. Definitions, For the purposes of this Schedule-

- (a) "Solvent Extraction Plant" means the plant in which the process of extracting vegetable oils from oil cakes by the use of solvents is carried on.
- (b) "Solvent" means an inflammable liquid such as pentane, hexane and heptane used for the recovery of vegetable oils.
- (c) "Flame Proof" enclosure as applied to electrical machinery or apparatus means an enclosure that will withstand, when covers or other access doors are properly secured, an internal explosion of the flammable gas or vapour which may enter or which may originate inside the enclosure without suffering damage and without communicating internal inflammation (or explosion) to the external flammable gas or vapour.

2. Location and Layout,- (a) No solvent extraction plant shall be permitted to be constructed or extended to within a distance of 30 metres from the nearest residential locality.

- (b) A 1.5 metre high continuous wire fencing shall be provided around the Solvent Extraction Plant up to a minimum distance of 15 metres from the plant.
- (c) No person shall be allowed to carry any matches or mobile or an open flame or fire inside the area bound by the fencing.
- (d) Boiler houses and other buildings where open flame processes are carried on shall be located at least 30 metres away from the Solvent Extraction Plant.
- (e) If godowns and preparatory processes are at less than 30 metres distance from the Solvent Extraction Plant, these shall be at least 15 metres distance from the plant, and a continuous barrier wall of non-combustible material 1.5 metres high shall be erected at a distance of not less than 15 metres from the Solvent Extraction Plant so that it extends to at least 30 metres of vapour travel around its ends from the plant to the possible sources of ignition.
- 3. Electrical Installations,-**(a) All electrical motors and wiring and other electrical equipment installed or housed in Solvent Extraction Plant shall be of flame proof construction.
- (b) All metal parts of the plant and building including various tanks and containers where solvents are stored or are present and all parts of electrical equipment not required to be energized shall be properly bonded together and connected to earth so as to avoid accidental rise in the electrical potential of such parts above the earth potential.
- 4. Restriction on Smoking,-**Smoking shall be strictly prohibited within 15 metres distance from Solvent Extraction Plant. For this purpose, "No Smoking" signs shall be permanently displayed in the area.
- 5. Precautions Against Friction,-**(a) All tools and equipment including ladders, chains and other lifting tackle required to be used in Solvent Extraction Plant shall be of non-sparking type.
- (b) 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.
- (c) No person shall be allowed to enter and work in the Solvent Extraction Plant if wearing clothes made of nylon or such fibre that can generate static electrical charge, or wearing footwear which is likely to cause sparks by friction.
- 6. Fire Fighting Apparatus,-**(a) Adequate number of portable fire extinguishers suitable for use against flammable liquid fires shall be provided in the Solvent Extraction Plant.
- (b) 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 water supply for feeding water by gravity to condensers which shall come into play automatically with the power failure.
- 8. Magnetic Separators,-**Oil cake shall be fed to the extractor by a conveyor through hopper and a magnetic separator shall be provided to remove any pieces of iron during its transfer.
- 9. Venting,-** (a) Tanks containing solvents shall be protected with emergency venting to relieve excessive internal pressure in the event of fire.
- (b) All emergency relief vents shall terminate at least 6 metres 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.
- 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,-**(a) 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.

- (b) 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.
- (c) Space within the Solvent Extraction Plant and within 15 metres 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,-**(a) 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 submitted to the Inspector-cum-Facilitator with his observation as to whether or not the plant is in safe condition to work.
- (b) No repairs shall be carried out to the machinery or plant except under the direct supervision of the competent employee of the factory.
- (c) 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 person 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. Vapour Detection,-**A suitable type of combustible gas indicator shall be provided and maintained in good working order and a schedule of routine sampling of atmosphere at various locations as approved by the Chief Inspector-cum-Facilitator shall be drawn out and entered in a register maintained for the purpose.
- 16. Further Precautions in Case of Batch Type Solvent Extraction Plants,-**In case of batch type Solvent Extraction Plants, the following further precautions shall be observed:
- (a) When the solvent is removed from batch extractor by vacuum, gauges shall be provided and tests shall be carried out to ensure that a minimum vacuum of 650 mm (26") mercury is obtained and maintained steadily for a minimum period of 30 minutes before the extractor is allowed to be opened for discharge of cake or for persons to enter.
- (b) When on opening the door of a batch extractor the extracted meal cannot be dislodged from the extractor freely, the door shall be closed and the material reheated (dry) under vacuum for at least 60 minutes before the door is reopened.
- (c) Where solvent is removed by steam heating, the presence of the solvent shall be tested at the vent provided on the top of the vessel before opening the vessel.
- (d) A log book of operations with the following particulars shall be maintained and made available on demand to the Inspector-cum-Facilitator:
- (i) Vacuum gauge reading for each charge.
- (ii) Testing of continuity of electrical bonding and earthing system.
- (iii) Loss of solvent every 24 hours or loss per tonne of raw materials used.
- 17. Exemption,-** If in respect of any factory, the Chief Inspector-cum-Facilitator is satisfied that owing to the exceptional circumstances or infrequency of the processes or for any other reasons, all or any of the provisions of this Schedule is not necessary for the protection of the workers in 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 XX

Manufacture or Manipulation of Manganese and its Compounds

- 1. Definitions,-** For the purpose of this Schedule-
- (a) "Manganese process" means processing, manufacture or manipulation of manganese or any compound of manganese or any ore or any mixture containing manganese.

- (b) "First employment" means first employment in any manganese process and includes also re-employment in any manganese process following any cessation of employment for a continuous period exceeding 3 calendar months.
 - (c) "Manipulation" means mixing, blending, filling, emptying, grinding, sieving, drying, packing, sweeping, or otherwise handling of manganese, or a compound of manganese or an ore or mixture containing manganese.
 - (d) "Efficient Exhaust Ventilation" means localized ventilation effected by mechanical means for the removal of dust or fume or mist at its source of origin so as to prevent it from escaping into the atmosphere of any place where any work is carried on. No draught shall be deemed to be efficient which fails to remove the dust or fume or mist at the point where it is generated and fails to prevent it from escaping into and spreading into the atmosphere of a workplace.
2. **Application.**—This Schedule shall apply to every factory in which or in any part of which any manganese process is carried on.
 3. **Exemptions.**—Where 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 any 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 work or process may not be affected by the same.
 5. **Ventilation of Process.**—No process in which any dust, vapour or mist containing manganese is generated 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 Examination.**— Every worker employed in any manganese process shall be medically examined within 15 days of his first employment. Such examination 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.
 7. **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 manganese process.
(ii) The occupier of the factory shall provide suitable respiratory protective equipment for use by workers in emergency to prevent inhalation of dusts, fumes or mists. Sufficient number of complete sets of such equipment shall always be kept near the workplace and the same shall be properly maintained and kept always in a condition to be used readily.
(iii) The occupier of the factory 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.
 8. **Cautionary Placard and Instructions.**— Cautionary notices in the form given below and printed in the language of the majority of the workers employed shall be affixed in prominent places in the factory where they can be easily and conveniently read by the workers. 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.

Cautionary Notice

Manganese and Manganese Compounds

1. Dust, fumes and mists of manganese and its compounds are toxic when inhaled or ingested.
2. Do not consume food or drink near the workplace.

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 headaches, prolonged sleeplessness or abnormal sensations on the body, report to the manager who would make arrangements for your examination and treatment.

SCHEDULE XXI

Manufacture, Handling and Use of 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 working atmosphere.
 - (d) "Efficient exhaust draught" means localized ventilation effected by mechanical means for the removal of gases, vapours, 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,-** (a) Use of benzene and substances containing benzene is prohibited in the following processes:
 - (i) Manufacture of varnishes, paints and thinners; and
 - (ii) Cleaning and de-greasing operations.(b) Benzene or substances containing benzene shall not be used as a solvent or diluent unless the process in which it is used is carried on in an enclosed system or unless the process is carried on in a manner which is considered equally safe as if it were carried out in an enclosed system.
(c) Where suitable substitutes are available, they shall be used instead of benzene or substances containing benzene. This provision, however, shall not apply to the processes specified in Appendix 'A'.
(d) The Chief Inspector-cum-Facilitator may, subject to confirmation by the State Government, permit exemption from the percentage laid down in clause 2(a) and also from the provisions of sub-clause (b) temporarily under conditions and within limits of time to be determined after consultation with the employers and workers concerned.
4. **Protection Against Inhalation,-** (a) The process involving the use of benzene or substances containing benzene shall, as far as practicable, be carried out in an enclosed system.
(b) Where it is not practicable to carry out the process in an enclosed system, the workroom shall be equipped with an efficient exhaust draught or other means for the removal of benzene vapours so that the concentration of benzene in the air does not exceed 25 parts per million (ppm) by volume or 80 mg/m³.
(c) Air analysis for the measurement of concentration of benzene vapours shall be carried out every 8 hours or at such intervals as may be directed by the Chief Inspector-cum-Facilitator. Results shall be recorded in a register maintained for this purpose. If the concentration exceeds 25 ppm or 80 mg/m³, the manager shall immediately report the concentration and reasons for such increase.

(d) Workers likely to be exposed to concentrations exceeding the prescribed limit shall be provided with suitable respirators or face masks. The duration of such exposure shall be limited as far as possible.

5. **Measures Against Skin Contact,-** (a) Workers likely to come into contact with liquid benzene or substances containing benzene shall be provided with suitable gloves, aprons, boots and, where necessary, vapour-tight chemical goggles made of material not affected by benzene or its vapours. (b) Such protective wear shall be maintained in good condition and inspected regularly.
6. **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, toxicity warning and inflammability warning.
7. **Improper Use of Benzene,-** (a) The use of benzene or substances containing benzene by workers for cleaning their hands or work clothing shall be prohibited.
(b) Workers shall be instructed on the dangers arising from such misuse.
8. **Instructions as Regards Risks,-** Every worker on first employment shall be fully instructed on the properties of benzene or substances containing benzene handled by him and the dangers involved. Workers shall also be instructed on emergency measures.
9. **Cautionary Notices,-** Cautionary notices in the form specified in Appendix 'B' and in a language understood by the majority of workers shall be displayed prominently in all workrooms where benzene or substances containing benzene are manufactured, handled or used.
10. **Medical Examination,-** Every worker employed in processes covered under this Schedule shall be examined within 15 days of first employment. Such examination shall include:
 - Detection of phenol in urine,
 - Determination of urinary sulphide ratio,
 - Central Nervous System (CNS) examination,
 - Hematological tests.

No worker shall continue employment after 15 days unless certified fit by the Medical Officer or Factory Medical Practitioner.

Appendix 'A'

[Clause 3(c)]

1. Production of benzene.
2. Processes where benzene is used for chemical synthesis.
3. Motor spirits (used as fuel).

Appendix 'B'

[Clause 9]

CAUTIONARY NOTICE

(a) The Hazards

1. Benzene and substances containing benzene are harmful.
2. Prolonged or repeated breathing of benzene vapours may result in acute or chronic poisoning.
3. Benzene can also be absorbed through the skin and may cause skin and other diseases.

(b) Preventive Measures

1. Avoid breathing benzene vapours.
2. Avoid prolonged or repeated skin contact.
3. Remove benzene-soaked clothing promptly.

4. If exposed to high concentrations and symptoms such as dizziness, breathing difficulty, excessive excitement or unconsciousness occur, immediately inform the factory manager.
5. Keep all containers of benzene closed or underground where feasible.
6. Handle benzene carefully to prevent spillage.
7. Install sensors with alarm systems at appropriate locations.
8. Maintain good housekeeping.

(c) Protective Equipment

1. Use respiratory protective equipment where benzene vapours are present in high concentrations.
2. In emergencies, use self-generating oxygen masks or oxygen/air cylinder masks.
3. Wear gloves, aprons, goggles and gumboots to avoid contact with benzene.

(d) First-Aid Measures in Case of Acute Benzene Poisoning

1. Remove contaminated clothing immediately.
2. If benzene enters the eyes, flush with clean running water for at least 15 minutes and seek medical attention immediately.
3. In case of unusual exposure to benzene vapour, call a physician immediately.

If the exposed person is conscious:

- Move him to fresh air.
- Lay him down without a pillow and keep him quiet and warm.

If the exposed person is unconscious:

- Lay him down preferably on the left side with the head low.
- Remove false teeth, chewing gum, tobacco or other foreign objects from the mouth.
- Provide artificial respiration if breathing is difficult.
- If shallow breathing or cyanosis (bluish skin, lips, ears or fingernails) occurs, provide medical oxygen by a trained person and administer artificial respiration if required.

SCHEDULE XXII

Carbon Di-sulphide Plants

1. **Application.**-(a) This Schedule shall apply to all electric furnaces in which carbon disulphide is generated and all other plants where carbon disulphide, after generation, is condensed, refined and stored.
(b) These rules are in addition to and not in derogation of any of the provisions of the Code and rules made thereunder.
2. **Construction, Installation & Operation.**-(a) The buildings in which electric furnaces are installed and carbon disulphide after generation is condensed and refined shall be segregated from other parts of the factory and shall be of open type to ensure optimum ventilation. 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.
(b) Every electric furnace and every plant in which carbon disulphide is condensed, refined and stored, together with all fittings and attachments, shall be of good construction, sound material and adequate strength to sustain internal pressure. They shall be designed so that carbon disulphide liquid and gas remain in an enclosed system during normal operation.
(c) Electric furnace supports shall be firmly grouted about 0.75 metres in concrete or by other effective means.
(d) Every electric furnace shall be installed and operated according to the manufacturer's instructions, and such instructions shall be clearly imparted to personnel responsible for construction and operation.

(e) Instructions regarding observance of correct furnace temperature, sulphur dose, admissible current/power consumption and periodic checking of charcoal level shall be strictly complied with.

3. **Electrodes,-**(a) Where upper ring electrode(s) made of steel are used in the electric furnace, they shall be of seamless tube construction and shall have arrangements for connection to a cooling water system through a siphon built into the electrodes or through a positive pressure water pump.

(b) The cooling water arrangement shall be connected to an automatic alarm system which shall actuate in the event of interruption of cooling water supply and provide visible and audible alarm signals in the control room. Simultaneously, power supply to the furnace operation and further water supply shall be stopped. The alarm system and actuating device shall be checked daily.

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 for vibrating the charcoal. These means shall be used as often as necessary to maintain correct charge and charcoal level.

5. **Charcoal Separator,-** A cyclone-type charcoal separator shall be fitted on the off-take pipe between the electric furnace and sulphur separator to prevent entry of charcoal pieces into condensers and piping.

6. **Rupture Discs and Safety Seal,-**(a) At least two rupture discs of adequate size, designed to blow off at a pressure twice the maximum operating pressure, shall be provided on each furnace and shall either be mounted directly on the furnace top or connected through an independent pipe as close as possible to the furnace.

(b) A safety water seal shall be provided and tapped from a point between the charcoal separator and sulphur separator.

7. **Pyrometer and Manometers,-**(a) Each electric furnace shall be fitted with an adequate number of pyrometers to correctly assess temperatures at various points in the furnace. Temperature dials shall be located in the control room.

(b) Manometers shall be provided for indicating pressure:

- (i) In the off-take pipe before and after the sulphur separator; and
- (ii) In the primary and secondary condensers.

8. **Check Valves,-**All piping carrying carbon disulphide shall be fitted with check valves at suitable positions to prevent gas from flowing back into any electric furnace in the event of shutdown.

9. **Inspection and Maintenance of Electric Furnaces,-** (a) Every electric furnace shall be inspected internally by a competent person:

- (i) Before being placed in service after installation;
- (ii) Before being placed in service after reconstruction or repairs; and
- (iii) Periodically whenever the furnace is opened for cleaning, de-ashing or electrode replacement.

- (b) When an electric furnace is shut down for cleaning or de-ashing:

- (i) Brick lining shall be checked for continuity and defective portions removed;
- (ii) After removal of any lining part, the shell condition shall be closely inspected;
- (iii) Any shell plate found corroded to an extent endangering safety shall be replaced.

10. **Maintenance of Records,-** The following hourly records shall be maintained in a log book:

- 1. Manometer readings at locations specified in Clause 7(b);
- 2. Gas temperatures indicated by pyrometers and other vital points near sulphur separator and primary and secondary condensers;
- 3. Water temperature and flow through the electrode siphons;

4. Primary and secondary voltages, current and energy consumption.

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 affording adequate protection against fire and explosion.
12. **Prohibitions Relating to Smoking,-** No person shall smoke or carry matches, fire, naked lights or any spark-producing means into buildings where carbon disulphide is refined or stored. Notices prohibiting such acts shall be displayed in languages understood by the majority of workers.
13. **Means of Escape,-** Adequate means of escape shall be provided and maintained to enable workers to move quickly to a safe place during emergencies.

At least two independent staircases of adequate width shall be provided in every building housing furnaces, located at opposite ends and kept free from obstructions at all times.

14. **Warnings in Case of Fire,-** Adequate arrangements shall be made for giving warnings in case of fire or explosion. These shall operate electrically and, in the event of power failure, by mechanical means.
15. **Fire Fighting Equipment,-** (a) Adequate numbers of suitable fire extinguishers and firefighting equipment shall be maintained according to the quantity and nature of materials stored.
- (b) Instructions regarding use of such equipment, printed in a language understood by the majority of workers, shall be affixed to each unit and workers shall be trained in their use.

16. **Bulk Sulphur,-** (a) Open or semi-enclosed sulphur storage areas shall be located with due regard to risks from sparks generated by nearby locomotives or similar sources.

(b) Sulphur storage enclosures shall be non-combustible, adequately ventilated and designed to minimize dust accumulation.

(c) Bulk sulphur shall be handled in a manner that minimizes dust clouds. Smoking, flames, matches and ignition sources are prohibited. Non-sparking tools shall be used.

(d) Repairs involving flames, heat or powered tools shall not be carried out within sulphur storage enclosures.

17. **Liquid Sulphur,-** Open flames, electric sparks and all ignition sources, including smoking and matches, shall be excluded from the vicinity of molten sulphur.

18. **Training and Supervision,-** (a) All electric furnaces and carbon disulphide plants shall remain under adequate supervision while in operation.

(b) Workers responsible for operation and maintenance shall be properly qualified and adequately trained.

19. **Washing Facilities,-** The occupier shall provide and maintain clean washing facilities under cover, including at least one tap or standpipe with clean water for every five workers. Taps shall be spaced at least 120 centimetres apart and supplied with soap and clean towels.

Where directed by the Inspector-cum-Facilitator, individual towels shall be supplied to each worker.

Workers engaged in sulphur storage, handling and melting shall also be provided with nail brushes.

20. **Personal Protective Equipment,-** (a) Suitable goggles and protective clothing consisting of overalls without pockets, gloves and footwear shall be provided for workers engaged in:

(i) Operating valves or cocks controlling fluids;

(ii) Drawing molten sulphur from sulphur pots;

(iii) Handling charcoal or sulphur.

(b) Suitable respiratory protective equipment shall be provided and stored for use during emergencies or abnormal conditions.

(c) Arrangements shall be made for proper and efficient cleaning of all protective equipment.

21. Unauthorised Persons

Only maintenance and repair personnel, persons directly connected with plant operation, and persons accompanied by authorised personnel shall be permitted entry into the plant.

SCHEDULE XXIII**Manufacture and Manipulation of Dangerous Pesticides****1. Definitions,-** For the purpose of this Schedule-

(a) "Dangerous Pesticides" means any product proposed or used for controlling, destroying or repelling any pest, or for preventing or mitigating such growth, including formulations considered toxic under the Insecticides Act, 1968 and rules made thereunder, and any other product notified by the State Government.

(b) "Manipulation" includes mixing, blending, formulating, filling, emptying, packing or otherwise handling.

(c) "Efficient Exhaust Draught" means localized mechanical ventilation for removing smoke, gas, vapour, dust, fume or mist to prevent escape into workplace air. It shall be deemed inefficient if it fails to remove contaminants at the point of origin.

(d) "First Employment" means first employment in any manufacturing process covered by this Schedule and includes re-employment after a break exceeding three calendar months.

2. Application,- This Schedule applies to all factories or plant sections where dangerous pesticides are manufactured or manipulated.**3. Instruction to Workers,-** Every worker shall, on first employment, be fully instructed regarding:

- Properties and dangerous properties of chemicals handled;
- Hazards involved;
- Emergency procedures.

Such instructions shall be repeated periodically.

4. Cautionary Notices and Placards,- Cautionary notices and placards in the form specified in Appendix-I and in the language understood by the majority of workers shall be displayed prominently in all workplaces.

Workers shall also be periodically instructed regarding:

- Health hazards of the process;
- Protective methods;
- Periodic medical examinations required.

5. Medical Examination,- Every worker shall be medically examined within 15 days of first employment.

For Halogenated Pesticides, examinations shall include:

- Determination of chemical in blood and fat tissues;
- EEG abnormalities;
- Memory tests.

For Organophosphorus Compounds, examinations shall include:

- Tests for depression of cholinesterase in plasma and red blood cells.

6. Protective Clothing and Equipment,- (a) Protective clothing consisting of long pants and shirts or overalls with long sleeves and head coverings shall be provided.

(b) Protective equipment shall include:

- Rubber gloves;

- Gumboots;
- Rubber aprons;
- Chemical safety goggles;
- Respirators.

Where pesticides contain oil, gloves, boots and aprons shall be made of synthetic rubber.

(c) Workers shall wear the protective clothing and equipment provided.

(d) Protective clothing and equipment shall be washed daily when handling nicotine- or phosphorus-containing pesticides and frequently when handling other pesticides.

(e) Protective clothing and equipment shall be maintained in good repair.

7. **Floors and Work Benches,-** (a) Floors shall be made of cement or other impervious smooth materials.
(b) Floors shall be maintained in good condition, sloped towards drains and washed thoroughly once daily.
(c) Work benches shall be made of smooth, non-absorbing material, preferably stainless steel, and cleaned daily.
8. **Spillage and Waste,-**(a) Any pesticide spill on floors, benches or clothing shall be immediately decontaminated.
(b) Contaminated rags, cloths or paper shall be deposited in covered containers and destroyed by burning at least once a week.
(c) Suitable deactivating agents shall be kept readily available.
(d) Easy access shall be provided to all plant areas for cleaning, maintenance and repairs.
9. **Empty Containers,-** Containers previously used for dangerous pesticides shall be thoroughly cleaned and treated with an inactivating agent before disposal or destruction.
10. **Manual Handling,-** (a) Dangerous pesticides shall not be handled manually except by means of long-handled scoops.
(b) Direct body contact with dangerous pesticides shall be avoided.
11. **Ventilation,-** (a) Adequate ventilation through fresh air circulation shall be provided at all times.
(b) Unless completely enclosed, the following operations shall be carried out only under efficient exhaust draught:
1. Emptying containers;
2. Blending pesticides;
3. Preparing liquid or powder formulations;
4. Filling tanks, hoppers, machines or small containers.
(c) If exhaust draught fails, these operations shall be stopped immediately.
12. **Time Allowed for Washing,-** (a) At least ten minutes in addition to normal rest intervals shall be allowed before meals and at the end of work for washing.
(b) Workers shall thoroughly wash before meals and at the end of the workday.
13. **Exemption,-**The Chief Inspector-cum-Facilitator may exempt a factory from any provision of this Schedule where special circumstances justify such exemption, subject to conditions specified in writing.
14. **Manipulation Not to be Undertaken,-**Manufacture or manipulation of any pesticide shall not be undertaken unless a certificate regarding its dangerous nature or otherwise has been obtained from the Chief Inspector-cum-Facilitator.

Appendix-I

Cautionary Notice (Insecticides & Pesticides)

1. Chemicals handled in this plant are poisonous substances.
2. Smoking, eating, drinking or chewing tobacco in this area is prohibited.
3. Some chemicals may be absorbed through the skin and cause poisoning.

4. Take a good wash before meals.
5. Take a good bath at the end of the shift.
6. Use the protective clothing and equipment supplied.
7. Do not use pesticide containers for storing foodstuffs.
8. Any chemical spilled on the body, floor or workbench shall be washed away immediately with water.
9. Remove contaminated clothing immediately.
10. Maintain scrupulous cleanliness in this area.
11. Do not handle pesticides with bare hands; use the scoops provided.
12. In case of nausea, vomiting or giddiness, inform the manager immediately for treatment arrangements.
13. All workers shall report regularly for prescribed medical tests to protect their health.

SCHEDULE XXIV

Operations Involving High Noise Levels

1. **Application,-** This Schedule shall apply to all operations in any manufacturing process having high noise levels.
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 that is 90 dB or above.
 - (c) "Decibel" means one-tenth of a "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 10 of this ratio. The noise level (or sound pressure level) corresponds to a reference pressure of 20×10^{-5} newtons per square metre or 0.0002 dynes per square centimetre, which is the threshold of hearing, i.e., the lowest sound pressure level necessary to produce the sensation of hearing in average healthy listeners. The decibel is abbreviated as dB.
 - (d) "Frequency" means the rate of pressure variations expressed in cycles per second or hertz (Hz).
 - (e) "dBA" refers to sound level in decibels as measured on a sound level meter operating on the A-weighting network with slow meter response.
 - (f) "A-weighting" means making graded adjustments in the intensities of sound of various frequencies for the purpose of noise measurement so that the sound pressure level measured by an instrument reflects the actual response of the human ear to the sound measured.

3. Protection Against Noise

(1) Maximum Permissible Exposure Levels

In every factory, suitable engineering controls 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 exposure levels specified in Tables 1 and 2.

Table 1

Permissible Continuous Noise Exposure Levels

Total Time of Exposure (Continuous or a Number of Short-Term Exposures) Per Day	Sound Pressure Level (dBA)
8 Hours	90
6 Hours	92
4 Hours	95
3 Hours	97
2 Hours	100
1.5 Hours	102

Total Time of Exposure (Continuous or a Number of Short-Term Exposures) Per Day	Sound Pressure Level (dBA)
1 Hour	105
0.75 Hour	107
0.5 Hour	110
Less than 0.5 Hour	115

Note 1: No exposure in excess of 115 dBA shall be permitted.

Note 2: For any period of exposure falling between any figure and the next higher or lower figure indicated in Column 1, the permissible sound pressure level shall be determined by extrapolation on a proportionate basis.

Table 2

Permissible Exposure Levels of Impulsive or Impact Noise

Peak Sound Pressure Level (dB)	Permitted Number of Impulses or Impacts 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 shall be permitted.

Note 2: For any peak sound pressure level falling between any figure and the next higher or lower figure indicated in Column 1, the permitted number of impulses or impacts per day shall be determined by extrapolation on a proportionate basis.

(2) Classification of Noise

For the purpose of this Schedule:

- If variations in noise level involve maxima at intervals of one second or less, the noise shall be considered continuous noise, and the criteria specified in Table 1 shall apply.
- In other cases, the noise shall be considered impulsive or impact noise, and the criteria specified in Table 2 shall apply.

(3) Combined Exposure to Different Noise Levels

Where daily exposure consists of two or more periods of noise exposure at different levels, the combined effect shall be considered rather than the individual effect of each exposure.

The mixed exposure shall be deemed to exceed the permissible limit if the sum of the fractions

$C_1/T_1 + C_2/T_2 + \dots + C_n/T_n$ exceed unity, Where:

C_1, C_2 , etc. = Actual time of exposure at a specified noise level.

T_1, T_2 , etc. = Permissible time of exposure at that noise level.

Note: Noise exposure below 90 dBA may be ignored in the above calculation.

(4) Use of Ear Protectors

Where it is not reasonably practicable to reduce noise exposure to the prescribed levels through engineering controls or administrative measures:

- Noise exposure shall be reduced to the greatest extent feasible by such measures.
- Every worker exposed shall be provided with suitable ear protectors capable of reducing exposure to the levels specified in sub-clause (1).

(5) Reduction of Exposure Period

Where ear protectors provided under sub-clause (4) cannot adequately attenuate the noise reaching the worker's ear, as determined by subtracting the attenuation value (in dBA) of the ear protector from the measured sound pressure level:

- The period of exposure shall be suitably reduced.
- The reduced exposure period shall correspond to the permissible exposure limits specified in Table 1 or Table 2, as applicable.

(6) Hearing Conservation Programme**(a) General Requirements**

Where prevailing sound levels exceed the permissible levels specified in sub-clause (1), an effective Hearing Conservation Programme shall be implemented.

The programme shall include:

- (i) Pre-employment auditory surveys;
- (ii) Periodic auditory surveys of workers exposed to excessive noise;
- (iii) Rehabilitation of affected workers by:
 - a) Reducing exposure to noise;
 - b) Transferring them to areas with lower noise levels; or
 - c) Adopting other suitable protective measures.
- (b) Medical Examination
 - (a) Every worker employed in areas where noise exceeds the permissible exposure levels specified in sub-clause (1) shall:
 - (i) Be examined by a Medical Officer within 14 days of first employment; and
 - (ii) Thereafter be re-examined at least once every 12 months.
 - (b) The initial and periodic examinations shall include such tests as the Medical Officer considers appropriate and shall include determination of auditory thresholds for pure tones at:
 - (i) 125 cycles per second (Hz)
 - (ii) 250 cycles per second (Hz)
 - (iii) 500 cycles per second (Hz)
 - (iv) 1,000 cycles per second (Hz)
 - (v) 2,000 cycles per second (Hz)
 - (vi) 4,000 cycles per second (Hz)
 - (vii) 8,000 cycles per second (Hz)
 - (c) These tests shall be conducted for monitoring hearing ability and detecting occupational hearing loss at an early stage.

SCHEDULE XXV**Manufacture of Rayon by Viscose Process****1. Definitions,-** For the purpose of this Schedule-

- (a) "Approved" means approved for the time being in writing by the Chief Inspector-cum-Facilitator.
- (b) "Breathing apparatus" means a helmet or face piece with necessary connections by means of which the person using it in a poisonous, asphyxiating or irritant atmosphere breathes unpolluted air; or any other approved apparatus.

- (c) "Churn" means the vessel in which alkali cellulose pulp is treated with carbon disulphide.
- (d) "Dumping" means transfer of cellulose xanthate from a dry churn to a dissolver.
- (e) "Efficient exhaust draught" means localized ventilation by mechanical means for the removal of any gas or vapour so as to prevent it from escaping into the air of any place in which work is carried on. No draught shall be deemed to be efficient if it fails to control effectively any gas or vapour generated at the point where such gas or vapour 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 person.
- (h) "Protective equipment" means aprons, goggles, face shields, footwear, gloves and overalls made of suitable materials.

2. Ventilation,- (1) 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 disulphide and hydrogen sulphide in the air of every work environment within the permissible limits.

(2) Notwithstanding sub-clause (1), 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) Hydro-extractors for yarn cakes;
- (d) After-treatment processes;
- (e) Trick rollers and cutters used in staple fibre spinning; and
- (f) Spin baths.

(3) To ensure the effectiveness of exhaust draught:

- (a) Spinning machines; and
- (b) Trick rollers and cutters used in staple fibre spinning,

shall be enclosed as fully as practicable and provided with suitable shutters in sections to enable operations to be carried out without causing undue quantities of carbon disulphide and hydrogen sulphide to escape into the work environment.

(4) No dry churn shall be opened after completion of reaction without first exhausting the residual vapours of carbon disulphide through a suitable and efficient vapour-exhausting arrangement, which shall continue to operate for as long as the churn remains open.

(5) Whenever any ventilation apparatus required under sub-clauses (2), (3) and (4):

- (a) becomes ineffective;
- (b) fails; or
- (c) is stopped for any reason,

all persons shall leave the work areas where the equipment or processes are in use as soon as possible and in any case not later than 15 minutes after such occurrence.

(6) (a) All ventilating systems provided under sub-clauses (2), (3) and (4) shall:

- (i) be examined and inspected once every week by a responsible person; and
- (ii) be thoroughly examined and tested once every 12 months by a competent person.

Any defects found shall be rectified immediately.

(b) A register containing particulars of such examinations and tests, together with details of repairs or alterations, shall be maintained and made available for inspection by an Inspector-cum-Facilitator.

3. Waste from Spinning Machines,- Waste yarn from spinning machines shall:

- (a) be deposited in suitable containers fitted with close-fitting covers; and
- (b) be disposed of as quickly as possible after decontamination.

4. Lining of Dry Churns,- The inside surface of all dry churns shall:

- (a) be coated with non-sticky paint so that cellulose xanthate does not adhere to the surface; and
- (b) have such coating maintained in good condition.

5. Air Monitoring,- (1) To ensure effectiveness of control measures:

- (a) monitoring of carbon disulphide and hydrogen sulphide in air shall be carried out at least once during every shift; and
- (b) results shall be recorded in a register maintained for this purpose.

(2) Instantaneous gas detector tubes shall not be used.

- (a) Samples shall be collected over duration of not less than 10 minutes.
- (b) Analysis shall be conducted by an approved method.
- (c) Monitoring locations shall be as directed by the Inspector-cum-Facilitator.

(3) If concentrations of carbon disulphide or hydrogen sulphide exceed permissible limits prescribed under Rule:

- (a) immediate corrective measures shall be taken; and
- (b) a report shall be submitted to the Chief Inspector-cum-Facilitator forthwith.

6. Prohibition to Remain in Fume Process Room,- No person shall remain in any room where a fume process is carried on during:

- (a) meal intervals; or
- (b) rest periods.

7. Protective Equipment,- (1) The occupier shall provide and maintain in good condition the following protective equipment:

Process Protective Equipment

Dumping	Overalls, face shields, gloves and footwear made of suitable material
Spinning	Suitable aprons, gloves and footwear
Process involving or likely to involve contact with viscose solution	Suitable gloves and footwear
Handling of sulphur	Suitable chemical goggles

Any other process involving contact with hazardous chemicals Protective equipment as directed in writing by the Chief Inspector-cum-Facilitator

(2) Suitable rooms or lockers shall be provided exclusively for storage of protective equipment, and such equipment shall not be stored elsewhere.

8. Breathing Apparatus,- (1) Every factory where a fume process is carried on shall provide sufficient quantities of:

- (a) Breathing apparatus;
- (b) Oxygen and suitable appliances for its administration; and
- (c) Life belts.

- (2) (a) The above equipment shall be:
 - (i) maintained in good condition; and
 - (ii) kept in suitable locations for immediate use.
- (b) The breathing apparatus and related equipment shall be:
 - (i) cleaned and disinfected at suitable intervals; and
 - (ii) thoroughly inspected once every month by a responsible person.
- (c) A maintenance register shall be maintained and made available for inspection.
- (3) A sufficient number of workers shall be trained and periodically retrained in:
 - (a) use of breathing apparatus; and
 - (b) administration of artificial respiration,so that at least two trained persons are available during all working hours in each room where a fume process is carried on.
- (4) Breathing apparatus shall be:
 - (a) properly labelled;
 - (b) kept in clean, dry, dust-proof cabinets; and
 - (c) protected in suitable containers where exposure to fumes is possible.
- (5) No person shall perform work requiring breathing apparatus unless properly instructed in its use.
- (6) Breathing apparatus used by one person shall not be used by another person unless thoroughly cleaned and disinfected and the second person has been instructed in its proper use.
- 9. Electric Fittings,-** All electrical fittings in any room where carbon disulphide is:
 - (a) produced;
 - (b) used;
 - (c) emitted; or
 - (d) likely to be emitted,shall, except electrical conductors:
 - (i) be enclosed in metal conduits or be lead-sheathed; and
 - (ii) electrical fittings in spinning rooms shall be of flame-proof construction.
- 10. Prohibition Relating to Smoking, Fire and Sparks,-** No person shall:
 - (a) smoke;
 - (b) carry matches;
 - (c) carry fire;
 - (d) carry naked lights; or
 - (e) carry any spark-producing deviceinto any room where a fume process is carried on.

A notice prohibiting such activities shall be displayed prominently in a language understood by the majority of workers.

Provided that fire, naked lights or spark-producing devices may be used when necessary for the process itself and under the supervision of a responsible person.

- 11. Cautionary Notice and Instructions,-** (1) The following notice shall be prominently displayed in every fume process room:

Cautionary Notice

1. Carbon disulphide (CS_2) and hydrogen sulphide (H_2S) which may be present in this room are hazardous to health.
2. Follow safety instructions.
3. Use protective equipment and breathing apparatus whenever required.
4. Smoking is strictly prohibited in this area.

The notice shall:

- (a) be displayed in a language understood by the majority of workers;
 - (b) be easily visible and readable; and
 - (c) be explained carefully to illiterate workers.
- (2) Workers employed in any fume process room shall receive:
- (a) initial instruction regarding health hazards and preventive measures; and
 - (b) periodic refresher instruction.
- (3) Special emergency instructions shall be prepared regarding accidental release of:
- (a) carbon disulphide; and
 - (b) hydrogen sulphide.

Such instructions shall be:

- (a) displayed in relevant areas; and
 - (b) workers shall be trained in emergency response procedures.
- 12. Medical Examination,-** Every worker employed in a fume process shall be medically examined within 15 days of first employment. The examination shall include:
- (a) Exposure coefficient test (Iodine Azide Test for urine);
 - (b) Cholesterol estimation;
 - (c) Electrocardiogram (ECG); and
 - (d) Central Nervous System (CNS) examination.
- 13. Exemptions,-** Where the Chief Inspector-cum-Facilitator is satisfied that, due to:
- (a) exceptional circumstances;
 - (b) infrequency of the process; or
 - (c) any other valid reason,

all or any provisions of this Schedule are not necessary for worker protection, he may, by written certificate, exempt the factory from such provisions subject to conditions specified therein.

Such exemption may be revoked at any time at the discretion of the Chief Inspector-cum-Facilitator.

SCHEDULE XXVI

Highly Flammable Liquids and Flammable Compressed Gases

- 1. Application,-** These rules shall be applicable to all factories where highly flammable liquids or flammable compressed gases are manufactured, stored, handled, or used.
- 2. Definitions,-** For the purpose of this Schedule-

(a) "Highly flammable liquid" means any liquid, including its solution, emulsion, or suspension, which, when tested in a manner specified by Sections 14 and 15 of the Petroleum Act, 1934 (Central Act No. 30 of 1934), gives off flammable vapours at a temperature less than 32 degrees centigrade.

(b) "Flammable compressed gas" means flammable compressed gas as defined in Section 2 of the Static and Mobile Pressure Vessels (Unfired) Rules, 2016 framed under the Explosives Act, 1884.

3. **Storage,-** (1) Every flammable liquid or flammable compressed gas used in every factory shall be stored in a suitable fixed storage tank, or in a suitable closed vessel located in a safe position under the ground, in the open, or in a storeroom of adequate fire-resistant construction.

(2) Except as necessary for use, operation, or maintenance, every vessel or tank which contains a highly flammable liquid or flammable compressed gas shall always be 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.

(3) Every container, vessel, tank, cylinder, or storeroom 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 the factory in totally enclosed systems consisting of pipelines, 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 Mixtures with Air,-** Wherever there is a possibility of leakage or spill of highly flammable liquid or flammable compressed gas from equipment, pipelines, valves, joints, or other parts of a system, all practicable measures shall be taken to contain, drain off, or dilute such spills or leakage so as to prevent formation of flammable mixtures with air.

6. **Prevention of Ignition,-** In every room, workplace, 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 sources of ignition. Such precautions shall include the following:

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

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

(c) No person shall wear or be allowed to wear any footwear having iron or steel nails or any other exposed ferrous material which is likely to cause sparks by friction.

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

(e) Transmission belts with iron fasteners shall not be used.

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

7. **Prohibition of Smoking,-** No person shall smoke in any place where highly flammable liquid or flammable compressed gas is present in circumstances that smoking would give rise to a risk of fire. The occupier shall take all practicable measures to ensure compliance with this requirement, including display of a 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 fixed and portable fire-extinguishing systems, extinguishing materials, procedures, and the process of firefighting, shall conform to the standards and levels prescribed by the applicable Indian Standards and, in any case, shall not be inferior to the stipulations under the Code, rules, regulations, and standards made thereunder.

9. **Exemptions,-** If, in respect of any factory, the Chief Inspector-cum-Facilitator is satisfied that, owing to exceptional circumstances, infrequency of the processes, or for any other reason, all or any of the provisions of this Schedule are not necessary for the protection of workers in the factory, the Chief Inspector-cum-Facilitator may, by a certificate in writing, which he may at his discretion revoke at any time, exempt such factory from all or any of such provisions, subject to such conditions, if any, as he may specify therein.

SCHEDULE XXVII

OPERATIONS IN FOUNDRIES, FURNACES & INDUCTION FURNACES

1. **Application,-** The 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 mixtures of materials, or by shell moulding or 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 moulding, die-casting (including pressure die-casting), centrifugal casting, or continuous casting, and any process incidental to such production;
- (c) The melting and casting of non-ferrous metal and/or ferrous metal for the production of ingots, billets, slabs, or other similar products and the stripping thereof;

Provided that this Schedule shall not apply with respect to:

- (i) Any process relating to the smelting and manufacture of lead and electric accumulators;
- (ii) Any process for the purposes of printing works;
- (iii) Any smelting process in which metal is obtained by a reducing operation or any process incidental to such operation;
- (iv) Any process in the course of the manufacture of solder or any process incidental to such manufacture; or
- (v) The melting and casting of lead or any lead-based alloy for the production of ingots, billets, slabs, or other similar products, or the stripping thereof, or any process incidental to such melting, casting, or stripping.

2. **Definitions,-** For the purpose of this Schedule:

- (i) "Approved respirator" means a respirator of a type approved by the Chief Inspector-cum-Facilitator.
- (ii) "Cupola or furnace" includes a receiver and associated equipment therewith.
- (iii) "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 a reasonably clean and smooth surface, but does not include:
 - (a) 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
 - (b) Any operation which is a knockout operation within the meaning of this Schedule.
- (iv) "Foundry" means those parts of a factory in which the production of iron, steel, or non-ferrous castings (other than the production of pig iron or steel in the form of ingots) is carried on by casting in moulds made of sand, loam, moulding composition, or other mixtures 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 the course of such production, namely:
 - Preparation and mixing of materials used in foundry processes;
 - Preparation of moulds and cores;

- Knockout operations; and
- Dressing or fettling operations.

- (v) "Knockout 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.
- (vi) "Pouring aisle" means an aisle leading from a main gangway or directly from a cupola or furnace to where metal is poured into moulds.
- (vii) "Qualified Supervisor" means a person possessing a Bachelor's Degree in Science or a Diploma or Degree in Engineering with a Certificate in Ferrous/Non-Ferrous Technology from an institution recognized by the Chief Inspector-cum-Facilitator.

- 3. Prohibition of Use of Certain Materials as Parting Materials,-** (1) A material shall not be used as a parting material if it contains compounds of silica, calculated as silica, to the extent of more than five percent by weight of the dry material.

Provided that this prohibition shall not prevent the following materials from being used as parting materials if they do not contain an admixture of any other silica:

1. Zirconium Silicate (Zircon)
 2. Calcined China Clay
 3. Calcined Aluminous Fire Clay
 4. Sillimanite
 5. Calcined or Fused Alumina
 6. Olivine
 7. Natural Sand
- (2) Dust or other matter deposited from a fettling or blasting process shall not be used as a parting material or as a constituent in a parting material.
- 4. Arrangement and Storage,-** For the purposes of promoting safety and cleanliness in workrooms, the following requirements shall be observed:
- (a) Moulding boxes, loam plates, ladles, patterns, pattern plates, frames, boards, box weights, and other heavy articles shall be so arranged and placed as to enable work to be carried on without unnecessary risk.
- (b) Suitable and conveniently accessible racks, bins, or other receptacles shall be provided and used for the storage of other gear and tools.
- (c) Where there is bulk storage of sand, fuel, metal scrap, or other materials or residues, suitable bins, bunkers, or other receptacles shall be provided for such storage.
- 5. Construction, Installation and Operation,-** (i) The precinct in which an induction furnace is installed shall be of adequate strength and shall be segregated from other parts of the factory in such a way that the minimum number of workers is exposed to the risk of fire or explosion at any time.
- (ii) The furnace shed shall be well ventilated.
- (iii) All fittings and attachments of the induction furnace shall be of good construction, sound material, and adequate strength.
- (iv) Adequate arrangements shall be made to avoid tilting of ladles during transportation.
- (v) Ladles shall not be filled with molten metal beyond three-fourths ($3/4$) of their volume in order to avoid spillage while being carried by crane.
- (vi) The refractory material of the induction furnace shall be:

- (a) Strong at high temperatures;
 - (b) Resistant to thermal shock;
 - (c) Chemically inert;
 - (d) Of low thermal conductivity and coefficient of expansion; and
 - (e) Of adequate and uniform thickness.
- (vii) The lining of the induction furnace shall be checked by a qualified supervisor every week for wear, tear, and damage in accordance with the relevant Bureau of Indian Standards.
- (viii) Adequate precautions shall be taken during repair of the induction furnace in accordance with the relevant Bureau of Indian Standards.
- 6. Construction of Floors.-** (1) Floors of indoor workplaces in which the processes are carried on, other than parts which are of sand, shall have an even surface of hard material.
- (2) No part of the floor of any such indoor workplace shall be of sand except where this is necessary by reason of the work done.
- (3) All parts of the floor surface that are of sand shall, so far as practicable, be maintained in an even and firm condition.
- 7. Means of Escape.-** There shall be at least two means of escape of adequate width at opposite ends of the furnace platforms.
- 8. Display of Notice.-** A notice regarding the non-use of water and other precautions near the induction furnace shall be prominently displayed.
- 9. Charging of Scrap in Induction Furnace.-** (1) No scrap material with closed cavities shall be charged into the induction furnace. Scrap to be charged shall be dry and shall not contain oil, moisture, or any other liquid.
- (2) No scrap material shall be fed into the induction furnace unless it has been thoroughly checked in the presence of a qualified supervisor.
- (3) Sealed containers or parts made by centrifugal casting shall not be fed into the furnace unless they are cut into pieces.
- (4) No worker shall be engaged in charging scrap material into an induction furnace unless practical measures, including substantial safeguards against splashes of hot metal, splatter, and similar hazards, are provided.
- (5) Scrap received in the form of pressed bundles shall be opened, sorted, and only thereafter fed into the furnace.
- 10. Cleanliness of Indoor Workplaces.-** (1) All accessible parts of the walls of every indoor workplace in which the processes are carried on, and of everything affixed to those walls, 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 such cleaning, 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), shall be maintained.
- (2) Effective cleaning of all accessible parts of the floor of every indoor workplace shall be carried out at least once every working day, other than parts which are of sand. Parts which are of sand shall be kept in good order.
- 11. Manual Operations Involving Molten Metal.-** (1) There shall be provided and properly maintained for all persons employed in manual operations involving molten metal a working space:
- (a) Which is adequate for the safe performance of the work; and
 - (b) Which, so far as reasonably practicable, is kept free from obstruction.
- (2) Any operation involving carrying by hand of a container holding molten metal shall be performed on a floor all parts of which are on the same level.

Provided that where necessary to enable the operation to be performed without undue risk, nothing in this paragraph shall prevent occasional or exceptional use of a working space on a different level, provided safe means of access is available.

12. Gangways and Pouring Aisles,- (1) Main Gangways- In every workroom to which this paragraph applies, sufficient and clearly defined main gangways shall be provided and maintained which:

- (a) Shall have an even surface of hard material and shall not be of sand, except as necessary to prevent risk from flying metal due to 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 mm in width;
- (d) If used for carrying molten metal:
 - (i) Where truck ladles are used exclusively, shall be at least 600 mm wider than the overall width of the ladle;
 - (ii) Where hand shanks are carried by not more than two men, shall be at least 920 mm wide;
 - (iii) Where hand shanks are carried by more than two men, shall be at least 1.2 metres wide;
 - (iv) Where used for simultaneous travel in both directions by men carrying hand shanks, shall be at least 1.8 metres wide.

(2) Pouring Aisles

In workrooms to which this paragraph applies, sufficient and clearly defined pouring aisles shall be provided and maintained which:

- (a) Shall have an even surface of hard material and shall not be of sand except as necessary for safety;
 - (b) Shall be kept, so far as reasonably practicable, free from obstruction;
 - (c) If molten metal is carried in hand ladles or bull ladles by not more than two men per ladle, shall be at least 460 mm wide; where moulds alongside the aisle are more than 510 mm above floor level, the aisle shall be at least 600 mm wide;
 - (d) If carried by more than two men per ladle, shall be at least 760 mm wide;
 - (e) If molten metal is carried by crane, trolley, or truck ladles, shall be of adequate width for safe operation.
- (3) The requirements of sub-paragraphs (1) and (2) shall not apply where the floor is of sand due to the nature of work.
- (4) "Workroom to which this paragraph applies" means any part of a ferrous or non-ferrous foundry in which molten metal is transported or used.

13. Work Near Cupolas and Furnaces

No person shall carry out any work:

- (a) Within 4 metres from a vertical line passing through the delivery end of any spout of a cupola or furnace used for delivering molten metal, or
- (b) Within 2.4 metres from a vertical line passing through the nearest part of any ladle in position at the end of such spout,

except where such work is necessary for proper operation or maintenance and is carried out under conditions ensuring no danger from molten metal.

14. Dust and Fumes, (1) Open coal, coke, or wood fires shall not be used for heating or drying ladles inside a workroom unless adequate measures prevent fumes entering the atmosphere.

- (2) Such fires shall not be used for drying moulds except where unavoidable.

(3) Mould stoves, core stoves, and annealing furnaces shall be designed and maintained to prevent offensive or injurious fumes entering workrooms.

(4) Knock-out operations shall be carried out:

(a) In a separate partitioned area with effective ventilation; or

(b) In an area with local exhaust ventilation or, where not practicable, high general ventilation.

(5) Dressing or fettling operations shall be carried out:

(a) In a separate room or partitioned area; or

(b) In a designated area with effective local exhaust ventilation or equivalent dust suppression.

15. Maintenance and Examination of Exhaust Plant,- (1) Ventilation plant used for dust or fume control shall be properly maintained.

(2) Such plant shall be examined weekly by a responsible person and thoroughly tested at least once every twelve months by a competent person.

16. Protective Equipment,- (1) The occupier shall provide and maintain suitable protective equipment for workers, including:

(a) Suitable gloves or hand protection for workers handling hot material likely to cause burns, scalds, cuts, or abrasions, including pig iron, rough castings, or similar articles;

(b) Approved respirators for workers engaged in operations creating heavy dust concentration that cannot be effectively controlled by ventilation.

(2) No respirator shall be used by another person unless it has been thoroughly cleaned and disinfected after use.

(3) Suitable footwear and gaiters shall be provided for persons engaged in:

(a) Cupola or furnace work where contact with hot material is possible;

(b) Pouring molten metal;

(c) Carrying or moving ladles or moulds containing molten metal;

(d) Knockout operations involving hot materials.

(4) Suitable screens shall be provided to protect against flying materials, including molten metal splashes and sparks.

(5) Adequate storage and cleaning facilities shall be provided for protective equipment.

(6) Every worker shall use the protective equipment provided and report defects or loss immediately.

(7) Workers in furnace/casting pit areas shall be provided with cotton clothes, safety shoes, leg guards, apron, face shield, hand gloves, and safety helmet.

(8) Workers engaged in segregation of scrap shall be provided with safety shoes and hand gloves.

(9) Fire-retardant and heat-retardant clothing shall be provided to workers on induction furnace platforms.

17. Training and Supervision,- (1) All operations under this Schedule shall be carried out under the supervision of qualified supervisors at all times.

(2) Workers involved in operations and maintenance in foundries and furnaces shall be adequately trained.

18. Washing and Bathing Facilities,- (1) The occupier shall provide and maintain wash places under cover, consisting of either:

(a) A trough with an impervious surface fitted with a waste pipe, providing at least 60 cm per 10 persons, with a constant supply of clean water; or

(b) At least one tap or standpipe for every 10 persons, spaced not less than 1.2 metres apart, with a constant supply of clean water.

- (2) At least half of the washing places shall be in the form of bathrooms.
- (3) Adequate supply of clean towels (changed daily), nail brushes, and soap shall be provided.
- (4) These facilities shall be maintained under the charge of a responsible person in a clean and orderly condition.
- 19. Disposal of Dross and Skimmings,-** Dross and skimmings removed from molten metal or furnaces shall be placed immediately in suitable receptacles.
- 20. Disposal of Waste,-** Appropriate measures shall be taken for disposal of waste products from shell moulding, including waste burnt sand, as soon as reasonably practicable after knock-out operations.
- 21. Material and Equipment Left Outdoors,-** All material and equipment left outdoors shall be properly arranged to avoid unnecessary risk. Safe means of access shall be provided and maintained, including properly maintained roadways or pathways with firm, even surfaces and kept free from obstruction.
- 22. Medical Facilities and Records of Examinations and Tests,-** (1) The occupier shall:
 - (a) Employ a Factory Medical Officer for medical surveillance of workers;
 - (b) Provide all necessary facilities for such surveillance.
 - (2) Workers shall undergo medical examination:
 - (a) Before employment (to assess fitness);
 - (b) Every six months thereafter, or at shorter intervals if required.
 - (3) Pre-employment tests shall include pulmonary function tests and chest X-ray.
 - (4) Periodic examinations shall include all pre-employment tests except chest X-ray, which shall be done at least once in three years.
 - (5) Records shall be maintained in Health Register (Form VII).
 - (6) No worker shall be employed without a Fitness Certificate (Form VII).
 - (7) Workers found unfit shall have the right to appeal, and alternate employment shall be provided where possible.
 - (8) Medical Officers may conduct examinations on their own or on referral.
 - (9) Workers removed from employment may be re-employed only after obtaining a Fitness Certificate.

SCHEDULE-XXVIII

Manufacturing of Green Fire Crackers

- 1. Application,-** The provisions of this schedule shall apply to all manufacturing Process and other processes incidental thereto involving green fire crackers. This Schedule shall be in addition to and not in derogation of any provisions of the rules made thereunder.
- 2. Definitions,-** For the purpose of this Schedule,-
 - (a) Green fire cracker- As defined and updated by CSIR-National Environmental Engineering Research Institute (CSIR NEERI) time to time and amended.
 - (b) 'Green Fire Cracker Factory' means any factory or such parts of any factory, wherein the manufacturing process of green fire crackers is being carried on, as defined by the CSIR-National Environmental Engineering Research Institute (CSIR NEERI) and as defined by Indian Explosive Act and certified by NEERI.
- 3. Buildings,-** The construction of building of any green fireworks manufacturing factory shall conform to the standards prescribed in The Indian explosive rules, 2008 framed under the Indian Explosives Act, 1884 (Central Act IV of 1884, as amended up-to-date)
- 4. Safety distances,-** Safety distances including Inside Safety Distance (ISD), Middle Safety Distance (MSD) and Outside Safety Distance (OSD) shall be maintained as required in the explosive rules 2008 (as amended up-to-date)

5. **Time of Work,-** (a) No manufacturing process shall be carried out except during day time using natural daylight only.
(b) No artificial light shall be used during manufacturing process.
6. **Prohibition of use of any electrical driven or operated equipment,-**No electrical driven or operated equipment shall be used in green firecracker manufacturing, mixing, packing, loading, unloading, etc. process within the factory premises.
7. **House-Keeping,-** (a) Every part of way, floor and work benches shall be kept and maintained in a clean and tidy condition;
(b) Any spillage of materials shall be cleaned without delay;
(c) Platforms, passages and gangways shall be kept free of any obstructions.
8. **Protective Clothing,-** (1) The occupier shall provide and maintain suitable protective equipment specified below for the protection of the workers:
a) Respiratory protection device for workers in mixing sheds and other processes where dangerous fumes and dust is generated;
b) Protective clothing made of fire retardant material;
c) Anti-stat foot-wear;
(2) All protective equipment shall be maintained in an efficient condition and also shall be maintained in a clean and hygienic condition.
9. **First Aid,-** First aid box and other facilities shall be maintained as mentioned in Rule 65.
10. **Prohibition of employment ,-** No person who is below eighteen years of age and no person who is not sufficiently trained shall be employed in the manufacturing process or any work or operation or process connected therewith or incidental thereto in green fireworks manufacturing process.
11. **Precaution to be taken in connection with manufacture of fuses used in green fire crackers, etc.,-** (a) Bundles of fuses shall be handled by carrying and shall not be dragged on the floor.
(b) Drying of fuses, after wrapping, shall be carried out on Platforms away from workrooms.
(c) Cutting shall be done by experienced workers specially employed for the said purpose and shall be done: (i) under proper supervision;
(ii) on large masonry platform covered with tarpaulin and kept free from grit and pebbles;
(iii) on a raised platform so that worker can work standing posture, and
(iv) by placing the fuse on wooden sleepers kept over wooden blocks. Bricks shall not be used beneath wooden sleepers.
(d) A worker, while on a dangerous operation of manufacturing. Process of Green Fire Works Factories shall not-
(i) Wear clothing sewn with ferrous or steel buttons, buckles or attachments, and
(ii) Carry iron knives, keys etc. on his person.
(e) During the manufacture of fuses only brass or non-ferrous knives and non-sparking tool shall be used and drying of fuses shall be away from all workrooms.
12. **General Preventive Measures,-** a) No person other than a factory worker and/or an inspecting officer or others connected with the manufacturing process shall be allowed to enter the working area;
b) Cardboard containers and trays without steel nails shall be used for storage and day-to-day working purposes.
c) Door mats shall be provided outside the workroom and near all drying platforms and where fuses are cut for the workers to clean their feet.

- d) At no time, mixing materials shall exceed the quantity that is required for the manufacture of mixing for half an hour operation only.
- e) For filling up chemicals in the inner tubs of crackers, only aluminium or plastic rings shall be used and not galvanised iron rings.
- f) Buckets, containers, hoops, locks, nails, screws, bolts, nuts, knives, scissors, hinges, latches etc. made up of iron shall not be used within the factory premises.
- g) In case of sieving, brass or any other nonferrous material shall be used as a sieve material.
- h) Wooden racks without iron nails shall be used for drying paper cap sheets, in green fire cracker factories.
- i) Wooden racks used for drying paper cap sheet shall be provided with asbestos or other fire resistant sheets on the three sides leaving the front side open.
- j) Dried paper cap sheets shall be carried in wooden trays with four compartments (partitions) each compartment (partition) carrying a single sheet.
- k) Any floor where mixing, manufacturing, loading, unloading or packaging of green firecracker may take place shall be covered with rubber mats of minimum 3 mm thickness.

- 13. Display of Notices,-** Cautionary Notices in the form specified below and printed in the language understood by the majority of workers shall be prominently displayed at conspicuous and convenient places in the factory for ensuring their safety and health.

CAUTIONARY NOTICE

- (i) Smoking is strictly prohibited;
- (ii) No worker shall carry matches or other igniting materials into the factory
- (iii) No worker shall enter in a workroom or other area where he has not been assigned to any work
- (iv) If any accident occurs in any shed, all workers shall rush to the main gate/ or any such designated area by the factory management, which serve as out gates of the factory and shall not situate themselves near the affected shed/ area
- (v) Any spillage of materials should be cleaned without delay
- (vi) Wearing of clothes made of artificial fibre like terylene, polyester, nylon, etc. is prohibited. Clothing sewn with ferrous or steel buttons or buckles or attachments shall not be worn;
- (vii) Footwear with iron nails shall not be used;
- (viii) Workers shall not carry with themselves knives and iron keys, etc.
- (ix) No electronics gadgets such as Mobile phones, etc. shall be allowed inside the green fire cracker factory.

- 14. Prevention of Ignition: -** (a) Effective measures shall be taken for prevention of accumulation of static charges to a dangerous extent such as provision of providing of properly earthed copper plate(s). No person shall be allowed to enter the manufacturing or mixing section without discharging the static electricity by touching the copper plate.

(b) no person shall wear or be allowed to wear any foot wear having iron or steel nails or any other exposed ferrous materials which may cause sparks by friction;

(c) smoking, lighting or carrying of matches, fire or lighters or other means of producing a naked light or spark shall be prohibited;

(d) 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, or overheated surfaces of tools etc.

- 15. Burning Pit,-** (a) In every green firecracker factory where firecracker manufactured, stored, handled, shall be provided appropriate and adequate means of burning pit for disposal of waste explosives and ingredients.

(b) Cloths, rags, paper or other material soaked or soiled with fire cracker chemical /fuses shall be deposited in a suitable receptacle with tight fitting cover. Contaminated waste shall be destroyed by burning with appropriate manner and supervision by a trained supervisor at least once in a week without affect the general environment of the vicinity.

- 16. Fire Fighting,-** In every green firecracker factory where firecrackers are manufactured, stored, handled, adequate firefighting equipment and facilities shall be provided. Adequate provisions of water shall be made in the premises for purpose of firefighting.

The adequacy and suitability of such means, which expression include the fixed and portable fire extinguishing systems, extinguishing materials, procedures and the process of fire-fighting, shall be to the standards and levels prescribed by the Bureau of Indian Standard applicable, and any case not inferior to the stipulations under rule 62 of W.B. Factory rules, 1958 (as amended up to date).

- 17. Exemption,-** If, having regard to the special conditions or special methods of work or any process, in any green firecracker factory or by any reason of the frequency of the process or for any other reason, the Director/ Chief Inspector of Factories is satisfied that the application of all or any of the provisions of this Schedule to such factory or process, or for the persons employed in such factory or process, is not necessary, he may by with the prior approval of the Government and subject to such conditions as he may deem expedient, with a view to ensure safety and Health of the workers of the factory, exempt factory or part thereof or process or a worker from operation of all or any of these provisions.

Schedule XXIX

Operations involving Biomedical waste treatment

- 1. Application,-** This Schedule shall apply to all operations in any manufacturing process having Biomedical waste treatment facility.
- 2. Definitions,-** For the purpose of this Schedule
 - (a) "Bio-medical waste" means any waste, which is generated during the diagnosis, treatment or immunisation of human beings or animals or in research activities pertaining thereto or in the production or testing of biologicals, and including categories mentioned in Schedule I of Bio-Medical Waste (Management & Handling) Rules, 1998;
 - (b) "Bio-medical waste treatment facility" means any facility wherein treatment, disposal of bio-medical waste or processes incidental to such treatment or disposal is carried out (and includes common treatment facilities).
- 3. Precautions in manipulation,-** (a) Isolating the process
 - b) Enclosing the process
 - c) The floor of every workplace of a factory in which manipulation of Biomedical waste is carried on shall be made of impervious material. The surface of every floor of every work-room or place where any work is carried on or where any person has to pass during the course of his work, shall be cleaned as often as necessary.
- 4. Protective equipment,-** The Occupier shall provide suitable protective wear for hands and feet, suitable coveralls, face shields etc. The equipments 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 microorganism or absorbed chemicals.
- 5. Vaccines,-** All workers employed in the above manufacturing process shall be vaccinated against tetanus and Hepatitis B.

Schedule- XXX

MANUFACTURING OF PAPER, PAPER BOARDS AND ALLIED PRODUCTS

- 1. Application,-** The requirements of the Schedule shall apply to factories and parts thereof engaged in manufacturing of paper, paper board, allied products and also to the corresponding operations involved in pulp production.
- 2. Definitions,-** For the purpose of this schedule,-

- (a) "approach safety stop" means a safety device which automatically removes a hazardous function when part of a body comes within dangerous proximity of the danger zone;
- (b) "broke" means paper or paper board wasted out during processing;
- (c) "broke Guillotine" means a machine with a straight knife for cutting up broke or paper reels ;
- (d) "Calendar" means a machine for glazing paper or paper board;
- (e) "Calendar work platform" means a lifting platform at a Calendar;
- (f) "Constant Pressure Switch" means a start and stop switch automatically returning to the stop position when not actuated;
- (g) "Crosscutting knife" means a knife mounted on a cylinder roll cross cutting the web;
- (h) "drum reel up" means a machine (pope reel) for reeling up the web on an empty spool, friction-driven;
- (i) "nip point" means roll nip or any other place where face converge or run so close together that part of the body is in danger of being caught and injured;
- (j) "pulper" means a machine for making fiber suspension by mechanical treatment of pulp or paper broke;
- (k) "reeling Drum or Spool" means a roll for reeling up the web in full machine width at the drum reel-up;
- (l) "threading" means (feeding a narrower pointed web (tail end) through a machine;
- (m) "web" means pulp paper or paper-board in the shape of a continuous carpet during manufacturing or processing;
- (n) "allied products" means all kinds of materials involving paper.

3. **Safety Measures against Nip Hazards.-** (1) General: Nip points shall, when possible be inaccessible from floor level or from any other surface that can easily be stepped on. If this requirement cannot be satisfied the risk must be avoided in some other way, like air jet/chute, carrier ropes, carrier belt or felt. The platforms should have the board of at least 100 millimeters high and two handrails at a height of 400 millimeters and at 900 millimeters. The vertical members of the platform should be spaced at 1 meter for cross platform and 2 meters for longitudinal platform.
(2) Threading: Threading shall be done without manual interference when feasible. If threading must be done manually, measures must be taken to achieve adequate safety as in paragraph (1) above.
4. **Reeling Drum Exchange.-** Feeding during spool exchange at the drum reel up shall be effected only by using air jet or air hose, if the speed of the paper machine exceeds 100 meters per minute. If the speed of the machine is less than 100 meters per minute the feeding may be done manually, but measures must be taken to safety during the operation.
5. **Safety measures against risks of being squeezed or knocked down.-** The movement of machine pan or other technical device must not expose anybody to the risk of being squeezed, knocked down or injured. If it cannot be ensured that the danger zone is in accession when a risk is present, the moving device must be equipped with an approach safety stop. Its movement controlled by a hand-operated constant pressure switch or the risk avoided.
6. **Web Reeling.-** (1) Web reeling shall be arranged so that the reel cannot cause injury by moving without control from its intended position by providing a cradle or a protection barrier.
(2) When a reel is carried by a through shaft, a device must if necessary, be arranged to keep the shaft ends in their intended position.
(3) When a reel is carried and substantially governed by resting on two rolls, an ejection shield must be arranged to stop any reel, ejection when the web speed exceeds 15 meters per minute. If the shield is movable, a web speed exceeding 15 meters per minute must not be attainable unless the shield is in its protective position. The shield must not be removable from that position if the web speed exceeds the above value.
7. **Handling of reels.-** (1) A reel must not be automatically put in free motion on a floor level or surface that can easily be stepped on unless this can be done with adequate safety.

(2) A reel discharger shall be arranged and handled so that nobody can be injured by its function or by the discharge reel.

(3) The discharger must not come into operation unless measures are taken to receive the discharger reel safely, if necessary, the discharger shall be controlled by a hand-operated constant pressure switch from a place where the operator can supervise both the zone of movement of the discharger and the course of the discharged reel.

(4) A reel lifted by the ends of a through shaft must not rotate unless the shaft ends and the lifting equipment can stand the stress caused by the rotation.

8. Cutting of paper.-

(1) A power-driven sharp edged tool for cutting paper shall be shielded against inadvertent contact and as far as possible, inaccessible while in operation.

(2) A cross-cutting knife shall be shielded so that the tool is inaccessible when in operation. It must not be possible to start the tool unless the shield is in its protective position and it must not be possible to open the shield unless the tool is inoperative and its energy supply has been cut off by a safety switch which can be locked in its off-position.

9. Pulpers, pulp chests. Etc.- (1) The opening of a pulper, a pulp chest another reservoir of a feeding service shall be arranged so that nobody is in danger of falling or stepping down through the opening.

(2) A pulper and its feeding device shall have a joint emergency stop and if possible a joint energy cut-off device, lockable in the off position.

(3) Broke holes should not be allowed to become covered by paper or broke which may hide them from operating personnel.

10. Certain devices moving vertically.- (1) Calendar work platforms, pallet table, rider rolls, ejection shields, reel lowering devices, lids of driving section covers broke guillotine knives or other stationery devices, which for functional reasons are regularly manoeuvred to considerably different heights, shall be constructed, handled and maintained in such a way that they do not cause any risk of injury by falling down or in any other way and must not be liable to fall down as a result of interruption or variation in the energy supply.

(2) An operating movement that can cause risk of injury shall be controlled by a constant pressure switch from a place where the operator can supervise the zone of movement.

(3) A device as referred to in paragraph (1) above carried by a wire rope or chain shall have the requisite derailment protection and a breaker to stop the movement if the wire rope or chain should slacken or burst.

(4) If operationally stopped in a position where it could cause a risk of injury by falling down, the device shall be automatically secured.

(5) The hoisting equipment of a device as referred to in paragraph (1) above shall be readily available for full inspection.

11. Calendar Work Platform.- (1) Calendar work platform shall be longer than the width of the calendar roll and provided with a gate or opening bar. The gate may only be openable inward or the bar may only be openable upwards and it must not be capable of staying open. The bar shall contain at least two rails.

(2) A calendar super work platform shall be controlled by a constant pressure switch, located on the platform.

(3) Along the work side of the platform there shall be an emergency stop controlling the movement of the platform as well as the calendar bowl rotation.

(4) The hoisting and lowering speed must not exceed 0.15 meter per second.

(5) A hydraulic cylinder being part of the hoisting gear of a calendar work platform shall have a valve which, in the event of a hose or pipe fracture or considerable leakage, prevents the platform from moving downwards or retards its descent. Such a valve shall be mounted in or directly on the cylinder.

- (6) A calendar super work platform carried by wire rope or chain shall have a reliable catch.
- (7) An elevating screw of a calendar wait platform shall be self-breaking bearing nuts and safety nuts shall serve as load carrying devices.
- 12. Examination and Inspection.-** (1) A device as referred to in paragraph 10 (1) above, shall when needed and at least twice a year, and in case of a calendar work platform once a month, is subjected to thorough examination by a qualified person as long as it is being used. If a calendar work platform has been out of use for more than three months, thorough examination shall be carried out before it is used again.
- (2) In the course of examination, a check shall be made to ensure that safety devices are in working order and also that the hoisting and towering speed of the calendar work platform does not exceed the permitted value.
- (3) An examination log book shall be maintained and made readily available.
- 13. Hose Pipes.-** (1) A hose pipe used for cleaning near a rotating pair of rolls shall have a rounded nozzle or otherwise be arranged so that the nozzle cannot be caught in the nip.
- (2) A hose used for flushing liquid at a pressure exceeding 25 Kilogram/ Square centimeter shall have a constant pressure actuated valve for flow control. If needed for safety during handling the nozzle shall be mounted on a stand or the hose designed for two operators.
- 14. Space inside a machine.-** Any opening leading to a walkable passage into or through a machine must be blocked. This does not apply if the passage must be accessible for operational or maintenance purpose on condition that entering does not involve any risk.
- 15. Inching. -** If it is necessary, to operate a machine temporarily without the protective devices otherwise provided, the speed of the web shall be as low as possible and shall not exceed 15 meters per minute. The machine shall be governed by a hand operated constant pressure switch from a place where the operator can supervise those places where protective devices have been rendered inoperative.
- 16. Emergency stop.-** An emergency stop must not break the energy supply to any device needed in an emergency or provoke any movement that might aggravate the situation. Braking provoked by the emergency stop must not be so violent as to cause any risk of injury.
- 17. Auxiliary measures. -** In place where large quantities of pulp or broke are frequently handled, measures shall be taken to facilitate the work. Special attention shall be paid to the need for such measures in places where there are high temperatures.
- 18. Work Instructions.-** (1) Instructions shall be provided for the work routines necessary to promote safety during normal operation as well as during maintenance, cleaning operation and similar kinds of periodically recurrent tasks.
- (2) Work permit system should be adopted for maintenance and cleaning operations.
- 19. Other Safety Precautions. -(1)** Wherever risk of injury prevails, necessary caution boards or symbols should be displayed like moving equipments, Nip points, slippery area, men at work, etc.
- (2) Adequate training in safe operations should be imparted to employees at the time of induction into the factory and at periodical intervals not exceeding a year and whenever there is a job rotation or operational changes.
- (3) For paper machine speeds exceeding 200 meters per minute, start up alarm should be provided before crawl and before being put to run.
- (4) All rotating elements should indicate direction of rotation.
- (5) Wherever nip is there, indication in bold letter to be provided.
- 20. Precautions against ignition.-** Wherever there is danger of fire from accumulation of flammable or explosive dust, fumes or vapours or any combustible materials in air:-
- (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) employees shall wear shoes without iron or steel nails or any other exposed ferrous materials which is likely to cause sparks by friction;
- (d) smoking, lighting or carrying of matches, lighters or smoking materials shall be prohibited ;
- (e) transmission belts with iron fasteners shall not be used; and
- (f) all other precautions as are reasonably practicable, shall be taken to prevent initiation of ignition from all other possible sources such as open flames, frictional sparks overheated surfaces of machinery or plant, chemical or physical chemical reaction and radiant heat.

21. Spontaneous ignition. - Where materials are likely to induce spontaneous ignition, care shall be taken to avoid formation of air pocket and to ensure adequate ventilation. The material susceptible to spontaneous ignition should be stored in dry condition and should be in heaps of such capacity and separated by such passage which will prevent fire. The materials susceptible to ignition and stored in the open shall be at a distance not less than 10 meters away from process or storage buildings.

22. Fire fighting system. - (1) In every factory to which this schedule applies fire fighting arrangement shall be made wherein:

- (i) the fire hydrant system shall be capable of supplying a minimum of 4,500 liters per minute at a pressure of not less than 7 kilograms per square cm.
- (ii) adequate provision of water supply for fire fighting shall be made with static storage capacity of not less than 2 hours aggregate pumping.

(2) Every factory employing five hundred or more persons 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 eight such trained persons to be available at any time. The squad shall consist of watch and ward personnel, fire pump man and departmental supervisors and operators trained in the operation of fire and emergency services.

(b) Squad leaders shall preferably be trained in a recognised 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.

(d) 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.

(e) 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 brought to the notice of squad leader.

(f) 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 interlinked and placed in a convenient location near such areas.

23. Personnel Protective Equipment.-The occupier shall provide suitable personnel protective equipments such as respirators, hand gloves, shoes, helmets, goggles, earplug, aprons, etc, as per the relevant standard prescribed by the Bureau of Indian Standards to the employees.

24. Ventilation.-In all workrooms adequate ventilation by the circulation of fresh air shall be provided so as to maintain reasonable conditions of comfort and prevent injury to health of the employees employed therein.

25. Precautions against dangerous fumes, gases, etc.- (1) No person shall be required or allowed to enter any chamber, tank, vat, pit, pipe, flue or other confined space in any factory in which any gas, fume, vapour or dust is likely to be present to such an extent as to involve risk to persons being overcome thereby, unless it is provided with a manhole of adequate size or other effective means of egress.

(2) No person shall be required or allowed to enter any confined space as is referred to in sub-paragraph (1), until all

practicable measures have been taken to remove any gas, fume, vapour or dust, which may be present so as to bring its level within the permissible limits and to prevent any ingress of such gas, fume, vapour or dust and unless-

(a) a certificate in writing has been given by a competent person, based on a test carried out by himself that the space is reasonably free from dangerous gas, fume, vapour or dust; or

(b) such person is wearing suitable breathing apparatus and a belt securely attached to a rope the free end of which is held by a person outside the confined space.

26. Medical facilities and records of examinations and tests.-

(1)(a) The occupier of every factory to which the schedule applies, shall employ a qualified medical practitioner for medical surveillance of the employees employed therein whose employment shall be subject to the approval of the Chief Inspector-cum-Facilitator; and

(b) Provide to the said medical practitioner all the necessary facilities for the purpose referred to in clause (a).

(2) The record of medical examinations and appropriate tests carried out by the said medical practitioner shall be maintained in **FORM VII**, which shall be kept readily available for inspection by the Inspector-cum-Facilitator.

(3) Every employee employed in handling chemicals involved in the processes shall be examined by a Medical practitioner within 15 days of his first employment and re-examined at least once in every 12 calendar months.

Schedule- XXXI

Forging, Forming, Heat Treatment and Incidental Processes

1. Application. -The schedule shall apply to all types of operations involved in Forging, Forming, Heat Treatment and other incidental processes.

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

(a) "approved" means approved by the Chief Inspector-cum-Facilitator;

(b) "Forming" includes all kinds of manufacturing processes involving the application of force by power press, rollers etc.,

(c) "Heat treatment" includes annealing, normalizing, hardening, tempering, marquenching, ausforming, carburizing, nitriding etc.,

(d) "fixed fencing" means fencing provided for the tools of a power press being fencing which has no moving part associated with or dependent upon the mechanism of a power press and includes that part of a closed tool which acts as a guard;

(e) "power press" means a machine used for moulding, pressing, blanking, raising, drawing and similar purposes;

3. Starting and stopping mechanism.-(1) The starting and stopping mechanism shall be provided with a safety stop so as to prevent over running of the press.

(2) Suitable arrangements shall be made to arrest the movement of ram during power failure, changing of dies, tool setting and other maintenance work etc.

4. Safety provisions on power press.-(1) Each power press shall be provided with suitable fixed fencing on all sides so as to safeguard the employees engaged nearby.

(2) The design, construction and mutual position of the safeguards referred to in sub paragraph (1) shall be such as to preclude the possibility of the employees hand or fingers reaching the danger zone.

(3) The machine shall be fed through suitable means so as to ensure the safety of the employees.

(4) Notwithstanding anything contained in sub-paragraph (1) an automatic or an inter-locked guard with photo-electric sensors, proximity sensors etc., may be used in place of a fixed guard, but where such guards are used

they shall be maintained in an efficient working condition and if any guard develops a defect, the power press shall not be operated unless the defect of the guard is removed.

5. **Appointment of persons to prepare power presses for use.**-(1) Except as provided in paragraph 6, no person shall set, re-set, adjust or try out the tools on a power press or install or adjust any safety device thereon, being installation or

adjustment preparatory to production of proving, or carry out an inspection and test of any safety device thereon required by paragraph 8 unless he -

- (a) has attained the age eighteen;
 - (b) has been trained in accordance with the sub-paragraph (2) ; and
 - (c) has been appointed by the Occupier of the Factory to carry out those duties in respect of the class or description of power press or the class or description of safety device to which the power press or the safety device (as the case may be) belongs;
- (2) The training shall include suitable and sufficient practical instruction in the matters in relation to each type of power press and safety device in respect of which it is proposed to appoint the person being trained.

6. **Examination and testing of power-presses and safety devices.**-(1) No power press or safety device shall be taken into use in any Factory for the first time in that factory or in case of a safety device for the first time on any power press, unless it has been thoroughly examined and tested, in the case of a power press, after installation in the factory, or in the case of a safety device, when in position on the power press in connection with which it is to be used.

(2) No power press shall be used unless it has been thoroughly examined and tested by a competent person, within the immediately preceding period of twelve months.

(3) No power press shall be used unless every safety device (other than fixed fencing) thereon has within the immediately preceding six months when in position on that power press been thoroughly examined and tested by a competent person.

(4) The competent person carrying out an examination and test under the foregoing provisions shall make a report of the examination and test containing the following particulars and every such report shall be kept readily available for inspection, namely:

- (a) name of the occupier of the Factory;
- (b) address of the Factory;
- (c) identification number or mark sufficient to identify the power press or the safety device;
- (d) date on which the power press or the safe device was first taken into use in the Factory;
- (e) the date of each periodical thorough examination carried out as per requirements of sub-paragraph (2) above;
- (f) particulars of any defects affecting the safe working of the power press or the safety device found at any such thorough

examination and steps taken to remedy such defects.

7. **Defects disclosed during a thorough examination and tests.**-(1) Where any defect is disclosed in any power press or in any safety device by any examination and test under paragraph 6 and in the opinion of the competent person carrying out the examination and test, either

(a) the said defect is a cause of danger to employees and in consequence the power press or safety device (as the case may be) ought not to be used until the said defect has been remedied ; or

(b) the said defect may become a cause of danger to employees and in consequence the power press or the safety device (as the case may be) ought not to be used after the expiration of a specified period unless the said defect has been remedied ; such defect shall, as soon as possible after the completion of the examination and test, be notified in writing by the competent person to the occupier of the Factory and, in the case of a defect falling within clause (b) of this paragraph such notification shall include the period within which, in the opinion of the competent person, the defect ought to be remedied.

(2) In every case where notification has been given under this paragraph, a copy of the report made under sub-paragraph

(4) of paragraph 6 shall be sent by the competent person to the Inspector-cum-Facilitator for the area within fourteen days of the completion of the examination and test.

(3) Where any such defect is notified to the Occupier in accordance with the foregoing provisions of this paragraph the power press or safety device (as the case may be) having the said defect shall not be used

(a) In the case of a defect falling within clause (a) of sub-paragraph (1) until the said defect has been remedied; and

(b) In the case of defect falling within clause (b) of sub-paragraph (1), after the expiration of the said defect has been remedied.

(4) As soon as is practicable after any defect of which notification has been given under sub-paragraph (1) has been remedied, record shall be made by or on behalf of the occupier stating the measures by which and the date on which the defect was remedied.

- 8. Inspection and test of safety devices.**-(1) No power press shall be used after the setting, resetting or adjustment of the tools thereon unless a person appointed or authorised for the purpose under paragraph 5 has inspected and tested every safety device thereon while it is in position on the said power press;

Provided that an inspection, test and certificate as aforesaid shall not be required where any adjustment of the tools has not caused or resulted in any alteration to or disturbance of any safety device on the power press and if, after the adjustment of the tools, the safety devices remain, in the opinion of such a person as aforesaid, in efficient working order.

- (2) Every power press and every safety device thereon while it is in position on the said power press shall be inspected and tested by a trained person every day.

- 9. Defects disclosed during an inspection and test.**-(1) Where it appears to any person as a result of any inspection and test carried out by him under paragraph 8 that any necessary safety device is not in position or is not properly in position on a power press or that any safety device which is in position on a power press is not in his opinion suitable, he shall notify the occupier forthwith.

(2) Except as provided in sub-paragraph (3) of this paragraph where any defect is disclosed in a safety device by any inspection and test under paragraph 8, the person carrying out the inspection and test shall notify the Occupier forthwith.

(3) Where any defect in a safety device is the subject of a notification in writing under paragraph 7 by virtue of which the use of the safety device may be continued during a specified period without the said defect having been remedied, the requirement in sub-paragraph (2) of this paragraph shall not apply to the said defect until the said period has expired.

- 10. Identification of power presses and safety devices.**-For the purpose of identification every power press and every safety device provided for the same shall be distinctively and plainly marked.

- 11. Safety precautions in forging and rolling operations.**-(1) Employees shall be provided with suitable personal protective equipment to prevent burns from contact with hot surfaces or splatters of hot material.

(2) Material handling equipments involved in forging and rolling operations shall be of adequate strength, size and suitable shape.

(3) Substantial safeguards shall be provided to ensure the safety of the persons employed in forging and rolling operations from the flying scales, splatter and other materials.

(4) No process or work shall be carried on in such a manner as to cause risk of bodily injury to the persons employed.

- 12. Precautions against ignition.**-Wherever there is danger of fire from accumulation of flammable or explosive dust, fumes or vapours or any combustible materials in air:-

(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; and
 - (c) 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 etc.,
 - (d) safe level of quenching medium shall be ensured in the heat treatment furnaces.
 - (e) alternate power supply arrangements shall be made and interlocked with the normal power supply system so as to ensure constant supply of power during quenching operations.
- 13. Training and Instructions to operators.**—The operators shall be trained and instructed in the safe method of work before starting work on any power press.
- 14. Ventilation.**—Efficient ventilation shall be provided by mechanical means and shall operate on the dust, fumes or smoke given off in the process as near as may be at the point of origin. The ventilation system shall be so constructed, arranged and maintained as to prevent the dust, fumes or smoke entering into any room or place in which work is carried on.
- 15. Testing and examination of ventilating systems.**—(1) All ventilating systems used for the purpose of extracting or suppressing fumes as required by this schedule shall be as per the relevant standard prescribed by the Bureau of Indian Standards. It shall be thoroughly examined and tested by a competent person once in every period of twelve months. Any defects found by such examinations or test shall be rectified forthwith.
- (2) A register containing particulars of such examination and tests and the state of the plant and the repairs or alterations, if any, found to be necessary shall be kept and shall be available for inspection by an Inspector-cum-Facilitator.
- 16. Medical facilities and records of examinations and tests.**—(1) The occupier of every factory to which the schedule applies, shall
- (a) employ a qualified medical practitioner for medical surveillance of the employees employed therein whose employment shall be subject to the approval of the Chief Inspector-cum-Facilitator; and
 - (b) provide to the said medical practitioner all the necessary facilities for the purpose referred to in clause (a).
- (2) The record of medical examinations and appropriate tests carried out by the said medical practitioner shall be maintained in FORM 7, which shall be kept readily available for inspection by the Inspector-cum-Facilitator.
- 17. Prohibition relating to Pregnant Women.**— No pregnant women shall be employed or permitted to work in any area wherein heat treatment process is carried on.

SCHEDULE -XXXII

PROCESSING OF RUBBER AND PLASTIC COMPOUNDS

- 1. Application** The requirements of this schedule shall apply to factory or part thereof wherein manufacture or processing of rubber and plastic compounds is carried on.
- 2. Definitions:**—For the purpose of this Schedule,—
- a. "Processing of Rubber and plastic compounds" means breaking down, cracking, washing, grating, mixing, refining, moulding, extruding, handling, vulcanizing and warming rubber or plastic compounds;
 - b. "calendar" shall mean machine with rolls used for frictioning, sheeting coating and spreading of rubber compounds and plastic or plastic compounds;
 - c. "Injection moulding machine" shall mean a moulding machine wherein a heat-softened rubber or plastic material is forced from a cylinder into a relatively cool cavity, which gives the article the desired shape.
- 3. Installation of machines.**— Rubber and Plastic Mills shall be so installed that top of the front roll is not less than one metre above the floor or working level, provided that in existing installations where the top of the front roll is below this height, a strong rigid distance bar guard shall be fitted across the front of the machine in such position that the operator cannot reach the nip of the roller from the normal working position of the operator.

- 4. Safety Devices.-** (1) (a) Rubber and Plastic Mills shall be equipped with hoppers so constructed or guarded that it is impossible for the operators to come into contact in any manner with the nip of the rolls or horizontal safety-trip rods or tight wire cable across both front and rear, which will when pushed or pulled operate instantly to disconnect the power and apply the brakes or to reverse the rolls.
- (b) Safety-trip rods or tight wire cable on rubber Mills shall extend across the entire length of the face of the rolls and shall be located not more than 170 centimeters above the floor or working level.
- (2) (a) Calendar machines shall be equipped with horizontal safety-trip rods or tight wire across both front and rear, which will when pushed or pulled, operate instantly to disconnect the power and apply the brakes or to reverse the roll;
- (b) Safety-trip rods or tight wire cables on calendar machines shall extend across the entire length of the face of the rolls and shall be located not more than 170 centimeters above the floor or working level.
- (c) On each side of all calendars and near both ends of the face of the rolls there shall be a vertical tight wire cable connecting with the bar tripping mechanism at the top and fastened to the frame within 30 centimeters of the floor. These cables should be positioned at a distance of not more than 30 centimeters from the face of the roll and at a distance of not less than 25 millimeters from the calendar frame.
- 5. Maintenance and Safety Devices:-** Safety-trip rods and tight wire cables on all rubber mills and calendars shall be examined and tested daily in the presence of the occupier or other qualified person and if any defect is disclosed by such examination and test, the mill or calendars shall not be used until such defect has been remedied. Record of such examination and testing shall be maintained.
- 6. Injection Moulding Machine and Extruders,-** (1) A Suitable interlock arrangement shall be provided and maintained so that moulds cannot be closed unless the front safety gate is fully closed and on opening the front safety gate, the movement of moulds will stop automatically. No access shall be available to the moulds through the safety gate.
- (2) In addition to the above, a hydraulic safety arrangement shall also be incorporated with the front safety gate. This shall prevent the tail stock mould plate from moving forward on opening of the front safety gate.
- (3) At the rear of the machine there shall be provided either an efficient fixed guard or a sliding gate which shall be suitably inter-locked with the movement of the mould plates in the manner of the front safety gate as required under (1) above so as to prevent access to the danger zone of the moulds in motion from the rear.
- (4) The injection unit and all other accessible parts shall be adequately insulated or guarded and warning signs shall be displayed where hot parts are necessarily exposed.
- (5) The electrical safety of the machine shall be ensured through proper insulation of heating elements and provision of ground fault current breaker systems.
- 7. Ventilation ,-** (1) Adequate ventilation arrangements shall be provided and maintained at all times in the process area referred in paragraph (1) where dangerous or toxic or flammable or explosive dust, fumes and vapours could be present. These arrangements shall ensure that concentrations, which are either harmful or could result in fire or explosion, are not permitted to be built up in the work environment.
- (2) By suitable means, ventilation arrangements shall provide adequate supply of fresh air along with the maintenance of workplace temperature without detrimental to the health of the workers employed therein.
- 8. Safety Precautions,-** (1) Written safe system of work shall be developed and followed for safety of all workers working on the machine, mould changing and maintenance work and all such workers shall be adequately trained and instructed in the safe method of work before being employed.
- (2) No process or work shall be carried on in such a manner as to cause risk of bodily injury to the persons employed.
- 9. Personal protective equipment's,-** (1) Workers shall be provided with suitable personal protective equipment to prevent burns from contact with hot surfaces or splatters of hot plastic and gases.

(2) An approved breathing apparatus and protective clothing shall be provided and maintained in good condition for use of every person employed in process area.

10. Medical facilities and records of examination and tests,- (1) The occupier of every factory to which the schedule applies, shall

- (a) employ a Factory Medical Officer for medical surveillance of the workers employed therein.
- (b) provide to the said Factory Medical Officer all the necessary facilities for the purpose referred to in clause (a).

(2) Workers employed in this scheduled process / operation shall be medically examined by the Factory Medical Officer-

(a) Once before employment, to ascertain the physical fitness of the person to do the particular job: (b) Once in a period of six 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.

(3) The record of the examinations referred to in sub-paragraph (2) shall be maintained in Health Register in Form VII which shall be kept readily available for inspection by the Inspector-cum-Facilitator.

(4) No person shall be employed for the first time without a Certificate of Fitness in Form VII 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-cum-Facilitator who shall refer the matter to the Medical Officer whose opinion shall be final in this regard. If the Inspector cum-Facilitator is also a Medical Officer, he may dispose of the application himself.

(5) 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 Medical Officer who shall in turn, examine the concerned worker and communicate his findings to the occupier within thirty days. If the Medical Officer is of the opinion that the workers 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 Medical Officer, fully incapacitated in which case the worker affected shall be suitably rehabilitated.

(6) A Medical Officer on his own motion or on a reference from an Inspector cum- Facilitator may conduct medical examination of a worker to ascertain the suitability of his employment in the scheduled Process/operation or for ascertaining his health status. The opinion of the Medical Officer in such a case shall be final. The fee required for this medical examination shall be paid by the occupier.

(7) 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 Medical Officer and after making entries to that effect in the Health Register.

Schedule XXXIII

Painting, Powder Coating and process incidental thereto

1. **Application.-**The provisions of this schedule shall apply to all factories or parts of factories in which Painting, Powder Coating and incidental processes is carried on.
2. **Definitions.-**For the purposes of this Schedule.-
 - (a) "Powder Coating" means electrostatic spray deposition of dry powder on to the surface of the substrate; and
 - (b) "painting" includes varnishing, lacquering and incidental processes.
3. **Ventilation.-**(1) Adequate ventilation arrangements shall be provided and maintained at all times in the process area referred in paragraph

- (1) where dangerous or toxic or flammable or explosive dust, fumes and vapours could be present. These arrangements shall ensure that concentrations, which are either harmful or could result in fire or explosion, are not permitted to be built up in the work environment.
- (2) No person shall be required or allowed to work inside the chamber or booth unless he is provided with suitable breathing apparatus capable of continuous supply of fresh air.
- (3) No process or work shall be carried on in such a manner as to cause risk of bodily injury to the persons employed.
4. **Position of spray operators.**-Arrangement shall, as far as practicable, be made so as to render it unnecessary for the person operating the spray to be in a position between a ventilating outfit and the article being sprayed.
5. **Precautions against ignition.**-Wherever there is danger of fire or explosion from accumulation of flammable or explosive dust, fumes or vapours in air:-
 - (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) employees shall wear shoes without iron or steel nails or any other exposed ferrous materials which is likely to cause sparks by friction;
 - (d) smoking, lighting or carrying of matches, lighters or smoking materials shall be prohibited ;
 - (e) transmission belts with iron fasteners shall not be used; and
 - (f) all other precautions as are reasonably practicable, shall be taken to prevent initiation of ignition from all other possible sources such as open flames, frictional sparks overheated surfaces of machinery or plant, chemical or physical chemical reaction and radiant heat.
6. **Washing facilities.**-There shall be provided and maintained in a cleanly state and in good repair for the use of all persons employed
 - (a) a trough with a smooth impervious surface fitted with a waste pipe without plug, and of sufficient length to allow at least
61 centimeters for every ten persons employed at any one time, and having a constant supply of water from taps or jets above the trough at intervals of not more than 61centimeters ; or
 - (b) at least one wash-basin for every ten such persons employed at any one time, fitted with a waste pipe and plug and having a constant supply of water together with, in either case, a sufficient supply of nail brushes, soap or other suitable cleansing material, and clean towels
7. **Food, drinks, etc., prohibited in work-rooms.**-No food, drink, pan and supari or tobacco shall be brought into or consumed by any employee in any work room or shed in which any process specified in paragraph 2 is carried on and no person shall remain in any such room during intervals for meals or rest.
8. **Medical facilities and records of examination and tests.**- (1) The occupier of every factory to which the schedule applies, shall,-
 - (a) employ a qualified medical practitioner for medical surveillance of the employees employed therein whose employment shall be subject to the approval of the Chief Inspector-cum-Facilitator;
 - (b) Provide to the said medical practitioner all the necessary facilities for the purpose referred to in clause (a);
 - 2) The record of medical examinations and appropriate tests carried out by the said 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.
 - (3) Every employee employed in any of the processes to which this Schedule applies shall be examined by a Medical practitioner within fifteen days of his first employment. No employee shall be allowed to work after fifteen days of his first employment in the factory unless certified fit for such employment by the Medical practitioner.
 - (4) Every employee employed in the said processes shall be re-examined by a Medical practitioner at least once in every 12 calendar months.

9. **Prohibition relating to Pregnant Women.**- No pregnant women shall be employed or permitted to work in the process area wherein painting or powder coating process is carried on.

SCHEDULE XXXIV

Manufacture of chromic acid or manufacture or recovery of the bichromate of sodium, potassium or ammonium

1. **Definitions.** - For the purposes of this Schedule-

(a)"Chrome Process" means the manufacture of chromic acid, chromate or bichromate of sodium or potassium or ammonium, any preparation of these substances, or any process involving the use of such preparation or of these substances, and shall also include the manipulation, movement or treatment of such substances or any preparation of such substances.(b)"Efficient Exhaust Draught" means localized ventilation effected by mechanical or other means for the removal of gas vapour, dust or fumes so as to prevent them from escaping into the air of any place in which work is carried on. No draught shall be deemed efficient which fails to remove gas, vapour, fumes or dust from the point where they originate

2. **Prohibition relating to Pregnant women and adolescent.** - No pregnant woman or adolescent shall be employed or permitted to work on any chrome process.

3. **Efficient exhaust draught.** - The following chrome processes shall not be carried on without the use of an efficient exhaust draught, unless they are carried on by means of an enclosed mechanical or other appliance so constructed as to prevent the escape of dust, fume, vapour or gas into the atmosphere, where any person is working-

(a)grinding;(b)sieving;(c)batch mixing;(d)leaching and acidification, and(e)concentration (Evaporating Tanks).

4. **Washing facilities** - (1) Where acidifications, filtration, sulphate settling or washing, concentration, crystallization, centrifugation or packing is carried out, there shall be provided close to the place of work -

(a)wash places with running water for frequent washing of hands and feet, and(b)a container holding at least 20 ounces of 10 per cent solution of sodium bisulphide or any other suitable reducing agent for treating chromic acid split on clothes or any part of body.(2)There shall also be provided and maintained in a clean state and good repair washing accommodation under cover, with a sufficient supply of soap, nail brush and towels on the scale indicated below-At least one tap or stand pipe for every 10 employees and the tap or pipe shall be spaced not less than 4 feet apart.Note: - In computing the total number of taps required for the purposes of this rule, the taps or stand pipes as required under paragraph 4(1) (a) shall be included.

5. **Time to be allowed for washing.**- Before each meal and before the end of the day's work, at least ten minutes, in addition to the regular meal times, shall be allowed for washing to each person employed in a chrome process.

6. **Flooring** - The floor of every work-room, shall be-

(a) of cement or similar other material so as to be smooth and impervious to water and provided with suitable gradient and drainage;(b)maintained in sound condition and cleaned daily.

7. **Medical facilities and records of examination and tests.** - 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 appointment shall be subject to the approval of the Chief Inspector Cum Facilitator;(b)in addition employ a person trained in First Aid treatment for daily medical surveillance of the workers employed therein;(c)provide to the said medical practitioner and the person all the necessary facilities for the purpose referred to in sub-paragraphs (a) and (b),(d)provide and maintain a sufficient supply of protective cream such as glycerin, Vaseline etc. for application to hands, feet and nostrils and impermeable waterproof plaster dressing in a separate box, readily accessible to the workers and used solely for the purpose of keeping the cream and plaster dressing and;(e)The record of medical examination and appropriate tests, carried out by the medical practitioner and the person under sub-paragraphs (a) and (b), shall be maintained in a separate register, approved by the Chief Inspector Cum Facilitator and it shall be kept readily available for inspection by the Inspector Cum Facilitator at all times during working of the factory.

- 8. Medical examination by Medical Officer.**- (a) Every worker employed in chrome processes shall be produced for examination by a Certifying Surgeon within 15 days of his first employment. Such examination shall include all such tests as may be deemed necessary. No worker shall be required or allowed to work after 15 days of his first employment by the Medical Officer.
- (b) Every worker employed in the chrome processes shall be produced periodically for re-examinations by a Medical Officer at least once in every three calendar months. Such re-examination includes appropriate tests specified in sub-paragraph (a).
- (c) The Medical Officer after examining a worker shall issue a certificate of fitness in Form VII. The record of examination and re-examinations carried out shall be entered in the certificate which shall be kept in the custody of the Manager of the factory. The record of each examination, carried out under sub-paragraphs (a) and (b) including the nature and the results of the tests shall also be entered by the Medical Officer in a health register in Form VII, maintained in the factory.
- (d) The certificates of fitness and the health register shall be kept readily available for inspection by the Inspector Cum Facilitator at all times during working of the factory.
- (e) If, at any time, the Medical officer is of the opinion that a worker is no longer fit for employment in the chrome process on the ground that continuance therein may 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 shall also include the period for which he considers that the said person is unfit for work in the said processes. The worker so suspended from the process shall be provided with alternate placement facilities unless he is fully incapacitated in the opinion of the Medical officer, in which case the worker affected shall be suitable rehabilitated.
- (f) No person who has been found unfit to work as mentioned in sub-paragraph (e) above shall be required or allowed to work in the chrome processes unless the Medical Officer, after further examination, again certifies him fit from employment in the said processes.
- 9. Protective clothing and equipment.** - (1) The occupier shall provide and maintain for the use of all persons employed-
- (a) in grinding, sieving or mixing raw materials and cooling or raking roasted mass, sufficient and suitable respirators issued separately for each individual the filtering materials of which shall be renewed daily; (b) in roasting process, suitable protective footwear, respirators and glove or mitten; (c) in acidification, settling, concentration, crystallization centrifugation or packing aprons and protective converging for hands and feet; and (d) in furnace cleaning and dismantling, suitable protective clothing and equipment. (2) Arrangement shall be made by the occupier for the proper maintenance and supervision of all protective clothing and equipment at the close of each day's work and for the repairs or renewal thereof when necessary. (3) Arrangements shall be made for cleanliness of tools and equipment of the maintenance staff of the factory.
- 10. Use of protective equipment.** - Every person employed in a chrome process shall make use of the protective cream on his hands, feet and nose and also of the protective clothing and equipment provided under paragraph 9.
- 10. Cloak-room and storage of protective equipment** - There shall be provided and maintained for the use of all persons employed in chrome processes, a suitable cloak-room for clothing put-off during working hours and a suitable place separate from the cloak-room, for the storage of all the working clothes and protective equipments and no such clothes and equipments shall be stored in any place other than the room or place so provided. The accommodation so provided shall be placed in charge of a responsible person and shall be kept clean.] [Substituted by the West Bengal Factories (Amendment) Rules, 1991]
- 11. Mess-room.** - (1) There shall be provided and maintained for the use of all persons remaining within the premises during the meal intervals a suitable mess-room provided accommodation of at least 10 sq.ft. per head and furnished with
- (i) a sufficient number of tables and chairs or benches; (ii) arrangements for washing utensils; (iii) adequate means for warming food; (2) The mess-room shall be placed under the charge of responsible person, and shall be kept clean.

- 12. Food, drinks, etc., prohibited in work-room.-** No food, drink "Pan", "Supari" or tobacco shall be brought or consumed by any worker in any work-room in which chrome process is carried on and no person shall remain in any such room during intervals for meals or rest.
13. Separate locker shall be provided, where food, etc., shall be stored by workers before it is actually consumed in the mess-room.
- 14. Medical examination -** (1) Every person employed in a chrome process shall be examined by a Medical Officer, once in every calendar month or at such other intervals as may be specified in writing by the Chief Inspector Cum Facilitator on a day of which due notice shall be given to all concerned and such examination shall take place on the factory premises.
- (2) Every person employed shall present himself at the appointed time for examination by the Medical Officer as provided in sub-paragraph (1).
- (3) A Health Register as nearly as possible in Form No.VII containing the names of all persons employed in a chrome process shall be kept.
- (4) No person after suspensions shall be employed in chrome process without written sanction from the Certifying Surgeon entered in the Health Register.
- 15. Fencing of vessels.-** Every fixed vessel, whether pot, pan, vat or other structure, containing any dangerous material, and not so covered as to eliminate all reasonable risk of accidental immersion of any portion of the body of a person employed shall be fenced as follows:-
- (a) Each such vessel shall, unless its edge is at least 3 feet above the adjoining ground or platform, be securely fenced to a height of at least 3 feet above such adjoining ground or platform: (b) No plank or gangway shall be placed across or inside any such vessel unless such plank or gangway is - (i) At least 18 inches wide; and (ii) securely fenced on both sides, either by upper and lower rails, to a height of 3 feet or by other equally efficient means. (c) If any two such vessels are near each other and the space between them clear any surrounding brick work or other work, it either: (i) less than 18" in width, or (ii) less than 18" in width, but is not securely fenced on both sides to a height of at least 3 feet, secured barriers shall be placed so as to prevent any passage between them.
16. For the purpose of limiting exposure levels in various departments the various processes shall be isolated as given below:-
- (1) Storage of raw materials.
- (2) (a) Sieving, (b) grinding and mixing.
- (3) (a) Roasting, (b) Cooling of roasted ore.
- (4) Leeching, concentration, crystallisation and drying. (5) Packing.
17. Proper type of receptacles shall be provided for corrosive liquids to prevent their spillage.
18. Adequate arrangements shall be made for the storage or disposal of waste material so as to avoid atmospheric or ground pollution.
- 19. Cautionary notice -** A cautionary notice in the form specified by the Chief Inspector Cum Facilitator Cum Facilitator 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.
- Arrangements shall also be made for issue of verbal instructions to the uneducated workers.
- 20. Exemption. -** If in respect of any factory the Chief Inspector Cum Facilitator is satisfied that owing to the exceptional circumstance or the infrequency of the process, or for any other reason, all or any of the provisions of this Schedule are not necessary for the protection of the persons employed in such factory, he may by certificate in writing exempt such factory from all or any of the provisions indicated in such certificate on such conditions as he may specify therein. Such certificate may at any time at his discretion be revoked by the Chief Inspector Cum Facilitator.

SCHEDULE XXXV**Manufacture, use of cellulose solutions**

1. **Application.** - This Schedule shall apply to all factories or parts thereof in which cellulose solution are manufactured, used or stored.
2. **Saving Clause.** - Nothing in this Schedule shall apply to the painting of any building, or to any process in the manufacture of artificial silk, or of explosives or to any factory in which cellulose solutions or inflammable liquids are not manipulated or used for more than 15 minutes on any day.

Paragraphs 4, 5, 6 and 8 of this Schedule shall not apply to any cellulose space in which the following conditions are observed-(a)The total quantities of cellulose solutions and other inflammable liquids together, consumed in the cellulose space do not exceed four pints on any day, and not more than two pints are kept in the cellulose space at any time.(b)The cellulose solutions and other inflammable liquids do not contain-(i)Benzene ("benzole")(ii)Toluene.(iii)Xylene.(iv)Any halogenated hydrocarbon.(c)The occupier of the factory keeps available for inspection a certificate from the makers of the cellulose solutions and other inflammable liquids used in cellulose space certifying that the solutions and liquids do not contain benzene ("benzol"), toluene, xylene or any halogenated hydrocarbon.

3. **Definition** - (a) In this Schedule "Cellulose solutions" mean any solution in inflammable liquid of cellulose acetate, cellulose nitrate, celluloid, or of any other substance containing cellulose, acetate, cellulose nitrate or any other cellulose compound, with or without the admixture of other substances.

(b)"Cellulose space" means a cabinet, booth or similar structure, or a room or part of a room, within which cellulose solutions are manipulated or used.(c)"Fire Resisting Materials" mean properly constructed brickwork not less than five inches in thickness, concrete not less than three inches in thickness, iron or steel or any other material the thickness of which is approved in writing by the Chief Inspector Cum Facilitator.

4. **Separation of cellulose space.** - Every cellulose space shall be separated by enclosure from every other part of the building except in so far as openings are necessary for the purpose of the work or for operation of the ventilating apparatus required by paragraph 6.
5. **Provisions for fire-proofing.**- (a) All walls, partitions, doors, windows, floors, tops, and ceilings, enclosing or forming part of the enclosure of any cellulose space shall be constructed of fire-resisting material, except as regards (1) any cellulose space which was in use as such before the commencement of these rules, and (2) any tops or ceilings of rooms in single storey buildings or of top floor rooms or any outside walls doors or windows other than any of the aforesaid parts of a building in respect of which the Chief Inspector Cum Facilitator specially directs that this exception shall not apply.

(b)All ducts, trunks or casings used in connection with the means of ventilation required by paragraph 4 above shall be constructed of fire-resisting material.

6. **Ventilation.** - (a) Every cellulose space shall be adequately ventilated by mechanical means so as to remove any vapour of cellulose solutions or inflammable liquids and to prevent them (as far as may be practicable under the atmospheric conditions usually prevailing) from entering into any place where work is carried on. Such ventilation shall be kept in full operation for at least five minutes after cessation of work.

(b)Where cellulose solutions are applied by spraying apparatus, arrangements shall (as far as practicable) be made so as to render it unnecessary for the person operating the spare to be in a position between the ventilation outlet and the article being sprayed.

7. **Prohibition relating to smoking etc.** - There shall be no smoking, fire, flame, open light or other agency likely to cause ignition with 20 feet of any cellulose spray unless separation therefrom is effected by means of intervening fire-resisting material.
8. **Fire escapes.** - Adequate means of escape in case of fire, including a sufficient number of safe exits not fewer than two in number shall be provided and maintained for every room or part of a room in which cellulose solutions are manipulated and such exits shall be constructed so as to open outwards or to slide.

- 9. Precautions against fire.-** (a) Cotton waste, cleaning rags or similar material liable to spontaneous combustion shall, after use, be deposited without delay in metal containers with covers or be removed without delay to a safe place.
- (b) Solid residues resulting from the manufacture, manipulation or use of cellulose solutions shall be removed from all cellulose spaces and from the ventilating apparatus used therewith and shall be deposited in a safe space. No such removal shall be effected by scraping with iron or steel implements.
- 10. Fire Extinguishers. -** An adequate supply of efficient fire extinguishing appliances in suitable position shall be provided for every cellulose space.
- 11. Storage. -** (a) All stock of cellulose solutions or inflammable liquid shall be kept in
- (i) fixed storage tanks in safe positions, or
- (ii) metal drums, cans or similar vessels situated in store rooms which shall either be constructed of fire-resisting material or be in safe positions not less than 30 feet from any occupied building.
- (b) The quantity of cellulose solution or inflammable liquid in any cellulose space shall not exceed the estimated requirements for one day's use.

SCHEDULE-XXXVI

Processes involving exothermic chemical reactions

- (1) Application.-** This schedule shall apply to the processes involving exothermic chemical reactions are carried out.
- (2) Definitions.-** For the purpose of this schedule,-
- (i) "Adiabatic Temperature Rise" means increase in temperature of a reacting mixture as a result of exothermic chemical reaction, when there is no heat transfer to or from the environment;
- (ii) "Compatibility" means a measurement of the stability of one substance when mixed with another;
- (iii) "exothermic chemical reactions" mean a chemical reaction in which energy is released in the form of heat;
- (iv) "HAZOP Study" (Hazards Operability Study) means a technique to identify process hazards and potential operating problems using series of guide words to study process deviations;
- (v) "Heat of decomposition" means change in enthalpy in the form of thermal energy accompanying the decomposition;
- (vi) "Heat of reaction" means total quantity of thermal energy liberated or absorbed during a chemical reaction;
- (vii) "Hydraulic Test" means the pressure test carried out as per design pressure for assuring integrity of a reactor and shall be carried out with water and/or compatible fluid as prescribed by the manufacturer;
- (viii) "Maker" means any person or firm in whose name the reactor is manufactured;
- (ix) "reactants" includes the chemicals that are converted into products during the reaction process;

- (x) "Reactor" means an enclosed vessel or device designed to contain and control chemical reactions;
- (xi) "runaway reaction" means a reaction that is out of control because the rate of heat generation by an exothermic chemical reaction exceeds the rate of cooling available.
- (3) Predictive Measures-** (a) The occupier shall before carrying out any exothermic chemical reaction for the first time in a Reactor,-
- (i) check the compatibility of reactants between themselves as well as with material of construction (MOC) of the Reactor using Coupon Test or any other equivalent test and the occupier shall prepare a report of compatibility of reactors and shall preserve the same till such exothermic reaction is carried out;
 - (ii) evaluate the desired heat of reaction;
 - (iii) evaluate Heat of decomposition under undesired reaction conditions;
 - (iv) predict the maximum Adiabatic Temperature Rise of reaction;
 - (v) evaluate the cooling system of the Reactor to ensure that the Reactor can efficiently remove heat input, reaction heat and thermal accumulation of reactants, considering fouling of the cooling area.
 - (vi) predict the runaway reaction using criticality of classes specify by the Chief Inspector in this behalf and its consequences such as pressure in the reactor and/or gas evolution.
- (b) The occupier shall before carrying out any exothermic chemical reaction for the first time in a Reactor, identify the safety margin between the temperature at which an undesired exothermic chemical reaction starts and the operating temperature.
- (c) The occupier shall before carrying out any exothermic chemical reaction for the first time in a Reactor, shall determine addition sequence, rate and order of the reactants to prevent the addition of the wrong reactants or the correct reactants too early, too late, too quickly, too slowly, in too much or too little quantities, or in the wrong order.
- (d) The occupier shall before carrying out any exothermic chemical reaction for the first time in a Reactor, study the scenarios in case the agitator or circulation pump fails, starts too late, stops, not turned on, or operates at the wrong speed.
- (4) Preventive Measures-** (a) The occupier shall before carrying out any exothermic chemical reaction in Reactor,-
- (i) adhere to hierarchy of controls which are Elimination, Substitution, Engineering Controls, Administrative Controls and Personal Protective Equipment's, respectively;
 - (ii) consider the alternative reaction routes to avoid runaway reactions;
 - (iii) evaluate the possibility of conducting reactions in semi-batch mode to control the addition of reactants and ensure that the heat removal capacity is adequate;
 - (iv) evaluate the possibility of using a flow reactor for high heat reactions to provide high heat transfer area and additional safety by allowing the user to stop the reactant flow instantly;
 - (v) conduct the reaction under well controlled conditions that prevent decomposition of reaction mass components;
 - (vi) implement reliable control systems, actuators, sensors, and automatic systems to manage the process and take corrective actions when deviations in process parameters are detected.

(b) The occupier shall obtain a certificate from the Maker of the Reactor specifying the maximum safe working pressure of the Reactor and the tests to which it was subjected to.

(c) The Reactor, which is previously used, isolated, not used for over six months, or repaired or altered in any factory shall not be used, by the occupier in the premises where it is used unless it is thoroughly examined by a competent person under clause (6) of this schedule.

(d) The occupier shall conduct the HAZOP Study of the reaction system to identify and evaluate hazards, and implement all safety recommendations and findings to maintain system safety.

(e) The occupier shall provide a written procedure excluding "replacements in kind" for management of changes in chemical process, technology, equipments, plant structure and any other procedure that affect the Reactor.

(f) The occupier shall consider following aspects before making changes in the Reactor and auxiliary equipments associated with Reactor, namely:-

(i) Technical basis for the proposed change;

(ii) Impact of the change on safety and health;

(iii) Modifications to operating procedures;

(iv) Necessary time for the change; and

(v) Authorization requirements for the proposed changes.

(g) The occupier shall record the changes in the Reactor and auxiliary equipment's associated with Reactor in writing for a period of three years.

(5) Protective Controls- The occupier shall undertake the following protective controls

namely:-

(i) suitable and efficient instruments and fittings with an interlocked shall be provided to cut off the heating and stoppage of feeding to the reactor to prevent the exceeding the safe operating temperature;

(ii) automatic arrangements with appropriate interlocks shall be installed to stop heating and feeding the reactor and forced cooling shall be started in case the mechanical agitation fails;

(iii) reactor shall be provided with a safety valve, rupture disc or other effective devices with the vent system connected to a surge tank in case the maximum safe working pressure exceeds;

(iv) the vent system shall be designed in such a way to minimize resistance and avoid secondary explosions;

(v) the Reactors shall be equipped with pressure gauges with appropriate dial ranges, marked with the maximum safe working pressure;

(vi) heat input in jacketed vessels shall be controlled to prevent exceeding the safe working pressure and temperatures;

(vii) an Audio-Visual alarms shall be provided in case agitation or cooling system or Reactant feeding system fails and Safe operating temperature and pressure

(viii) in case, the safe operating temperature and pressure in Reactor exceeds,-

(a) automatic arrangement of cooling water along with a system of gravity flow cooling shall be provided;

- (b) the system of catalyst poisoning or addition of inhibitors shall be provided to halt the reaction in the Reactor;
 - (c) provide mechanism for the dumping of reaction mass into a cold inert diluent.
- (6) Examination of Reactor and auxiliary equipments associated with Reactor, -**
- (a) Every Reactor in service shall be thoroughly examined by a competent person,-
 - (i) externally, once in every six months;
 - (ii) internally, once in a year, and;
 - (iii) hydraulic test once in a period of two years.
 - (c) No Reactor shall be taken into use for the first time in any factory unless it is thoroughly examined by a competent person in the premises where it is intended to be used.
 - (d) In case, any suspicion arises as to the reliability of the Reactor or examination shows that the part cannot continue to be used with safety unless certain repairs are carried out immediately, the competent person shall submit a report to the Inspector within a period of seven days from the date of completion of the examination.
 - (e) Where the report of any examination under this clause specifies any conditions and suggestions for the working of a reactor, the same shall not be used unless such conditions and suggestions are rectified by the occupier.
- 7) Measure to tackle emergency situation.-** The occupier shall undertake following measures to tackle emergency situations, namely:-
- (i) simple and specific instructions shall be provided and displayed prominently in bold letters in language understood by the majority of workers.
 - (ii) suitable training shall be given to workers emphasizing the specific safety and health hazards associated with the process and emergency operations including shutdown procedures and other safe work practices.
 - (iii) mock drills based on exothermic reaction scenarios shall be conducted once in six months.
- (8) Supervisor.-** The Occupier shall appoint a person as Supervisor who possess,-
- (a) a degree in Chemical Engineering or Chemical Technology and minimum three years of experience working with Reactors in which exothermic chemical reactions are carried out; or
 - (b) a diploma in Chemical Engineering or Chemical Technology and minimum five years of experience working with Reactors in which exothermic chemical reactions are carried out.
- (9) Operator.-** The Occupier shall appoint a person as an Operator who possess,-
- (a) Bachelor's Degree in Chemistry; or
 - (b) Diploma in Chemical Engineering; or
 - (c) Certificate of vocational training in chemical plant operation; and possess a certificate for successfully completing training in the field of chemical reactor operation and handling of hazardous substances from the Institute recognized by the Chief Inspector-cum-Facilitator
- (10) General Measures.-** The occupier shall ensure that,-
- (a) the names of the reactor operator and supervisor shall be displayed in conspicuous places near the Reactors;
 - (b) a shift logbook of operator and supervisor shall be maintained and preserved for three months from the last entry;
 - (c) sufficient number of supervisors and operators shall be available in each shift to ensure safe operation of reactor.

SCHEDULE XXXVII**Lifting, stacking, storing and shipping of bales in and from finished goods godowns of jute mills**

Handling of bales in finished goods godowns of jute mills. - Lifting, stacking and storing of bales in and shipping from finished goods godowns of jute mills shall not be done except by mechanical means. Winch operated lifting tackle without side movement and with the winch driver obstructed from view of the bale to be lifted or lowered, will not be deemed to comply with this rule.

Schedule -A

Scale of fees payable per year for Grant of Licence and Renewal of Licence for Factories wherein no power is used
i.e. Factories as defined in section 2(w)(i) of the OSH Code 2020

Note : 1 H.P. =

0.7457 K.W.

Maximum number of workers to be employed on any day during the period of application

Total amount of
installed power in
K.W. (H.P.)

Category	Installed Power (Over) K.W. (H.P.)	Installed Power (Not Over) K.W. (H.P.)	20-50	51-100	101- 250	251- 500	501- 750	751- 1000	1001- 1500	1501- 2000	2001- 3000	3001- 5000	5001- 7500	7501- 10000	Over 0000
A	0 (0)	7.457 (10)	2000	2500	4500	9000	16500	23500	30000	45000	55000	65000	80000	100000	115000
B	7.457 (10)	37.285 (50)	2500	3000	5500	10000	17000	24000	31500	46500	56000	66000	83000	103000	120000
C	37.285 (50)	74.57 (100)	3000	3500	6000	11000	18000	25000	32000	48500	58000	67500	85000	106000	125000
D	74.57 (100)	186.425 (250)	3500	4000	7500	12000	19000	26000	33000	50500	60000	70000	90000	110000	130000
E	186.425 (250)	372.85 (500)	4000	4500	8000	13000	20000	28000	35000	52500	61500	75000	95000	115000	135000
F	372.85 (500)	745.7 (1000)	4500	6000	9500	14000	21500	30000	37000	54000	63500	80000	97500	120000	145000
G	745.7 (1000)	1491.4 (2000)	5000	6500	10500	15000	22500	32000	39000	56000	65000	85000	100000	130000	155000
H	1491.4 (2000)	3728.5 (5000)	6000	7000	12000	16500	23500	34000	41000	60000	70000	90000	110000	160000	180000
I	3728.5 (5000)	7457 (10000)	9500	11500	18000	25000	34500	50000	63000	80000	100000	125000	160000	200000	220000
J	7457 (10000)	11185.5 (15000)	11500	13000	19500	26500	36500	58000	68000	105000	120000	135000	175000	225000	260000
K	11185.5 (15000)	Over	14000	15500	23500	32000	44000	70000	85000	125000	145000	165000	210000	270000	300000

Schedule B

Scale of fees payable per year for Grant of Licence and Renewal of Licence for Electricity Generating Stations only

Installed Capacity of Generation Station	Workers	Fees Payable (Rs.)
Not over 1,000 KW	10 or above	₹10,000
Over 1,000 KW but not over 5,000 KW	Same	₹20,000
Over 5,000 KW but not over 10,000 KW	Same	₹33,500
Over 10,000 KW but not over 50,000 KW	Same	₹63,500
Over 50,000 KW but not over 60,000 KW	Same	₹73,500
Over 60,000 KW but not over 80,000 KW	Same	₹87,000
Over 80,000 KW but not over 100,000 KW	Same	₹100,000
Over 100,000 KW but not over 150,000 KW	Same	₹127,000
Over 150,000 KW but not over 200,000 KW	Same	₹150,000
Over 200,000 KW but not over 300,000 KW	Same	₹175,000
Over 300,000 KW but not over 500,000 KW	Same	₹200,000
Over 500,000 KW but not over 1,000,000 KW	Same	₹300,000
Over 1,000,000 KW up to 1,500,000 KW	Same	₹400,000
Over 1,500,000 KW up to 2,000,000 KW	Same	₹500,000
Over 2,000,000 KW	Same	₹667,000

Schedule C

Scale of fees payable per year for Grant of Licence and Renewal of Licence for Factories wherein no power is used i.e. Factories as defined in section 2(w)(ii) of the OSH Code 2020

Maximum workers employed	Fees Payable (Rs.)
40 to 50	₹1,500
51 to 100	₹3,000
101 to 200	₹5,000
201 to 300	₹7,000
301 to 500	₹9,000
501 to 750	₹12,000
751 to 1000	₹15,000
Above 1000	₹20,000

Schedule D**[Jute Textile and Jute Textile Products]**

- Fencing of machinery.** - Fencings, guards or safety devices in respect of each individual machine as prescribed shall be provided and maintained in good order.
- Softening machines.** - (a) A safety stopping device comprising a breast plate in front of the feed table to operate the belt striking gear by releasing an unbalanced weight.

No device departing from the unbalances weight principle will be deemed to conform to this rule unless it has been approved in writing by the inspector.

In the case of machines provided with an individual electric drive the device shall be arranged to act on a switch inserted in the no-volt release circuit.

- (b) The feed table shall not be less than 1.83 meters in length, measured from the centre of the first cloth to the centre of the first pair of cast iron rollers. The table shall be provided with side guards reaching a height of not less than 1.37 meters from the floor, and extending at that height, not less than 1.07 meters from the centre of the first pair of rollers: the height of the rest of the side guards shall not be less than 1.22 meters from the floor.
- (c) The starting and stopping gear shall be arranged to comply with the following:-
 - (i) Provision for stopping the machine at both the feed and delivery end.
 - (ii) Provision for starting the machine at the feed end only, the design shall be such that an operator at the feed end cannot start the machine without the co-operation of an operator at the delivery end.
 - (iii) Working for cleaning a jam or attention otherwise shall not be undertaken unless the supply of power to the machine is cut off and the machine is completely brought to rest by breaking or otherwise.":]

[(iiiA) The level balancing the unbalanced weight shall be securely fenced.]

- (d) Sheet steel casting completely enclosing the side shafts, i.e the shafts and gears shall not be exposed on the underside. The castings shall be locked or secured by a device which will ensure (i) that they cannot be opened while the machines is in motion and (ii) that it will not be possible to start the machine unless they are closed.

- 3. **Carding machines.** - (a) The underframe shall be guarded in such a manner that it will not be possible for operatives to obtain access underneath the machine until the cylinder has ceased to revolve. The lowest cross member of the frame shall come down to a point not more than 25.4 cm from the floor and all openings above this, large enough to permit of access underneath, shall be filled in with sheet steel or fitted with bars or rods spaced not more than 15.24 cm apart, and part of this protection may be in the form of a door, but all such doors shall be controlled by a device which will ensure that they cannot be opened until the cylinder has come to rest that the Machine cannot be restarted until the doors are closed.

Provided that in the case of machines installed before 1st January, 1950, rigidly secured panels filling the under-frame will be deemed to comply with it.

- (b) A guard with panels and sliding doors of sheet steel or closely, spaced bars or rods enclosing the side gears; there shall be no opening at the underside of this protection for access to the gears. The sliding doors shall be controlled by a device which will ensure that they cannot be opened until the cylinder has come to rest, and that the machine cannot be started up until the doors are closed.
- (c) A sheet steel guard extending upto the centre line of the cylinder, enclosing the steeper belts and pulleys shall be provided on all machines installed after 1st January, 1950.
- (d) An adequately strong and rigid set of bars or rods over the doffer, roller, securely bolted in position. This guard must follow the radius of the roller, the space between the rods not to exceed 5.08 cm; the distance from the doffer pin point to the underside of the rods to be 10.16cm : the space between the Drawing pressing roller underside of the rod not to exceed 5.08 cm' and the width of the guard from the first to last rod to be not less than 30.5 cm.
- (e) A hand or guard rail extending the full width of the Drawing pressing roller, fitter in a convenient position in front of and higher than the roller.
- (f) Effective side guards to prevent operative's fingers being caught between the delivery roller and the pressing ball.
- [(g) Work for cleaning a jam or attention otherwise shall not be undertaken unless the supply of power to the machine is cut-off and the machine is completely brought to rest by braking of otherwise.]
- [(h)] When a machine is stopped for clearing a jam or attention otherwise, the starting gear shall be secured in the "off" position atleast by a lock operated by a removable key in possession of the person attending the machine.

- 4. **Drawing Machine** - (a) A sheet steel guard completely closing the space between the bend rail and the bottom of the retaining roller, the opening and closing of which shall be controlled by the starting gear, and the design such that the guard cannot be opened while the machine is running. The guard plate shall swivel more or less about the centre of its height, and the top edge shall swing inwards towards the gill bars as guard opens, and outwards as the guard closes :

Provided that in the case of machines installed before 1st January, 1950, a fixed guard will be sufficient if the clearance between the top of the guard and the underside of the retaining roller does not exceed 9.5 mm:

Provided further that in the case of machines with individual electric drive it will be sufficient if the guard is of the swivelling type and interlinked with the driving mechanism so that silver cannot be fed into the gills, or the guard opened, before the machine is stopped, and that the machine cannot be started up unless the guard is closed.

- (b) Sheet steel or cast iron guards completely enclosing the end gears, is possible only by removing the guard in its entirety. If doors or movable panels are provided they shall be controlled by a locking device, operated by the starting gear, which will ensure that the machine cannot be started unless the guard is completely closed and that no movable part can be opened whilst the machine is in motion;

Provided that in the case of machines installed before 1st January, 1950, a guard securely held in position by automatic catches to prevent opening by vibration but without the interlocking arrangement will be deemed to comply with it.

- (c) An efficient guard which will prevent operatives' fingers or hands being caught between the delivery roller and the pressing ball.
- (d) Starting and stopping gear so designed that the machine can be stopped by operatives on the feed and delivery sides; can be started only by an operative on the feed side but with the co-operation of the operative on the delivery side and cannot be started by an operative on the delivery side. The device necessitating co-operation shall be engaged before the machine stops.
- (e) Shear pins driving the individual carriages shall be fitted to the pinion on the main back shaft and not to the pinion on the carriage back shaft.

5. Roving machine. - (a) Starting and stopping gear designed to embody the following:-

- (i) Provision for stopping the machine on both the feed and delivery sides.
- (ii) Provision for starting the machine on the delivery side only.
- (iii) A device on the delivery side which will automatically lock the belt striking gear in the "off" position. This device shall be such that the machine will not stop before the lock is engaged nor start before it is disengaged by a worker on the delivery side.
- (b) Sheet steel or cast iron guards completely enclosing the end gears, the design to be such that access to the gears is possible only by removing the guards in its entirety. If doors or movable panels are provided, they shall be controlled by a locking device, operated by the starting gear, which will ensure that the machine cannot be started unless the guard is completely closed and that no movable part can be opened whilst the machine is in motion:

Provided that in the case of machines installed before 15th January, 1950, a guard securely held in position by automatic catches to prevent opening by vibration, but without the interlocking arrangement will be deemed to comply with it.

- (c) Shear pins driving individual carriages shall be fitted to the pinion on the main back shaft and not to the pinion on the carriage back shaft.

6. Spinning frames - (a) Access between the driving cylinders whilst in motion shall be prevented by providing a door at the pass end, so interconnected with the starting gear that neither side of the frame is or are running:

Provided that in the case of machines installed before 1st January, 1950, hinged and well secured doors will be deemed to comply with it.

- (b) Sheet steel or cast iron guards completely enclosing the end gear, the design to be such that access to the gears is possible only by removing the guard in its entirety. If doors or movable panels are provided they shall be controlled by a locking device, operated by the starting gear, which will ensure that the machine cannot be started unless the guard is completely closed and that no movable part can be opened whilst the machine is in motion;

Provided that in the case of machines installed before 1st January, 1950, a guard securely held in position by automatic catches to prevent opening by vibration but without the interlocking arrangement will be deemed to comply with it.

7. Cop winding machines. - (a) Effective guards covering the driving end gears. Hinged doors or panels will not be deemed to comply with this rule unless securely held in the closed position by automatic catches to prevent opening by vibration.

- (b) Guards covering the spindle driving gears of such designs that it will not be possible to remove them from position whilst the machine is in motion:

Provided that in the case of machines installed before 1st January, 1950, guards rigidly secured by bolts or screws will be deemed to comply with it.

8. **Roll winding machines.** - Effective guards for traverse or other gears and cams. Hinged doors or panels will not be deemed to comply with this rule unless securely held in the closed position by automatic catches to prevent opening by vibration.

9. **Beaming and machines.** - (a) The flywheel shall be of the disc type.

- (b) Cross and side shafts driving the starch rollers shall be enclosed in protecting tubes.

- (c) A guard securely anchored in position and protecting the nip between the top and bottom starch rollers. It shall have an aperture large enough to pass the yarn through but not the operative's hand. A hinged guard will not be deemed to be in compliance with this rule.

- (d) A guard protecting the nip between the yarn beam pressing roller and the outer top weight roller, i.e. the top weight roller on the side at which the beam is inserted and removed.

- (e) The space between any yarn guide roller and its adjacent steam cylinder must be not less than 7.62 cm.

10. **Looms.** - (a) Sheet steel for cast iron guards protecting the crank and wiper shaft spur shall be provided.

- (b) The minimum clearance between the sley and the breast beam shall not be less than 5.08 cm.

- (c) Yarn beams shall be placed on looms by mechanical or other means. Lifting into position by hand alone will not be deemed to comply with this rule.

11. **Cropping machines.** - Sheet steel guards protecting the spirals shall be provided.

12. **Calendering machines.** - (a) A strong and rigid guard, securely fixed in position, in front of the nip between the bottom cast roller and the paper roller on top of same. This guard shall be constructed in such a manner that it will be impossible for the fingers of an operative to reach the nip through the aperture in the guard.

- (b) Safety rollers protecting the nip of the upper rollers. These rollers must be made of steel or wrought iron tube, as light as possible, and not more than 6.35 cm in external diameter. The safety roller shall ride on the under roller and be free to lift. It shall be set in such a manner that the peripheral clearance between it and the upper roller and between it and the under roller, when the safety roller is fully raised, will not permit of an operative's fingers reaching the nip.

- (c) Sheet steel panels shall be fitted on the machine gable to prevent access through same to the large wheel.

- (d) Lever weights shall be lowered into strong and rigid guards.

13. **Cloth cutting machines.** - A guard preventing access to the knife from the front, top or sides shall be provided. On the underside the knife shall be protected up to the maximum limit without interfering with the machine operation.

14. **Lapping machines.** - (a) Provision for starting the machine at the feed end only: the design shall be such that an operator at the feed end cannot start the machine without the co-operation of an operator at the delivery end and that he cannot interfere with device necessitating co-operation.

- (b) A "sight panel" fitted to the feed table in such position that operators on either side of the machine can see through to the other side.

- (c) The hand wheel on the driving shaft shall be of the disc type and it shall be located at sufficient distance from the machine gable to permit of fencing being constructed between it and the lever mechanism operating the folder.

- (d) The treadle mechanism shall be such as to allow extraction of the maximum cloth lapped and no worker shall be required to go up on the machine table to force it down.

15. **Sewing machines.** - An apron plate shall be fitted in front of the feed chain and the plate shall be without holes or openings except for slots for the jockey pulleys.

16. **Press pits.** - When the press table is level with the floor the clearance between it and the floor shall not be less than 10.16 cm.

Schedule E**Textile Machinery-Except Machinery used in Jute Textiles**

- 1 **Application** - The requirements of this Schedule shall apply to machinery in factories engaged in the manufacture or processing of textile other than jute textiles. The Schedule shall not apply to machinery in factories engaged exclusively in the manufacture of synthetic fibres.
2. **Definitions** - For the purposes of the Schedule,
 - (a) "Calender" means a set of heavy rollers mounted on vertical side frames and arranged to pass cloth between them. Calenders may have two to ten rollers, or bowls some of which can be heated;
 - (b) "Embossing calender" means a calender with two or more rolls one of which is engraved for producing figure effects of various kinds on a fabric;
 - (c) "Card" means a machine consisting of cylinders of various sizes, and in certain cases flats covered with card clothing and set in relation to each other so that fibres in staple form may be separated into individual relationship. The speed of the cylinders and their direction of rotation vary. The finished product is delivered as a silver. Cards of different types are: the revolving flat card, the roller and clearer card etc;
 - (d) "Card clothing" means the materials with which the surface of the cylinder, doffer, flats etc. of a card is covered and consists of a thick foundation material made of either textile fabrics through which are pressed many fine closely spaced, specially bent wires, or mounted saw toothed wire;
 - (e) "Comber" means a machine for combing fibres of cotton, wool etc. The essential parts are device for feeding forward a fringe of fibres at regular intervals and an arrangement of combs or pins, which, at the right time, pass through the fringe. All tangled fibres, short fibres, and nips are removed and the long fibres are laid parallel ;
 - (f) "Combing machinery" means a general classification of machinery including cumbers, silver lap machines, ribbon lap machines and gill boxes, but excluding cards ;
 - (g) "Rotary staple cutter" means a machine consisting of one or more rotary blade(s) used for the purpose of cutting textile fibres into staple lengths;
 - (h) "Rarnett machine" means any of a number of types of machines for opening hard twisted waste of wool, cotton, silk, etc. Essentially, such machines consist of lickering; one or more cylinders, each having a complement worker and stripper rolls and a fancy roll and doffer. The action of such machines is somewhat like that of a wool card, but it is much more severe in that the various rolls are covered with garnett wire instead of card clothing;
 - (i) "Gill box" means a machine used in the worsted system of manufacturing yarns. Its function is to arrange fibres in parallel order. Essentially, it consists of a pair of feed rolls and a series of followers where the followers move at a faster surface speed and perform a combing action;
 - (j) "In -running rolls" means any pair of rolls or drums between which there is a "nip" ;
 - (k) "Interlocking arrangement" means a device that prevents the setting in motion of a dangerous part of machine or the machine itself while the guard, cover or door provided to safeguard against danger is open or unlocked, and which will also hold the guard, cover or door closed and locked while the machine or the dangerous part is in motion;
 - (l) "Kier" means a large metal vat, usually a pressure type, in which fabrics may boiled out, bleached etc.;
 - (m) "Ribbon lapper" means a machine or a part of a machine used to prepare laps for feeding a cotton comb: its purpose is to provide a uniform lap in which the fibres having been straightened as much as possible;
 - (n) "Silver Lapper" means a machine or a part of a machine in which a number of parallel card silvers are drafted slightly, laid side by side in a compact sheet, and wound into a cylindrical package;
 - (o) "Loom" means a machine for effecting the interlocking of two series of yarns crossing one another at right angles. The warp yarns are wound on a warp beam and pass through headless and reeds. The filling is shot across in a shuttle and settled in place by reeds and slays, and the fabric is wound on a cloth beam;
 - (p) "Starch mangle" means a mangle that is used specially for starching cotton goods. It commonly consists of two large rolls and a shallow open vat with several immersion rolls. The vat contains the starch solution;
 - (q) "Water mangle" means a calender having two or more rolls used for squeezing water from fabrics before drying. Water mangles also may be used in other ways during the finishing of various fabrics;

- (r) "Mule" means a type of spinning frame having a head stock and a carriage as its two main sections. The head stock is stationary. The carriage is moveable and it carries the spindles which draft and spin the roving into yarn. The carriage extends over the whole width of the machine and moves slowly towards and away from the head stock during the spinning operation;
- (s) "Nip" is the danger zone between two rolls or drums which by virtue of their positioning and movement create a nipping hazard;
- (t) "Openers and pickers" mean a general classification of machinery which includes breaker pickers, intermediate pickers, willow machines, card and picker waste cleaners, thread extractors, willow machines, card and picker waste cleaners, thread extractors, shredding machines, roving waste openers, shoddy, pickers, bale breakers, feeders, vertical openers, lattice cleaners, horizontal cleaners, screen section, calender section rolls, or beaters used for the preparation of stock for further processing;
- (u) "Paddler" means a trough for a solution and two or more squeeze rolls between which cloth passes after being passed through a mordant or dye bath;
- (v) "Plating machine" means a machine used to lay cloth into folds of regular length for convenience of subsequent process or use;
- (w) "Roller printing machine" means a machine consisting of a large central cylinder, or pressure bowl, around the lower part of the perimeter of which is placed a series of engraved colour rollers, (each having a colour trough), a furnisher roller, doctor blades etc. The machine is used for printing fabrics;
- (x) "Continuous bleaching range" means a machine for bleaching of cloth in rope or open-width form with the following arrangement. The cloth, after wetting out, passes through a squeeze roll into a Saturator containing a solution of caustic soda and then to an enclosed J-Box. A V-shaped arrangement is attached to the front part of the J-box for uniform and rapid saturation of the cloth, with steam before it is packed down in the J-box. The cloth in a single strand rope form, passes over a guide roll down the first arm of the "V" and up the second. Steam is injected into the "V" at the upper end of the second arm so that the cloth is rapidly saturated with steam at this point. The J-box capacity is such that cloth is rapidly saturated with steam at this point. The J-Box capacity is such that cloth will remain hot for a sufficient time to complete the scouring action. It then passes a series of washers with a squeeze roll in between. The cloth then passes through a second set of saturator, J-box, and washer, where it is treated with the peroxide solution. By slight modification of the form of the unit, the same process can be applied to open-width cloth;
- (y) "Mercerizing range" means a 3-bowl mangle, a tenter frame, and a number of boxes for washing and scouring. The whole set-up is in a straight line and all parts operate continuously. The combination is used to saturate the cloth with sodium hydroxide. Stretch it while saturated and washing out most of the caustic before releasing tension.
- (z) "Sanforizing machine" means a machine consisting of a large steam-heated cylinder and endless, thick, woollen felt blanket which is in close contact with the cylinder for most of its perimeter and an electrically heated shoe which presses the cloth against the blanket while the latter is in a stretched condition as it curves around feed-in-roll ;
- (aa) "Shearing machine" means a machine used for shearing cloth. Cutting action is provided by a number of steel blades spirally mounted on a roller. The roller rotates in close contact with a fixed ledger blade. There may be from one to six such rollers on a machine.
- (bb) "Singeing machine" means a machine which comprises of a heated roller, plate or an open gas flame. The cloth or yarn is rapidly passed over the roller or the plate or through the open gas flame to remove fuzz or hairiness by burning;
- (cc) "Slasher" means a machine used for applying a size mixture to warp yarns. Essentially, it consists of stand for holding section beams, a size box, one or more cylindrical dryers or an enclosed hot air dryer and a beaming end for winding the yarn on the loom beams;
- (dd) "Tenter frame" means a machine for drying cloth under tension. It essentially consists of a pair of endless travelling chains fitted with clips of fine pins and carried on tracks. The cloth is firmly held at the selvages by the two chains which diverge as they move forward so that the cloth is brought to the desired width;
- (ee) "Warper" means a machine for preparing and arranging the yarns intended for the warp of a fabric, specifically, a beam warper.

- 3. General safety requirements.** - (a) Every textile machine shall be provided with individual mechanical or electrical means for starting and stopping such machines. Belt shifter on machines driven by belts and shafting should be provided with a belt shifter lock or an equivalent positive locking device.
- (b) Stopping and starting handles or other control shall be of such design and so positioned as to prevent the operator's hand or fingers from striking against any moving part or any other part of the machine.
- (c) All belts, pulleys, gears, chains, sprocket wheels and other dangerous moving parts of machinery which either form part of machinery or are used in association with it, shall be securely guarded.
- 4. Openers and pickers.** - (a) In all opening or picker machinery, beaters and other dangerous parts shall be securely fenced by suitable guards so as to prevent contact with them. Such guards and doors or covers or opening giving access to any dangerous part of the machinery shall be provided with interlocking arrangement.

Provided that in the case of doors or covers of openings giving access to any dangerous part, other than beater covers, instead of the interlocking arrangement, such opening may be so fenced by guards which shall prevent access to any such dangerous part and be either kept positively locked in position or fixed in such a manner that it cannot be removed without the use of hand tools.

- (b) The feed rolls on all opening and picking machinery shall be covered with a guard designed to prevent the operator from reaching the nip while the machinery is in operation.
- (c) The lap forming rollers shall be fitted with a guard or cover which shall prevent access to the nip at the intake of the lap roller and fluted roller as long as the weighted rack is done. The guard or cover shall be provided with interlocking arrangement;

Provided that the foregoing provision shall not apply to the machines equipped with automatic lap forming devices.

Provided further that any such machine equipped with an automatic lap forming device shall not be used unless the automatic lap forming device is in efficient working order.

- 5. Cards** - (a) All cylinder doors shall be secured by an interlocking arrangement which shall prevent the door being opened until the cylinder has ceased to revolve and shall render it impossible to restart the machine until the door has been closed ;

Provided that the latter requirement in respect of the automatic locking device shall not apply while stripping or grinding operations are carried out. Provided further that stripping or grinding operations shall be carried out only by specially trained adult male workers, wearing tight fitting clothing, whose names have been recorded in the register, as nearly as possible in Form No. 7.

- (b) The licker-in shall be guarded so as to prevent access to the dangerous parts.
- (c) Every card shall be equipped with an arrangement that would enable the card cylinder to be driven by power during stripping or grinding operations without having either to shift the main belt to the fast pulleys of the machine or to dismantle the interlocking mechanism. Such an arrangement shall be used only for stripping or grinding operations.

- 6. Garnett machines.** - (a) Garnett licker-ins shall be enclosed.

- (b) Garnett fancy roils shall be enclosed by guards. These shall be installed in a way that keeps worker rolls reasonably accessible for removal or adjustment.
- (c) The underside of the garnett shall be guarded by a screen mesh or other form of enclosure to prevent access.

- 7. Gill Boxes;** - (a) The feed end shall be guarded so as to prevent fingers being caught in the pins of the intersecting failers.

- (b) All nips of in-running rolls shall be guarded by suitable nip guards conforming to the following specifications:

Any opening which the guard may permit when fitted in position shall be so restricted with respect to the distance of the opening from any nip point through that opening and in any circumstances, the maximum width of the opening shall not exceed the following:

Distance of opening Form nip	Maximum width-of opening
0 to 38 mm	6 mm
39 to 63 mm	10 mm
64 to 88 mm	13 mm
89 to 140 mm	15 mm
141 to 165 mm	19 mm
166 to 190 mm	22 mm
191 to 215 mm	32 mm

8. **Silver and ribbon lappers** - The calender drums and the lap spool shall be provided with a guard to prevent access to the nip between the in-running rolls.
9. **Speed frame** - Jack box wheels at the head stock shall be guarded and the guard shall have interlocking arrangement.
10. **Spinning mules**- Wheels on spinning mule carriage shall be provided with substantial wheel guards, extending to within 6 mm of the rails.
11. **Wrappers** - Swivelled double-bar gates shall be installed on all wrappers operating in excess of 410 metres/min. These gates shall have interlocking arrangement, except for the purpose of inching or jogging; Provided that the top and bottom bars of the gate shall be at least 105 and 53 cm. High respectively from the floor or working platform and the gate shall be located 38 mm. From the vertical tangent to the beam head.
12. **Slashers.** - (a) Cylinder dryers-
 - (i) All open nips of in-running rolls shall be guarded by nip guards conforming to the requirements enjoined in sub paragraph (b) of paragraph 7;
 - (ii) When slashers are operated by control levers, such levers shall be connected to a horizontal bar or treadle located not more than 170 cm. Above the floor to control the operation from any point ,
 - (iii) Slashers operated by push button control shall have stop and start buttons located at each end of the machine and additional buttons located on both sides of the machine at the size box and the delivery end. If calender rolls are used, additional buttons shall be provided at both sides of the machine at points near the nips, except when slashers are equipped with an enclosed dryer as in sub paragraph(b).
- (b) Enclosed hot air dryer -
 - (i) All open nips of the top squeezing rollers shall be guarded by nip guards conforming to the requirements enjoined in sub paragraph (b) of paragraph 7;
 - (ii) When slashers are operated by control levers, such levers shall be connected to a horizontal bar or treadle located not more than 170 cm. above the floor to control the operation from any point;
 - (iii) Slashers operated by push-buttons control shall have stop and start buttons located at each end of the machine and additional stop and start buttons located on both sides of the machine at intervals spaced not more than 183 cm. or centres.
13. **Looms** - (a) Each loom shall be equipped with suitable guards designed to minimise the danger from flying shuttles.
- (b) Beam weights for tensions in beam shall be of such construction as to prevent it from falling during its adjustment.
14. **Valves of kiers, tanks and other containers** - (a) Each valve controlling the flow of steam, injurious gases or liquid into a kier or any other tank or container into which a person is likely to enter in connection with a proves, operation, maintenance or for any other purpose, shall be provided with a suitable locking arrangement to enable the said person to lock the valve securely in the closed position and retain the key with him before entering the kier, tank or containers.

- (b) Wherever boiling tanks, caustic tanks and any other containers from which liquids which are hot, corrosive or toxic may overflow or splash, are so located that the operator cannot see the contents from the floor or working area emergency shut off valves which can be controlled from a point not subject to danger of overflow or splash shall be provided to prevent danger.
15. **Shearing machines** - All revolving blades on shearing machines shall be guarded so that the opening between the cloth surface and the bottom of the guard will not exceed 10 mm.
16. **Continuous bleaching range (cotton and rayon)** - The nip of all in-running rolls on open-width bleaching machine rolls shall be protected with a guard to prevent the worker from being caught at the nip. The guard shall extend across the entire length of the nip.
17. **Mercerising range (Piece goods)** - (a) A stopping device shall be provided at each end at the machine.
- (b) A guard shall be provided at each end of the frame between the in-running chain and the clip opener.
- (c) A nip guard shall be provided for the in-running rolls of the mangle and washers and the guard shall conform to the requirements enjoined in subparagraph (b) of paragraph 7.
18. **Tenter frames.** - (a) A stopping device shall be provided at each end of the machine.
- (b) A guard shall be provided at each end of the machine frame at the in-running chain and clip opener.
19. **Paddlers.** - Suitable nip guards conforming to the requirement enjoined in sub-paragraph (b) of paragraph 7 shall be provided to all dangerous in-running rolls.
20. **Centrifugal extractors.** - (a) Each extractor shall be provided with a guard for the basket and the guard shall have interlocking arrangement.
- (b) Each extractor shall be equipped with a mechanically or electrically operated brake to quickly stop the basket when the power driving the basket is shut off.
21. **Squeezer or wringer extractor, water mangle, starch mangle, back washer (worsted yarn_crabbing machines, and decating machines.** - All in-running rolls shall be guarded with nip guards conforming to the requirements enjoined in sub-paragraph (b) of paragraph 7.
22. **Sanforising and palmer machine.** - (a) Nip guards shall be provided on all accessible in-running rolls and these shall conform to the requirements enjoined in sub-paragraph (b) of paragraph 7.
- (b) Access from the sides to the nips of in-running rolls shall be securely fenced by suitable side guards.
- (c) A safety trip rod, cable or wire centre cord shall be provided across the front and back of all palmer cylinders extending the length of the face of the cylinder. It shall operate readily whether pushed or pulled. The safety trip shall not be more than 170 cm. Above the level at which the operator stands and shall be readily accessible.
23. **Rope washers.** - (a) Splash guards shall be installed in all rope washers unless the machine is so designed as to prevent the water or liquid from splashing the operator, the floor and the working surface.
- (b) A safety trip rod, cable or wire centre cord shall be provided across the front and back of all rope washers extending the length of the face of the washer. It shall operate readily whether pushed or pulled. This safety trip shall be not more than 170 cm. above the level on which the operator stands and shall be readily accessible.
24. **Laundry washer tumble or shaker.** - (a) Each drying tumble, each double cylinder shaker or clothes tumbler, and each washing machine shall be equipped with an interlocking arrangement which shall prevent the power operation of the inside cylinder when the outer door on the case or shell is open, and which shall also prevent the outer door on the case or shell from being opened without shutting off the power and the cylinder coming to a stop. This may not prevent the movement of the inner cylinder by means of a hand operated mechanism or an inching machine.
- (b) Each closed barrel shall also be equipped with adequate means for holding open the doors or covers of the inner and outer cylinders or shells while it is being loaded or unloaded.

25. **Printing machine (roller type)** - (a) All in-running rolls shall be guarded by nip guards conforming to the requirement enjoined in sub-paragraph (b) of paragraph 7.
(b) The engraved roller gears and the large crown wheel shall be securely guarded.
26. **Calenders.** - The nip at the in-running side of the rolls shall be provided with a guard extending across the entire length of the nip and arranged to prevent the fingers of the workers from being pulled in between the rolls or between the guard and the rolls, and so constructed that the cloth can be fed into the rolls safely.
27. **Rotary staple cutters.** - The cutter shall be protected by a guard to prevent hands reaching the cutting zone.
28. **Plaiting machines.** - Access to the trap between the knife and card bar shall be prevented by a guard.
29. **Hand bailing machine** - An angle iron handle-stop guard shall be installed at right angle to the frame of the machine. The stop guard shall be so designed and so located as to prevent the handle from travelling beyond the vertical position should the handle slip from the operator's hand when the pawl has been released from the teeth of the take-up gear.
30. **Flat-work ironer** - Each flat-work or collar ironer shall be equipped with safety bar or other guard across the entire front of the feed or first pressure rolls, so arranged that the striking of the bar or guard by the hand of the operator or other person shall stop the machine. The guard shall be such that the operator or other person cannot reach into the rolls without removing the guard. This may be either a vertical guard on all sides or a complete cover. If a vertical guard is used, the distance from the floor or working platform to the top of guard shall be not less than 183 cm."

Schedule F

Wood-Working Machinery

1. **Definition.** - For the purpose of the Schedule :-

Wood-working machine means a machine used for sawing, planing, morticing or moulding wood or cork.

2. **Stopping and starting device** - An efficient stopping and starting device shall be provided on every wood working machine. The control of this device shall be in such a position as to be readily and conveniently operated by the person in charge of the machine.
3. **Space around machines.** - The space surrounding every wood-working machine in motion shall be kept free from obstruction.
4. **Floors.** - The floor surrounding every wood-working machine in motion shall be maintained in good and level condition, and shall not be allowed to become slippery, and as far as practicable shall be kept free from chips or other loosed material.
5. **Circular saws.** - Every circular saw shall be fenced as follows:-
 - (a) Behind and in direct line with the saw there shall be a riving knife, which shall have a smooth surface, shall be strong, rigid, and easily adjustable, and shall also conform to the following conditions:-
 - (i) The edge of the knife nearer the saw shall be form an arc of a circle having a radius of the largest saw used and it shall extend upward from the bench to a height not less than that reach/6d by the largest wood or timber saw.
 - (ii) The knife shall be maintained as close as practicable to the saw having regard to the nature of the work being done at the time, and at the level of the bench the distance between the front edge if the knife and the teeth of the saw shall not exceed 12mm.
 - [(iii) For a saw of a diameter] of less than 60 cm. The knife shall extend upwards from the bench table to within 25 mm. of the top of the saw, and for a saw of a diameter 60 cm. Or over shall extend upwards from the bench table to higher of at least 23 cm. Of the top of the saw.]
 - (b) The top of the saw shall be covered by a strong and easily adjustable guard, with a flange at the side of the saw

farthest from the lence. The guard shall be kept so adjusted that the said flange shall extend below the roots of the teeth of the saw. The guard shall extend from the top of riving knife to a point as low as practicable at the cutting edge of the saw.

- (c) The part of the saw below the bench shall be protected by two plates of metal or other suitable material one on each side of the saw; such plates shall not be more than 15 cm. apart, and shall extend from the axis of the saw outwards to a distance of not less than 5.1 cm. beyond the teeth of the saw. Metal plates, if not beaded, shall be of thickness of at least 2.54 mm. Or if beaded be of a thickness of atleast 1.27 mm.
6. **Push sticks.** - Any push stick or other suitable appliance shall be provided for use at every vertical spindle moulding machine to enable the work to be done without unnecessary risk.
7. **Band saws.** - Every band saw shall be guarded as follows :
- (a) Both sides of the bottom pulley shall be completely encashed by sheet metal or other suitable material.
- (b) The front of the pulley shall be covered with sheet metal or other suitable material.
- (c) All portions of the blade shall be enclosed or otherwise securely guarded except the portion of the blade between the top guide.
8. **Planning machine.** - (1) A planning machine (other than a planning machine which is mechanically fed) shall not be used for overhand planning unless it is fitted with a cylindrical cutter block.
- (2) Every planning machine used for overhand planning shall be provided with a "bridge" guard capable of covering the full length and breadth of the cutting slot in the bench, and so constructed as to be easily adjusted both in vertical and horizontal direction.
- (3) The feed roller of every planning machine used for thicknessing, shall be provided with an efficient guard.
9. **Vertical spindle moulding machines.** - (1) The cutter of every vertical spindle moulding machine shall be guarded by the most efficient guard having regard to the nature of the work being performed.
10. **Chain morticing machines.** - The chain of every chain morticing machine shall be provided with a guard which shall enclose the cutters as far as practicable.
11. **Adjustment and maintenance of guards.** - The guards and other appliances required under this Schedule shall be -
- (a) maintained in an efficient state,
- (b) constantly kept in position while the machinery is in motion, and
- (c) so adjusted as to enable the work to be done without unnecessary risk.
12. **Exemptions.** - Paragraphs 5, 7, 8 and 9 shall not apply to any wood-working machines in respect of which it can be proved that other safeguards are provided, maintained and used which render the machine as safe as it would be if guarded in the manner prescribed in this schedule.

Schedule G

Rubber Mills

1. **Installation of machines** - Mills for breaking down, cracking, granting, mixing, refining and warming rubber or compounds shall be so installed that the top of the front roll is not less than 1.16 metres above the floor or working level:
- Provided that in existing installations where the top of the front roll is below this height a strong rigid distance bar guard shall be fitted across the front of the machine in such position that the operator cannot reach the nip of the rolls.
2. **Safety devices.** - (1) Rubber mills shall be equipped with horizontal safety-trip rods or tight wire cables across both front and rear, which will when pushed or pulled, operate instantly to disconnect the power and apply the brakes, or to reverse the rolls.

- (2) Safety-trip rods or tight wire cables on rubber mills shall extend across the entire length of the face of the rolls and shall be located not more than 1.5 metres above the floor or working level.
- (3) Safety-trip rods and tight wire cable on all rubber mills shall be examined and tested daily in the presence of the Manager or other responsible person and if any defect is disclosed by such examination and test the mill shall not be used until such defect has been remedied.

Schedule H

Power Presses

1. **Definition.** - For the purposes of this Schedule power press means a machine used in metal or other industries for banking, raising, drawing and similar process.
2. **Starting and stopping mechanism.** - The starting and stopping mechanism shall be provided with a safety stop so as to prevent over running of press or descent of the ram during tool setting, etc.
3. **Protection of tool and die.** - (a) Each press shall be provided with a fixed guard with a ship plate on the underside enclosing the front and sides of tool.
(b) Each die shall be provided with a fixed, guard surrounding its front and sides, and extending to the back in the form of a tunnel through which the pressed article falls to the rear of the press.
(c) The design, constructions and mutual position of the guards referred to in (a) and (b) shall be such as to preclude the possibility of the worker's hand or fingers reaching the danger zone.
(d) The machine shall be fed through a small aperture at the bottom of the die guard, but a wider aperture may be permitted for second or subsequent operations if feeding is done through a chute.
(e) Notwithstanding anything contained in clauses (a) and (b), an automatic or an interlocked guard may be used in place of a fixed guard but where such guards are used they shall be maintained in an efficient working condition and if any guard develops a defects, the power shall not operated unless the defect of the guard is removed;]
4. **Exemption** - If in the case of a machine or operation it is not possible to comply with the provisions of paragraph 3 alternative means of protection as approved by the Inspector shall be provided.

Schedule I

Shears, Slitters and Guillotine Machines

1. **Definitions-** For the purpose of this schedule -
(a) "guillotine" means a machine ordinarily equipped with straight, bevel edged blade operating vertically against a stationary resisting edge and used for cutting metallic or nonmetallic substances;
(b) "shears" or "shearing machine" means a machine ordinarily equipped with straight, bevel-edged blade operating vertically against resisting edges, or with rotary, overlapping cutting wheels and used for shearing metals or non-metallic substances;
(c) "slitters" or "slitting machine" means a machine ordinarily equipped with circular disc type knives and used for trimming or cutting into metal or non-metallic substances or for slitting them into narrow strips and includes bread or other food slicers equipped with rotary knives of cutting discs.
2. **Guillotine and shears.** - (a) Where practicable, a barrier metal guard of adequate strength shall be provided at the front of knife, fastened to the machine frame and shall be so fixed as to prevent any part of the operator's body to reach the descending blades from above, below or through the barrier guard or from the sides;

Provided that in case of a machine used in the paper printing and allied industries, where a fixed barrier metal guard is not suitable on account of the height and volume of the material being fed, there shall be provided suitable starting devices which require simultaneous action of both the hands of the operator or an automatic device which will remove both the hands of the operator from the danger zone at every cutting stroke of the blade.

- (b) At the back end of such machines, an inclined guard shall be provided over which the slit pieces would slide be collected at a safe distance in a manner as to prevent a person at the back of the machine from reaching the descending blade.
 - (c) Power-driven guillotine cutters, except continuous feed trimmers, shall be equipped with:
 - (i) starting devices which require the simultaneous action of both hands to start the cutting stroke and of at least one hand on a control during the complete cutting cycle of the knife; or
 - (ii) an automatic guard which will remove the hands of the operator from the danger zone at every cutting stroke of the blade, used in conjunction with one hand starting devices which require two distance movements of the device to start the cutting stroke and so designed as to return positively to the non-starting position after each complete cycle of the knife.
 - (d) Where two or more workers are employed at the same time on the same power-driven guillotine cutter equipped with two-hand control the device shall be so arranged that each worker shall be required to use both hands simultaneously on the safety trip to start the cutting stroke, and at least one hand on a control to complete the cycle of the knife.
 - (e) Power-driven guillotine cutters, other than continuous trimmer, shall be provided, in addition to the brake or other stopping mechanism, with an emergency device so as to prevent the machine from operating in the event of failure of the brake when the starting mechanism is in the non-starting position.
- 3. Slitting Machines.** - (a) Circular disc-type knives on machine for cutting metal the leather, paper, rubber textiles or other non-metallic substances shall, if within reach of operators during operation, provided with guards enclosing the knife edges at all times, as near as practicable to the surface of the material and which may either -
- (i) automatically adjust themselves to the thickness of the material ; or
 - (ii) be fixed or manually adjusted so that the space between the bottom of the guard and the materials shall not exceed 6mm at any time.
- (b) Portions of blades underneath the tables or benches of slitting machines shall be covered by guards.
- 4. Index cutters and vertical papers slitters.** - Index cutter and other machines of cutting strip from the edge of books and for similar operation shall be provided with fixed guards, so arrange that the fingers of the operators may not come between the blades and the tables.
- 5. Corner cutters** - Corner cutters, used in the manufacture of paper boxes, shall be equipped with-
- (a) suitable guard, fastened to the machines in front of the knives and provided with slots or perforations to afford visibility of the operations ; or
 - (b) other guards equally efficient for the protection of the fingers of the workers.
- 6. Band knives.** - Band wheels on band knives, and all portions of the blades except the working side between guide and the table on vertical machines, or between the wheel guards on horizontal machines, shall be completely enclosed with hinged guards of sheet metal not less than 6 mm. in thickness or of other material of equal strength.
- 7. Exceptions.** - If in the case of a machine or operation it is not possible to comply with the provisions of this Schedule alternative means of protection as approved by the Inspector shall be provided.

Schedule J

Centrifugal machines

- 1. Definition.** - "Centrifugal machines" include centrifugal extractors, separators and drivers.
- 2. Every part of centrifugal machine shall be** - (i) of good design and construction and of adequate strength ;
 - (ii) properly maintained ; and
 - (iii) examined thoroughly by a competent person at regular intervals.

3. **Interlocking guard for drum or basket** : - (a) The case, housing the rotation drum or basket of every centrifugal machine shall be provided with a strong lid. The design and construction of the cage as well as the lid shall be such that no access is possible to the drum or basket when the lid is closed.
- (b) Every centrifugal machine shall be provided with an efficient interlocking device so as to effectively prevent the lid referred to in sub-paragraph (a) from being opened while the drum or basket is in motion and prevent the drum or basket being set in motion while the lid is the open position.
4. **Braking arrangement**. - Every centrifugal machine shall be provided with an effective braking arrangement capable of bringing the drum or basket to rest within such a period of time as is reasonable practicable, after the power is cut off.
5. **Operating speed**. - No centrifugal machine shall be operated at a speed in excess of the manufacturer's rating which shall be legibly stamped at easily visible place both on the inside of the basket and on the outside of the machine casing.
6. **Exceptions**. - Sub-paragraph (b) of paragraph 3, paragraph 4 and paragraph 5 shall not apply in case of top lung machines or similar machines used in the sugar manufacturing industry.;

Schedule K

Ovens and driers.

- (1) **Application** - This rule shall apply to ovens and driers, except those used in laboratories or kitchens of any establishment and those which have a capacity below 325 litres.
- (2) **Definition**. - For the purpose of this rule, oven drier means any enclosed structure, receptacle, compartment or box which is used for baking, drying or otherwise processing of any article or substance at a temperature higher than the ambient temperature or the air in the room or space in which the oven or drier is situated, and in which a flammable or explosive mixture of air and a flammable or explosive mixture of air and a flammable substance is likely to be evolved within the enclosed structure, receptacle, compartment or box or part thereof on account of the article or substance which is baked, dried or otherwise processed within it.
- (3) **Separate electrical connection**. - Electrical power supplied to every oven or drier shall be by means of a separate circuit provided with an isolation switch.
- (4) **Design, construction, examination and testing**. - (a) Every oven or drier shall be properly designed on sound engineering practice and be of good construction, sound materials and adequate strength, free from any patent defects and safe if properly used.
- (b) No oven or drier shall be taken into use in a factory for the first time unless a competent person has thoroughly examined all its parts and carried out the tests as are required to establish that the necessary safe systems and controls provided for safety in operation for the processes for which it is to be used and a certificate of such examination and tests signed by that competent person has been obtained and is kept available for examination by an Inspector at all times during working of the factory.
- (c) All parts of an oven or drier which has undergone any alteration or repair which has the effect of modifying any of the design characteristics, shall not be used unless a thorough examination and test as have been mentioned in clause (b) has been carried out by a competent person and a certificate of such examination and test signed by that competent person has been obtained and is kept available for examination by an Inspector at all times during working of the factory.
- (5) **Safety ventilation**. - (a) Every oven or drier shall be provided with positive and effective safety ventilation system using one or more motor-driven centrifugal fans so as to dilute, any mixture of air and any flammable substance that may be formed within the oven or drier and maintain the concentration of the flammable substance in the air a safe level of dilution.
- (b) The safe level of dilution referred to in clause (a) shall be such as to achieve a concentration of the concerned flammable substance in air of not more than 25 per cents of its lower explosive limit. Provided that a level of concentration in air upto 50 per cent of the lower explosive limit of the concerned flammable substance may be permitted to exist subject to installation and maintenance of an automatic device which

- (i) shows continuously the concentration of the flammable substance in the air present in the oven or drier at any instance.
 - (ii) sounds and alarms when the concentration of the flammable substance in air in any part of the oven or drier reaches a level of 50 per cent of its lower explosive limit; and
 - (iii) shuts down the heating system of the oven or drier automatically when the concentration in air of flammable substance in any part of the oven or drier reaches a level of 60 per cent of its lower explosive limit and is provided to the oven or drier and maintained in efficient working condition.
- (c) No oven or drier shall be operated without its safety ventilation system working in an efficient manner.
- (d) No oven or drier shall be operated with a level of dilution more than what is referred to in clause (b).
- (e) Exhaust ducts of safety ventilation system shall be so designed and placed as to discharge the mixture of air and flammable substance away from one workroom and not near windows or doors other openings from where the mixture may re-enter the workroom or create a pollution hazard in the neighboring atmosphere.
- (f) The fresh air admitted into the oven or drier by means of the safety ventilation system shall be circulated adequately by means of circulating fan or fans through all parts of the oven or drier so as to ensure that there are no locations where the flammable substance can accumulate in the air or become pocketed to any dangerous degree.
- (g) Throttling dampers in any safety ventilation system shall be so designed by cutting away a portion of the damper or otherwise, that the system may handle at least the minimum ventilation rate required for safety they are set in their maximum throttling position.
- 6. Explosion panels.** - (a) Every oven or drier having an internal total space of not less than half cubic metre shall be provided with suitably designed explosion panels so as to allow release of the pressure of any possible explosion within the oven or drier through explosion vents. The area of openings to be provided by means of such vents together with the area of openings of any access doors which are provided with suitable arrangements for their release in case of an explosion, shall be not less than 2200 square centimeter for every one cubic metre of volume of the oven or drier. The design of such explosion panels and doors shall be such as to secure their complete release under an internal pressure of 0.25 kg. per square centimeter.
- (b) The explosion releasing panels shall, as far as practicable, be situated at the room of the oven or drier or at those portions of the walls where persons do not remain in connection with operations of the oven or drier.
- (7) Interlocking-arrangements.** - In each oven or drier, efficient, interlocking arrangements shall be provided and maintained to ensure that
- (i) all ventilating fans and circulating fans whose failure may adversely affect the ventilation rate or flow pattern, are in operation before any mechanical conveyor that may be provided for feeding the article or substances to be processed in the oven or drier is put into operation;
 - (ii) failure of any of the ventilating or circulating fans may automatically stop any conveyor as referred to in clause (i) as may be provided, as well as stop the fuel supply by closing the shut off valve and shut off the ignition in the case of gas or oil fired ovens, and in the case of electrically heated ovens switch off the electrical supply to the heaters;
 - (iii) the above said mechanical conveyor is set in operation before the above said shut-off valve can be energized; and
 - (iv) the failure of the above said conveyor may automatically close the above said shut-off valve in the case of ovens and driers heated by gas oil or steam and deactivate the ignition system or cut off the electrical heaters in the case of electrically heated ovens or driers.
- (8) Automatic prevention.** - Every oven or drier heated by oil, gas, steam or electrically shall be provided with an efficient arrangement for automatic prevention consisting of at least three volume changes with fresh air by operation of the safety ventilation fans and the circulating fans (is used) so as to effect purging of the oven or drier

of any mixture of air and a flammable substance before the heating system can be activated and before the conveyor can be placed in position.

- (9) **Temperature Control.** - Every oven or drier shall be provided with an automatic arrangement to ensure that the temperature within may not exceed a safe upper limit to be decided in respect of the particular processing being carried on.
- (10) **Multistage processes.** - Wherever materials are to be processed in ovens or driers in successive operations, suitable arrangement shall be provided to ensure that the operating temperatures necessary for safe operation at each stage are maintained within the design limits.
- (11) Combustible substance not to drip on electrical heater or burner flames. Effective arrangements shall be provided in every oven or drier to prevent dripping of combustible substances on electric heater or burner flame used for heating.
- (12) **Periodical examination, testing and maintenance.** - (a) All parts of every oven and drier shall be properly maintained and thoroughly examined and the various controls as mentioned in this rule and the working of the oven or drier tested at frequent intervals to ensure its safe operation by a responsible person designated by the occupier or manager, who by his experience and knowledge of necessary precautions against risks of explosion, is fit to undertake such works.
- (b) A register shall be maintained in which the details of the various tests carried out from time to time under clause (a) shall be entered and every entry made shall be signed by the person making the tests. The register shall be kept available for examination by an Inspector at all times during working of the factory.
- (13) **Training of operators.** - No person shall be assigned any task connected with operation of any oven or drier unless he has completed 18 years of age and he is properly trained.
- (14) **Polymerising machines.** - (a) Printed fabrics shall be thoroughly dried by passing them over drying cans or through hot flue or other equally effective means, before the same is allowed to pass through polymerizing machines.
- (b) Infrared ray heaters of polymerizing machines shall be cut off while running the prints.
- (15) **Exemption.** - Where the Chief Inspector cum facilitator is satisfied that owing to the special conditions or special methods, all or any of the provision of this rule are not necessary for safe operation of all or any class or any oven or drier, he may by an order, in writing, exempt any factory from all or any of the provisions of this rule subject to such condition as may be specified therein. Such order at any time may also be revoked by Chief Inspector cum facilitator at his discretion.]

Schedule -L

Reaction vessels and kettles.

- (1) This rule applies to reaction vessels and kettles, hereinafter referred to as reaction vessels, which normally work at a pressure being created above the atmospheric pressure due to reaction getting out of control or any other circumstances.
- (2) In the event of the vessel being heated by electrical means, a suitable thermostatic control device shall be provided to prevent the temperature exceeding the safe limit.
- (3) Where steam is used for heating purpose in a reaction vessel, it shall be supplied through a suitable pressure reducing valve or any other suitable automatic device to prevent the maximum permissible steam pressure being exceeded, unless the pressure of the steam in the supply line itself cannot exceed the said maximum permissible pressure.
- (4) A suitable safety valve or rupture disc of adequate size and capacity shall be provided to effectively prevent the pressure being built up in the reaction vessel beyond the safe limit. Effective arrangement shall also be made to

ensure that the released gas, fumes, vapours, liquids or dusts, as the case may be, are led away and disposed of through suitable pipes without causing any hazard. Where flammable gas or vapours are likely to be vented out from the vessel, the discharge end shall be provided with a flame arrester.

- (5) Every reaction vessel shall be provided with a pressure gauge having the appropriate range.
- (6) In addition to the devices as mentioned in the foregoing provisions, means shall be for automatically stopping the feed into the vessel as soon as process conditions deviate from the normal limits to an extent which may be considered as dangerous.
- (7) Wherever necessary, an effective system for cooling, flooding or blanketing shall be provided for the purpose of controlling the reaction and process conditions within the safe limits of temperature and pressure.
- (8) An automatic auditory and visual warning device shall be provided for clear warning whenever process conditions exceed the present limit. This device, wherever possible, shall be integrated with automatic process correction system.
- (9) A notice pointing out the possible circumstances in which pressure above atmospheric pressure may be built up in the reaction vessel, the dangers involved and the precautions to be taken by operators shall be displayed at a conspicuous place near the vessel.

Schedule M

Fragile roofs

- (1) In any factory no person shall be required or allowed to stand, walk or do any work or go for any purpose whatsoever, on a roof or ceiling covered with or constructed of sheets of whatever nature made of any material or materials in respect of which there may be danger of the sheet-breaking due to the weight of a man or otherwise, and no person shall be required or allowed to work or go for any purpose whatsoever, on a sloping roof unless:
 - (a) suitable and sufficient safety devices like ladders, duck ladders, access boards, crawling boards; safety belts; safety nets etc. securely supported and fixed are provided and used;
 - (b) suitable and sufficient parapet wall or railing or any other equally effective device to prevent the person from falling from the sloping roof is provided;
 - (c) a notice in bold letters, in a language understood by the majority of the workers warning that the roof is of fragile materials and is dangerous and that no person should go or work on the roof unless full protective measures have been taken, is displayed at such a prominent place or places, and in such a manner as to attract immediate attention; and
 - (d) a permit to work on the roof has been issued by a responsible person duly authorized for this purpose by the manager.
- (2) All preparatory work like cutting, trimming, piercing etc. of the sheets or of any other materials or article to be used on a roof shall be carried out only on the ground and not on the roof.

Schedule N

Railways in factories

- (1) This rule shall apply to railways in the precincts of a factory which are not subject to the Indian Railways Act, 1980 (9 of 1890) in a factory.
- (2) Gateways: A gateway through which a railway track passes shall not be used for the general passage of workers into, or out of, a factory.
- (3) **Barriers and Turn gates:** (a) Where building or walls contain doors or gates which open to a railway track a barrier about 1 metre high shall be fixed parallel to and about 60 cm. away from the building or wall outside the opening and extending several feet beyond it at either end, so that any person passing out may become aware of an approaching train when his pace is checked at the barrier.

If the traffic on the nearest track is all in one direction, the barrier shall be in the form of an "L" with the end of the short leg abutting on to the wall and the other end opening towards the approaching train.

- (b) If the distance between wall and track cannot be made to accommodate such a barrier, the barrier or a turngate shall be placed at the inside of the opening.
- (c) Where a footway passes close to a building or other obstruction as it approaches a railway track, a barrier or a turngate shall be fixed in such a manner that a person approaching the track is compelled to move away from the building or obstruction and thus obtain timely sight of an approaching locomotive or wagon.
- (4) **Crowds:** - (a) Workers' pay-windows, first-aid stations and other points where a crowd may collect, shall not be placed near a railway track.
- (b) At any time of the day when workers are starting or ending work, all railways traffic shall cease for not less than five minutes
- (5) **Locomotives:** - (a) No locomotive shall be used in shunting operations unless it is in good working order.
- (b) Every locomotive and tender shall be provided with efficient brakes, all of which shall be maintained in good working order. Brake-shoes shall be examined at suitably fixed intervals and those that are worn out shall be replaced at once.
- (c) Water-gauge glasses of every locomotive, whatever is its boiler pressure, shall be protected with substantial glass or metal screens.
- (d) Suitable steps and hand-holds shall be provided at the corners of the locomotive for the use of shunter.
- (e) Every locomotive crane shall be provided with lifting and jacking pads at the four comers of the locomotive for assisting in re-rating operations.
- (f) It shall be clearly indicated on every locomotive crane in English and in a language understood by the majority of the workers in the factory.
- (6) **Wagons:** - (a) Every wagon (and passenger coach, if any) shall be provided either with self-acting brakes capable of being applied continuously or with efficient hand brakes which shall be maintained in good working order. The hand brakes shall be capable of being applied by a person on the ground and fitted with a device for retaining them in the applied position.
- (b) No wagon shall be kept standing within 3 metres of any authorized crossing.
- (c) No wagon shall be moved with the help of crow bars or pinch bars.
- (7) **Riding on locomotive wagon or other stock :** No person shall be permitted to be upon (whether inside or outside) any locomotive, wagon or other rolling stock except where secured foothold and handhold are provided.
- (8) **Attention to brakes and doors:** - (a) No locomotive, wagon or other rolling stock shall be kept standing unless its brakes are firmly applied and, where it is on a gradient, without sufficient number of properly constructed scotches placed firmly in position.
- (b) No train shall be set in motion until the shunting jamadar has satisfied himself that all wagon doors are securely fastened.
- (9) **Projecting loads and cranes:** - (a) If the load on wagon projects beyond its length, a guard or dummy truck shall be used beneath the projection.
- (b) No loco-crane shall travel without load unless the jib is completely lowered and positioned in line with the track.
- (c) When it is necessary for a loco-crane to travel with a load, the jib shall not be swung until the loco-crane has come to rest.
- (10) **Loose-shunting :** Loose-Shunting shall be permitted only when it cannot be avoided. It shall never be performed on a wagon not accompanied by a man capable of applying and pinning down the brakes. A wagon not provided with brakes in good working order and capable of being easily pinned down shall not be loose-shunted unless there

is attached to it at least another wagon with such brakes. Loose shunting shall not be performed with, or against, a wagon containing passengers, live-stock or explosives.

(11) Fly-shunting: - Fly-shunting shall not be permitted on any factory railway.

(12) The shunting jamadar: - (a) Every locomotive or wagon in motion in a factory shall be in charge of a properly trained jamadar.

(b) Before authorizing a locomotive or wagon to be moved, the shunting jamadar shall satisfy himself that no person is under or in between or in front of the locomotive or wagon.

(13) Hand signals: The hand signals used by the shunting jamadar by day and night shall be those prescribed by the shunting rules of railways, working under the Indian Railways Act (9 of 1890).

(14) Night work and fog: - (a) In factories where persons work at night, not movement of locomotive, wagon or other rolling stock otherwise than by hand shall be permitted between sunset and sunrise unless the tracks and their vicinity are lighted on a scale of not less than 10 lux as measured at the horizontal plane at the ground level.

(b) In no circumstances shall any locomotive or train be moved between sunset and sunrise or at any time when there is fog, unless it carries a white head light and a red rear light.

(15) Speed control: - (a) A locomotive or train shall not be permitted to move by speed greater than seven kilometers per hour.

(b) A train, locomotive, wagon or other rolling stock shall not be moved by mechanical or electrical power unless it is preceded at a distance of not less than 10 metres during the whole of its journey by a shunting jamadar, who shall be provided with signalling flags or lamp and whistle, necessary for calling the attention of the driver

(16) Tracks : - (a) The distance (i) between tracks and (ii) between tracks and buildings, blind walls or other structures and (iii) between tracks and materials deposited on the ground shall be respectively not less than-

(aa) from center to center of parallel tracks, the overall width of the widest wagon of that gauge plus twice width of the door of such a wagon when opened directly outward plus 1 metre:

(bb) from a building or structure other than a loading platform to the center of the nearest track, half the overall width of the widest wagon of that gauge, plus the width of its door when opened out-ward, plus 1.5 metres;

(cc) from material stacked or deposited alongside the track, on the ground or on a loading platform, to the center of the nearest track, half the overall width of the widest wagon of that gauge, plus half the width of its door when opened directly outward plus 1 meter.

(b) Sleepers of a track shall be in level with the ground and at all crossings of track with a road or walkway the surface of the road or walkway shall be in level with the top of the rails.

(c) All track ends shall be equipped with buffer stops of adequate strength.

(d) Barriers of substantial construction shall be securely and permanently fixed across any doorway or gateway in a building or in a wall which conceals an approaching train from view, between the building and the track as prescribed in clause (a) of sub-rule (3).

(e) Where tracks are carried on gantry or other elevation, a safe footway or footways with hand rails and toe-boards shall be provided at all positions where persons works or pass on foot, and where there is an opening in the stage of an elevated track for the dropping of material to a lower level, the position shall be adequately fenced or the opening itself provided with grill through which a person cannot fall.

(f) All point levers shall have their movements parallel, to and not across, the direction of the track.

(g) All loading platforms which are more than 60 cm. above the level of the ground on which the track is laid and more than 15 metres in length, shall be provided with steps at intervals not greater than 15 metres apart to enable the platform to be easily mounted from the track.

(h) Turn table on plant railways shall be provided with locking devices which will prevent the tables from turning while locomotives or wagons are being run on or off the tables.

- (i) Workers shall be prohibited from passing under, between or above railway wagons.
- (17) Crossing:** - (a) At all crossings of a track with a road or walkway, danger or crossing signs and wherever reasonably practicable, blinking light or alarm lights shall be provided. Swinging gates and barriers shall be secured against inadvertent opening or closing.
- (b) All crossing warning signs, gates and barriers shall be illuminated during hours of darkness.
- (18) Duties of drivers and shunters:** It shall be the duty of every driver of a locomotive, or a shunter including a shunting jamadar to report without delay to their superior any defect in permanent way, locomotive or rolling stock.
- (19) Young persons not to be employed as drivers of locomotive or as shunters:** No person who is under 18 years of age and no person who is not sufficiently competent and reliable shall be employed as a driver of a locomotive or as a shunter.
- (20) The Chief Inspector cum Facilitator may by an order in writing exempt a factory or part of it from all or any of the provisions of this rule to such extent and on such conditions as he deems necessary.

Schedule O

Sl. No.	Section or Rule under which competency is recognized	Qualifications Required	Experience for the Purpose	Facilities at his Command in the Particular Location(s)/District(s) within the State of West Bengal
1	Rules made under Section 79 and Section 2(1)(I) – Certificate of Stability for Buildings	A degree in Civil or Structural Engineering or a degree equivalent thereto.	(i) A minimum experience of 10 years in the design or construction or testing or repairs of structures. (ii) Knowledge of non-destructive testing, various codes of practice that are current and the effect of vibrations and natural forces on the stability of the building.	Requisite facilities and tools required for the purpose.
2	Rules made under Section 18(2)(f) - Dangerous Machines	A degree in Electrical or Mechanical or Textile Engineering or a degree equivalent thereto.	A minimum experience of 7 years in- (i) Design or operation or maintenance; or testing, examination and inspection of relevant machinery, their guards, safety devices and appliances. (ii) He shall be conversant with safety devices and their proper functioning.	Gauges for measurement; instruments for measurement of speed and any other equipment or device to determine the safety in the use of dangerous machines.

Sl. No.	Section or Rule under which competency is recognized	Qualifications Required	Experience for the Purpose	Facilities at his Command in the Particular Location(s)/District(s) within the State of West Bengal
3	Section 18(2)(f) - Lifts and Hoists	A degree in Civil or Structural Engineering or a degree equivalent thereto.	(i) A minimum experience of 7 years in— (a) Design or erection or maintenance; or (b) Inspection and test procedure of Lifts and Hoists. (ii) He shall be— (a) Conversant with relevant codes of practices and test procedures that are current; (b) Conversant with other statutory requirements covering the safety of the Hoists and Lifts.	Facilities for load testing, tensile testing, gauge equipment, gadgets for measurement and any other equipment required for determining the safe working conditions of Hoists and Lifts.
4	Section 18(2)(f) – Lifting Machines, Chains, Ropes and Lifting Tackles	A degree in Electrical or Mechanical or Metallurgical Engineering or a degree equivalent thereto.	(i) A minimum experience of 7 years in— (a) Design or erection or maintenance; or (b) Testing, examination and inspection of lifting machines, chains, ropes and lifting tackles. (ii) He shall be— (a) Conversant with the relevant code of practices and test procedures that are current; (b) Conversant with fracture mechanics and metallurgy of the material of construction; (c) Conversant with heat treatment, stress relieving techniques as applicable to stress-bearing components and parts of lifting machines and lifting tackles.	Facilities for load testing, tensile testing, heat treatment, equipment gadgets for measurement, gauges and such other equipment to determine the safe working conditions of the lifting machines, chains, ropes and lifting tackles.

Sl. No.	Section or Rule under which competency is recognized	Qualifications Required	Experience for the Purpose	Facilities at his Command in the Particular Location(s)/District(s) within the State of West Bengal
5	Section 18(2)(f) – Pressure Plant	A degree in Chemical or Electrical or Metallurgical or Mechanical Engineering or a degree equivalent thereto.	(i) A minimum experience of 10 years in— (a) Design or erection or maintenance; or (b) Testing, examination and inspection of pressure plants. (ii) He shall be— (a) Conversant with the relevant codes of practice and test procedures relating to pressure vessels; (b) Conversant with statutory requirements concerning the safety of unfired pressure vessels and equipment operating under pressure; (c) Conversant with non-destructive testing techniques as are applicable to pressure vessels; (d) Able to identify defects and arrive at a reliable conclusion with regard to the safety of pressure plants.	Facilities for carrying out hydraulic tests, non-destructive tests, gauges, equipment/gadgets for measurement and other equipment or gauges to determine the safety in the use of pressure vessels.
6	Section 18(2)(f) – Precautions Against Dangerous Fumes	A Master's Degree in Chemistry or a degree in Chemical Engineering.	(i) A minimum experience of 7 years in collection and analysis of environmental samples and calibration of monitoring equipment; (ii) He shall be conversant with the hazardous properties of chemicals and their permissible limit values; (iii) Able to arrive at reliable conclusions as regards the safety in respect of entering and carrying out hot work.	Meters, instruments and devices duly calibrated and certified for carrying out the tests and certifications of safety in working in confined spaces.

Sl. No.	Section or Rule under which competency is recognized	Qualifications Required	Experience for the Purpose	Facilities at his Command in the Particular Location(s)/District(s) within the State of West Bengal
7	Ventilation System as required under various Schedules framed under Section 82 such as Schedules on— (i) Grinding or glazing of metals and processes incidental thereto. (ii) 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. (iii) Handling and processing of asbestos. (iv) Manufacture of Rayon by viscose process. (v) Foundry operations. (vi) Welding processes.	A degree in Mechanical or Electrical Engineering or a degree equivalent thereto.	(i) A minimum experience of 7 years in the design, fabrication, installation and testing of ventilation systems and systems used for extraction and collection of dusts, fumes and vapours and other ancillary equipment. (ii) He shall be conversant with relevant codes of practice and test procedures that are current in respect of ventilation and extraction systems for fumes.	Facilities for testing the ventilation system, instruments and gauges for testing the effectiveness of extraction systems for dust, vapours and fumes, and any other equipment needed for determining the efficiency and adequacy of these systems. He shall have the assistance of a person having a postgraduate degree in Physics or a diploma in Mechanical Engineering with at least 7 years of experience on related facilities.

FORM-I
(See rule 3(1))

**Application for registration of establishment/Amendment to
certificate of registration**

A. Establishment Details.

1. Retrieve details of Establishment through LIN:
2. Name of Establishment:
3. Location and Address of the Establishment:
- 3 a. PAN:
4. Others details of Establishment:
 - a. Total Number of employees engaged directly in the establishment:
 - b. Total Number of the contract employees engaged:
 - c. Total Number of Inter-State Migrant workers employed:

5 (a) For factories:

Details of the manufacturing process	Full postal address and situation of the factory	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 or 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) Any Other establishment:

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 / 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 & Mobile No. 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:-

Signature/ E-sign/digital sign of employer

Date-
Place-

FORM-II**[[See rule 3(10)]]****Application for cancellation of Registration Certificate of establishment**

1. Registration No:
2. Name and Address of Establishment:-
3. Name and Designation of employer :-
4. Full address to which communication relating to the establishment to be sent :-
5. Nature of work of the establishment :-

I/We here by intimate that the establishment having registration No.
..... dated..... is closed with effect from (Date).

Certificate from Employer

I/we hereby certify that the payment of all dues to the workers employed in the establishment having registration no. _____ dated____ has been made.

I/we hereby certify that the establishment having registration no. ____dated____ kept free from storage of hazardous chemicals and substances.

[Strikeout whichever if not applicable]

To,

The Registering Officer
The Inspector-cum-
Facilitator

Signature of the Employer

Place:

Date:

Signature/ E-sign/digital sign of
employer

FORM-III
[See rule 3(2)]
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(37.of 2020) to (Name of the establishment)

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

(a) Factory	(b)	Building or Other Construction Works
(c) Contract Work	(d)	any other work (not covered above)

2. Details of the establishment:

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

3 (a) For factories

Details of the manufacturing process	Full postal address and situation of the factory	Name and address of the occupier and manager	Maximum number of workers to be employed on any day
1	2	3	4

3 (d) For building or 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 (e) Any Other establishment:

4. Remarks of registering officers:

Place:

/Signature E -Sign/DSC of registering officer

Date:

along with designation

Conditions of Registration

(1) Every certificate of registration issued under rule 3 shall be subject to the following conditions, namely:

(a) the certificate of registration shall be non-transferable;

(b) The number employees engaged in an establishment, whether directly or on contract, shall not, on any day, exceed the maximum number specified in the certificate of registration; and

(c) Save as otherwise provided in these rules, the fees paid for the grant of certificate of registration shall be non-refundable.

(2) The employer shall intimate the change, if any, in the number of employees or the conditions of work to the registering officer within 30 days.

(3) The employer shall, within thirty days of the commencement or cessation of operation, intimate to the Registering Officer and Inspector-cum-Facilitator, having jurisdiction in the area where the proposed establishment is situated or the work is executed, the actual date of such commencement or, as the case may be, closing of establishment 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-IV
[(See rule 3(11)]

Certificate of cancellation of Registration Certificate of Establishment

No.

Date:

The Registration No.....dated.....of
.....(Name of the establishment), of Factory/ Contract Work/
Building or Other Construction Work/ Any other work (work carried on in the
establishment) is hereby cancelled with effect from under
sub-section (5) of section 3 of the Occupational Safety, Health and Working
Conditions Code, 2020 (37 of 2020).

Place:

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

Date:

FORM-V
[See rule 3(9)]
Register of
Establishment

Sl.No.	Nature of work	Registration No. and Date	Name, address, and location of the establishment registered	Name, Address and Contact Details of Employer	Total number of Workers and Total Horsepower(if any)	Total number of Contract Workers	Remarks
1	2	2	3	4	5	6	
	(a) Factories (b) Building Or other Construction work (c) Contract work (d) Inter-State Migrant Work (e) Any other work(not covered above)						

FORM-VI
[See rule 4(1)]

Notice of Commencement / cessation of operations

1. Registration No:
2. Name and Address of establishment:-
3. Name and Designation of employer :-
4. Full address to which communication relating to the establishment to be sent :-
5. Nature of work of the establishment :-

A. Notice of Commencement / cessation of operations

I/We hereby intimate that the operation of establishment having registration No. dated has commenced with effect from..... (Date) and approximate duration of operation is ____year____month.

OR

I/We hereby intimate that the operations of the establishment having registration No..... dated has ceased with effect from(Date).

[Strikeout whichever is not applicable]

B. Certificate from employer in case of cessation of operation

I/we hereby certify that the payment of all dues to the workers employed in the establishment having registration no. _____ dated _____ has been made.

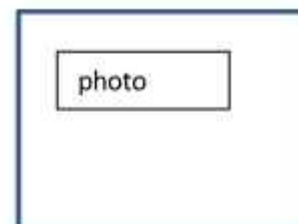
I/we hereby certify that the establishment having registration no. ____dated____kept free from storage of hazardous chemicals and substances.

[Strikeout whichever is not applicable]

To,
The Registering Officer
The Inspector-cum-Facilitator

Signature of the
Employer

FORM-VII
(See rule 5(2))
HEALTH EXAMINATION



PART -A (Sl.No.1-11) : To be filled by the Employee:

1. Name of employee..... 2. Gender.....
3. Age (with DOB)..... 4. Company.....
5. Designation..... 5(a). UAN
- 5(b) Aadhaar Number (after obtaining consent)
6. In-charge Employer / Executive Contacts.....
7. Complete personal /plant Address
8. Mobile /Phone 9.Email.....
10. Medical illness (Current) and under treatment & medication, If any.....
-
11. Nature of Job (furnish more details, if hazardous and work-related viz. Physical, Chemical, Biological, Ergonomic etc)

Date:

.....
 Signature of Employee

PART-B:

12. Medical Test Carried out & Reports to be Attached as Annexure. Medical Officer's interpretation/ Opinion of the Tests below (To be indicated only if abnormal, with reference to the attached Test reports) :

- a. Ht. (in cm)
- b. Wt. (in Kg)
- c. Chest measurement:
 - (i) On inspiration..... cm
 - (ii) On expiration..... cm
- (d) Waist Circumference
- (e) Body Mass Index:
- (f) Vision (Ophthalmologist tests):
 - i. Visual Acuity both Right & left eyes
 - ii. Colour Vision.....
- (g) Blood Pressure (mm Hg).....
- (h) Complete Blood Count: (Hb, TLC, DLC, Platelets).....
- (i) Fasting Blood Sugar
- (j) Post Prandial Blood Sugar.....
- (k) SpO2.....
- (l) Blood Urea
- (m) S. Creatinine
- (n) S. Bilirubin (Total + direct)
- (o) SGOT
- (p) SGPT.....
- (q) Lipid profile (S. Cholesterol / Triglyceride / S.HDL)
- (r) S. TSH
- (s) X-ray Chest (PA view)
- (t) ECG.....
- (u) Others if any.....

13. Final Diagnosis/ Opinion / Treatment if any, advise by qualified medical practitioner

14. Does the person have seizure(s) related disorders or difficulty in working at height?
If yes, specify the works to be avoided: Yes/No/ NA (Not applicable)

Date:

Signature of the qualified medical practitioner
SEAL

FORM-VIII
(See rule 7(1) and rule 7(2))

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
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) Gender :

(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 them 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 them; or

(ii) acting in contravention of any orders given by or on behalf of their employer; or

(iii) acting without instructions from their 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 their place of works; :
- (b) The injured person was travelling with the express or implied permission of their 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 their 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 time when the injured person returned to 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-IX
(See rule 25)

NOTICE OF PERIODS OF WORK

Name of the Establishment..... Place..... District.....

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

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 employer :

Date :

FORM-X
(See rule 26(1)(i))
EMPLOYEE REGISTER

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

Name of Establishment:		
Name of the Employer/owner:		
PAN/TAN of the Employer		
Registration Number of the establishment (Labour Identification Number (LIN) shall be the Registration Number of the Establishment		
To be maintained for all employees of the establishments		
1.	Employee Code	
2.	Name	
	Middle Name	
3.	Surname	
4.	Gender	
5.	Father's/Mother's/ Spouse's Name	
6.	Date of Birth	
7.	Place of Birth	
8.	Nationality	
9.	Education level	
10.	Date of Joining	
11.	Designation	
12.	Category (unskilled, semi-skilled, skilled or highly skilled)	
13.	Type of employment (P/T/FT/T/B)**	
14.	Mobile Number	
15.	Universal Account Number (UAN)	
16.	PAN	
17.	Nominee (To be filled on the basis of Nomination form)	
18.	EPS/NPS	
19.	Details of Family	
20.	Details of Posting	
21.	Pay	
22.	Promotion	
23.	ESIC IP Insurance No.	
24.	Aadhaar number	

25. Bank A/c No.	
26. Bank	
27. Branch(IFSC)	
28. Present address	
29. Permanent address	
30. Service Book No.	
31. Date of Exit	
32. Reason for Exit	
33. Mark of Identification	
34. Photo	
35. Specimen Signature/Thumb Impression	
36. Remarks	

** (Permanent/Temporary/Fixed Term/Trainee/Badli)

Signature of Employer

Signature of Employee

FORM-XI
(See rule 26(1)(ii))

ATTENDANCE REGISTER-CUM-MUSTER ROLL
(The attendance register-cum-muster roll may also be maintained in electronically capturing, inter-alia the following details)

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

***Note:** Required in case register is maintained physically.

FORM – XII

(See Rule 26(1)(iii))

REGISTER FOR WAGES, OVERTIME AND DEDUCTIONS

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

Name of Establishment:		
Name of the Employer/owner:		
PAN/TAN of the Employer		
Registration Number of the establishment (Labour Identification Number (LIN) shall be the Registration Number of the Establishment)		
Wage Period from dd/mm/yyyy to dd/mm/yyyy (Monthly/Fortnightly/Weekly/Daily/Piece Rated)		
1.	Serial Number	
2.	Employee Code Number	
3.	Name of the employee	
4.	Designation	
5.	Department	
6.	Duration of Payment of wages (Monthly/Fortnightly/Weekly/Piece rated)	
7.	Wage Period from- to	
8.	Total number of days worked during the wage period	
9.	Total overtime hours worked or overtime production in case of piece workers	
Rate of Wage		
10.	a)Basic	
11.	b)DA	
12.	c)Other allowance	
13.	Basic	
14.	DA	
15.	Allowances	
16.	Overtime	
17.	Total wages earned	
Deductions		
18.	EPF	
19.	ESIC	
20.	Society	
21.	Income Tax	
22.	Insurance	
23.	Advances	
24.	Recovery of Fine	

25	Recovery on amount of damages/losses	
26	Total deductions	
27	Others	
28	Net Payment	
29	Date of Payment	
30	Receipt by employee/Bank Transaction ID	
31	Nature of acts and omissions for which fine imposed with date	
32	Amount of fine imposed	
33	Damage or loss caused to the employer by neglect or default of the employee	
34	Signature of Employer/Employer Representative*	

***Note: Required in case register is maintained physically**

FORM – XIII
(See rule 26(2))
Wage slip

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

***Note: Required in case register is maintained physically.**

FORM-XIV
[See rule 26(5) r/w
rule 30] ANNUAL
RETURN

FOR THE YEARENDING 31st December.

Instructions for filling up the Annual Return										
(1) This return shall be filled-up and furnished on or before the 28 th or 29 th day of February every year. (2) This return consists of two parts i.e. Part-I, which shall be filled up by all establishments. (3) Part-II shall be filled-up only by the establishments that are Mines in addition to Part-I. (4) The terms "establishment" and "mines" shall have the same meanings as assigned to them in the Occupational Safety, Health and Working Conditions Code, 2020. (5) This return shall be filled-up in the case of contractor or manpower supplier who has engaged more than 50 workers and in the case of mines, even where one worker was employed during the relevant period.										
Applicable to All Establishments - Part-I										
A. General Information:										
Sl. No.					Instructions for filling the column					
1.	Labour Identification Number				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 (employer)									
5.	Telephone No. (employer)									
6.	Mobile number (employer)									
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									
	Number of hours in a shift									
C. Details of Manpower Deployed										
Details		Directly employed				Employed through Contractor				Grand Total
Skill Category		Highly skilled	Skilled	Semi-Skilled	Un-Skilled	Highly Skilled	Skilled	Semi-Skilled	Un-Skilled	
(i) Maximum No. of employees employed in the establishment in any day during the year		M/F/T	M/F/T	M/F/T	M/F/T	M/F/T	M/F/T	M/F/T	M/F/T	
(ii) Average No. of employees employed in the establishment during the year		No. to be indicated	M/F/T	M/F/T	M/F/T	M/F/T	M/F/T	M/F/T	M/F/T	
(iii) Maximum number of Migrant Worker during the year (Section 59 of OSH&WC Code)		M/F/T	M/F/T	M/F/T	M/F/T	M/F/T	M/F/T	M/F/T	M/F/T	
(iv) Number of fixed term employee engaged		M/F/T	M/F/T	M/F/T	M/F/T					

D. Details of contractors engaged in the Establishment:				
Sl. No.	Name with LIN 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&WC Code, 2020)	Tick yes or no in the box and not applicable	Applicable to all establishments wherein 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&WC Code 2020)	Tick yes or no in the box and not applicable	Applicable to all establishments where fifty or more workers are employed	
2a	If 2 above is not given than whether Crèches allowance under Rule.. of Social Security Code given.	Tick yes or no in the box and not applicable	Reference rule.. on Social Security	
3.	Ambulance Room (as per section 24(2)(i) of OSH&WC Code, 2020)	Tick yes or no in the box and not applicable	Applicable to mine, building or other construction work wherein more than five hundred workers are ordinarily employed	
4.	Safety Committee (as per section 22(1) of OSH&WC Code, 2020.	Tick yes or no in the box and not applicable	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&WC Code, 2020)	No. of safety officers appointed	In case of mine 100 or more workers, in case of BOCW 250 or more workers and in case of dock work 500 or more workers are ordinarily employed.	
6.	Qualified Medical Practitioner (as per section 12 (2) of OSH&WC 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:				Instructions for filling
1.	Is the Works Committee has been functioning. (Section 3 of IR Code, 2020)	Yes/No and not applicable	Industrial establishment in which 100 or more workers are employed	
(a)	Date of its constitution.			
2.	Whether the Safety Redressal Committee constituted (Section 4 of IR Code, 2020)	Yes/No and not applicable	Industrial establishment employing 20 or more workers	
3.	Number of registered Unions in the establishments.			
4.	Whether any negotiation union exist (Section 14 of IR Code, 2020)	Yes/No		
5.	Whether any negotiating council is constituted (Section 14 of IR Code, 2020)	Yes/No		
6.	Number of workers discharged/dismissed, retrenched or whose services were terminated during the year:			
	Dismissed	Retrenched	Discharged /Terminated or Removed	Grand Total

7. Man-days lost during the year on account of					
Sl. No.	Reasons	Period /Date	No. of man-days lost		
(a)	Strike				
(b)	Lockout				
8. Details of retrenchment / lay off					
Sl. No.	No. of persons retrenched during the period	Details of payment paid to retrenched employees	No. of workers laid off during the period	No. of man-days lost due to lay-off	Applies on industrial establishment employing 300 or more workers

G. Details pertaining to maternity benefit:				
No. of female employees	No. of female employees availed maternity leave	No. of female employees paid medical bonus	No. of deduction of wages, if any made from female employees	

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

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

J. Man days and production lost due to accidents / dangerous occurrences		
Sl. No.	Accident/Dangerous Occurrence	Man days lost

Dated:

PART II**[See rule 49(9)]**

ANNUAL RETURN period ending 31st December
(to be submitted by the principal employer)

1. Name of the principal employer:
2. Name of the establishment:
3. Registration number (LIN) of the establishment:
4. Details of the Contractors, wages paid, etc.:

Sl.	Month	Name and address of the contractors	LIN of the contract or	Name of the work	Maximum number of contract labour employed	Amount paid against wage bill (if applicable) to the contract or (including EPF, ESIC, Bonus etc.)	Date of payment of wage bill (if applicable)	Amount of the wages paid directly to the contract labour by Principal Employer (in case the contractor fails to pay)	Date of payment of wages paid directly to the contract labour by Principal Employer (in case the contractor fails to pay)	Remarks

Date:**Signature of the principal employer**

PART III
(see rule 26(8))

Self-Declaration form for EPFO/ESIC Contribution	
Year:	
PAN No:	LIN: (Auto-Populated)
EPF Code No. (Auto-Populated)(Editable): Branch Code Nos. (Auto-Populated)(Editable):	ESI Code No. (Auto-Populated)(Editable): Sub Code Nos. (Auto-Populated) (Editable):

Statement of salary/wages and contribution in r/o of EPFO

1	2	3	4 =(2+3)	5	6	7	8=(5+7)	9	10	11	12=(9-10)	13
Month & Year	Total No. of employees eligible for membership under SS Code/Scheme	Total no. of employees not eligible for membership under SS Code/scheme	Total no. of employees employed	Total Wages paid to employees eligible for membership under SS Code/scheme	Total EPF Wages paid to employees eligible under SS Code/scheme	Total Wages paid to employees not eligible under SS Code/scheme	Total wages paid to all employees	Total Contribution Payable (Based on column 6)	Total contribution paid	Date of payment	Balance to be paid	No. of employees to whom dues to be paid
04/20..												
05/20..												
06/20..												
07/20..												
08/20..												
09/20..												
10/20..												
11/20..												
12/20..												
01/20..												
02/20..												
03/20..												

- Upload Salary sheet of contribution details of all members as per **Form-XII**
(Register of Wages, Overtime & Deduction)

Details of Employees non-enrolled but eligible to be member:								
Sr. No	Name of Employee	Gender	Aadhaar Number	Father's Name	Date of Birth	Date of Joining	Date of Exit (If already left)	Wages paid

Contractors details:						
S.No.	Name & Address of the contractor	EPF code No.	ESI code No.	Nature of work	Maximum Number of employees employed during any day	Total payment made during the FY

<*contractor details may be pre-filled from CLC Licence data if available with option to add other contractors>

Details of tax benefit claimed by employer by way of contribution towards a recognized provident fund or an approved superannuation fund u/s 36(1)(iv) of Income Tax Act:

Financial Year	Contribution	Tax benefit

UPLOAD DCOUMENTS:

S. No.	DOCUMENT Name	<upload field in portal>
1.	Balance Sheet*	<upload field for Balance Sheet of the financial year>
2.	Form 26AS*	<upload field for Form 26AS of the financial year>
3.	Form 26Q*	<upload field for Form 26Q of the financial year>

*mandatory field

(Signature of the Employer/authorized representative)

***Section 36(1)(iv) of Income Tax Act:**

any sum paid by the assessee as an employer by way of contribution towards a recognised provident fund or an approved superannuation fund, subject to such limits as may be prescribed for the purpose of recognising the provident fund or approving the superannuation fund, as the case may be; and subject to such conditions as the Board may think fit to specify in cases where the contributions are not in the nature of annual contributions of fixed amounts or annual contributions fixed on some definite basis by reference to the income chargeable under the head "Salaries" or to the contributions or to the number of members of the fund;

FORM XV
[See rule 26(5) and 49(7)]

Half Yearly Return (January to June / July to December) to be submitted electronically by the contractor

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

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

Date:

Signature of the contractor:

FORM-XVI
(See rule 27)

REGISTER OF ACCIDENTS AND DANGEROUS OCCURRENCES

Name of injured/deceased person (if any)	Date of accident or dangerous occurrence	Date of report to Inspector-cum-Facilitator	Nature of accident or dangerous occurrence	Date of return of injured person to work	Number of days the injured person was absent from work	Signature of employer/representative
1	2	3	4	5	6	7

FORM-XVII**(See rule 28)****REGISTER FOR LEAVE WITH WAGES**

Part I - Adults

Part II - Adolescents

Establishment:

Name of worker :

Department :

Father's Name:

S L N o	Sl.no. in the regist er of workers	Da te of ent ry int o ser vic e	Interruptions					Le av e du e wit h eff ect fro m	Whet her leave not desir ed durin g the next 12 mont hs	Date from whic h the work er is allo wed leave	Wage s for Leave Paid in	Disc harg ed work er		Leave	Remarks
			Sickn ess and accide nts	Aut hor i sed Lea ve	Lock Out or Lega l Strik e	Invol unta r y une mplo y men t	Oth ers					Date of Disc harg e	Date and amount of payment made in lieu of leave due	Accu mulat ed carry forwar d leave	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Note: - Separate page shall be allotted to each worker

Signature of Employer/Register Keeper/Representative

FORM-XVIII
[See Rule 32(1)]
IMPROVEMENT
NOTICE

To,

Name of the Establishment
(Employer / Principal Employer /
Contractor) Address

Sub- Notice regarding contraventions observed under the OSH & WC Code, 2020,
OSH & WC (Central) Rules, 2026, Regulations, Standards and Orders made
thereunder, in respect of (Name of the establishment)

Sir / Madam,

- (1) It is to inform that the undersigned conducted inspection of.....
(name of the establishment), engaged in the work of
..... (name
of work) located at on.....(date).
- (2) The particulars of the establishment inspected and the contravention(s) of the
provisions of the OSH&WC Code 2020, OSH & WC (Central) Rules, 2026, Regulations,
Standards, Notifications and Orders made thereunder observed during inspections
are annexed herewith.
- (3) You are hereby directed to rectify the contraventions / irregularities observed
during inspections and submit compliance report (through speed post/electronic
mode / designated portal) within 30 days from the date of issue of this notice,
failing which necessary action will be initiated as per the relevant provisions
of the statute without making any further correspondence in this regard.

Yours faithfully,

Encl: As above.

Inspector-cum-Facilitator.

FORM- XIX
[See rule 124(1)]

APPLICATION FOR COMPOSITION OF OFFENCE

1. Name of applicant:
2. Father's / Spouse name:
3. Address of the applicant:
4. Name of establishment:
5. Particulars of the offence:.....
.....
.....
6. Section of the Code under which the offence is committed :.....
7. Maximum fine provided for the offence under the Code :.....
8. Whether prosecution against the applicant is pending or not
9. Whether the offence is a first offence or whether the applicant has committed any other offence prior to the offence. If yes, then, full details of such prior offence
.....
.....
10. Any other information which the applicant desires to provide
.....
.....

Dated:

Applicant
(Name and signature)

FORM-XX
[See rule 124(1)]

Notice to the employer for an offence committed under the provisions of the Code for the first time for composition of offences

Notice No.....

Date:

On the basis of records and documents produced before me, the undersigned has reasons to believe that you, being the employer of the establishment..... (Registration No), have committed an offence for the violation of provision of the Code or the Schemes or the Rules or the Regulations or the Standards framed thereunder as per the details given below:-

PART – I

1.	Name of the person:	
2.	Name and Address of the establishment :	
3.	Registration No. of the establishment:	
4.	Particulars of the offence:	
5.	Provisions of the Code/Scheme/Rules/Regulations under which the offence is committed:	
6.	Amount required to be paid for compounding of the offence:	
7.	Name and details of account for depositing the amount specified in serial no. 6:	

PART-II

In view of the above, you have an option to pay the entire amount mentioned at serial no. 6 in Part-I within fifteen days from the date of issue of this notice and return the application duly filled in Part – III of this notice.

In case the said amount is not paid within the specified time, necessary action for institution of prosecution shall be initiated without giving any further opportunity in this regard.

Date:

Place:

To:

(Signature)

(Name and designation of Officer)

...

..... **(Employer/Establishment)**

..... **(Name and registration number)**

..... **(Address)**

PART – III
[See rule 124(2)]

Application under section 114 for composition of offence

Ref: Notice No.....

Date:

The undersigned has deposited the entire amount as specified at serial 6 of Part-I and the details of payment are given below with a request to compound the offences mentioned in Part-I.

8. Details of the compounding amount deposited (Copy of the electronically generated receipt to be attached):
9. Details of the prosecution, if any filed in respect of the violation of the above-mentioned offences:
10. Whether the present offence is a first offence or whether the applicant has committed any other offence prior to this offence, if so, then, full details of such offence:
11. Any other information which the applicant desires to provide:

Date:

Signature of the applicant
(Name and Designation)

Place:

To:

..... **(Compounding Officer)**

.....**(Name of the Office)**

..... **(Address)**

PART – IV
[See rule 124(3)]

Composition Certificate

Ref: Notice No.....

Date:

This is to certify that the offence under sub-section of section 114 in respect of which Notice No. Dated: ____ was issued to Sh/Smt. (Applicant), the employer of (name and registration number of the establishment) has been compounded on upon receipt of the full amount of Rs (Rupees ____) towards compounding of the offence, to the satisfaction of the requirements of the said notice.

Date:

(Signature)

Place:

Name and Designation of the Officer

To:

..... **(Employer/Establishment)**

..... **(Name and registration number)**

..... **(Address)**

FORM-XXI
[See rule 39 and rule 47(1)]

Application for Grant of Licence/ Renewal of Licence/Amendment of Licence (including common/single licence)						
Government of India, Ministry of Labour and Employment						
ESTABLISHMENT PROFILE:						
Labour Identification Number				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) : e-sign/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 work wise)						
Location s of worksites	Name of works	Activity as per national industrial classification	Date of commence ment	Date of completion	Name of Establishme nts 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 contract labour employed / proposed to be employed	
1	2	3	4	5	6	

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

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

Signature of Contractor**(e-Sign/DSC)****Note:** This is an online application summary applied on Shram Suvidha Portal or designated Portal.**APPLICATION FOR RENEWAL OF LICENCE**

1. Licence No.	Date :
2. LIN & PAN	
3. Name and address of the establishment:	
4. Date of expiry of previous licence :	
5. Whether the licence of the employer/contractor was suspended or revoked:	
6. 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 contract labour presently employed : When there is an increase in the maximum number of contract labour to be employed, the additional fee/security deposit required under law shall be deposited:	
(b). Details of fees paid through e-payment date on which made :	
(c). 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.

Date

:-

Place

:-

FORM-XXII
(See rule 40(1) and rule
41) PROFORMA OF
LICENCE

Licence No. ----- Reg. No. ----- Date of Reg. -----

Licence is hereby -----
 granted to for the -----
 premises known as -----
 situated at -----
 nature of work -----

for use as a establishment within the limits stated herein after, subject to provisions of the Occupational Safety, Health and

Working Conditions Code, 2020, and the rules made there under.

The ----- 20.. Issuing Authority

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

AMENDMENTS:

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

E-sign /digital sign of the designated authority

FORM-XXIII
(See rule 51)

EXPERIENCE CERTIFICATE OF CONTRACT LABOUR

To whomsoever it may concern

1. Name of contractor/employer*:
2. LIN/PAN No. of the contractor/employer *:
3. Email Id of the contractor /employer *:
4. Mobile No. of the contractor/employer *:
5. Nature and location of work:
6. Name of principal employer*:
7. LIN/PAN No. of the principal employer .*
8. Email Id of the principal employer : *
9. Mobile No. of the principal employer :*
10. Name of the labourer*:
11. UAN / Aadhaar No.:
12. Mobile No. :
13. Serial Number in the employee register :
14. Registration number, date and name of the Board where the building or other construction work is registered as a beneficiary:
15. Period of employment:
16. Designation:
17. Work performed:
Seal and Signature of Contractor
*Strike off whichever is not applicable.

FORM-XXIV**(See rule 56)****Agreement between Producer and Audio-visual worker**

This agreement is made on this day monthyear..... between M/s having office at (hereinafter referred to as the "Producer") on the first part and Shri/Smt/Kumarison/daughter/wife of Shri residing at (herein 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 production 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 their confirmation, to perform their respective job punctually as and when he shall be required by a written intimation by the Producer or the person duly authorised by them in writing.
3. That inconsideration of the audio-visual worker's 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 installments.
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 scheduled time of the shift, for preparatory work, and in that case, audio-visual worker shall be paid by the Producer extra wages at the rate of Rs. per hour or part thereof for such early attendance.

- (b) continue to work beyond the working day, with one hour break and in that case, audio-visual worker shall be paid by the Producer extra wages at the rate of Rs. for the work during the extended hours and refreshments, and transport facilities.

7. That the Producer shall provide transport and food or pay 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.

8. That the Producer shall also pay for all travelling and accommodation expenses, fares, cost of food and such other allowances as are customary when the audio-visual worker is required to work on location outdoors.

9. That the Producer shall get the audio-visual worker insured for any injury or damage to such person including death caused by accident arising out of or in the course of their employment and/or during the period of their assignment under this agreement.

10. That where the Producer is prevented from proceeding with the production of the audio-visual by reason of fire, riot, natural calamity, order of the public authority or any other reason beyond their 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 their 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.

11. That in case if the Producer desires to terminate this agreement before the expiry of its term for reasons other than misconduct in relation to performance of the audio-visual worker's duties or of their 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 their place.

12. That the Producer shall have the right to terminate this agreement on ground of misconduct on the part of the audio-visual worker in relation to performance of their duties or their 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 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.

13. That in case of premature termination of this agreement, it shall be the option of the Producer whether or not to retain the work of the audio-visual worker in the audio-visual and at the same time, it shall be the option of the audio-visual worker whether or not to allow their name to go on the credit titles of the film.

14. That the Producer shall have the right to decide the manner of representing the audio-visual worker's personality on the screen, their 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 them.

15. That the audio-visual worker agrees to render their services to the best of their ability in such manner as the Producer or, at their instance, the Director of the audio-visual may direct and shall comply with all reasonable instructions that he may give for the production of the film.

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

17. 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.

18. That the provisions of Chapter-III of Code on Social Security, 2020 (36 of 2020) shall be applicable to this agreement.

19. 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-XXV*{See sub-rule (1) of rule 58}***Application for Grant / Renewal of License for Beedi and Cigar Work****1. Full name of the industrial premises:**
_____**2. (i) Full postal address and situation of the industrial premises:**
_____**(ii) Full address to which communication relating to the industrial premises should be sent:**
_____**(iii) Full address of the applicant*:**
_____**3. Maximum number of employees proposed to be employed on any one day during the financial year:** _____**4. Full name and residential address of the person who shall be the employer for the purposes of the Code:**
_____**5. If the employer is a partnership company, full name and residential address of other partners or directors:**
_____**6. Financial resources of the employer (e.g., particulars and value of movable and immovable properties, bank reference, income-tax assessment):** _____**7. Whether the employer is a trade mark holder registered under the Trade and Merchandise Marks Act, 1958: Yes / No****8. Whether the proposed site of the industrial premises amounts to the alteration of the site of any existing industrial premises and, if so, the reasons for such alteration:**
_____**9. Source of obtaining tobacco:**
_____**10. Whether the beedis or cigars or both manufactured by the applicant* will be sold and marketed by himself or through a proprietor or a registered user of a trade mark registered under the Trade and Merchandise Marks Act, 1958, or any other person:**
_____**11. Whether the plans of the premises are enclosed: Yes / No**

12. Amount of fee paid: Rs. _____

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

Date: _____
Applicant*: _____

Signature of

Note: Where industrial premises are run or proposed to be run by a contractor for or on behalf of another person or persons or company, the said other person or persons or company is under the Act the employer and particulars to be entered for "employer" in the Form should be in regard to such person, persons or company.

**The applicant for license may, however, be either the contractor or the employer.*

FORM-XXVI*{See sub-rule (5) of rule 58 and sub-rule (2) of rule 66}***Form of Declaration by Employer**

I/We, hereby declare that the contents given in the application for license is true and complete in all respect and I/We fulfill the requirement of the license as provided in provisions of Occupational Safety Health and Working Conditions Code, 2020 and West Bengal rules made thereunder.

I/We further declare that I/We will be fully responsible for any of the particulars given in the application and if any of the contents found incorrect the license given to me/us may be withdrawn by the Authorities under the Code, 2020.

Date: _____
Place: _____
Address): _____

Signature (Name and

FORM-XXVII*{See Rule 62 }***Licence / Registration Form**

Registration No: _____

Licence No: _____

Fee paid: Rs. _____

Licence is hereby granted to _____

valid only for the premises described below for use as an industrial premises employing not more than _____ employees on any one day during the year subject to the conditions specified in Annexure.

The licence shall remain in force till the 31st day of March _____

Name of industrial premises: _____

Situation of the industrial premises: _____

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

Date: _____
the Authority

Signature and Seal of

Renewal *{See Rule 4}*

S.No.	Date of renewal	Fees paid for renewal	Date of expiry
1			
2			
3			
4			

Signature and Seal of the Authority

Annexure

This licence is subject to the following conditions:

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

FORM-XXVIII*{See Rule 63}***Record of White Washing, Colour Washing, Varnishing, Painting and Cleaning**

Part of industrial premises (name of room)	Parts white washed, colour washed, painted, varnished (walls, ceilings, woodwork etc.)	Treatment whether white washed, painted, varnished or cleaned	Date on which white washing, painting, varnishing or cleaning was carried out (DD/MM/Y Y)	Remarks	Signature of employer or manager

FORM-XXIX*{See sub-rule (1) of rule 68}***Record of outside work**

Number and date of Government Order permitting work outside the industrial premises: _____

Date	Place or places where outside work was permitted	Nature of work	Name of employee	Remark
1	2	3	4	5

FORM-XXX*{see sub-rule (2) of Rule 68}***Home worker's log book**

1. Name of home-worker: _____
2. Address of the home-worker, where the manufacturing process is carried on: _____
3. Month and year: _____

4. Account of work done at home

Date	Raw material supplied to the worker			signature or thumb impression of the worker	No. of beedis received by the employer
	tendu patta	tobacco	thread		
1	2	3	4	5	6

No. of standard beedis	No. of sub-standard or chhat beedis	wages payable for standard beedis	to the worker for sub-standard or chhat beedis	wages paid to worker
7	8	9	10	11

Date	Amount of wages to date in arrears	signature or thumb impression of the worker	Signature of the employer
<i>12</i>	<i>13</i>	<i>14</i>	<i>15</i>

FORM-XXXI*{See sub-rule (2) of rule 69}***Form of Approval of plans and permission for site.****1- Name of the factory:** _____**2- Location of the factory (if possible geo-mapping):**
_____**3- Name of the employer:** _____**4- Address, telephone number and E-mail Id of the employer:**
_____**5- Name and Address, telephone number and E-mail Id of the Occupier:**
_____**6- Name and Address, telephone number and E-mail Id of the Manager:**
_____**7- Activity or proposed activity as per national industrial classification:**
_____**8- Detail of selected NIC code:** _____**9- Number of the workers employed or to be employed:**
_____**10- Details of power used or to be used:**

Signature
(Name and Address)

FORM-XXXII

{See clause (a) & (d) of sub-rule (3) of rule 69 and sub-rule (6) of Rule 69}

Particulars of rooms in the factory

N a m e of r o o m in f a c t o r y	Dimensions in feet					T o t a l a r e a in s q u a r e f e t	F l o o r a r e o c c u p i e d b y m a c h i n e r y	B r e a t h i n g s p a c e (c u. f t.)	T o t a l v o l u m e o f a i r	N u m b e r & s i z e o f d o o r s	Ventilation			T o t a l a r e a (s q u. f t.)	M a x i m u m l o a d i n t e n d e d	S t o r a g e r o o m o n l y? (Y / N)	D a t e o f c o n s t r u c t i o n	R e m a r k s
	L e n g t h	B r e a d t h	H e i g h t								W i n d o w s (N o. & s i z e)	S k y l i g h t s (N o. & s i z e)						
			M a x	M i n	A v g													
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19

Signature of the Occupier: _____

Signature of the Manager: _____

Questionnaire Annexed to Form-XXXII

Careful attention to the questionnaire will assist in drawing up the plans in accordance with the law, and thus prevent delay in dealing with the plans.

Note: The site-plans should be drawn to a minimum scale of 100'-1" and the other plans drawn to a minimum scale of 10'-1"

1. Plans—

- (a) Has a site-plan showing the immediate surroundings including adjacent buildings and other structures, roads, drains, etc., been submitted in triplicate.
- (b) If there is a system of underground sewage within 100 ft. of the factory, has its position been shown in the site plan?

- (c) Have the directions i.e., north, south, east and west been shown on the site-plans as well as on the detailed plans?
- (d) Have the municipal nos. or the field nos. of the premises and the surrounding areas been shown on the site-plan?
- (e) Have the factory premises been clearly demarcated in the site-plan in distinctive colour?
- (f) Have the detailed plans of the factory indicating all relevant details relating to doors, windows, ventilators, fire escapes, etc., been submitted in triplicate?
- (g) Are all new buildings, parts of buildings (if extensions) or alterations in existing buildings shown by boundaries duly marked in a distinctive colour?
- (h) Are all rooms, sheds, enclosures, etc., serially numbered inside a circle on the plans, corresponding to the serial entry in Form-42?
- (i) Are the outlines of all rooms, sheds, enclosures, etc., shown in the site-plan and allotted the same number as in Item 1(h) above?
- (j) Is the Sectional elevation of such a room or shed, etc., shown separately?
- (k) Is the minimum and maximum height of every room, shed, etc., shown clearly in the Sectional elevation?
- (l) Is the material of which the roof is constructed indicated in the Sectional elevation?
- (m) Are the heights of all the workrooms in accordance with the provisions of Rule 70 as under:
 - (i) Is the minimum height 20 ft. with C. I. sheet roofing?
 - (ii) Is the minimum height 14 ft. with A. C. sheet roofing or R.B./R. C. C. roofing?
 - (iii) Has an inner ceiling of a heat resisting material with an air gap of at least 4" been provided at a minimum height of 14 ft. and the name of the heat resisting material given?
 - (iv) Has an exemption been sought for a height of up to 12 ft. R.B/R. C. C. roofing?
 - (v) Has an exemption been sought for on the assurance of not employing more than 150 employees in the factory on any day?
- (n) Is the minimum distance of the nearest building from latrines and urinals shown on the plans?
- (o) Is the minimum distance of the nearest well, hand-pump or other drinking water centres shown in the drawing?

- (p) Are water centres shown on the plans?
- (q) Are the sizes of all the doors and ventilators shown on the plans along with their exact position?
- (r) Are all the drains, pipes and sewers for carrying sullage sewage water effluent and waste products running within the factory premises constructed and shown in the plans?
- (s) Are the positions of various machines fitted or proposed to be fitted shown in the drawings together with their names?

2. Form No-XXXII—

- (a) Is Form No-XXXII submitted in triplicate, filled in for all workrooms, godowns, etc. which are proposed to be constructed or extended?
- (b) Have the internal dimensions only been entered in all the columns of Form No-42?
- (c) Is the breathing space of workroom, shed, etc., calculated as shown below:
Floor area of room x its mean height (height above 14 ft. has to be left out of calculation).
- (d) Is the maximum capacity entered in Column No. 15 of Form No-42? The maximum number of persons shown as the lower value of the two calculations shown below:
 - (i) Floor area of a room less area occupied by machinery in the room divided by 36 [Rule 70(2)].
 - (ii) Breathing space [as in (c) above] divided by 500.
- (e) Have the maximum number of persons as worked out above (lower value) been also shown on the plans for each workroom corresponding to Column No. 15 of Form No-42?
- (f) Is the window, ventilator and skylight area provided at the minimum rate of 1 sq. ft. to every 15 sq. ft. of floor area of the room? (Section 23 (2) (II) & its rule)?
- (g) Can the windows and skylights under Columns Nos. 12 and 13 of Form No. 42 all be opened for ventilation?
Note: It is recommended that windows and skylights may be provided one opposite to another so as to provide cross ventilation.
- (h) Has a flow chart of the manufacturing process supplemented by its brief description in various stages been submitted in triplicate? [Rule 69(1) (b)]

3. Doors and ventilators.—

- (a) Is every work room provided with at least two doors or exits?
- (b) Is the minimum size of every door or exit 6'-6" x 3'?
- (c) Have any doors or ventilators in common with two adjacent rooms been counted in both?

- (d) Are all the doors opening outwards?
- (e) Do the windows and skylights entered under Cols. 12 and 13 of Form No-XXXIII actually serve the purpose of ventilation?

4. Fire Escapes (In case of buildings of more than one story)—

- (a) Are two fire escapes provided on either side of the building?
- (b) Are the fire escapes accessible from every room in the upper floor in the buildings?
- (c) Is the material used in construction of the fire escapes non-combustible?
- (d) Are the windows, doors giving access to an external staircase arranged to open immediately from inside?
- (e) Is any fire escape or stairway constructed at an angle greater than 45 degrees with the horizontal?
- (f) Is any fire escape or stairway less than 45 inches in width?
- (g) Is any part of the factory building further (along the line of travel) than 150 ft. from the fire escape stair?
- (h) Have the particulars given against Items 4(e), (f) and (g) above been also clearly shown in the various drawings being submitted?
- (i) Is the setback area of the factory and its premises uncovered and free from obstruction?

5. Latrines and urinals.—

- (a) Are the latrines and urinals provided separately for men and women?
- (b) Are these sufficient to meet the requirements of Section 23(2)(viii) read with its Rules?
- (c) Is the surrounding ground up to a distance of 4 ft. all round of impermeable material?
- (d) Is the surrounding ground raised to at least 6" above the ground level?
- (e) Is any latrine, ventilator or opening in the proximity of any opening of the main building?
- (f) Do any latrines or urinals communicate with any work room without any intervening space open to the sky?
- (g) Are the latrines of the flush type?
- (h) Are all the drains, pipes and sewers for carrying sullage, sewage water effluent and waste products running within the factory premises constructed of impermeable material?

- (d) Are all the doors opening outwards?
- (e) Do the windows and skylights entered under Cols. 12 and 13 of Form No-XXXIII actually serve the purpose of ventilation?

4. Fire Escapes (In case of buildings of more than one story)—

- (a) Are two fire escapes provided on either side of the building?
- (b) Are the fire escapes accessible from every room in the upper floor in the buildings?
- (c) Is the material used in construction of the fire escapes non-combustible?
- (d) Are the windows, doors giving access to an external staircase arranged to open immediately from inside?
- (e) Is any fire escape or stairway constructed at an angle greater than 45 degrees with the horizontal?
- (f) Is any fire escape or stairway less than 45 inches in width?
- (g) Is any part of the factory building further (along the line of travel) than 150 ft. from the fire escape stair?
- (h) Have the particulars given against Items 4(e), (f) and (g) above been also clearly shown in the various drawings being submitted?
- (i) Is the setback area of the factory and its premises uncovered and free from obstruction?

5. Latrines and urinals.—

- (a) Are the latrines and urinals provided separately for men and women?
- (b) Are these sufficient to meet the requirements of Section 23(2)(viii) read with its Rules?
- (c) Is the surrounding ground up to a distance of 4 ft. all round of impermeable material?
- (d) Is the surrounding ground raised to at least 6" above the ground level?
- (e) Is any latrine, ventilator or opening in the proximity of any opening of the main building?
- (f) Do any latrines or urinals communicate with any work room without any intervening space open to the sky?
- (g) Are the latrines of the flush type?
- (h) Are all the drains, pipes and sewers for carrying sullage, sewage water effluent and waste products running within the factory premises constructed of impermeable material?

We certify that the replies given to the questionnaire above are correct.

Signature of Manager: _____

Signature of Occupier: _____

N. B. (i) After showing the above details, the plans and site-plan, this questionnaire and Form-42 should all be submitted in triplicate to the Inspector-cum-facilitator having jurisdiction for the approval of the Chief Inspector cum facilitator, West Bengal.

(ii) A certificate of stability signed by a Competent Person having the qualifications, shall be submitted on Form-XXXIV before the manufacturing process with the aid of power is begun in the building.

FORM-XXXIII

(See clause (i) of sub-rule (3) of Rule 69, rule 71(1))

Certificate of Stability of a Factory or Part of a Factory

(To be submitted after completion and before working)

I hereby declare that I have personally examined the plans and specifications of the building described below, the actual materials and methods used in its construction and the finished building and I am satisfied that its construction is such that its stability will be satisfactory when used as factory or part of a factory for the purposes herein declared.

1.	Name of the factory: _____
2.	Name of builder (s) or Contractor (s): _____
3.	General type of construction: (a) Full name of signatory (in block letters): _____ (b) Qualifications: _____ (c) Present occupation: _____ (d) Permanent postal address: _____
4.	Purpose for which the building is to be used: _____
5.	Name of room or building for which this certificate is granted giving reference to plan no.: _____
6.	Nature of work to be carried on in the above room/building: _____
7.	Nature and amount of moving power: _____

Date: _____

Signature of Competent person (Name and Designation): _____

Signature of occupier (Name and Designation): _____

NOTE. The competent person as defined under section 2(l) of the Occupational Safety, Health and Working Conditions Code, 2020.

FORM-XXXIV*{see sub-rule (11) of rule 69}***Certificate of Approval of site-plan of factory**From,
_____To,
_____**Site plan no.: F/plan/lic:** _____ **Date:** _____**Subject: Regarding approval of new extension and revision of factory building plans and stability certificate.**

Sir/Madam,

Please refer to your on-line application regarding approval of the site-plan of new/ extension and revision of factory building plans and stability certificate dated _____ submitted to Chief Inspector-cum-Facilitator or (mention Licensing Authority).

Your aforesaid application is forthwith approved under the following conditions/reasons according to the provisions of occupational safety health and working conditions code 2020 and rules made there under:

Conditions/remarks-1: _____

Conditions/remarks-2: _____

Conditions/remarks-3: _____

Conditions/remarks-4: _____

Over all conditions/ remarks: _____

As well as the stability certificate dated _____ which is signed by _____ for the use of work room number/ as has been shown in the factory plans number _____ is approved for total _____ horsepower electricity/ and _____ horsepower diesel/oil engine, horsepower for use is approved. Besides this your attention is sought towards the provisions of these rules according to that before starting the work with the help of power, it shall be compulsory to issue and get the approval of the stability certificate.

Enclosed:

- 1. Plans
- 2. Site plans
- 3. Questionnaires
- 4. Form-42
- 5. Flow chart
- 6. Certificate of Stability (Form-XXXIII)

Yours faithfully,

Chief Inspector-cum-Facilitator

FORM-XXXV*{see Rule 70(1), rule 71(1) }***Notice of occupation for Registration and grant or Renewal/
amendment of License****LICENCE NUMBER:** _____Full name of the factory and its licence number, if already registered:
_____1. Postal address and situation of the factory including the police station,
tehsil and district with PIN code: _____2. Address to which communication Relating to the factory should be sent:

3. Contact Number of Factory: _____

4. Email Address of Factory: _____

5. Nature of manufacturing process/ processes—

(a) carried on in the factory during the next twelve months (in case of
factories already in existence).(b) to be carried on in the factory during the next twelve months (in case of
all factories).

(c) Details of National Industrial Classification-2008 (NIC) code:

(i) sub-class (6 digit): _____

(ii) description as per NIC: _____: _____

6. Names and values of the principal products manufactured during the last
twelve months: _____

7. Man power:

(a) Maximum number of workers proposed to be employed on any one day
during the year.(b) Maximum number of workers employed in any day during the last
twelve months.

(c) Number of workers to be employed in the Factory.: _____

8. Power to be used:

(a) Nature and total amount of power (kW.) installed or proposed to be
installed.

(b) Maximum amount of power (kW) proposed to be used.

Note: If power is not proposed to be used originally but is introduced later,

the fact should be immediately communicated to the Chief Inspector-cum-Facilitator.: _____

9. In the case of a factory constructed or extended after the date of the commencement of the rule:

(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-cum-facilitator.

(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.: _____

10. Full name, father's name and residential address of:

(a) The person who shall be Manager of the factory for the purposes of the code:

(b) The occupier of the factory:: _____

11. If the factory is covered by the provisions of Section 80 of the Code, full name, father's name, and address of the owner of the premises or buildings in which the factory is situated.: _____

12. Half Yearly (if applicable) & Annual return submitted (Yes/No): _____:

13. Date on which the Manager assumed charge: _____:

14. Date on which the occupier occupied the premises or will occupy the premises: _____:

15. Detail of fee (Amount of fee in Rupees paid through Bank / E-Challan / Electronically, reference number and date): _____:

16. Last annual return submission date: _____

17. Validity of No objection certificate for premises from **W.B** Fire control services: _____

Amendments in Licence

Year when amended	Valid for	Maximum number of workers on any one day	Total amount of power installed (KW)	Name of occupier employer	Update in address of premises	Details of Amendment in Licence
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>

I/ We certify that information given by me/us is true and correct to the best of my/our knowledge.

Date: _____

Full signature of occupier: _____

Full signature of manager: _____

Full signature of owner, if any: _____

Notes:

(1) This form should be completed in ink in block letters or typed.

(2) If any of the persons named against the item is minor the fact should be clearly stated.

(3) In the case of a factory where a Managing Agent or Agents have been appointed as occupiers under the Indian Companies Act, 1913 (VII of 1913), information required in the item should be supplied in respect of that person or persons.

FORM-XXXVI

{see sub-rule (3) of rule 70, sub rule (5) &(6) of rule 71, and rule 73}

LICENCE FOR FACTORY UNDER THE OCCUPATIONAL SAFETY, HEALTH
AND WORKING CONDITIONS CODE, 2020

(Licence to Work a Factory)

Registration No:- _____

Old Registration No:- _____

Date Of Issue :- _____

Licence is hereby granted to Sh /Smt

Fee Rs. _____ valid 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 _____ kW, subject to the
provisions of the Occupational Safety, Health and Working Condition Code,
2020 and the rules made thereunder.

This licence shall remain in force till _____ unless further
renewed.

Description of the Licenced Premises

The licenced Premises shown on plan No. _____ dated
____/____/____ are situated in M/S.

Address.

District:- _____ and consist of the premises shown on
approved site and detailed plan.

Licence Details & Capacity

Sl. No.	Period of issue	Valid for Maximum number of workers on any one day	Total amount of power installed (KW)	Challan number and date of payment
---------	-----------------	---	--------------------------------------	---------------------------------------

Details of Renewal of licence

Sl. No.	Date of renewal	Fees paid for renewal	Date of expiry
---------	-----------------	-----------------------	----------------

1			
---	--	--	--

2			
---	--	--	--

Signature of Chief Inspector-cum-Facilitator/

Licencing Authority

Note:

1- This is a computer generated licence.

2- This licence may be verified from the official website of the Directorate of Factories, Govt. of WB

3- This licence is issued solely on the basis of the information submitted by the applicant. The Directorate of Factories does not undertake responsibility for the correctness of the information contained herein.

4- This license shall remain in force subject to validity of NOC from Concerned Department.

FORM-XXXVII*{see sub-rule (2) of rule 73 and rule 76,83}***Notice of occupation**

LICENCE NUMBER: _____

For the year: _____

01- Full name of the factory and its licence number:
_____02- (a) Address and situation of the factory including the police station,
tehsil and district: _____

(b) Correspondence Address: _____

(c) Contact Number and Email Address of Factory:
_____03- Nature of manufacturing process/ processes carried on in the factory
during the next twelve months: _____04- Names and values of the principal products manufactured during the
last twelve months: _____05- (a) Maximum number of workers proposed to be employed on any one
day during the year: _____(b) Maximum number of workers employed in any day during the last
twelve months: _____(c) Actual number of workers employed in the Factory at present:
_____06- (a) Nature and total amount of power (H.P.) installed:

(b) Maximum amount of power (H.P.): _____

NOTE: *If power is not proposed to be used originally but is introduced later, the fact should be immediately communicated to the Chief Inspector-cum-Facilitator or Licencing Authority.*07- In the case of a factory constructed or extended after the date of the
commencement of the rule:(i) 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-cum-Facilitator:
_____(ii) 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: _____

08- Full name, father's name and residential address of:

(i) Who shall be Manager of the factory for the purposes of the Act:

(ii) The occupier of the factory: _____

09- If the factory is covered by the provisions of Section 80 of the Code, full name, father's name, and address of the owner of the premises or buildings in which the factory is situated: _____

10- Return submitted (Yes/No): _____

11- Date on which the Manager assumed charge: _____

12- Date on which the occupier occupied the premises or will occupy the premises: _____

I hereby declare that our factory is complying / will comply with all health and safety provisions of The Code 2020 to the best of my knowledge.

Full signature of occupier: _____

Date:

Full signature of manager: _____

FORM-XXXVIII*{See rule 77(2)}***Notice of change in Manager**

1. Name of factory with current licence number: _____
2. Postal address of the factory: _____
3. Name of outgoing manager: _____
4. Name of the new manager with his postal residential address and telephone number, if any: _____
5. Date from which new manager took over charge: _____

Date: _____

Signature of new Manager:

Place: _____

Signature of Occupier:

FORM-XXXIX*{see sub-rule (4) of rule 81}***Form of application to Site Appraisal Committee**

1. Name and address of the applicant: _____
2. Site ownership date: _____
 - a. Revenue details of site such as survey number, plot number, etc:

 - b. Whether the site is classified as Forest and if so, whether approval of the Central Government under section 5 of the Indian Forest Act, 1927 has been taken: _____
 - c. Whether the proposed site attracts the provisions of Section 3(2)(v) of the E.P. Act, 1986, if so, the nature of the restrictions:

3. Local authority under whose jurisdiction the site is located:

4. Site plan: _____
 - a. Site plan with clear identification of boundaries and total area proposed to be occupied and showing the following details nearby the proposed site:
 - i. Historical monuments, if any, in the vicinity:
 - ii. Names of neighbouring manufacturing units and human habitats, educational and training institutions, petrol installations, storages of LPG and other hazardous substances in the vicinity and their distances from the proposed unit:
 - iii. Water sources (rivers, streams, canals, dams, water filtration plants etc.) in the vicinity:
 - iv. Nearest hospitals, fire stations, civil defence stations and police stations and their distances:
 - v. High tension electrical transmission lines, pipelines for water, oil, gas or sewerages, railway lines, roads, stations, jetties and other similar installations: _____
- b. Details of soil conditions and depth at which hard strata obtained:

- c. Contour map of the area showing nearby hillocks and difference in levels: _____
- d. Plot plan of the factory showing the entry and exit points, roads within, water drains etc.: _____

-
5. Project report: _____
- a. A summary of the salient features of the project:
Maximum number of persons likely to be working in the factory: _____
 - b. Status of the organisation (Government, Semi-Government, Public or Private etc.): _____
 - c. [Field omitted in original text] _____
 - d. Maximum amount of power and water requirements and source of their supply: _____
 - e. Block diagram of the buildings and installations, in the proposed site: _____
 - f. Details of housing colony, hospital, school and other infrastructural facilities proposed: _____
6. Organisation structure of the proposed manufacturing unit/factory: _____
- a. Organisation diagram of:
 - i. Proposed enterprise in general:
 - ii. Health safety and environment protection departments and their linkage to operation and technical departments. _____
 - b. Proposed to health and safety policy:
 - i. Area allocated for treatment of waste and effluents:
 - ii. Percentage outlay on safety, health and environment protection measures. _____
7. Meteorological data relating to the site: _____
- a. Average minimum and maximum of:
 - i. Temperature
 - ii. Humidity
 - iii. Wind velocity during the previous ten years _____
 - b. Seasonal variations of wind direction: _____
 - c. Highest water level reached during the floods in the area recorded so far: _____
 - d. Lightning and Seismic data of the area: _____
8. Communication links: _____
- a. Availability of telephone/telex/wireless and another communication facilities for outside communication: _____
 - b. Internal communication facilities proposed: _____
9. Manufacturing process information: _____
- a. Process flow diagram: _____
 - b. Brief write-up on process and technology: _____
 - c. Critical process parameters such as pressure build-up, temperature rise and run-away reactions: _____

d. Other external effects critical to the process having safety applications, such as ingress of the moisture or water contact with incompatible substances, sudden power failure: _____

e. Highlights of the built-in safety/pollution control devices or measures incorporated in the manufacturing technology: _____

10. Information of hazardous materials: _____

a. Raw materials, intermediate products and by-products and their quantities (includes Material Safety Data Sheet in respect of each substance): _____

b. Main and intermediate storages proposed for raw materials/intermediates/products/by-products (maximum quantities to be stored at any time): _____

c. Transportation methods to be used for materials inflow and outflow, their quantities and likely routes to be followed: _____

d. Safety measures proposed for:

i. handling of materials

ii. internal and external transportation

iii. disposal (packing/forwarding of finished products):

11. Information on disposal/disposal of waste and pollutions:

a. Major pollutions (gas, liquid, solid) their characteristics and quantities (average and at peak loads): _____

b. Quality and quantity of solid waste generated, method of their treatment and disposal: _____

c. Air, water and soil pollution problems anticipated and the proposed measures to control the same, including treatment and disposal of effluent:

12. Process Hazard information: _____

a. Enclose a copy of the report on environmental impact assessment:

b. Enclose a copy of the report on risk assessment study:

c. Published (Open or Classified) reports, if any, on accident situations occupational health hazards or similar plants elsewhere (within or outside the country): _____

13. Information of proposed safety and occupational health measures:

a. Details of firefighting facilities and minimum quantity of water, carbon-di-oxide and or other fire-fighting measures needed to meet the emergencies:

b. Details of in-house medical facilities proposed:

14. Information on emergency preparedness: _____

15. On-site emergency plan: _____

16. Proposed arrangements, if any, for mutual-aid scheme with a group of neighbouring factories: _____

17. Any other relevant information: _____

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

From: _____

To: _____

Name and signature of the applicant: _____

FORM-XL*{see rule 83 }***Format of report of Site Appraisal Committee to be submitted to State Government****To,**

Subject: Submission of report of Site Appraisal Committee in the case of application of (name of applicant) with respect to the proposed construction/ expansion/location/ operation of hazardous activities in (name of factory).

Sir/Madam,

Kindly refer to the Govt. order number _____ dated _____ through which the Site Appraisal Committee in the case of application of (name of applicant) w.r.t. the proposed construction/ expansion/location/ operation of hazardous activities in (name of factory) was constituted under sub-section (1) of Section 83 of the Occupational Safety, Health and Working Conditions Code, 2020 and rules made thereunder.

The above mentioned committee has examined thoroughly the application made by the applicant and the report of the committee is as follows:

- a. Name and address of the applicant: _____
- b. Name of the factory: _____
- c. Registration number (if any): _____
- d. License number (if any): _____
- e. Site ownership details: _____
- f. Date(s) of field visit(s) of the committee: _____
- g. Details of meetings of the committee (plz. enclose all minutes of meetings):

h. Details of recommended corrective measures to be adopted by the applicant (if any): _____

i. Details of adopted corrective measures (give details):

j. Recommendations of the Site Appraisal Committee:

k. Any other comments/ recommendations: _____

Date: _____

Signature: _____

Place: _____

FORM-XLI*{see sub-rule (4) of rule 102}***Register of persons in supervisory, managerial or confidential positions**

Name of the Factory: _____

License Number: _____

Sr.No	Name	Father's name	Designation	Date of joining	Date of leaving
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					

FORM-XLII
{see sub-rule (4) of Rule-105}
ANNUAL REPORT OF HOUSING

Annual return for the year: _____

- 1. Name of Plantation:** _____
- 2. Address and location where plantation is carried out:**

- 3. Name and address of the employer:** _____
- 4. Year in which the plantation came under the preview of the Code:**

- 5. Total resident labour population including dependents in the plantations:** _____
- 6. Number of resident workers requiring houses:** _____
- 7. Number of houses required to be provided according to the approved scheme every year:** _____
- 8. Number of houses provided according to the approved scheme by-**

 - i. Construction of new houses:** _____
 - ii. Adaptation of old houses:** _____
- 18. Reason for not providing the number of houses as required in item No. 7:** _____

Date: _____

Seal and Signature of the
Employer

Form No. XLIII
{See Rule 129(3)}

Form of Application for grant of Certificate of Competency to a person.

1. Name
2. Date of Birth
3. Name of the Organisation (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 Organisation	Period of Service	Designation	Area of Responsibility

7. Membership, if any, of professional bodies
8. (i) Details of facilities (examination, testing, etc.) at his disposal.

(ii) Arrangements for calibrating and maintaining the accuracy of these facilities.
9. Purpose for which Competency Certificate is sought (section or sections of the Act should be stated).
10. Whether the applicant has been declared as a competent person under any statute (if so, the details)

11. Any other relevant information.

12. Declaration by the applicant.

I,, hereby declare that the information furnished above is true. I undertake

(a) that in the event of any change in the facilities at my disposal (either addition or deletion) or my leaving the aforesaid organisation, I will promptly inform the Chief Inspector cum Facilitator;

(b) to maintain the facilities in good working order, calibrated periodically as per manufacturers instructions or as per National Standards; and

(c) to fulfill and abide by all the conditions stipulated in the certificate of competency and instructions issued by the 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 organisation for the purposes of being declared as a competent person under the Act. 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

Telephone No.

Official Seal

Date:

Form No.-XLIV
{See Rule 129(3)}

Form of Application for grant of Certificate of Competency to an Institution

1. Name and full address of the Organisation
2. Organisation's status (specify whether Government, Autonomous, Co-operative, Corporate or Private)
3. Purpose for which Competency Certificate is sought (specify Section(s) of the Act)
4. Whether the Organisation has been declared as a competent person under this or any other statute. If so, give details.
5. Particulars of persons employed and possessing qualification and experience as set out in Schedule annexed to sub-rule (1) of Rule 2A. S.No. Name and Designation Qualifications Experience Section(s) and the Rules under which Competency is sought for. 1. 2.
6. Details of facilities (relevant to item 3 above) and arrangements made for their maintenance and arrangements made for their maintenance and periodic calibration.
7. Any other relevant information.
8. Declaration:

I, hereby, on behalf of Certify the details furnished above are correct to the best of my knowledge. I undertake to ----

- (i) maintain the facilities in good working order, calibrated periodically as per manufacturers instructions or as per National Standards; and
- (ii) to fulfil and abide by all the conditions stipulated in the certificate of competency and instructions issued by the Chief Inspector from time to time.

Signature of Head of the Institution or of the persons authorised to sign on his behalf.

Designation Place & Date

Form No.XLV
{See Rule129(3)}
Form of Certificate of Competency

I,, in exercise of the powers conferred on me under Section 2(ca) of the Factories Act and the Rules made thereunder, hereby recognise (Name of the Institution) or Shri (Name of the person) employed in (Name of the Institution) to be a competent person for the purpose of carrying out tests, examinations, inspections and certification for such buildings, dangerous machinery, lifts and hoists, lifting machines and lifting tackles, pressure plants, confined space, ventilation system and process or plant and equipment as the case may be, used in a factory located in under Section and the Rules made thereunder. * Strike out the words not applicable. This certificate is valid fromto This certificate is issued subject to the conditions stipulated hereunder: - Tests, examinations and inspections shall be carried out in accordance with the provisions of the Act and the Rules made thereunder; (ii) Tests, examination and inspections shall be carried out under direct supervision of the competent person or by a person so authorised by an institution recognised to be a competent person. (iii) The certificate of competency issued in favour of a person shall stand cancelled if the person leaves the organisation mentioned in his application; (iv) The institution recognised as a competent person shall keep the Chief Inspector cum Facilitator informed of the names, designations and qualifications of the persons authorised by it to carry out tests, examinations and inspections. (v) (vi)

Official

Seal Signature of the Chief Inspector cum Facilitator

Date

NOTE: A separate certificate should be issued under each relevant Section. A person or an institution may be recognised competent for the purpose of more than one Section.

By order of the Governor,

(NABAKUMAR BARMAN)

Special Secretary to the Government of West Bengal