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PART-I

Notifications, Orders and Declarations by Haryana Government

HARYANA GOVERNMENT

LABOUR DEPARTMENT

Notification

The 4th May, 2026

The Haryana Occupational Safety, health and Working Condition Rules, 2026

No. 2/27/2026-2 LAB.— Whereas, the draft of the Haryana Occupational Safety, Health and Working Condition Rules, 2021 was published in Haryana Govt. Gazette (Extra) Sep, 17, 2021 (BIHDR. 26, 1943 SAKA vide notification No. 02/11/2021-2Lab dated 17.09.2021 inviting objection and suggestions from person likely to be effected thereby:

And whereas, it is decided by the State Government to publish revised following draft rules for information of all persons likely to be affected thereby:

Now, therefore, the following draft of the Haryana Occupational Safety, Health and Working condition Rules, 2026, which the State Government proposed to make in exercise of the power conferred by section 133 and 135 of the Occupational Safety, Health and Working condition Code, 2020 (Central Act No. 37 of 2020) are hereby published, as required sub section (1) of said sections for information of all persons likely to be affected thereby and the notice is hereby given that the said draft rules will be taken into consideration after the expiry of a period of forty five days from the date of the publication of this notification in the official Gazette.

Any objection and suggestion, if any, may be address to the Labour Commissioner-cum-Chief Inspector of Factories, Haryana 30 Bays Building, Sector, 17 B, Chandigarh or by email at haryanaoshrules@gmail.com The objections and suggestions, which may be received from any person with respect to the said draft before expiry of the period specified above, will be considered by the State Government. The objections and suggestions should be sent in a performa containing columns (i) specifying the name and address of the person/organization, 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 reason thereof.

DRAFT RULES
CHAPTER-1
PRELIMINARY

1) Short title, extent and commencement:

(1) These rules may be cited as the Haryana Occupational Safety, Health and Working Conditions Rules, 2026.

(2) These rules shall extend to whole of the State of Haryana.

(3) These rules shall come into force from the date of their publication in the Official Gazette after the date of commencement of Occupational Safety, Health and Working Conditions Code, 2020 (37 of 2020).

2) Definitions

(a) In these Rules unless there is anything repugnant in the subject or context:-

(i) "Appendix" means an appendix appended to these Rules.

(ii) "Code" means The Occupational Safety, Health and Working Conditions Code, 2020 (37 of 2020)

(iii) "Continuous Process" means the materials either dried bulk or fluids that are being processed are continuously in motion ,undergoing chemical reaction are subject to mechanical or heat treatment or any other process specified by State Government.

(b) "Designated Authority" means an officer notified by government for the purpose of the Code.

(c) "First employment" means first employment in the said processes and also reemployment in such processes following any cessation of employment for a continuous period exceeding three calendar months.

(d) "Form" means form appended to these rules.

(e) “Hazardous substance” means any substance being manufactured or stored or handled or used in any hazardous process and in such quantity as specified by the State Government by notification from time to time.

(f) "Portal" means website of Labour department of Government of Haryana for delivering services.

(g) "Recognized University or Institution" means,

(a) any university, incorporated by law, by central or any state government;

(b) any other university or institution which is declared by the Government to be a recognized university, deemed university or institution for the purposes of these rules.

(h) "Quarter" means period of three consecutive months beginning on 1st of January, 1st of April, 1st of July and 1st of October of the year.

(i) "Registering Officer means an officer appointed under the Code and the rules made thereunder.

(j) "Schedule" means the schedule of the Code and the rules made thereunder.

(k) "Section" means section of the Code.

(l) "Year" means period of twelve months beginning from 1st January.

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

3) **Income from the sources {Section 2(1)(x)}.-** The criteria for income from all sources means the income for the dependents as notified by the Employees State Insurance Corporation (ESIC) for the purpose of availing medical benefit or as specified by the State Government by notification.

4) **Competent person {Section- 2(1)(l)}.-** (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, inspections and certification for such buildings, dangerous machinery, hoists and lifts, lifting machines and lifting tackles, pressure plant, confined space, ventilation system and such other process or plant 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 the schedule 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 *where it is proposed to recognize a person employed under the Chief Inspector cum Facilitator as a 'Competent Person', concurrence of the State Government shall be taken and such a person after being so recognized, shall not have powers of an 'Inspector cum facilitator'.*

Provided further that *the 'Competent Person' recognized under this provision shall not be above the age of 62 years and shall be physically fit for the purpose of carrying out the tests, examination and inspection.*

Provided further that *the State Government may, by notification, amend the* schedule annexed to this Rule.

(2) The Chief Inspector-cum-Facilitator may recognize an institution of repute, having persons possessing qualifications and experience as set out in the Schedule annexed to this rule, for the purposes of carrying out tests, examinations, inspections and certification for buildings, dangerous machinery, hoists and lifts, lifting machines and lifting tackles, pressure plant, confined space, ventilation system and such other process or plant and equipment as stipulated in the Code and the Rules made thereunder, as Competent Person within such area and for such period as may be specified.

(3) The Chief Inspector-cum-Facilitator on receipt of an application, in Form-1 and Form-2, from a person and an institution respectively, intending to be recognized as a Competent Person's, shall register such application; and within a period of 60 days from the date of receipt of application, and after having satisfied himself as regards competence and facilities available at the disposal of the applicant, either recognize the applicant as a "Competent Person" and issue a certificate of competency in Form-3 or reject the application specifying the reasons thereof.

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

(i) If he has reason to believe that the competent person,

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

(b) has carried out a test, examination and inspection or;

(c) has acted in a manner inconsistent with the intent or the purpose of this Code or the Rules made thereunder; or;

(d) has omitted to act as required under the Code and the Rules made thereunder; or;

(ii) For any other reason to be recorded in writing;

Explanation: For the purpose of this rule an institution includes an organization.

(5)The Chief Inspector-cum-Facilitator may, for reasons to be recorded in writing, require recertification of lifting machinery, lifting tackles, and pressure plant or ventilation system as the case may be, which has been certified by a competent person outside the state.

Schedule

[Rule 4]

Sr. No.	Section Or Rule UnderWhich Competence Is Required	Qualification	Experience	Facilities At Disposal
1	Rules Made Under Section 79 Certification Of Buildings And Their Stability To Be Used As Factory	(A) Bachelors Degree In Civil Or Structural Engineering Or Its Equivalent From Recognized University.	(I) An Experience Of A Minimum Period Of Five Years In Design, Or Construction Or Testing Or Repair Of Structures. Provided That Experience For Those Who Possesses Master`S Degree Shall Be Minimum Of Three Years.	
			(Ii) Knowledge Of Non- Destructive Testing, Various Standards And Codes Of Practices That Are Current And The Effect Of The Vibrations And Natural Forces On The Stability Of The Building; And	
			(Iii) An Ability To Arrive At A Reliable Conclusion With Regard To The Safety Of The Structure Or The Building.	
2	Rules Made Under Section 18 Dangerous Machines	Bachelor's Degree In Mechanical, Or Production, Electrical Engineering Or Its Equivalent From Recognized University.	(i)An Experience Of Working For A Minimum Period Of Five Years In:- (a) Design Or Operation Or Maintenance Or (b) Testing, Examination and Inspection of Relevant Machinery, Their Guards, Safety Devices and Appliances. (Ii) Should :- (A) Be Conversant With Safety Devices And Their Proper Functioning	Gauges Dangerous Machine.
			(B) Be Able To Identify Defects And Other Causes Leading To The Failure.	
			Provided That Experience For Those Who Possesses Master's	

			Degree Shall Be Minimum Of Three Years; And (C) Have Ability To Arrive At A Reliable Conclusion With Regard To Proper Functioning Of Safety Devices, Appliances And Machine Guards	
3	Rules Made Under Section 18 Hoists & Lifts	Bachelor's Degree In Mechanical Or Production, Electrical Engineering Or Its Equivalent From Recognized University.	(i) An Experience Of Working For A Minimum Period Of Five Years In:- (a) Design Or Erection, Or Maintenance Or (b) Test and Inspection Procedure of Hoists & Lifts. Provided That Experience For Those Who Possesses Master's Degree Shall Be Minimum Of Three Years. (Ii) Should :- (A) Be Conversant With The Current And Relevant Codes Of Practices And Test Procedures; (B) Conversant With Other Statutory Requirements Covering The Safety Of Hoists And Lifts (C) Be Able To Identify Defects And Arrive At A Reliable Conclusion And With Regard To The Safety Of Hoists And Lifts	
4	Rules Made Under Section 18 Lifting Machines, Chains, Ropes And Lifting Tackles	Bachelor's Degree In Mechanical Or Metallurgical Or Production Engineering Or Its Equivalent From Recognized	(i) An Experience Of Working For A Minimum Period Of Five Years In:- (a) Design Or Erection Or Maintenance Or (b) Test and Inspection Procedure of Lifting Machines, Chains,	

		University	Ropes and Lifting Tackles.	
			Provided that experience for those who possesses master`s degree shall be minimum of three years. (ii) Should :- (a) Be conversant with the current and relevant codes of practices and test procedures. (b) fracture machines and metallurgy of the material of construction; and (c) Heat treatment or stress relieving techniques as applicable to stress bearing components and parts of lifting machinery and lifting tackles. (d) Capable of identifying defects and arriving at reliable conclusion and with regard to the safety of lifting machinery, chains, ropes and lifting tackles	
5	Rules made under Section 18 Pressure Plants	Bachelor`s Degree in Chemical or Mechanical or Metallurgical or Production Engineering its equivalent from recognized	(i) an experience of working for a minimum period of five years in:- (a) design or erection or maintenance or (b) testing, examination and inspection procedure of pressure plants Provided that experience for those	

		university	who possesses master`s degree shall be minimum of three years. (ii) Should :- (a) be conversant with the current and relevant	
			codes of practices and test procedures relating to pressure plants; (b) conversant with statutory requirement concerning the safety of unfired pressure vessels and equipments operating under pressure (c) conversant with non-destructive testing techniques as are applicable to pressure vessels; and (d) able to identify defects and arriving at a reliable conclusion and with regard to the safety of pressure plants.	

6	Rules made under Section 18 Precautions against dangerous fumes, gases etc.	Bachelor`s Degree in Chemical engineering from recognized university	(i) Anexperienceof working for a minimum period of five years in; collection and analysis ofenvironmental samples and calibration of monitoring equipments. Provided that experience for those who possesses master`s degree shall be minimum of three years. (ii) should be (a) Be conversant with the hazardous properties of chemicals and their permissiblelimit values; (b) Be conversant with current techniques sampling and analysis ofenvironmental contaminants; and (c) able to arrive at a reliable conclusion as regards	meters, instruments & devices duly calibrated and certified for carrying out the tests and certification of safety for working in confined spaces
			the safety in respect of entering and carrying out hot work	

7	Rules made under Section 82 Ventilation systems.	Bachelor`s Degree in Chemical, Electrical or equivalent from recognized university.	(i) Aminimumoffive year experiencein design, fabrication, testingof ventilating system used for extractionand collectionof dust, fumes and vapours and otherancillary equipment.Provided that experiencefor thosewho possesses master`s degree shall be minimum of three years. (ii) he shall be conversant with relevant codes of practice andtest proceduresthatare currentinrespectof ventilation and extractionsystemfor fumes and (iii) be able to arrive at a reliable conclusion with regard to effectiveness of the system	Facilities for Testing the ventilating system instruments and gauges for testing adequacy

CHAPTER-II
REGISTRATION

5) **Application for registration (Section 3). - (1)** The employer seeking registration for an establishment, not already registered, shall apply electronically by giving details as specified in Form-4. The Form shall be signed digitally or in any other manner as may be required on the portal. The applicant shall be responsible for veracity of all information submitted in the application. Registration fees for the grant of registration certificate shall be paid through online mode at departmental portal under the Head of Accounts and manner as prescribed by the state government from time to time at the rates given in the schedule: -

SCHEDULE

Number of employees to be employed	Fee for Registration
Up to 20	1000
21-50	2000
51-100	3000
101-150	5000
151-200	7500
201-250	10000
251-500	12500
501-750	15000
751-1000	17500
1001-1500	20000
1501-2000	25000
2001-3000	30000
3001-5000	40000
Above 5000	50000

Provided that if the application for Registration is submitted after expiry of the prescribed period specified under Section 3(1) (b), the application may be entertained only on payment of the late fee of twenty five percent of the registration fee, in addition to the fee payable as prescribed under the Schedule.

(2) The Permanent Account Number (PAN) of the applicant or the establishment allotted under Income Tax Act, 1961 or any other unique number allotted to the establishment under any other Act for the time being in force or any other

particular furnished in the form, may also be verified online.

(3) The certificate of registration shall be issued in Form-5 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 establishment shall be deemed to have been registered and the certificate of registration shall be auto generated:

Provided that in exceptional circumstances, the State Government may, (for such period), by notification, dispense with requirement of electronic registration in respect of establishment or class of establishment, and submission of application in Form 4 and issuance of certificate of registration under Form 5 .

(4) The certificate of registration shall be non-transferable and a copy of the certificate of registration shall be displayed in the premises of the establishment at any conspicuous place in hard copy or electronically.

(5) The registering officer under the Code may direct the employer, who fails to comply with the requirements of sub-rule (1), to comply within the time stated therein and such employer shall, thereupon comply with the instruction issued by the officer in this behalf.

(6) The employer in respect of an establishment already registered under any other Central/State labour law for the time being in force shall, update the registration particulars on the departmental website within four months from the date on which the Code comes into force.

(7) Any registration obtained by providing wrong information shall be liable to be cancelled, provided that establishment has been given an opportunity to show Cause, electronically or by registered post, as to why the certificate of registration should not be cancelled.

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

(9) Any change in the ownership, management or any particular furnished in Registration Form submitted on the portal shall be updated on the portal by the employer within thirty days of such change.

(10) The employer of an establishment to which the provisions of the Code apply and whose business activities are in process of closure, may online apply for cancellation of registration on the portal after giving complete details of the dues payable under the Central Labour Codes:

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

(11) The registering officer shall maintain a register of establishment electronically in Form-6 showing the particulars of establishment in relation to which certificates of registration have been issued by him.

(12) The employer shall, within thirty days of the commencement and completion of any work, intimate to the Inspector-cum-Facilitator, having jurisdiction in the area where the proposed establishment or as the case may be, the work is to be executed, intimating the actual date of the commencement, completion of work and cessation of establishment, as the case may be, in Form-7 annexed to these rules electronically and the same shall be auto-shared to EPFO and ESIC.

6) **Appeal (Section 4).-** (1) The employer aggrieved by the order of Registering Officer, may electronically file an appeal against such order before the Administrative Secretary as an appellate officer for such purpose within thirty days from the date of receipt by him of such order.

(2) Where the memorandum of appeal is in order, the appellate officer shall admit the appeal, acknowledge it and intimate admission of such appeal, and shall register the appeal in electronic form, and maintain it electronically in the register of appeals.

(3) When the appeal has been admitted, the appellate officer shall send the notice of the appeal to the registering officer, against whose order the appeal has been preferred. The registering officer shall thereupon send the records of the case to the appellate officer online electronically.

(4) On receipt of the appeal, the appellate officer shall send a notice electronically or by registered post to the appellant to appear before him on such date and time as may be specified in the notice for the hearing of the appeal.

(5) If on the date fixed for hearing, the appellant does not appear, the appellate officer may dismiss the appeal for default of appearance of the appellants, and shall send copy of the order to the applicant electronically.

(6) Where an appeal has been dismissed in default, the appellant may apply electronically to the appellate officer for the restoration of the appeal within

thirty days from the date of electronic receipt of the order. If the appellate officer is satisfied that the appellant was prevented by sufficient cause from appearing, the appellate officer shall restore the appeal.

(7) The order of the Appellate Officer shall be communicated electronically or by registered post to the appellant and copy thereof shall be sent to the registering officer against whose order the appeal has been preferred. The Appeal shall ordinarily be disposed of within a period of thirty days from the date of receipt of appeal, unless the delay is attributed on the part of appellant.

7) **Notice of commencement and cessation of operation (Section 5).-** The employer of every establishment being factory or relating to contract labour or building or other construction works shall within thirty days of the commencement or cessation of operation, submit to the Registering Officer in Form-7, electronically. The notice of cessation of operation shall be enclosed with a certificate that the payment of all dues to the workers employed in the establishment have been made and the premises are kept free from storage of hazardous chemicals and substances.

CHAPTER-III
DUTIES OF EMPLOYER AND EMPLOYEE

8) **Annual Health Examination of employees {Section 6(1)(c).-** Every employer of an establishment shall arrange to conduct free of cost, medical examination, once in a calendar year, for every employee who is drawing wages equal to or less than ceiling notified by government from time to time. The medical examination shall be conducted by a qualified medical practitioner as per tests specified in the Form-8. The Medical Examination Reports shall be submitted to the concerned employer and employee.

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

9) **Letter of appointment to employee {Section 6(1)(f)}.-**No employee shall be employed in any establishment unless he has been issued a letter of appointment in the prescribed format as appended to this Rule:

Provided that, an employee who has not been issued an appointment letter containing the required particulars, shall be issued an appointment letter within three months of coming into force of these rules.

Format

a)	Name & Address of Establishment:	.....
b)	Haryana Udhyam Memorandum Number (HUM) of the establishment:	.....
c)	Name of employee:	.....
d)	Father's name:	.....
e)	Permanent Address:	.....
f)	Aadhar number:	.....
g)	UAN (if available)	.....
h)	ESIC number (if allotted)	.....
i)	EPF No. (If available)	.....
j)	Haryana Employment Exchange (HREX) Registration Number(if any)	.....
k)	Designation:	.....
l)	Category of skill:	.....
m)	Date by which employee has to join:	.....
n)	Detail of Basic Pay, Dearness Allowance etc.:	.....
o)	Avenue(s) for achieving higher wages/higher position:	.....

p) Applicability of social security EPFO and ESIC benefits: .....

q) Broad Nature of duties to be performed: .....

r) Any other information: .....

Signature

Occupier/employer/owner/authorized agent/ authorized manager

10) **Notice of accidents and dangerous occurrences {Section 10(1) and 11}.-** (1) Where at any place in an establishment, an accident occurs which results in the death of any person, the employer or occupier or manager of the establishment shall forthwith electronically send a notice thereof in **Form-9** within twelve hours to the Inspector-cum- facilitator, Chief Inspector-cum Facilitator, District Magistrate, Sub-divisional Magistrate, the officer-in-charge of the nearest police station; and the family members/ next of kin of the deceased person.

Provided that the information shall be given immediately after the accident by telephone/ mobile phone.

(2) Where at any place in an establishment, an accident occurs which results in bodily injury by reason of which injured person is prevented from working for a period of more than 48 hours from the time of accident, the employer or occupier or manager of the establishment shall forthwith electronically send a notice to the Inspector-cum-Facilitator in **Form-9** within 60 hours from the time of accident**.**

(3) Where in an establishment, there is any dangerous occurrence as specified in the schedule annexed hereto, whether causing any bodily injury or disability or not, within twelve hours from such occurrence, a notice in **Form-9** shall be sent to:

(i) The Inspector-cum-facilitator;

(ii) District Magistrate and Sub-divisional Magistrate;

Provided that if in the case of an accident or dangerous occurrence, death occurs to any person injured by such accident, or dangerous occurrence after the notices and reports referred to in the foregoing sub-rules have been sent; the employer or occupier or manager of the establishment shall forthwith send a notice thereof by telephone and electronically to the authorities and persons mentioned in sub-rules (1) and (2) and also have information about death confirmed in writing within 12 hours of the death.

Provided further that, if the period of disability from working for 48 hours or more referred to in sub-rule (2) does not occur immediately following the accident, or the dangerous occurrence, but later, or disability from working, occurs in more

than one spell, the report referred to in schedule (2) shall be sent to the Inspector-cum-Facilitator in the prescribed form within 24 Hours following the time when the actual total period of disability from working resulting from the accident or the dangerous occurrence becomes 48 hours.

SCHEDULE

The following classes of dangerous occurrences, whether or not they are attended by personal injury or disablement, namely:-

(i) bursting, of any plant or pipeline or equipment containing petroleum, steam, compressed air or other substance at a pressure greater than the atmospheric pressure;

(ii) collapse or failure of a crane, derrick, winch, hoist or other appliances used in raising or lowering persons or goods, or any part thereof, or the overturning of a crane.

(iii) explosion, explosion due to explosives, fire, leakage or release of harmful toxic gases, bursting out, leakage or escape of any molten metal, or hot liquid or gas causing bodily injury to any person or damage to any room or place in which persons are employed;

(iv) explosion of a receiver or container used for the storage at pressure greater than atmospheric pressure of any gas or gases (including air) or any liquid or solid resulting from the compression of gas.

(v) collapse or failure of lifting appliances or hoist or conveyors or other similar equipment for handling building or construction material or breakage or failure of rope, chain or loose gears; overturning of cranes used in building or other construction work; falling of objects from height;

(vi) a spontaneous heating or outbreak of fire, or appearance of smoke, or other indication of heating or outbreak of fire in below ground mines;

(vii) collapse of any wall, floor, gallery, roof bridge, tunnel, chimney, wall, building or subsidence of soil or any other structure, platform, staging, scaffolding or any means of access including formwork; contact work, excavation and collapse of transmission;

(viii) spillage or leakage of hazardous substances and damage to their container;

(ix) an eruption or inrush of water or other liquid matter in mines;

(x) collapse, capsizing, toppling or collision of transport equipment within the establishment;

(xi) fall from height of any excavation, loading or transport machinery;

(xii) an instantaneous failure of a pillar, part of a pillar or several pillars in working below ground;

(xiii) a rock-burst in working belowground; a premature collapse of any part of the working;

(xiv) a breakage, fracture or failure of an essential part of any machine or apparatus whereby the safety of persons may be endangered;

(xv) a slide causing injury to any person, damage to any machinery, or interruption of normal mining operations;

(xvi) failure of dump or side in opencast working; a blowout;

(xvii) a failure of any structure or installation whereby the safety of persons may be endangered; or spark generated due to electrical flash-over causing burn injury to any person;

(xviii) a major uncontrolled emission of petroleum or chemical spillage;

(xix) any other occurrence of similar nature.

11) **Notice of disease {Section 12(1) and (2)}.-** (1) A notice in the following format shall be sent forthwith electronically within 24 hours, to the Inspector- Cum Facilitator or Chief Inspector- cum-facilitator, by the employer or occupier or manager of an establishment in which there occurs any disease as notified under the Schedule –III of the Code.

NOTICE OF DISEASE

1 Name of establishment:

2 Nature of establishment:

3 In case of Factory the Name of the Manufacturing Process:

4 Details of Patient:

(a) Name(s) of Patient(s):

(b) Works number of Patient(s):

(c) Address of Patient(s):

(d) Precise occupation of patient(s):

5 Nature of disease from which patient(s) is/are suffering:

6 Date of Detection of Disease:

7 Details of Medical Practitioner(s):

8 Has the case been reported to the Medical Officer :

Date

Signature of employer or
Occupier or manager

(1) If any qualified medical practitioner attends on a person who is or has been employed in an establishment and who is or is believed by the qualified medical practitioner to be suffering from any disease specified in the Third Schedule, the qualified medical practitioner shall without delay send a report in writing to the office of the Chief Inspector-cum-facilitator stating-

(a) the name and full postal address of the patient,

(b) the disease from which he believes the patient to be suffering, and

(c) the name and address of the establishment in which the patient is or was last employed.

12) **Duties of employee (Section 13).-** If an employee comes to know that of any unsafe or unhealthy condition in the establishment, he shall report to the employer, or health and safety representative, or safety officer, or manager in case of factory, as soon as practicable, electronically or in writing or telephonically or by registered post or speed post.

13) **Rights of Employee {Section 14(3)}.-** On receipt of information from the employee relating to the existence of an imminent danger to their safety and health, the employer shall take immediate remedial action in this regard. The employer, whether satisfied or not with such information, shall send a report forthwith of such actions taken, to the Inspector-cum-facilitator electronically or by registered post, or speed post.

CHAPTER-IV

OCCUPATIONAL SAFETY AND HEALTH

14) **Haryana Occupational Safety and Health Advisory Board (Section 17).-** The Haryana Occupational Safety and Health Advisory Board (herein after in these rules referred as Haryana Advisory Board) shall consist of :

a) AdministrativeSecretary, Labour Department—Chairperson/Chairman ex-officio;

b) Chief Inspector-cum-Facilitator— Member Secretary ex officio;

c) Chairman, Haryana State Pollution Control Board-- Member ex officio;

d) Director General, Urban & Local Bodies Department—Member ex officio;

e) Director General, Industries and Commerce Department—Member ex officio;

f) Director General, Health Department —Member ex officio;

g) Director, ESI Health Care, Haryana —Member ex officio;

h) Joint Chief Controller of Explosives, Faridabad—Member ex officio;

i) Regional Director, Employee's State Insurance Corporation, Faridabad—Member ex-officio;

j) three representatives of employers (to be nominated by State Government)—Member;

k) two eminent persons connected with the field of Occupational Safety and Health, or representatives from reputed research institutions or similar other discipline (to be nominated by State Government)— Member;

l) three representatives of employees / Trade Union as nominated by the State Government.

15) **Terms of the office to the non-official member (section 17).-** The term of each member referred in clause(j), (k) and (l) of Rule 14 shall remain for three years.

16) **Resignation (section 17). -** (1) any member referred to clause (j), (k) and (l) of Rule 14 may resign by a letter in writing addressed to State Government.

(2) The seat of such member shall remain 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.

17) **Cessation of membership (section 17).-** If any member of the Board referred in clause (j), (k) and (l) of Rule-14, fails to attend three consecutive meetings of the Board, without obtaining the leave for such absence from the

Chairperson/Chairman of the Board, he shall cease to be a member of the Board:

Provided that the State Government may, if satisfied that such member was prevented by sufficient cause from attending three consecutive meetings, direct that the cessation shall not take place.

18) **Removal from membership (section 17).-** The State Government may remove from office any non-official member of the State Advisory Board, if in its opinion such member has ceased to represent the interest which he purports to represent.

19) **Meeting of the Board (section 17).-** The Board shall ordinarily meet once in three months;

Provided that the chairperson/Chairman 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 meeting thereof.

20) **Notice of the meeting and list of business (section 17).-** Notice intimating the date, time and venue of every meeting together with a list of business to be transacted at the meeting, shall be sent by registered post, or by special messenger, to each member fifteen days before the meeting:

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

21) **Quorum (section 17).-** No business shall be transacted at any meeting of the Board unless at least 4 members of the Board are present in that meeting:

Provided that if in any meeting of the Board less than 4 members are present, the Chairperson/ Chairman 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 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.

22) **Minutes of the meeting (section 17).-** Every decision taken at a meeting of the Board shall be recorded in a minutes book at the same meeting and signed by the chairperson. The minutes book shall be a permanent record.

23) **Allowances of members (section 17).-** (1) The traveling allowance of an official member of the Board 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.

(2) The non-official members of the Board shall be paid traveling allowance

for attending the meeting of such Board at such rates as are admissible to a Grade-1 officer of the State.

24) **Safety Committee {Section 22(1)}.-** (1) The employer of the every establishment shall constitute a safety committee:-

(a) Wherein one hundred and fifty or more employees are ordinarily employed; or

(b) Which manufacture or store or handle an hazardous substance or carry out any hazardous process under the Code and employing fifty or more employees.

(2) The representatives of the management on Safety Committee shall include,-

(a) a senior official, who by virtue of his position in the establishment can contribute effectively to the functioning of the Committee. Such a senior official shall be the Chairman of the safety Committee;

(b) a Safety Officer or Medical Officer, wherever available, the Safety Officer in such a case shall be Secretary of the Committee;

(c) a representative each from the human resource, production, maintenance and purchase departments.

(3) The employee's representatives on this Committee shall be elected by the employees.

(4) The tenure of the Committee shall be three years.

(5) Safety Committee shall meet as often as necessary but at least once in every quarter. The minutes of the meeting shall be recorded and produced to the Inspector-cum-Facilitator on demand.

(6) Functions and duties of the Safety Committee shall include,-

(a) assisting and co-operating with the management in achieving the aims and objects outlined in the `Health and Safety Policy' of the establishment;

(b) dealing with all matters concerning health safety and environment and to arrive at practicable solutions to problems encountered;

(c) creating health & safety awareness amongst all employees;

(d) undertaking educational training and promotional activities;

(e) deliberating on reports of safety environmental and occupational health surveys, emergency plans, safety audits, risk assessment and implementation of the recommendations made in the reports;

(f) carrying out health and safety surveys and identify causes of accidents;

(g) looking into any complaint made on the imminent danger to the safety

and health of the employees and suggest corrective measures; and

(h) reviewing the implementation of the recommendations made by it.

(7) Where owing to the size of the establishment, or any other reason, the functions referred to in sub-rule (6) cannot be effectively carried out by the Safety Committee it may constitute sub-committees as may be required to assist it."

25) **Safety Officer {section 22(2)}.-** (1) There shall be one safety officer for establishment employing between 500 to 1500 employees. Over 1500 employees, there shall be an additional safety officer for every additional 1000 employees or fraction thereof.

(2) in case of factory carrying on hazardous process, there shall be one safety officer for establishment employing between 250 to 1000 employees. There shall be an additional safety officer for every additional 1000 employees or fraction thereof over 1000.

(3) In case of Building or other construction work, there shall be one safety officer for establishment employing between 200 to 1000 employees. There shall be an additional safety officer for every additional 1000 employees or fraction thereof over 1000 employees.

26) **Qualification of Safety Officer.-** (1) A person shall not be eligible for appointment as a safety officer unless he possesses–

(a) a recognized degree in any branch of engineering or technology and has had practical experience in a supervisory capacity for a period of not less than 2 years, or;

(b) a recognized degree in physics or chemistry and has had practical experience in a supervisory capacity for a period of not less than 5 years, or;

(c) a recognized diploma in any branch of engineering or technology and has had practical experience in a supervisory capacity for a period of not less than 5 years, or;

(d) a degree or diploma in industrial safety from Central Labour Institute or Regional Labour Institutes recognized by Central or any State Government.

(2) Notwithstanding anything contained in sub-rule (1), any person who-

(i)possesses a recognized degree or diploma in engineering or technology and has had experience of not less than 5years in a department of the

Central or State Government which deals with the administration of the Factories, Building or other Construction works; or

(ii) possesses a recognized degree or diploma in engineering or technology and has had experience of not less than 5years, full time, on training, education, consultancy, or research in the field of accident prevention in industry or in any reputed institution;

shall also be eligible for appointment as a safety officer.

27) **Duties of Safety Officer.-** The duties of a Safety Officer shall be to advise and assist in the fulfillment of its obligations, statutory, concerning prevention of personal injuries and maintaining a safe working environment and such duties shall include the following:-

(i) to advise the concerned departments in planning and organizing measures necessary for the effective control of personal injuries;

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

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

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

(v) to carry out plant safety inspections in order to 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;

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

(vii) to investigate selected accidents;

(viii) to investigate the cases of notify-able diseases listed in the Third Schedule to the Code;

(ix) to organize 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; and

(x) to design and conduct either independently or in collaboration with the training department, suitable training and educational programme for the prevention of personal injuries.

CHAPTER-V
HOURS OF WORK AND ANNUAL LEAVE WITH WAGES

28) **Weekly holiday {Section 26(2)}- (1)** For the purpose of section 26, there shall be posted up in a conspicuous place outside the office of every establishment a notice showing the weekly holiday. Where the weekly holiday is not the same day for all persons employed in the establishment, the notice shall show the holiday allowed to each relay, or set of persons or individual in Hindi, English.

(2) Conditions of exemption from weekly holiday or compensatory holiday shall be notified by the State Government from time to time.

29) **Compensatory holidays**- (1) Except in the case of worker engaged in any work which for technical reasons must be carried on continuously throughout the day, the compensatory holidays to be allowed under sub-section (3) of section 26 shall be so spaced that not more than two compensatory holidays are given in one week.

(2) The manager of the establishment shall display, on or before the end of the month in which holidays were lost, a notice in respect of workers allowed compensatory holidays during the following month and of dates thereof, at the place at which the notice of periods of works specified under section 26 is displayed. Any subsequent change in the notice in respect of any compensatory holiday shall be made not less than three days in advance of the date of that holiday.

(3) Any compensatory holiday or holidays to which a worker is entitled shall be given to him before he is discharged or dismissed and shall not be reckoned as part of any period of notice required to be given before discharge or dismissal.

30) **Wages for overtime {Section 27}.-**

(1) Where in an establishment, a worker works on piece rate basis, the time rate shall be taken as equivalent to the daily average of his full time earnings for the days on which he actually worked during the week immediately preceding the week in which the overtime work has been done, exclusive of any overtime and such time rate shall be deemed to be the rate for overtime of such worker.

(2) In calculating overtime on any day, a fraction of an hour between 15 to 30 minutes shall be counted as 30 minutes and in case of more than 30

minutes it shall be rounded and shall be counted as an hour on actual basis.

(3) In calculating the wages or earnings in the case of a worker paid by the month, the daily wages shall be 1/26th of his monthly wages; and in the case of any other worker it shall be the daily wages or earnings as the case may be.

(4) The spread over for the workers shall exceed twelve hours in any one day under the following works and circumstances in respect of factories, 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,

(f) engaged in a process which cannot be carried on except during fixed seasons;

(g) engaged in a process which cannot be carried on except at times dependent on the irregular action of natural forces;

(h) engaged in an engine-rooms or boiler-houses or in attending to power-plant or transmission machinery;

(i) engaged in process on account of the break-down of machinery;

(j) engaged in the loading or unloading of railway wagons or lorries or

trucks;

(k) exceptional press of work and

(l) engaged in any work, which is notified by the Central Government in the Official Gazette as a work of national importance;

31) **Exemption for Double Employment {Section 30}:-** A worker may be allowed to work in more than one establishment on the same day if,-

(a) he is working on part-time basis; or

(b) he is doing a particular work of an occasional nature.

CHAPTER-VI
MAINTENANCE OF REGISTERS, RECORDS AND RETURNS:

32) **Notice of periods of work {Section 31(2)}.-** The notice referred to in sub-section (2) of section 31 shall be displayed at conspicuous places on a notice board or electronic board and maintained in Form-10 and copy of such notice shall be sent to Inspector- cum-facilitator electronically or by registered post.

33) **Maintenance and production of reports, registers and other records**

{Section 33(a)}.- Every employer shall-

(a) maintain electronically register of workers, wages, overtime, fine, deduction for damage or loss in Form-11 and shall be kept available at an office or the nearest convenient building within the precincts of the establishment;

(b) maintain registers of accident and dangerous occurrences required by sub-clause (v) of clause (a) of section 33 of the Code shall be maintained in a Form-12

(c) (i) enter, in case of manual registers and other records, legibly in ink in English and Hindi or the language understood by a majority of the persons employed;

(ii) enter, in case of electronic register and other records, in English and Hindi or the language understood by a majority of the employees

(d) preserve in original for a period of one calendar year after the date of the last report or entry;

Provided that when the original record is lost or destroyed before the expiry of one year period, true copies thereof, if available, shall be preserved for the prescribed period;

(e) produce, electronically or by registered post, on demand before the Chief Inspector-cum-facilitator or an Inspector-cum-facilitator or any person authorized in that behalf of the State Government.

34) **Display of notice {Section 33 (b)}.-** Every employer shall display at the conspicuous place of the workplace of the establishment under his control, notice in English, Hindi and in the Local Language understood by the majority of the workers mentioning the following detail:-

a) the name and address of the establishment (a board containing name and address of the establishment shall also be displayed outside the

establishment near main entrance),

b) hours of work,

c) wage period,

d) date of payment of such wages,

e) details of accident and dangerous occurrence in the establishment for the last five years,

f) name and address of the Inspector-cum-facilitator having jurisdiction to such establishment

g) date of payment of unpaid wages to such unpaid workers.

h) the addresses and contact numbers of emergency authorities of the District such as fire, police, hospitals etc.

i) the notices about hazardous chemicals specifying the nature of hazards, precautions and treatment etc.

j) summary of the code

35) **Wage Slip {Section 33(c)}.** Every employer shall issue wage slips, electronically or otherwise to the employees as prescribed under Rules framed by Appropriate Government under Code on Wages 2019 on or before payment of wages.

36) **Return {Section 33(d)}.-** Every employer of an establishment shall send annually a return relating to such establishment in electronic form in Form-13 to the Inspector- cum-facilitator having jurisdiction so as to reach him not later than 1st February following the end of each calendar year. with a copy to Director General, Labour Bureau electronically.

37) **Register of leave with wages {Section 33(a)}.-** (1) The owner, agent or manager of every establishment shall maintain in respect of every employee thereof a record of leave with wages electronically or manually in Form-14 .

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

38) **Muster Roll {Section 33(a)}.-** (1). The employer, the owner, agent or manager of every establishment shall maintain in respect of every employee thereof a record of leave with wages electronically or manually in Form-15 .

(2) The register mentioned in sub- rule (1) shall be preserved for a period of three 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.

39) **Attendance Card {Section 33(a)}.-**

i. No worker shall be required or allowed to work unless he/she has in his/her possession attendance card with up-to date entries, in Form-16 to be supplied by the employer. The attendance card shall always remain with the worker. The employer or his authorized person shall demand it only to make relevant entries therein, whenever necessary.

ii. If a worker loses his attendance card more than twice in a calendar year, the employer shall provide him/her with another copy duly completed from his record on payment of 25 rupees within two days of the payment otherwise another copy of attendance card shall be provided free of cost.

iii. Attendance card can be in electronic form also.

CHAPTER-VII
INSPECTOR-CUM-FACILITATOR AND OTHER AUTHORITY

40) **Qualification and experience of Chief Inspector-cum-Facilitator {Section 34(5)}.-** State Government may appointment any person as Chief Inspector-cum-Facilitator who:-

(1) Possesses bachelor`s degree in Engineering in any discipline with at least 10 years experience as an inspector under The Factories Act 1948 or Inspector-cum- Facilitator under The Occupational Safety, Health And Working Conditions Code 2020; or

(2) is an officer of Indian Administrative Services (IAS) having at least 9 years of experience.

41) **Powers of Inspector-cum-Facilitator for Plantation {Section 35(1)(IV)}.-** Inspector- cum-Facilitator can ask any type of record and can record statement of any person in relation to establishment or premises carrying plantation as per section 2(zx) of the Code.

42) **Power to take samples of any articles or substances {Section 35(1)(x)}.-** (1) The Chief Inspector-cum-Facilitator will recognize any laboratory accredited with National Accreditation Board for Testing and Calibration Laboratories for taking samples and giving analysis report required under the code.

(2) A notice on employer of the establishment from where or vicinity of which sample to be taken shall be served in **Form-17**.

(3) The recognized laboratory, on the order issued by the Inspector-cum-Facilitator in writing, shall take samples.

(4) Sample shall be taken in the presence of employer himself or person authorized by him

(5) Samples to be collected in two parts and to be placed in containers which shall be sealed marked and signed by person collecting sample and employer or his authorized person, and if the employer or his authorized person refuses to sign, then videography of the whole process of collection of samples may be done.

(6) One part of sample collected, sealed shall be handed over to the employer or his authorized person present and another part shall be sent forthwith to the laboratory for analysis.

(7) The findings shall be recorded in **Form-18** in triplicate and signed by the Analyst and sent to the Inspector-cum-Facilitator from whom the

order for sampling is received within 7 days from completion of analysis of sample.

(8) The expenditure of the sampling and analysis shall be borne by the employer of the establishment.

(9) On receipt of the report of the findings of the laboratory, the Inspector-cum- Facilitator shall send one copy of the report to the employer of establishment from whom the sample was taken for analysis, the second copy shall be retained by him for his records and the third copy shall be sent to Chief Inspector-cum-Facilitator for further action to be initiated.

43) **Powers and duties of Inspector-cum-facilitator (Section 35(1)(xiv)}.-** (1) Inspector- cum-Facilitator shall, after every inspection, as may be deemed necessary, issue prohibition or improvement notice in the Form-19 pointing out the non-compliance of provisions of safety, health and working conditions under the Code, and rules and regulations framed there under, to the employer or occupier 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. His findings and any shortcomings which may come to light during the inspection, together with any order passed by him under the Code or the regulations made there under shall be recorded and maintained.

(3) An Inspector-cum-facilitator for the purpose of the implementation of this code can photograph any person, inspect, examine, measure, copy, photograph, sketch or test, as the case may be, any building or room, any plant, machinery, appliance or apparatus any register or document or anything provided for the purpose of securing the health, safety or welfare of the employees employed in an establishment;

(4) An Inspector-cum-facilitator for the purpose of the implementation of this code in case he is a duly qualified medical practitioner, can carry out such medical examinations as may be necessary for the purposes of his duties under the code.

(5) An Inspector-cum-facilitator for the purpose of the implementation of this code shall have powers to prosecute, conduct or defend before a Court any complaint or other proceeding arising under the code or in discharge of his duties as an Inspector-cum-Facilitator.

(6) An Inspector-cum-facilitator for the purpose of the implementation of

the code may issue such orders to the employer of establishment to comply the orders issued under section 38 or any other section.

(7) An Inspector-cum-facilitator may exercise such other powers and performs such other duties as directed by the Government from time to time by way of an administrative order under the ambit of the Occupational Safety, Health and Working Conditions Code, 2020.

44) **Qualification and experience, duties and responsibilities of the experts empanelled under section 37.-** The applicant, for being recognized as Safety Auditor, shall possess the following qualifications and experience, etc.:-

Qualification and Experience. - The applicant shall hold, -

(i) Degree in Chemical or Mechanical or Electrical or Production Engineering and having five years' experience in manufacturing, maintenance, design, project or safety department in the supervisory or above capacity in factories;

Or

Diploma in Chemical or Mechanical or Electrical or Production Engineering and having Eight years' experience in manufacturing, maintenance, design, project or safety department in the supervisory or above capacity in factories;

or

Master Degree in Physics or Chemistry and having ten years' experience in, manufacturing or safety Department of any factory in the supervisory or above capacity in factories,

and

One year full time Diploma in Industrial Safety recognized by the Board of Technical Education or All India Council of Technical Education or a recognized University;

or

(ii) Degree or diploma in any branch of Engineering and having fifteen years' of experience in Factory Inspectorate or Directorate of Industrial Safety and Health or Director General Factory Advisory Services and Labour Institute or Regional Labour Institute or National Safety Council or hazardous factories of PSU's of Govt. of India.

(iii) The applicant shall not be directly or indirectly interested in the factory or in any process or business carried on therein or in any patent or machine connected therewith, in respect of which the safety audit is to be conducted.

(iv) If the age of applicant is more than 65 years, he shall submit a Certificate of physical fitness for carrying out safety audit of factories issued by civil

surgeon or certifying surgeon alongwith the application for recognition or renewal of recognition.

(v) No Safety Auditor shall be above 70 years of age for the purpose of working under this Code.

Duties and responsibilities.-

(i) Safety Auditor shall maintain a log book of all safety audits undertaken by him indicating the name and address of the audited factory, name of the person who has carried out safety audit, contact persons, date of the audit and date of submission of the audit report to the Occupier and Chief Inspector cum Factories.

(ii) Safety Auditor shall not conduct a Safety Audit of any factory where such auditor or person is employed, or an occupier, partner, director, or manager of that factory or of any factory owned, operated, managed, or conducted by immediate family members, relatives or extended family members or wherein that auditor has any direct or indirect interest whatsoever. An auditor shall not carry out the safety audit of those factories to which that auditor supplies any plant, machinery, raw material, safety equipment's or other materials or equipment.

(iii) Safety Auditor shall not disclose, even after he ceases to be a recognized auditor or employee of the institution, any manufacturing or commercial secrets or working.

(iv) Safety auditor shall sign a non-disclosure agreement before empanelment as safety auditor under the code/rules.

Processes or other confidential information which may come to his knowledge in the course of their duties as an auditor. Any failure in this regard may make such auditor liable for criminal or civil proceedings, in accordance with the law for the time being in force.

45) **Manner of providing Alternative Employment {Section 38 (1)(A)(d)}-** Every employer shall provide employment to the affected workers in the other areas of the establishment and provided that the wages of the affected person shall not be reduced due to alternate employment.

Provided further that if the whole or a part of establishment working as factory or building and other construction site is fully closed by an order, then it shall be the duty of the employer to pay wages to the affected workers as per Code of Wages 2020 for the number of days for which the establishment was closed.

46) **Appointment of Medical officer {Section 42(1)}-** The qualification for the Appointment of medical practitioner as medical officer in relation to factory, plantation, motor transport undertaking and any other establishment are as follows:

(i) Must possesses any recognized medical qualification as prescribed under the National Medical Commission Act,2019(30 of 2020) and who is enrolled on a Indian Medical Register as defined in clause (m) of Section 2, and on a State Medical Register as defined in clause (v) of section 2 of the Act.

(ii) In respect of factory carrying hazardous process or dangerous operations, in addition to the qualifications mentioned in sub rule (i) a person should possess a certificate of Training in Industrial Health of minimum three months duration recognized by the State Govt. or shall possess a diploma in Industrial Health or equivalent.

47) **Dangerous occupations for medical examination and duties of Medical Officer under {Section 42(2)}.-**

1. The medical officer shall examine, certify and medically supervise the workers engaged in dangerous occupation or process as prescribed below:
   (i) Operations declared dangerous under Section 82 of the code.
   (ii) Factories carrying hazardous process as per Schedule 1 of the code.
   (iii) Treatment of Biomedical waste.
   (iv) Sewerage Treatment
   (v) Solid waste management
   (vi) Marble cutting
   (vii) Ready mix concrete
   (viii) Hot Mix concrete
   (ix) Working at height
   (x) Operation of crane/heavy duty machinery
   (xi) any other establishment or class of establishment notified by the state government from time to time
2. (i) 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 person sent for such examination, prepare the age and fitness certificate and deliver the same to the manager of the establishment concerned after retaining a copy thereof.

(ii) 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.

(iii) 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 dangerous operations as mentioned under section 82 and the occupation/processes as specified in 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 arduous 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 prescribed in Third Schedule of the code.

(e) in any establishment or any class of establishments as notified by the State Government from time to time.

48) Medical Examination and Certification of Adolescent {Section 42(2)(c)}.-

(1) A medical officer shall, on the application of any adolescent or his parent or guardian accompanied by a document signed by the employer of an establishment that such person will be employed therein, if certified to be fit for work in an establishment, or on the application of the employer of the establishment in which any adolescent wishes to work, examine such person and ascertain his fitness for work in an establishment.

(2) The medical officer, after examination, may grant to such adolescent, in Form-20, or may renew; a certificate of fitness to work in an establishment as an adolescent, if he is satisfied that the adolescent has completed his/her fifteen years of age, that he has attained the prescribed physical standards and that he is fit for such work;

Provided that unless the medical officer has personal knowledge of the place where the adolescent proposes to work and of the manufacturing

process in which he will be employed, he shall not grant or renew a certificate under this sub-rule until he has examined such place

(3) A certificate of fitness granted or renewed under sub-rule (2);

(a) shall be valid only for a period of twelve months from the date thereof:

(b) may be made subject to conditions in regard to the nature of the work in which adolescent may be employed, or requiring re-examination of the adolescent before the expiry of the period of twelve months.

(4) A medical officer shall revoke any certificate granted or renewed under sub-rule

(2) if in his opinion the holder of it is no longer fit to work in the capacity stated therein in an establishment.

(5) Where a certificate under this rule with reference to any adolescent is granted or renewed subject to such conditions as are referred to in sub-rule (3), the adolescent shall not be required or allowed to work in any establishment except in accordance with those conditions.

(6) (a) A fee of rupees one thousand shall be payable for a certificate under this rule and must be paid by the employer and shall not be recoverable from the adolescent, his parents or guardian.

(b) Fee required under sub-rule (a) will be paid on portal in system prescribed and shall be credited to notified Head.

(7) Medical Officer shall maintain record of examinations under this rule in register in Form-21.

49) Safety of employment of women in dangerous operations {Section 44}:

(1) No women shall be allowed or required to work near the machinery in motion without wearing tight fitting clothing and suitable Personal Protective Equipments so as to avoid the risk of entanglement of cloths and bodily injury from any moving part.

(2) As far as practicable, women shall not be engaged in any workplace involving poor ergonomics detrimental to the safety and health.

(3) The employer shall ensure that the women are not allowed to expose to materials if any which may influence or affect their menstrual cycles, reproductive health or pregnancy.

(4) The State Government may by notification prescribe the adequate safeguards to be taken by the employer prior to the employment of

women in dangerous or hazardous processes in any establishment or class of establishment or in any particular hazardous or dangerous process.

CHAPTER-VIII
SPECIAL PROVISIONS RELATING TO EMPLOYMENT OF WOMEN

50) **Conditions relating to safety, holidays and working hours or any other condition to be observed by the employer (Section 43).-** Women shall be entitled to the employment in all establishments for all type of work under the code with their consent between 07:00 PM to 06:00 AM subject to the conditions as notified by the State Government from time to time.

51) **Manner of requiring the employer to provide the adequate safeguards (Section 44).-** The state government may by notification prescribe the adequate safeguards to be taken by the employer prior to the employment of woman worker in dangerous or hazardous processes in any establishment or class of establishment or in any particular hazardous or dangerous process.

CHAPTER-IX

SPECIAL PROVISIONS FOR CONTRACT LABOUR & INTER-STATE MIGRANT WORKER, ETC

PART I

Contract Labour

52) Qualification, Criteria and Manner of making application for licensing of establishments along with Forms, terms and conditions of license {Section 47(3)(a)}.

(1) Every application by a contractor for grant of a license shall be made electronically in Form-22.

(2) The applicant should not be a person who :

(a) Is a minor;

(b) Is of unsound mind and stands so declared by a competent court;

(c) Is an un-discharged insolvent under the Insolvency and Bankruptcy Code, 2016 or earlier code on the same subject.

(d) Has been convicted of an offence, in the last five years, involving moral turpitude.

(3) The application shall be accompanied by a treasury/online receipt showing the payment of fees for the registration of the establishment.

(4) Every application shall be submitted online on the official portal made for that purpose.

(5) The license shall be non-transferable.

(6) The number of workmen employed as contract labour in the establishment shall not, on any day, exceed the maximum number specified in the license;

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

(8) The rates of wages payable to the workmen by the Contractor shall be as per the provisions of Code on Wages, 2020.

(9) In case where the worker employed by the contractor performs the same or similar kind of work as the workers directly employed by the principal employer of the establishment, the wage rates, holidays, hours of work and other conditions of service of the workers of the contractor shall be same as applicable to the workers directly employed by the principal employer of the establishment for the same or similar kind of work.

(10) The licensee shall notify any change in the number of workmen or the nature and conditions of work to the licensing officer.

(11) A copy of the license shall be displayed prominently at the premises where the contract work is being carried on.

(12) If the application of the contractor is complete in all respects as prescribed, the license shall be granted to the contractor in Form-23.

53) **Fees for issuing of license {Section 48(2)}.-** (1) Before issuing a license to the contractor, a security deposit in the form of bank guarantee for an amount calculated at the rate of rupees two thousand for each worker to be employed as contract labour, in respect of which the application for license has been made, shall be deposited by the contractor for performance of the conditions of the license and compliance with the provisions of the Code or the rules made there under.

Provided that the state government may by notification amend the amount of bank guarantee for performance of the conditions of the licence from time to time.

(2) Wherein the issued contract license had expired, based on the request of the applicant, the licensing officer may adjust the security deposit in respect of his application for new license.

(3) The fees to be paid for the grant of a license shall be as specified in the table below, namely;

A	No license is required up to 49 contract labour	Nil
B	50 but does not exceed 100 contract labour	Rs. 1000
C	101 but does not exceed 300 contract labour	Rs. 2000
D	301 but does not exceed 500 contract labour	Rs. 3000
E	501 but not exceeding 1000 contract labour	Rs. 5000
F	1001 but not exceeding 5000 contract labour	Rs. 10000
G	5001 but not exceeding 10000 contract labour	Rs. 20000
H	10001 but not exceeding 20000 contract labour	Rs. 30000
I	20001 and above contract labour	Rs. 40000

All fees paid under these rules shall be paid through online mode at departmental portal under the Head of Accounts and manner as prescribed by the State Government from time to time.

54) Renewal and Amendment of license {Section 48(3)}-

(1) For renewal of License:-

(a) every contractor shall apply electronically to the licensing authority in **Form-22** on the Haryana Labour Department web portal made for the purpose for renewal of the license.

(b) Every such application shall be submitted on the said portal at least 30 days prior to expiry of license period but not before 90 days of such expiry of license.

(c) The security deposit and the fee chargeable for renewal of the license shall be the same as for the grant of license for same numbers of employees.

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

(d) It shall be the responsibility of the Designated Authority to renew license within 30 days.

(e) The renewed licence in **Form-23** shall be issued to the applicant after depositing the renewal fees.

(2) Amendment of License for Contractor {Section 48(3)}–

(a) Every contractor to whom license is issued shall make an application for any amendment to the designated authority on the official portal in Form-22 before any change or within three days from such change.

(b) The fee for the amendment of a license shall be five hundred.

(c) The amended licence in Form-23 shall be issued to the applicant after depositing the amendment fees.

(3) Register of Contractors {Section 48(3)}-A register of contractors shall be maintained by the Designated Authority in Form-24 to whom license is issued.

55) Refund of security deposit-

(1) On expiry of the period of license the contractor may, if he does not intend to have his license renewed further, make an application electronically to the licensing authority for the refund of the security deposited by him along with copy of license and notice of completion of work and bank details in which amount is required to be refunded.

(2) If the Licensing authority is satisfied that there is no breach of the

conditions of license or there is no order for the forfeiture of security deposit or any portion thereof, he shall direct the refund of the security deposit to the applicant.

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

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

56) Responsibility of contractor {Section 48(4)}.-

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

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

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

4) All contract labourer shall be covered under the Employees Provident Fund Organization and Employee‘s State Insurance Corporation.

5) The contractor shall notify any change in the number of workers or conditions of work to the Licensing Authority, electronically.

57) Intimation of work order and time limit for intimation (Section 50).-

1) Within fifteen days of the receipt of a contract work order, every contractor 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 (category wise) employed under that work order, duration of work orders.

2) The details of work order shall be sent by the contractor or his authorized representative.

3) The intimation shall be sent electronically to the Chief Inspector-cum-Facilitator or his representative and to the Licensing Officer as maybe notified by the State Government through official Gazette.

58) Revocation or suspension of license.-

1) If the Licensing Authority is satisfied that the license has been obtained by misrepresentation or suppression of any material fact or if the contractor has failed to comply with the conditions subject to which license was granted, the Licensing Authority shall issue a show cause notice of 15 days to the contractor electronically. On receipt of the reply, if any, from the contractor within 15 days, the Licensing Authority shall examine the same and in case the licensing authority feels that the continuation of contract business by the contractor is going to lead to grave harm to the workers, he may pass a Speaking Order recording the reasons for revocation or suspension or otherwise and communicate to the contractor electronically.

2) If the contractor has complied with the said provisions of the code and rules made thereunder within the stipulated time period, the Licensing Authority shall revoke the suspension by passing a speaking order or else the suspension may be continued.

3) If the contractor fails to comply with the directions as in sub-rule (1), the Licensing Authority may forthwith pass an order of revocation of license, recording the reasons thereof and communicate to the contractor electronically. The copy of the order shall be endorsed electronically to the Authorities of Labour Department notified by the State Government along with a copy to the same to the notified Central Authority.

59) Responsibility of Payment of wages (Section 55).-

1) The contractor shall fix the wage periods in respect of which wages shall be payable and no wage period shall exceed one month.

2) The wages of every person employed as contract labour in an establishment or by a contractor shall be paid before the expiry of seventh day after the last day of the wage period in respect of which the wages are payable.

3) The wages shall be disbursed through bank transfer or electronic mode only.

60) Making payment of wages from the security deposit amount {Section 55(4)}.- If the contractor or principal employer does not pay the wages to the

contract labour employed by him, the Chief Inspector-cum-Facilitator or his representative or the competent officer as may be notified shall conduct or cause to conduct, an inquiry and after giving an opportunity to be heard to the contractor shall pass an order to make payment if any, of such wages from the amount deposited by the contractor as security deposit. The contractor shall re-furnish the security deposit within a period of fifteen days or else his license will be liable to be suspended.

61) **Experience Certificate (section 56).-** Every concerned contractor shall issue on demand, experience certificate in **Form-25** to the contract labour giving details of the period, work performed, experience gained in various fields performed by such contract labour.

62) **Prohibition of employment of contract labour {Section 57(2)(b)}.-**

1) If a question arises as to whether any activity of an establishment is a core activity or activities, the work performed is of intermittent or of casual nature; the aggrieved party may make an application to the Chief Inspector-cum-Facilitator or any other Officer as notified by the State time to time giving reasons along with supporting documents.

2) The State Government may refer suo-moto, any such question relating to core activity or activities, the work performed is of intermittent or of casual nature, forwarded to the Haryana Occupational Safety and Health Advisory Board constituted under Section 17 of the Code for deciding the matter and to prohibit by notification in the official Gazette, employment of contract labour in any process, operation or other work in any establishment.

The State Board on the reference of the State Government, decide and may prohibit the contract labour in any process, operation or other work in any establishment, by taking following factors into consideration:-

(a) Whether the process, operation or other work is incidental to, or necessary for the industry, trade, business, manufacture or occupation that is carried on in the establishment;

(b) Whether it is of perennial nature, that is to say, it is of sufficient duration having regard to the nature of industry, trade, business, manufacture or occupation carried on in that establishment;

(c) Whether it is done ordinarily through, regular workmen in that establishment or an establishment similar thereto;

(d) Whether it is sufficient to employ considerable number of whole time workmen.

PART-II

Inter-state Migrant Worker

63) **Journey allowance to Inter-State Migrant Worker (Section 61).-** The employer shall pay a lump sum amount directly in the Aadhar seeded Bank Account of the inter-state migrant worker on account of fare for to & fro journey by train (not less than II Class Sleeper) or by bus or any other mode of passenger transport from the place of employment to the place of residence in the home state in the event of the following, namely:

if he has worked for a period of not less than 60 days in the concerned establishment(s)in preceding twelve months;

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

However, in the event of change of employer by the inter-state migrant worker during the middle of the employment period, and when he has not availed the journey allowance from his previous employer, then, the new employer (where the inter-state migrant worker is now working and such worker has completed sixty days in preceding twelve months including the period spent with the previous employer), shall give journey allowance, to the inter-state migrant worker, on the presentation of a certificate issued by the previous employer (along with the copy of bank statement of preceding 12 months).

64) **Study of inter-state migrant workers (Section 64).-** (1). The state government suo-moto or in consultation with the stake holder(s) or expert may hold survey of inter-state migrant workers.

(2) The State Government may identify the studies to be carried out to promote safety, health and welfare of inter-state migrant workers. Wherever required the State Government may also consult the stakeholders and the Central Government or expert organizations involved in the safety, health and welfare of inter-state migrant workers.

PART-III

Audio-Visual Workers

65) **Authority to whom a copy of the agreement shall be forwarded by the producer {Section 66(3)}.**

The agreement to be entered between producer and employees of audio-visual programme as envisaged in section 66(2)(a) shall be forwarded to Chief-Inspector-cum-Facilitator.

66) **Dispute Resolution process {Section 66(4)(vii)}.-** Dispute resolution process or mechanism, Constitution and other details shall be same as provided under the Industrial Relations Code, 2020 and rules framed thereunder.

PART-IV

Beedi and Cigar Workers

67) **License to industrial premises and person {Section 74(2),(4) and (5)}.-**

(1). The Chief Inspector-cum- Facilitator shall, in deciding whether to grant or refuse a licence, have regard to the following matters:

(a)the suitability of the place or premises which is proposed to be used for the manufacture of beedi or cigar or both;

(b)the previous experience of the applicant;

(c)the financial resources of the applicant including his financial capacity to meet the demands arising out of the provisions of the laws for the time being in force relating to welfare of labour;

(d)whether the application is made bona fide on behalf of the applicant himself or in benami of any other person;

(e) welfare of the labour in the locality, the interest of the public generally and such other matters as may be prescribed.

(2). Subject to the provisions of section 119, any person who intends to use or allows to use any place or premises specified in sub section (1) of Section 74 shall make an application to the Authority referred to in sub section (1) of Section 119 in Form-29 and on payment of fees as provided under the schedule prescribed under Rule 81, for a license to use, such premises as an industrial premise. On the receipt of a valid application, the Chief Inspector-cum- Facilitator shall grant a license in Form-30 within 45 days from the date of receipt of application.

68) **Plan of the place {Section 74(3)}.-** The application for the grant of the license as prescribed under Rule 67 shall be accompanied with a plan of the

place or premises duly approved by Chief Inspector-cum-Facilitator. The plans shall be prepared in accordance with the provisions as prescribed under Rule 73.

69) Welfare of the labour in the locality {Section 74(4)(e)}.-

1) Every employer of the establishment where beedi and cigar work is carried out, shall arrange to conduct free of cost, medical examination for every employee once in a calendar year. The medical examination shall be conducted by a qualified medical practitioner as per tests specified in the Form-8. The Medical Examination Reports shall be submitted by the qualified medical practitioner to the concerned employer and employee.

   Provided that an employer may avail facility for medical examination of the employee(s) under relevant rule of Social Security Code Rules, 2021 through Employees' State Insurance Corporation (ESIC).

2) The employer shall ensure that welfare of the labour in the locality is increased through awareness activities undertaken at least once in six months. A record of the activities undertaken along with names of the participants shall be kept.

3) Notices and warning signs shall be put up upon and around the premises warning about the nature of activities undertaken in the premises.

4) Cautionary notice in Hindi or in a language understood by the majority of workers shall be prominently displayed to draw attention of all workers about the hazards involved in the process along with do and don‘ts.

5) The children shall not be allowed inside the premises under any circumstances. In case of exceptional circumstances if admittance of children is necessary for medical or other reasons the information of such fact shall be sent forthwith to the Inspector-cum-Facilitator of the area.

70) Renewal of license {Section 74(6)}.-

1) A Licence shall be renewed by the Chief Inspector –cum – Facilitator under section 119 in electronic mode, on payment of the same fee which is charged for the grant of a licence for a period between one year upto ten years for which application has been made within 45 days after the receipt of complete valid application for renewal.

2) Occupier of every factory shall submit application in Form-29 in electronic mode, for the renewal of licence, accompanied by fee paid

showing that the renewal fee including additional registration fee wherein dangerous operations are carried on has been deposited, and if the application is so made the premises shall be held to be duly licensed until such date as Chief Inspector-cum-Facilitator renews the licence.

3) Every such application shall be submitted in electronic mode at least 30 days prior to expiry of license period but not before 90 days of such expiry of license.

4) If the application is not made before at least 30 days prior to expiry of licence period, an additional fee equal to 25 percent of the licence fee shall be payable by the licensee:

Provided that Chief Inspector-cum-Facilitator may, if satisfied that the delay was unavoidable and beyond the control of the occupier reduce or remit the payment of the additional fee as he thinks fit.

71) **Appeals**.- Any person aggrieved by the decision of the competent authority refusing to grant or renew a license or cancelling or suspending a license may, within 15 days from the cancellation or suspension of licence and on payment of Rs.1000/-, appeal to the Administrative Secretary of the Labour Department or the authority as the State Government may, by notification, specify in this behalf, and such authority may by order confirm, modify or reverse any order refusing to grant or renew a license or cancelling or suspending a license.

72) **Permission to work by employees outside industrial premises {Section 76(1).**

1) The State Government may permit the wetting or cutting of beedi or tobacco leaves by employees outside the industrial premises on an application made to it by the employer on behalf of such employees.

2) The record to be maintained by the employer of the work permitted under sub-section (1) of section 76 to be carried on outside the industrial premises shall be in Form-31.

PART-V

Factories

73) **Submission of Plans (Section 79).-**

(1) No building shall be constructed or shall be taken into used as a factory on any site on which a factory is to be situated or for the extension or use as a factory or a part of a factory after the date of the commencement of these rules, unless plans in respect of such building

are approved by Chief Inspector-cum-Facilitator, Haryana.

(2) The State Government or the Chief Inspector-cum- Facilitator may require for the purposes of the Code, submission of plans of any building / structure / premises to be taken in use as a factory which was either in existence on the date of commencement of the Code or which has not been constructed or extended since then.

(3) Every occupier applying for approval of the plans under the rule shall appoint a person declared competent person under the Code for drawing up of building or structural drawings and for issuing the stability certificate of the building or structure.

(4) Application for approval of the plans shall be made in the electronic mode to the Chief Inspector-cum-Facilitator in Form-26 which shall be accompanied by the following documents and specifications certified by persons possessing the qualifications as hereinafter provided:—

(i) Particulars of the rooms in the factory in Form-27.

(ii) Reply to the questionnaire annexed to Form-27.

(iii) The application shall consist of building plans, sections and elevations be drawn to the scale and shall include:-

(a) the site plan of the factory and immediate surroundings including adjacent buildings and other structures, road, drains, etc.;

(b) floor plans of all the floors together with covered area clearly indicating the size and spacing of all framing members, sizes of rooms , staircases, ramps, lift wells, means of lighting, ventilation, fire-escapes, position & size of plant/machinery/equipment, drinking water points, details of urinals/latrines, roof materials, washing facilities/drenching facilities, space for storing/drying of clothes, crèche, rest-room/ mess-room, canteen, ambulance room/occupational health center etc.

(c) Cross sections showing the height of the building/room.

(d) Cross sections through the staircase.

(e) The schedule indicating the size of the doors, windows, openings and other methods of ventilation of each room/ area.

(f) The schedule indicating number and size of plant / machinery / equipments etc.

(g) The schedule indicating area calculations of plot, ground

coverage, floors, buildings etc.

(h) Provision for differently-able person, photovoltaic solar power plant, rainwater harvesting system as required.

(iv) A flow chart of the manufacturing process supplemented by a brief description of the process in its various stages and showing raw materials/by-products/end product along with quantity/capacity.

(v) Letter of allotment from concerned agency which has developed the industrial area/industrial park if the factory is situated in industrial area/ industrial park or No Objection Certificate from any other local authority in which area the factory is situated.

(vi) Letter regarding classification of land from the Department of Town and Country Planning if site does not fall in industrial area/industrial park.

(vii) Safety Report in detail and List of chemicals to be used/stored/produced along with quantity.

(viii) Details of cess paid.

(ix) Such other particulars as the Chief Inspector-cum- Facilitator may require in relation to the application:

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

(5) All dimensions in plans shall be indicated in Units of Foot and Inch.

(6) The applicant and competent person shall duly sing digitally the application, plans, structural drawings, specifications and the certificates as required in the relevant forms and documents, before making submission.

(7) No addition/alteration/extension in the existing factory shall be made except those specified in the Table as below unless such additions, alterations or extensions are approved by Chief Inspector-cum-Facilitator, Haryana.

TABLE	
Sr. No	**Type of Additions/Alterations/Extension**
1	Boundary Wall upto height of 4 Feet.
2	Rooms/Cabins to be used for clerical/managerial/Pantry purposes.
3	Security picket/ Guard Rooms
4	Sheds for Vehicle Parking
5	Canopies for Generator Sheds
6	Balcony/Chajjas.
7	Changes in Outer Gates.

(8) Colourings of plans shall be as under**:-**

S.No.	**Item**	**Site & Building Plan (on white background)**
1	Plot line	Thick Black
2	Building lines	Thin Black
3	Open space	No colour
4	Construction to be approved	Blue filled in
5	Work proposed to be demolished	Yellow filled in
6	Proposed construction	Brown filled in
7	Drainage & sewerage work	Orange dotted
8	Water supply	Green dotted
9	Already approved construction	Orange filled in
10	Revised/Altered building	Pink filled in
11	Fire escapes	Red dotted
12	Any other	Purple dotted

74) APPROVAL OF PLANS (Section 79).-

1) If the Chief Inspector-cum-Facilitator is satisfied that the plans are in consonance with the requirements of the Code, he shall, subject to such conditions as he may specify, approve them in electronic mode by signing digitally within such period not exceeding thirty days.
2) If the Chief Inspector-cum-Facilitator fails to convey approval or rejection or any observation within a period of thirty days of the receipt from any person of an application, the plans shall without prejudice to the provisions of these rules, be deemed to have been approved.

Provided that plans shall not be deemed to have been submitted till such time

as they are resubmitted duly modified and corrected.

Provided further that plans which have been already approved by the Chief Inspector of Factories under The Factories Act 1948 before coming into force of these rules shall be deemed to be approved under these rules.

Appeal against the order of Chief Inspector of Factories shall be to the Administrative Secretary.

75) CERTIFICATE OF STABILITY (Section 79).-

1) No manufacturing process to be carried on with the aid of power shall be begun, or carried on in any building or part of a building until a certificate of stability of the building or part of the building in Form-28 signed digitally by a person possessing the qualifications prescribed in sub-rule has been delivered to and accepted by the Chief Inspector-cum- Facilitator in electronic mode. No extended portion of any factory wherein manufacturing process is being carried on with the aid of power shall be used as a part of the factory any time after the extension, nor plant or machinery shall be added in any factory nor brought into use any time, after such addition until such a certificate in respect of such extension or plan has been delivered to and accepted by the Chief Inspector- cum-Facilitator in electronic mode.

Provided that if on an application for the acceptance of certificate of stability submitted in electronic mode, complete in all respect, to the Chief Inspector-cum- Facilitator and if no response is received within thirty days from the date of such submission, the said application shall be deemed approved.

2) The person competent to certify the plans and specification or to sign digitally Form-28 shall possess the following qualification and experience: -

(i) Degree in Civil or Structural Engineering;

(ii) A minimum of 5 years' experience in the design or construction or testing or repair of structures;

(iii) Knowledge of non-destructive testing, various codes of practices that are current and the effect of the vibrations and natural forces on the stability of the building; and

(iv) Ability to arrive at a reliable conclusion with regard to the safety of the structure or the building.

(v) Age of competent person shall not be above the age of 60 years and

shall be physically fit for the purposed of carrying out the tests, examination and inspection.

3) No person, except in the case of buildings occupied or erected by any Government where a certificate may be granted by an officer not below the rank of Executive Engineer shall be authorized to sign a certificate of stability if he is in the full employment of the owner or the builder of the buildings.

76) **REVOCATION OF SANCTION (Section 79).-** The approval granted under these rules can 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 submitted along with the application or otherwise or the construction is not being done in accordance with the approval granted.

77) **INTERNAL HEIGHT OF WORK-ROOMS (section 79).-** (1) The internal height of a work-room 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 16 feet:

Provided that in the case of building having a brick or concrete roof or a combination of the two, the minimum height may be 12 feet, if approved by the Chief Inspector-cum- Facilitator;

Provided further that in case of factories employing less than 100 workers, the Chief Inspector-cum-Facilitator may, where he is satisfied that the conditions of work are reasonably good, (where no fumes/smoke or dangerous vapours are produced and where the facilities of air conditioning/cooling are provided) exempt such factories from the provision of this sub-rule.

(2) 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.

(3) Particulars of each work-room of the factory shall be entered in Form-27 which shall be shown to the Inspector-cum-Facilitator when required. The provisions of sub-rule (1) shall not apply to rooms intended for storage, godowns and like purposes and also rooms intended solely for office purpose where only clerical work is done.

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

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

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

79) **Exits in the Building: -** (1)(a) In this rule:

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

—travel distance‖ means the distances an occupant has to travel to reach an exit.

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

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

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

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

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

(f) Iron rung ladders or spiral staircases shall not be used as main exit staircases.

(g) Fire resisting doors or roller shutters shall be provided at appropriate

places along the escape routes to prevent spread of fire and smoke, particularly at the entrance of lifts or stairs where funnel or flue effect may be created inducing an upward spread of fire.

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

(i) Exits shall be so located that the travel distance to reach at least one of them on the floor shall not exceed 30 meters.

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

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

(l) The unit of exit width used to measure capacity of any exit shall be 50 cm. A clear width of 25 cm shall be counted as an additional half unit. Clear width of less than25 cm shall not be counted for exit width.

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

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

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

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

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

(r) Every exit doorway shall open into an enclosed stairway, horizontal exit on a corridor or passageway providing continuous and protected means

of egress.

(s) No exit doorway shall be less than 100 cm in width, doorways shall be not less than200 cm. in height.

(t) Exit doorways shall open outwards, that is, away from the room but shall

not obstruct the travel along any exit. No door when opened shall reduce the required width of a stairway or landing to less than 90 cm. overhead or sliding doors shall not be installed for this purpose.

(u) An exit door shall not open immediately upon a flight of I stairs. A landing at least

1.5 m x 1.5 m in size shall be j provided in the stairway to each doorway. The level of I landing shall be the same as that of the floor which it serves.

(v) The exit doorways shall be open able from the side which they serve without the use of a key.

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

(x) Where stairways discharge through corridors and passageways the height of the corridors and passageways shall not be less than 240 cm.

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

(z) Hollow combustible construction shall not be permitted.

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

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

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

(dd) Hand rails shall be provided with minimum height of 100 cm and shall be firmly supported.

(ee) The use of spiral staircase shall be limited to low occupant load and to a building of height of 9 meters, unless they are connected to platform such as balconies and terraces to allow escape or pause. A spiral staircase shall not be less than 300 cm in diameter and have

adequate headroom.

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

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

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

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

(jj) Doors in horizontal exits shall be open able at all times.

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

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

(2) The Chief Inspector-cum-Facilitator may, where he is satisfied that the conditions of work are reasonably good, exempt such factories or class of factories from the any provision of sub-rule (1).

80) Application for grant of common licence for factory, industrial premises for beedi & cigar work and for engaging contract worker (Section 74, 79 & 119).-

(1) The employer, who desires to obtain a common license in respect of factory, industrial premises for beedi & cigar work and for engaging contract worker or any combination thereof shall submit to the Chief Inspector-cum-Facilitator an application in electronic mode in Form-29 for the grant of license.

Provided that if on an application for the grant of License submitted in electronic mode, complete in all respect, to the State Government or Chief Inspector-cum- Facilitator and if no response is received within forty five days from the date of such submission, the said application shall be deemed approved.

(2) The responsibility under this rule shall entirely lie with the employer himself.

81) **Grant of licence** (**Section 74, 79 & 119**).- (1) A common license under this rule shall be granted in electronic mode by the Chief Inspector-cum-Facilitator in Form-30 for a period between one year to ten years, as the case may be, on payment of the fees specified in the Schedule there to:

Provided that if an application is made for a period for more than one year, the fee shall be payable as per fees specified in Schedule by multiplying the number of years for which license is applied for.

(2) Every licence granted or renewed shall remain in force up to the 31st of December of the year for which the licence is granted or renewed.

(3) The fee for the grant of a licence shall be paid through online mode at departmental portal under the Head of Accounts and manner as prescribed by the State Government from time to time at the rates given in the Schedule below:—

SCHEDULE

Annual License fee in respect of factory.

Maximum number of workers to be employed on any day during the year.

Quantity of KW Installed (Maximum KW)	**Up to 20**	**From 21 to 40**	**From 41 to 150**	**From 151 to 250**	**From 251 to 500**	**From 501 to 1000**	**From 1001 to 2000**	**From 2001 to 3000**	**From 3001 & above**
	Rs.	**Rs.**	**Rs.**	**Rs.**	**Rs.**	**Rs.**	**Rs.**	**Rs.**	**Rs.**
Nil	1500	3000	4500	6000	7500	9000	10500	12000	13500
Upto 10	3000	6000	9000	12000	15000	18000	21000	24000	27000
Above 10but not above 50	4500	9000	13500	18000	22500	27000	31500	36000	40500
Above 50 but not Above100	6000	12000	18000	24000	30000	36000	42000	48000	54000

Above 100 but not above 500	7500	15000	22500	30000	37500	45000	52500	60000	67500
Above 500 but not above 1000	9000	18000	27000	36000	45000	54000	63000	72000	81000
Above 1000 but not above 2000	10500	21000	31500	42000	52500	63000	73500	84000	94500
Above 2000	12000	24000	36000	48000	60000	72000	84000	96000	108000

Provided that in the case of a licence for a factory wherein dangerous operations as specified in the Rules, are carried on, an additional registration fee at the rate of 300 rupees per worker shall be charged.

(4) The annual licence fees in respect of industrial premise for beedi & cigar works and for engagement of contract workers shall be applicable separately, as the case may be, as per 1st row of above said table with respect to number of workers.

(5) On receipt of an application, the Chief Inspector-cum-Facilitator may investigate or cause to be investigated to his satisfaction about the correctness of the facts and particulars furnished in the application and other documents submitted along with it and grant such license.

(6) Where the Chief Inspector-cum-Facilitator is of the opinion that the license shall not be granted, he shall assign the reasons for such rejection and communicate to the applicant electronically.

(7) Any person aggrieved by an order passed under this section by the Chief Inspector-cum-Facilitator under sub-Section 6 of Section 119, may file within thirty days from the date of the order, an appeal electronically to the Administrative Secretary and with such fee notified by the Government which shall be disposed off within sixty days.

82) Amendment of licence (Section 74, 79 & 119).-

1) A licence granted in electronic mode may be amended by the Chief Inspector- cum-Facilitator.

2) A licensee who desires to have his licence amended shall submit an application in Form-29 in electronic mode stating the nature of the

amendment and reasons therefore to the Chief Inspector-cum-Facilitator.

Provided that if on an application for the amendment of the Licence submitted in electronic mode to the Chief Inspector-cum-Facilitator and if no response is received within forty five days from the date of such submission, the said application shall be deemed approved.

3) The fee for the amendment of a licence shall be 300 rupees plus the amount (if any) by which the fee that would have been payable if the licence had originally been issued in the amended form exceeds the fee originally paid for the licence.

4) The employer of a factory, wherein change in the quantity of power or the number of persons employed including contract workers or interstate migrant workers or a change of the name of the employer or contractor as given in the original licence, takes place, shall apply for amendment of the current licence within a month of such change.

Provided that where the occupier of a factory fails to apply for the amendment of the licence as laid down in sub-rule (4), the Chief Inspector-cum-Facilitator may levy an excess fee to the extent of 25 percent of the fee chargeable (as the case may be) for the amendment of the licence.

83) Renewal of licence (Section 74, 79 & 119).-

1) A Licence shall be renewed by the Chief Inspector –cum – Facilitator under section 119 in electronic mode, on payment of the same fee which is charged for the grant of a licence for a period between one year to ten years for which application has been made.

2) Occupier of every factory shall submit application in Form-29 in electronic mode, for the renewal of licence, accompanied by fee paid showing that the renewal fee including additional registration fee wherein dangerous operations are carried on has been deposited, and if the application is so made the premises shall be held to be duly licensed until such date as Chief Inspector-cum-Facilitator renews the licence.

3) Every such application shall be submitted in electronic mode at least 30 days prior to expiry of license period but not before 90 days of such expiry of license.

4) If the application is not made before at least 30 days prior to expiry of licence period, an additional fee equal to 25 percent of the licence fee shall be payable by the licensee:

Provided that Chief Inspector-cum-Facilitator may, if satisfied that the delay was unavoidable and beyond the control of the occupier reduce or remit the payment of the additional fee as he thinks fit.

84) **Procedure on death or disability of licensee** (**Section 74, 79 & 119**).- If a licensee dies or becomes insolvent, the person carrying on the business of such licensee shall not be liable to any penalty under these rules for exercising the powers granted to the licensee by the licence during such time as may reasonably be required to allow him to make an application for the amendment of the licence under the Rules in his own name for the unexpired portion of the original licence.

85) **Payment of fees [Section 74, 79 & 119).-**

1) Fee shall be paid be paid through online mode at departmental portal under the Head of Accounts and manner as prescribed by the State Government from time to time.
2) If an application for the grant, renewal or amendment of licence is rejected, the fee paid shall be refunded to the applicant.

86) **Suspension of factory licence** (**Section 74, 79 & 119**). - The Chief Inspector-cum- Facilitator may after giving the licensee concerned, reasonable opportunity to show cause against the proposed action, suspend any license, if he is satisfied that the license was obtained by the licensee through fraud, or by misrepresentation of facts or any other reason specified and on such suspension of licence the licensee shall not be entitled to the refund of the license fee.

87) **Prohibition of use of premises as factory without valid licence** (**Section 74, 79 & 119**).- Any premises shall not be used as a factory or carry on any manufacturing process in a factory unless a licence has been issued in respect of such premises and the same is in force for the time being:

Provided that if a valid application for grant of licence or renewal of licence has been submitted in electronic mode and the required fee has been paid, the premises shall be deemed to be fully licensed until such date as the Chief Inspector-cum-Facilitator grants or renews the licence or refuses in writing to grant or renew license.

88) **Liability of owner of premises in certain circumstances (Section 80).-**

1) where in any premises separate buildings or floors 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.

2) The Chief Inspector-cum-Facilitator may through an order specify the liability of the owner and occupier jointly or separately on receiving the application from the occupier and owner of the premises.

Provided that in case the occupier or owner does not apply for the same. Both occupier and owner shall be liable for the common services and facilities.

3) Where in any premises, independent or self-contained or floors are leased to different occupiers for use as separate factories; the owner of the premises and occupiers of such factories utilizing common facilities shall be liable for any contravention of the provisions of this Code in respect of—

(i) approach roads, drainage, water supply, lighting and sanitation;

(ii) latrines, urinals and washing facilities in so far as the maintenance of the common supply of water for these purposes is concerned;

(iii) fencing of machinery and plant belonging to the owner and not specifically entrusted to the custody or use of an occupier;

(iv) safe means of access to the floors and maintenance and cleanliness of stair cases and common passages;

(v) fire prevention and protection;

(vi) emergency preparedness and response;

(vii) canteens, shelter, rest rooms and crèches;

(viii) hygiene, ventilation, temperature;

(ix) safety and occupational health

(x) maintenance of hoists and lifts; and

(xi) Maintenance of any other common facilities provided in the premises.

4) In respect of the carrying out of the provision of sub-rules of the rule, while computing for the purposes of any of the provisions of this Code the total number of workers employed, the whole of the premises shall be deemed to be a single factory.

89) Dangerous operations (Section 82).-

(1) The following manufacturing processes or operations when carried on in any factory is declared to be dangerous operations under Section 82 of the Code:—

I. Manufacture Of Aerated Water and Processes Incidental Thereto.

II.	Electrolytic Plating Or Oxidation Of Metal Articles By Use Of An Electrolyte Containing Acids, Bases Or Salts Of Metals Such As Chromium, Nickel, Cadmium, Zinc, Copper, Silver, Gold Etc.
III.	Manufacture and Repair of Electric Accumulators.
IV.	Glass Manufacture.
V.	Grinding or glazing of Metals and Processes Incidental thereto.
VI.	Manufacture and Treatment Of Lead And Certain compounds Of Lead
VII.	Generation Of Gas From Dangerous Petroleum
VIII.	Cleaning Or Smoothening, Roughening, Etc. Of Articles, By A Jet Of Sand, Metal Shot, Or Grit Or Other Abrasive, Propelled By A Blast Of Compressed Air Or Steam. (Blasting regulations)
IX.	Liming andTanning Of Raw Hides and Skins And Processes Incidental thereto
X.	Carrying On Of Certain Processes Of lead and Lead Material in Printing Presses and Type Foundries
XI.	Chemical Works.
XII.	Manufacture Of Pottery
XIII.	Compression Of Oxygen And Hydrogen Produced By The Electrolysis Of Water
XIV.	Hand ligand Manipulation Of corrosive Substances
XV.	Manipulation of stone or any other Material containing free Silica
XVI.	Handling And Processing Of asbestos, Manufacture Of Any Article Of Asbestos And Any Other Process Of Manufacture Or Otherwise In Which Asbestos Is Used In Any Form
XVII.	Manufacture Or Manipulation Of Carcinogenic Dye Termediates
XVIII.	Process Of Extracting Oils and Fats From VegetablesAnd animal sources InSolvent Extraction Plants
XIX.	ManufactureOrManipulationOfManganese And Its Compounds
XX.	ManufactureAndManipulationOfDangerous Pesticides
XXI.	Carbon Di sulphide Plants
XXII.	Protection AgainstHazardsOfPoisoning Arising From Benzene
XXIII.	Operations Involving High Noise Levels
XXIV.	Manufacture Of Rayon By Viscose Process
XXV.	Highly FlammableLiquids AndFlammable Compressed Gases
XXVI.	Operation In Foundries

XXVII.	Fire Works Manufactories And Match Factories.
XXVIII.	Use Of Ovens And Driers In Factories
XXIX.	Textile Machinery Except Machinery Use In Jute Mills
XXX.	Process Of Melting In Induction Furnace
XXXI.	Woodworking Machinery
XXXII.	Rubber Mills
XXXIII.	Centrifugal Machines
XXXIV.	Powers Presses
XXXV.	Shears Slitters And Guillotine Machines
XXXVI.	Thermic Fluid Heaters
XXXVII.	Manufacture Of Chromic Acid Or Manufacture Or Recovery Of The Bichromate Of Sodium, Potassium Or Ammonium
XXXVIII.	Welding/Cutting Operation With The Use Of Lpg/Acetylene/Argon
XXXIX.	Effluent Treatment Plant (ETP), Sewage Treatment Plant (STP)
XL.	Processing of Hazardous Wastes

(2) the provisions specified in the Schedules annexed hereto shall apply to any class or description of factories wherein dangerous operations specified in each schedule are carried out.

(3) wherever a periodical medical examination has been prescribed under the different schedules, the occupier shall send a return in Form-34 to the Chief Inspector–cum–Facilitator so as to reach him on or before the 5th of every month in respect of medical examination of the workers conducted during the preceding quarter.

(4) Any register or record of medical examination and tests connected therewith required to be carried out under any of the schedule annexed hereto in respect of any worker shall be made readily available to the Inspector– cum –Facilitator and shall by preserved till the expiry of one year after the worker ceases to be in employment of the factory.

SCHEDULES UNDER RULE 89

Dangerous Operations - Special Provisions

SCHEDULE I

MANUFACTURE OF AERATED WATERS AND PROCESSES INCIDENTAL THERETO

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

2. **Face-guards and gauntlets.**

(a) The occupier shall provide and maintain in good condition for the use of all persons engaged in filling bottles or syphons: —

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

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

Provided that: **—**

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

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

(b) 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, labeling bottles or syphon's: —

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

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

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

SCHEDULE- II

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

1. **Definitions.** — For the purposes of this Schedule:
   (a) **—Electrolytic‖** means the electrolytic plating or oxidation of metal articles by the use of an electrolyte containing acids, bases or salts of metal such as chromium, nickel, cadmium, zinc, copper, silver, gold, etc.;
   (b) **—Bath‖,** means any vessel used for an electrolytic process or for any subsequent process; and
   (c) **—Employed‖,** means employed in any process involving contact with liquid from a bath.
2. **Exhaust draught.—**an efficient exhaust draught shall be applied to every vessel in which an electrolytic process is carried on. Such draught shall be provided by mechanical means and shall operate on the vapour or spray given off in the process as near as may be at the point of origin. The exhaust draught appliances shall be so constructed, arranged and maintained as to prevent the vapour or spray entering into any room or place in which work is carried on.
3. **Prohibition relating to pregnant women and young persons.—**No pregnant woman, adolescent or child shall be employed or permitted to work at a bath.
4. **Floor of work-rooms.** — The floor of every work-room containing a bath shall be impervious to water. The floor shall be maintained in good and level 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 or protective devices for the use of all persons employed on any process at which they are liable to come in contact with liquid from a bath and such devices shall be worn by the person concerned:
   (a) waterproof aprons and bibs; and
   (b) for persons actually working at a bath, loose fitting rubber gloves and rubber boots or other water-proof footwear and chemical goggles.

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

6. **Washing 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:

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

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

(ii) at least one washbasin 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. Whenever necessary, in order to ensure continuous water supply, storage tank of 1500 liters capacity shall be provided as a source of clean water for emergency use.

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

CAUTIONARY NOTICE

Electrolytic Plating —

1. Chemicals handled in this plant are corrosive and poisonous.
2. Smoking, chewing tobacco, eating food or drinking, in this area is prohibited. No food stuff or drink shall be brought in this area.
3. Some of these chemicals may be absorbed through the skin and may cause poisoning.
4. A good wash shall be taken before meals.
5. Protective devices supplied shall be used while working in this area.
6. Spillage of the chemicals on any part of the body or on the floor shall be immediately washed away with water.
7. All workers shall report for the prescribed medical tests regularly to protect their own health.
8.

9. **Medical facilities and records of examinations and tests.-** (1) the occupier of every factory in which electrolytic processes are carried on shall:

(a) employ a qualified medical practitioner for medical surveillance of the workers employed therein whose appointment shall be subject to the approval of the Chief Inspector – cum - Facilitator;

(b) provide to the said medical practitioner all the necessary facilities for the purpose referred to in clause (a); and (c) maintain a sufficient supply of suitable barrier cream, ointment and impermeable waterproof plaster in a separate box readily accessible to the workers and used solely for the purpose of keeping these substances. In case cyanides are used in the bath, the box shall also contain an emergency cyanide kit.

(2) The medical practitioner shall, examine all workers before they are employed in electrolytic processes. Such examination in case of chrome plating shall include inspection of hands, forearms and nose and will be carried out once at least in every fortnight.

(3) The record of the examinations referred to in sub-paragraph (2) shall be maintained in a separate register approved by the Chief Inspector – cum - Facilitator which shall be kept readily available for inspection by the Inspector– cum - Facilitator.

10. **Medical examination by the Certifying Surgeon.—**(1) every worker employed in the electrolytic processes shall be examined by a Certifying Surgeon before his first employment. Such examination shall include x-ray of the chest and:—

(a) in case of chromium plating include examination for nasal sputum perforation and test for chromium in urine;

(b) in case of nickel plating, test for nickle in urine; and

(c) 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 Certifying Surgeon.

(3) Every worker employed in the electrolytic processes shall be re-examined by a Certifying Surgeon at least once in every year, except in case of the workers employed in cadmium, chromium and nickel plating processes for whom this examination shall be carried out once in every six months. Such re- examination shall, wherever the Certifying

Surgeon considers appropriate, include tests as specified under sub-paragraph (1) excluding the X-ray of the chest which shall not be required normally to be carried out earlier than once in three years.

(4) The Certifying Surgeon after examining a worker shall issue Certificate of Fitness in Form-33 The record of examination and re-examination carried out shall be kept in the custody of the manager of the factory. The record of each examination carried out under sub-paragraphs (1) and (2), including the nature and the results of the tests, shall also be entered by the Certifying Surgeon in a health register in Form-32.

(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 Certifying Surgeon is of the opinion that worker is no longer fit for employment in the electrolytic processes on the ground that continuance therein would involve danger to the health of the worker, he shall make a record of his findings in the said certificate and the health register. The entry of his findings in those documents should also include the period for which he considers that the said person is unfit for work in the said processes. The person declared unfit in such circumstances shall be provided with alternate placement facility unless he is fully incapacitated in the opinion of the Certifying Surgeon, in which case the person affected shall be suitably rehabilitated.

(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 Certifying Surgeon, after further examination, again certifies him fit for employment in those processes.

SCHEDULE III

MANUFACTURE ANDREPAIROF ELECTRIC ACCUMULATORS

1. **Savings.—**this schedule shall not apply to the manufacture or repair of electric accumulators or parts thereof not containing lead or any compound of lead; or to the repair, on the premises, of any accumulator forming part of a stationery battery.

2. **Definitions.—**For the purpose 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.

(c) ―Suspension‖ means suspension from employment in any lead process by written certificates in the Health Register in Form-32 signed by the Certifying Surgeon who shall have power of suspension as regards all persons employed in any such process.

3. **Prohibition relating to pregnant women and young persons.**—No pregnant woman or young person shall be employed or permitted to work in any lead process or in any room in which the manipulation of raw oxide of lead or pasting is carried on;

4. **Separation of certain processes.**—each of the following processes shall be carried on in such a manner and under such conditions as to secure effectual separation from one another, and from any other 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.

(e) Melting down of pasted plates.

5. **Air space.**—in every room in which a lead process is carried on, there shall be at least 500 cubic feet of air space for each person employed therein, and in computing this air space no height over 12 feet shall be taken into account.

6. **Ventilation.**—every work-room shall be provided with inlets and outlets of adequate size as to secure and maintain efficient ventilation in all parts of the room.

7. **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 five feet.

8. **Floor of work-rooms.**—(1) the floor of every rooms in which a lead process is carried on shall be:—

(a) Of cement or similar material so as to be smooth and impervious to water;

(b) Maintained in sound condition;

(c) Kept free from materials, plant, or other obstruction not required for, or produced in the process carried on in the room.

(a) 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,.

(b) In grid casting shops the floor shall be cleaned daily.

(c) Without prejudice to the requirement of sub-paragraphs (1), (2) and (3), where manipulation of raw oxide of lead or pasting is carried on, the floor shall also be:

(i) Kept constantly moist while work is being done;

(ii) provided with suitable and adequate arrangement for drainage;

(iii) Thoroughly washed daily by means of a hose-pipe.

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

(a) Have a smooth surface and be maintained in sound condition;

(b) Be kept free from all materials or plant not required for, or produced in the process carried on thereat; and all such work- benches other than those in grid casting shops shall:

(i) be cleaned daily either after being thoroughly damped or by means of a suction cleaning apparatus at a time when no other work is being carried on thereat; and all such work benches in grid casting shops;

(ii) be cleaned daily; and every work-benches used for pasting;

(iii) be covered throughout with sheet lead or other impervious material;

(iv) be provided with raised edges;

(v) be kept constantly moist while pasting is being carried on.

10. 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, filling 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 linings for cell cases necessarily carried on in such a manner that the application of efficient

exhaust is impracticable.

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

11. **Fumes and gases from melting pots.**—the products of combustion produced in the heating of any melting -pot shall not be allowed to escape into a room in which persons work.

12. **Container for dross.**—a suitable receptacle with tightly fitting cover shall be provided and used for dross as it is removed from every melting pot. Such receptacle shall be kept covered while in the work-room except when dross is being deposited therein.

13. **Container for lead waste.**—a suitable receptacle shall be provided in every work-room in which old plates and waste material which may give rise to dust shall be deposited.

14.Racks or shelves in drying room.—The racks or shelves provided in any drying room shall not be more than 8 feet from the floor nor more than 2 feet in width; provided that as regards racks or shelves set or drawn from both sides the total width shall not exceed 4 feet.

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

15. **Medical examination.**—(a) Every person employed in a lead process shall be examined by the Certifying Surgeon within seven days, preceding or following the date of his first employment in such process and thereafter shall be examined by the Certifying Surgeon 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.

—First employment‖ means first employment in a lead process in the factory or workshop and also re-employment therein in a lead process following any cessation of employment in such process for a period exceeding three calendar months.

(b) A Health Register in Form-32 containing the names of all persons employed in a lead process shall be kept.

(c) No person after suspension shall be employed in a lead process without written sanction from the Certifying Surgeon entered in or attached to the Health Register.

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

(a) Manipulation of raw oxide of lead;

(b) Pasting's;

(c) The formation-room; and such clothing shall be worn by the persons concerned.

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

17. **Mess-room.—**There shall be provided and maintained for the use of all persons employed in a lead process and remaining on the premises during the meal intervals a suitable mess-room, which shall be furnished with (a) sufficient tables and benches, and

(b) adequate means for warming food.

The mess-room shall be placed under charge of a responsible person, and shall be kept clean.

18. **Cloak-room.—**There shall be provided and maintained for the use of all persons employed in a lead process:—

(a) A cloak-room for clothing put off during working hours with adequate arrangements for drying the clothing if wet. Such accommodation shall be separate from the mess room;

(b) Separate and suitable arrangements for the storage of protective clothing provided under paragraph 16.

19. **Washing facilities.—**there shall be provided and maintained in a clean state and in good repair for the use of all persons employed in a lead process:

(a) Wash place under cover, with either—

(i) a trough with a smooth impervious surface fitted with a waste pipe without plug, and of sufficient length to allow of at Least two feet for every five such persons employed at any one time, and having a constant supply of water from taps or jets above the trough at intervals of not more than two feet; or

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

(iii) a sufficient supply of clean towels made of suitable materials renewed

daily, which supply in the case of pasters and persons employed in the manipulation of raw oxide of lead shall include a separate marked towels for each such worker; and

(iv) a sufficient supply of soap or other suitable cleaning material and of nail brushes.

(b) There shall in addition be provided means of washing 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.

20. Time to be allowed for washing. —Before each meal and before the end of the day's work, at least ten minutes, in addition to the regular meal times, shall be allowed for washing to each person who has been employed in the manipulation of raw oxide of lead or in pasting:

Provided that *if there be one basin or two feet of trough for each such person this paragraph shall not apply.*

21. Facilities for bathing.—sufficient bath accommodation to the satisfaction of the Chief Inspector-cum-Facilitator shall be provided for all persons engaged in the manipulation of raw oxide of lead or in pasting, and a sufficient supply of soap and clean towels.

22. Foods, drinks, etc., prohibited in work rooms.—No food, drink, pan and supari or tobacco shall be consumed or brought by any worker into any work-room 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 on 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 reasons impracticable, he may by certificate in writing authorize such suspension or relaxation as may be indicated in the certificate for such period and on such conditions as he may think fit.

2. Definitions.-For the purpose of this Schedule:—

(a) **—Efficient exhaust draught‖** means localized ventilation effected by mechanical means, for the removal of gas, vapour, dust or fumes so as to prevent them (as far as practicable under the atmospheric condition 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 per cent of the dry weight of the portion taken for analysis. The method of treatment shall be as follows:

A weighed quantity of the material which has been dried at 100°C and thoroughly mixed shall be continuously shaken for one hour at the common temperature with 1000 times its weight of an aqueous solution of hydrochloric acid containing 0.25 per cent by weight of hydrogen chloride. This solution shall thereafter be allowed to stand for one hour and then filtered. The lead salt contained in the clear filtrate shall then be precipitated as lead sulphide and weighed as lead sulphate.

(c) ―Suspension‖ means suspension from employment in any process specified in paragraph 3 by written certificate in the Health Register in Form-32 signed by the Certifying Surgeon who shall have power of suspension as regards all persons employed in any such process.

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

(a) The mixing of raw materials to form a “batch”.

(b) The dry grinding, glazing and polishing of glass or any article of glass.

(c) All processes in which hydrofluoric acid fumes or ammonical vapours are given off.

(d) All processes in the making of furnace moulds or pots (including the grinding or crushing of used pots).

(e) All processes involving the use of a dry lead compound.

4. **Prohibition relating to pregnant women and young persons.**―No pregnant woman or young person shall be employed or permitted to work in any of

the operation specified in paragraph 3 or at any place where such operations are carried on.

5. **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) cleaned daily after being thoroughly sprayed with water at a time when no other work is being carried on in the room.

The work-benches hall:—

(a) have a smooth surface and be maintained in sound condition; and

(b) be cleaned daily either after being thoroughly damped or by means of a suction cleaning apparatus at a time when no other work is being carried on thereat.

6. **Use of hydrofluoric acid.—**The following provisions shall apply to room 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 hood that openings required for bringing in the objects to be treated shall be as small as practicable; and

(d) the efficient exhaust draughts shall be so contrived that the gases are exhausted downwards.

7. **Storage and transport of hydrofluoric acid.—**Hydrofluoric acid shall not be stored or transported except in cylinders or receptacles made of lead or rubber.

8. **Blow-pipes—**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.

9. **Food, drinks, etc., prohibited in work-rooms.—**No food, drink, pan and supari or tabacco shall be brought into or consumed by any worker in any room or work-place wherein any process specified in paragraph 3 is carried on.

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

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

(a) a wash-place with either—a trough with a smooth impervious surface fitted with a waste pipe, without plug and of sufficient length to allow of at least two feet for every five such persons employed at any one time, and having a constant supply of water from taps or jets above the trough at intervals of not more than 2 feet; or

(i) at least one wash-basin for every five such persons employed at any one time fitted with a waste pipe and plug and having adequate supply of water laid on or always readily available; and

(b) a sufficient supply of clean towel made of suitable material renewed daily with a sufficient supply of suitable cleaning material and of nail brushes; and

(c) a sufficient number of stand pipes with taps—the number and location of such stands pipes shall be to the satisfaction of the Chief Inspector-cum-Facilitator.

12. **Medical examination.—**(a) Every person employed in any process specified in paragraph 3 shall be examined by the Certifying Surgeon within seven days preceding or following the date of his first employment in such process and thereafter shall be examined by the Certifying Surgeon 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.

(b) A Health Register in Form-32 containing the names of all persons employed in any process specified in paragraph 3 shall be kept.

(c) No person after suspension shall be employed in any process specified in

paragraph 3 without written sanction from the Certifying Surgeon entered in or attached to the Health Register.

SCHEDULE V

GRINDING OR GLAZING OF METALS AND PROCESSES INCIDENTALTHERETO

1. Definitions.—For the purposes of this Schedule:—

(a) ―Grindstone‖ means a grindstone composed of natural or manufactured sandstone but does not include a metal wheel or cylinder into which blocks of natural or manufactured sandstone are fitted.

(b) ―Abrasive wheel‖ means a wheel manufactured of bounded emery or similar abrasive.

(c) ―Grinding‖ means the abrasion by aid of mechanical power, of metal by means of a grindstone or abrasive wheel.

(d) ―Glazing‖ means 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.

(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.

Exceptions.—

(1) Nothing in this Schedule 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 paragraph 4 shall apply to any grinding or glazing metals carried on intermittently and at which no person is employed for more than12 hours in any week.

2. Relaxation.- 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 suspensions 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 shall be kept free from obstruction and shall be provided with proper means of access for inspection and cleaning, and where practicable, with a connection at the end remote from the fan to enable the Inspector to attach thereto any instrument necessary for ascertaining the pressure of air in the said duct; and

(c) a fan or other efficient means of producing a draught sufficient to extract the dust:

Provided that the Chief Inspector-cum-Facilitator may accept any other appliance that is in his opinion, as effectual for the interception, removal and disposal of dust thrown off as a hood, duct and fan would be.

4. **Restriction on employment on grinding operations.—**Not more than one person shall at any time perform the actual process of grinding or glazing upon grindstone, abrasive wheel or glazing appliance:

Provided that this paragraph shall not prohibit the employment of persons in the manipulation of heavy or bulky articles at any such grindstone, abrasive wheel or glazing appliance.

5. **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. **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 grindstone, or (b) adequate appliances for the interception of dust are provided in accordance with the requirements of paragraph 3.

7. **Examination of dust equipment.—**(a) All equipment for the extraction or suppression of dust shall at least once in every six months be examined and tested by a competent person, and any defect disclosed by such examination and test shall be rectified as soon as practicable.

(b) A register containing particulars and tests shall be kept in Form-35 and;

8. **Medical examinations.—**(a) Every person employed in any process specified in paragraph 3 shall be examined by the Certifying Surgeon within fourteen

9. days of his first employment in such process and thereafter shall be examined by the Certifying Surgeon at intervals of not more than three months.

(b) A Health Register in Form-32 containing the names of all persons employed in any process specified in paragraph 3 shall also be maintained.

(c) No person after suspension shall be employed in any process specified in paragraph 3 without the written sanction of Certifying Surgeon and the same shall be entered in or attached to Health Register.

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 purpose of this Schedule:—

(a) **‗Lead Compound'** means any compound of lead other than galena which, when treated in the manner prescribed below, yields to an aqueous solution of hydrochloric acid, a quantity or soluble lead compound exceeding, when calculated as lead monoxide, 5 per cent of the dry weight of the portion taken for analysis. In the case of prints and similar products and other mixture containing oil or fat the dry weight means the ‗dry weight' of the material remaining after the substance has been thoroughly mixed and treated with suitable solvents to remove oil, fats varnish or other media.

The method of treatment shall be as follows:

A weighted 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 1000 times its weight of an aqueous solution of hydrochloric acid containing 0.25 per cent by weight of hydrogen chloride. This solution shall thereafter be allowed to stand for one hour and then filtered. The lead salt contained in the clear filtrate shall then be precipitated as lead sulphide and weighed as lead sulphate.

(b) **Efficient Exhaust draught.**— Means localised 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 the 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,treatmentorreductionofashes containing lead, the desilverising of lead or the melting of scrap lead or zinc.

(c) The manufacture of solder or alloys containing more than 10 per cent of lead.

(d) The manufacture of any oxide, carbonate, sulphate, chromate, acetate, nitrate or silicate of lead. Handling or mixing of lead tetraethyl.

(e) Any other operation involving the use of lead compound.

(f) The cleaning of work-rooms where any of the operations aforesaid are carried on.

4. **Prohibition relating to pregnant women and young persons.—** No

Pregnant woman or young person shall be employed or permitted to work in any of the operations specified in paragraph 3.

5. **Requirements to be observed.—**No person shall be employed or permitted to work in any process involving the use of lead compounds if the process is such that dust or fume from a lead compound is produced therein, or the persons employed therein are liable to be splashed with any lead compound in the course of their employment unless the provisions of paragraphs 6 to 14 are complied with.

6. **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.

7. **Certificate of fitness.**—A person medically examined under paragraph 8 and found fit for employment shall be granted by a Certifying Surgeon a certificate of fitness in Form-33 and such certificate shall be in the custody of the manager of the factory. The certificate shall be kept readily available for inspection by any Inspector and the person granted such a certificate shall carry with him, while at work, a token giving reference to such certificate.

8. **Medical examination. — (**1) The person so employed shall be medically examined by a Certifying Surgeon within 14 days of his first employment in such process and thereafter shall be examined by the Certifying Surgeon at intervals of not more than three months, and a record of such examinations

9. shall be entered by the Certifying Surgeon in the special certificate of fitness granted under paragraph 7.

(2) If at any time the Certifying Surgeon 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 Certifying Surgeon after re-examination, again certifies him to be fit for employment.

10. **Food, drinks, etc., prohibited in work-rooms.**—No food, drink, pan and supari or tabacco shall be brought into or consumed by any worker in any work- room in which the process is carried on and no person shall remain in any such room during intervals for meals or rest.

11. **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.

12. **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.

13. **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 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 cleaning materials and clean towels;

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

14. **Mess-room or canteen.—** The occupier shall provide and maintain for the use of the persons -employed suitable and adequate arrangements for taking their meals. The arrangements shall consist of the use of a room separate from any work- room which shall be furnished with sufficient tables and benches,

15. 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.

16. **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

1. **Prohibition relating to pregnant women and young persons.—**No pregnant woman or young person shall be employed or permitted to work in or shall be allowed to enter any building in which the generation of gas from dangerous petroleum is carried on.

2. **Flame traps.—**The plant for generation of gas from dangerous petroleum and associated piping and fittings shall be fitted with at least two efficient flame traps so designed and maintained as to prevent a flash back from any burner to the plant. One of these traps shall be fitted as close to the plant as possible. The plant and all pipes and valves shall be installed and maintained free from leaks.

3. **Generating building or room.—**All plants for generation of petrol gas from dangerous petroleum erected after the coming into force of the provisions specified in this Schedule, shall be erected outside the factory building proper in a separate well ventilated building (hereinafter referred to as the _generating building‘). In the case of such plant erected before the coming into force of the provisions specified in this Schedule there shall be no direct communication between the room where such plants are erected (hereinafter

referred to as the

_generating room') and the remainder of the factory building. So far as practicable, all such generating rooms shall be constructed of fire-resisting materials.

4. **Fire extinguishers.**—An efficient means of extinguishing petrol fires shall be maintained in an easily accessible position near the plant for generating gas from dangerous petroleum.

5. **Plant to be approved by Chief Inspector.**—Gas from dangerous petroleum shall not be manufactured except in a plant for generating gas, the design and construction of which has been approved by the Chief Inspector – cum- Facilitator.

6. **Escape of [dangerous petroleum]**—Effective steps shall be taken to prevent dangerous petroleum from escaping into any drain or sewer.

7. **Prohibition relating to smoking etc.**—No person shall smoke or carry matches, fire or naked light or other means of producing a naked light or spark in the generating room or building or in the vicinity thereof and warning notice in Hindi and in the language understood by the majority of the workers shall be posted in the factory prohibiting smoking and the carrying of matches, fire or naked light or other means of producing a naked light or spark into such room or building.

8. **Access to dangerous petroleum or container.**—No unauthorised person shall have access to any [dangerous petroleum] or to a vessel containing or having actually contained dangerous petroleum.

9. **Electric fittings.**—All electric fitting shall be of flame-proof construction and all electric conductors shall either be enclosed in metal conduits or be lead sheathed.

10. **Construction of doors.**—All doors in the generating room or building shall be constructed to open outwards or to slide and no door shall be locked or obstructed or fastened in 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 of building.

11. **Repair of containers.**—No vessel that has contained dangerous petroleum shall be repaired in generating room or building and no repairs to any such vessel shall be undertaken unless live steam has been blown into the vessel and until the interior is thoroughly steamed out or other equally effective steps have been taken to ensure that it has been rendered free from dangerous petroleum or inflammable vapour.

SCHEDULE–VIII

Cleaning or smoothening, roughening, etc. of articles, by a jet of sand, metal shot, or grit or other abrasive, propelled by a blast of compressed air or steam. (Blasting Regulations)

1. **Definitions.—**For the purpose of this Schedule: —

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

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

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

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

2. **Prohibition of sand blasting.—**Sand or any other substance containing free silica shall not be introduced as an abrasive in any blasting apparatus and shall not be used for blasting:

Provided that *this clause shall come into force two years after the coming into operation of this Schedule:*

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

3. **Precautions in connection with blasting operations.—**(1) Blasting to be done in blasting enclosure and no work other than blasting and any work immediately incidental thereto and clearing and repairing of the enclosure including the plants and appliances situated therein, shall be performed in a blasting enclosure. Every door, aperture and joint of blasting enclosure, shall be kept closed and airtight while blasting is being done therein.

(2) **Maintenance of blasting enclosure.**—Blasting enclosure shall always be maintained in good condition and effective measure 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; and no such abrasive shall be introduced into any blasting apparatus and used for blasting until it has been so separated:

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

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

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

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

(3) Particulars of the result of every such inspection, examination and test shall forthwith be entered in a register and shall be available for inspection by any workman employed in or in connection with blasting in the factory. Any defect found on any such inspection, examination or test shall be immediately reported by the persons 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.

5. **Provision of protective helmets, gauntlets & 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 in any work connected therewith or in cleaning such chamber, protective helmets of a type approved by a certificate of the Chief Inspector-cum-Facilitator and every such person shall wear the helmet provided for his use whilst he is in the chamber and shall not remove it until he is outside the chamber.

(2) Each protective helmets 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 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 six cubic feet 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 gauntlet and overall provided.

6. **Precautions in connection with cleaning & other work.—**(1)Where any person is engaged upon cleaning of any blasting apparatus or blasting enclosure or of any apparatus of ventilating plant connected therewith or the surroundings thereof or upon any other work in connection with any blasting apparatus or blasting enclosure or with any apparatus or ventilating plant connected therewith so that he is exposed to the risk of inhaling dust which has arisen from blasting. All practical measures shall be taken to prevent such inhalation.

(2) In connection with any cleaning operation referred to in clause 5, and with the removal of dust from filtering or settling devices all practicable measures shall be taken to dispose of the dust in such manner that it does not enter the air of any rooms. Vacuum cleaners shall be provided and used wherever practicable for such cleaning operations.

7. **Storage accommodation for protective wear.-** Adequate and suitable storage accommodation for the helmets, gauntlets and overalls required to be provided by clause 5 shall be provided outside and conveniently near to every blasting enclosure and such accommodation shall be kept clean. Helmets, gauntlets and overalls when not in actual use shall be kept in this accommodation.

8. **Maintenance and cleaning of protective wear.**- All helmets, gauntlets, overalls and other protective devices or clothing's provided and worn for the purposes of this Schedule, shall be kept in good condition and so far as is reasonably practicable shall be cleaned on every week day in which they are used. Where dust arising from the cleaning of such protective clothing or devices is likely to be inhaled, all practicable measures shall be taken to prevent such inhalation. Vacuum cleaners shall, wherever practicable, be used for removing dust from such clothing and compressed air shall not be used for removing dust from any clothing.

9. **Maintenance of vacuum cleaning plant.**- Vacuum cleaning plant used for the purpose of this Schedule shall be properly maintained.

10. **Restrictions in employment of young persons.—** (1) No person under 18 years of age shall be employed in blasting or assisting at blasting or in any blasting chamber or the cleaning of any blasting apparatus or any blasting enclosure or any apparatus or ventilating plant connected therewith or be employed on maintenance or repair work at such apparatus, enclosure or plant.

(2) No person under 18 years of age shall be employed to work regularly within 20 feet of any blasting enclosure unless the enclosure is in a room and he is outside that room where he is effectively separated from any dust coming from the enclosure.

11. **Power to exempt or relax.** (1) If the Chief Inspector-cum-Facilitator is satisfied that in any factory or any class of factory, the use of sand or other substance containing free silica as an abrasive in blasting is necessary for a particular manufacture or process (other than the process incidental or supplemented to making of metal castings) and that the manufacture or process cannot be carried on without the use of such abrasive or that owing to the special condition or special method of work or otherwise any requirement of this Schedule can be suspended either temporarily or permanently, or can be relaxed without endangering the health of the persons employed or that application of any of such requirements is for any reason impracticable or inappropriate, he may, with the previous sanction of the State Government, by an order in writing exempt the said factory or class of factories from such provisions of this Schedule, to such an extent and subject to such conditions and for such period as may be specified in the said order.

(2) Where an exemption has been granted under sub-clause (1), a copy of the order shall be displayed at a notice board at a prominent place at the main entrance or entrances to the factory and also at the place where the blasting is carried on.

SCHEDULE IX

LIMINGANDTANNINGOFRAWHIDESANDSKINS ANDPROCESSES INCIDENTALTHERETO

1.Cautionary notices.—(1) Cautionary notices as to anthrax shall be affixed in prominent place 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, on the first day of each calendar year.

(3) Cautionary notices as to the effects of chrome on the skin shall be affixed in prominent positions in every factory in which chrome solutions are used and such notices shall be 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 persons the contents of the notice specified in paragraphs 1, 2 and 4 and if chrome solutions are used in the factory, the contents of the notice specified in sub-paragraph 3.

2. Protective clothing.- The occupier shall provide and maintain in good condition the following articles of protective clothing:

(a) Water proof footwear, leg coverings, aprons and gloves for persons employed in processes involving contact with chrome solutions, including the preparation of such solutions;

(b) Gloves and boots for persons employed in lime yard; and

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

Provided that :

(i) The gloves, aprons, leg coverings or boots, may be of rubber or leather, but the gloves and boots to be provided under sub-clauses (a) and (b) shall be of rubber;

(ii) the gloves may not be provided to persons fleshing by hand or employed in processes in which there is no risk of contact with lime, sodium sulphide or other caustic liquor.

3. . **Washing facilities, mess-room and cloak room.-** There shall be provided and maintained in a clean state and in good repair for the use of all persons employed:

(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 cleaning material, and clean towels; or

(c) a suitable mess-room, adequate for the number remaining on the premises during the meal intervals, which shall be furnished with (1) sufficient tables and benches, and (2) adequate means for warming food and for boiling water. The mess-room shall (1) be separate from any room or shed in which hide or skins are stored, treated or manipulated, (2) be separate from the cloak-room and (3) be placed under the charge of responsible person;

(d) The occupier shall provide and maintain, for the use of all persons employed, suitable accommodation for clothing put off during working hours and another accommodation for protective clothing and shall also make adequate arrangement for drying up the clothing in both the cases, if wet. The accommodation so provided shall be kept clean at all times and placed under the charge of a responsible person.

4. **Food, drinks, etc., prohibited in work-room.—**No food, drink, pan and 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. **First- aid arrangement.-** The occupier shall (a) arrange for an inspection of the hands of all persons coming into contact with chrome solution to be made twice a week by a Medical Officer.

(b) Provide and maintain a sufficient supply of suitable ointment and impermeable waterproof plaster in a box readily accessible to the worker and used solely for the purpose of keeping the ointment and plaster.

SCHEDULE X

CARRYINGON OFCERTAIN PROCESSESOFLEADANDLEADMATERIALIN PRINTINGPRESSESANDTYPEFOUNDRIES

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

2. **Definitions.—**For the purpose of this Schedule:—

(a) **‗Lead material'** means material containing not less than five per cent of lead;

(b) **‗Lead processes'** means:

(i) the melting of lead or any lead material for casting;

(ii) the recharging of machines with used lead material; or

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

(iv) manipulation, movement, or other treatment of lead material;

(c) **Efficient Exhaust draught.**—means localised ventilation effected by heat or mechanical means for the removal of gas, vapour, dust or fume so as to prevent them from escaping into the air of any place in which work is carried on. No draught shall be deemed efficient which fails to remove gas, vapour, fume or dust at the point where they originate.

3. **Exhaust draught—**(1) None of the following process shall be carried on except with an efficient exhaust draught;

(a) melting lead material or slugs;

(b) heating lead material so that vapour containing lead is given off:

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

(2) Such exhaust draught shall be effected by mechanical means and so contrived as to operate on the dust, fume, gas or vapour given off as closely as may be at its point of origin.

4. **Prohibition relating to pregnant women and young persons.—**No pregnant woman or young person shall be employed or permitted to work in any lead process.

5. **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) melting of lead or any lead material;

(b) casting of lead ingots; and

(c) mechanical composing;

6. **Container for dross.—**A suitable receptacle with tightly fitting cover shall be provided and used for dross as it is removed from every melting pot. Such receptacle shall be kept covered while in the work-room near the machine except when the dross is being deposited therein.

7. **Floor of work-room.**—The floor of every work-room where lead process is carried on shall be:

(a) of cement or similar material so as to be smooth and impervious to water;

(b) maintained in sound condition; and

(c) Cleaned daily after being thoroughly damped with water at a time when no other work is being carried on at the place.

8. **Mess-room.--**There shall be provided and maintained, for the use of all persons employed in a lead process and remaining on the premises during the meal intervals a suitable mess-room which shall be furnished with sufficient tables and benches.

9. **Washing facilities.—**There shall be provided and maintained in a clean state and in good repair for the use of all persons employed in a lead process:

(a) a wash place with either:

(i) a trough with a smooth impervious surface fitted with a waste pipe without plug, and of sufficient length to allow at least 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 two feet; or

(ii) at least one wash-basin for every 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 cleaning material.

10. **Medical examination.**—(a) Every person employed in a lead process shall be examined by the Certifying Surgeon within 14 days of his first employment in such process and thereafter shall be examined by the Certifying Surgeon at intervals of not more than three months and a record of such examinations shall be entered by the Certifying Surgeon in the special certificate of fitness in Form-33.

(b) A Health Register containing names of all persons employed in any lead process shall be kept in Form-32.

(c) No person after suspension shall be employed in a lead process without the written sanction of the Certifying Surgeon entered in the health register.

11. **Food, drinks, etc, prohibited in work-room.**—No food, drink, pan and supari or tobacco shall be consumed or brought by any worker into any work-room in which any lead process is carried on.

12. **Protective clothing.**—The occupier shall provide to all persons in lead process two full sleeve overalls every year, arrange for their weekly washing and maintain these in a good condition. The persons employed in such a process shall wear these overalls while engaged in such work.

SCHEDULE XI CHEMICAL WORKS PARTI

1. **Application.**—This Schedule shall apply to all manufacture and processes incidental thereto carried on in chemical works.

2. . **Definitions.**—for the purpose of this Schedule:—

(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 localised ventilation effected by mechanical or other means for the removal of gas, vapour, fume or dust to prevent it from escaping into the air of any place in which work is carried on;

(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 homologous, and the making of explosives with the use of any of these substances;

(h) The term **—permit to work‖** system means the compliances with the procedures laid down under paragraph 20 of Part II;

(i) **—toxic substances‖** means all those substances which when they enter into the human body, through inhalation or ingestion or absorption through skin, in sufficient quantities cause fatality or exert serious affliction of health, or chronic harmful effects on the health of persons exposed to it due to its inherent chemical or biological effects. In respect of substances whose TLV is specified in the Rules exceeding the concentration specified therein would make the substance toxic;

(j) **—emergency‖** means a situation or condition leading to a circumstances or set of circumstances in which there is danger to the life or health of persons or which could result in big fire or explosion or pollution to the work and outside environment, affecting the workers or neighborhood in a serious manner, demanding immediate action;

(k) **—dangerous chemical reactions‖** means high speed reactions, run-away reactions, delayed reactions etc. and are characterised by evolution of large quantities of heat, intense release of toxic or flammable gases or vapours, sudden pressure build-up etc;

(I) **—manipulation‖** means mixing, blending, filling, emptying, grinding, sieving, drying, packing, sweeping, handling, using etc;

(m) **—approved personal protective equipment‖** means items of personal protective equipment conforming to the relevant ISI specifications or in the absence of it, personal protective equipment approved by the Chief Inspector-cum-Facilitator of Factories;

(n) **—appropriate personal protective equipment‖** means that when the protective equipment is used by the worker, he shall have no risk to his life or health or body and;

(o) **—confined space‖** means any space by reason of its construction as well as in relation to the nature of the work carried therein and where hazards to the persons entering into or working inside exist or are likely to develop during working.

PART II

GENERALREQUIREMENTS

Applying to all the works in Appendix "D".

1. **House-keeping.—**(1) Any spillage of materials shall be cleaned up before further processing.

(2) Floors, platforms, stairways, passages and gangways shall be kept free of any obstructions.

(3) There shall be provided easy means of access to all parts of the plant to facilitate cleaning.

2. **Improper use of chemicals.—**No chemicals or solvents or empty containers containing chemicals or solvents shall be permitted to be used by workers 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**

(4) In addition to the above cautionary notice, arrangement shall be made to instruct and educate all the workers including illiterate workers about the hazards in the process including the specific hazards to which they may be exposed to, in the normal course of their work. Such instructions and education should also deal with the hazards involved in unauthorised and unsafe practices including the properties of substances used in the process under normal conditions as well as abnormal conditions and the precautions to be observed against each and every hazard. Further, an undertaking from the workers shall be obtained within one month of their employment and for old workers employed, within one month of coming into operation of the rules, to the effect that they have read the contents of the cautionary notices and instructions, understood them and would abide by them. The training and instructions to all workers and all supervisory personnel shall include the significance of different types of symbols and colours used on the

(5) labels stuck or painted on the various types of containers and pipe lines.

5. **Evaluation and provision of safeguards before the commencement of process.—**

(1) Before commencing any process or any experimental work, or any new manufacture covered under **Appendix _A', ,** the occupier shall take all

possible steps to ascertain definitely all the hazards involved both from the actual operations and the chemical reaction including the dangerous chemical reactions. The properties of the raw materials used, the final products to be made, and any by-products derived during manufacture, shall be carefully studied and provisions shall be made for dealing with any hazards including effects on workers which may occur during manufacture.

(2) Information in writing giving details of the process, its hazards and the steps taken or proposed to be taken from the design stage to disposal stage for ensuring the safety as in sub-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.

(3) The design, construction, installation, operation, maintenance and disposal of the buildings, plants and facilities shall take in consideration effective safeguards against all the safety and health hazards/so evaluated.

(4) The requirement under the sub-paragraphs (1) to (3) shall not act in lieu of or in derogation to, any other provisions contained in any Act governing the work.

6. **Authorised entry.**—Authorised persons only shall be permitted to enter any section of the factory or plant where any dangerous operations or processes are being carried on or where dangerous chemical reactions are taking place or where hazardous chemicals are stored.

7. **Examination of instruments and safety devices.**—(1) All instruments and safety devices used in the process shall be tested before taking into use and after carrying out any repair to them and examined once in a month, by a competent person. Records of such tests and examinations shall be maintained in a register.

(2) All instruments and safety devices used in the process shall be operated daily or as often as necessary, to ensure its effective and efficient working at all times.

8. **Electrical installations.**—All electrical installations used in the process covered in **Appendix ‗A'** shall be of an appropriate type to ensure safety against the hazard prevalent in that area such as suitability against dust, dampness, corrosion, flammability and explosivity, etc. and shall conform to

9. the relevant ISI specifications governing their construction and use for that area.

10. Handling and storage of chemicals.—(1) The containers for handling and storage of chemicals shall be of adequate strength taking into consideration the hazardous nature of the contents. They shall 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 ISI standards. The instructions given in the label shall be strictly adhered to. Damaged containers shall be handled only under supervision of a knowledgeable and responsible person and spillage shall be rendered innocuous in a safe manner using appropriate means.

(2) The arrangements for the storage of chemicals including charging of chemicals in reaction vessels and containers shall be such as to prevent any risk of fire or explosion or formation of toxic concentration of substances above the limits specified in the Rules.

(3) Without prejudice to the generality of the requirements in sub-paragraph (2) above, the arrangements shall have suitable ventilation facilities and shall enable the maintenance of safe levels in vessels and containers. Such arrangements shall also take into consideration, the type of storage and the capacity of storage and the compatibility requirements of substances with other chemicals stored nearby.

(4) (a) Storage of chemicals and intermediate products, which are highly unstable or reactive or explosive shall be limited to the quantities required for two months use.

(b) Whenever the quantities laid down in the above clauses (a) are to be exceeded, the permission of the Chief Inspector-cum-Facilitator shall be obtained.

(c) Notwithstanding any thing contained in clauses (a) and (b) above, the Chief Inspector-cum-Facilitator of factories 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 consideration of safety.

(5) Standby arrangements equal to the biggest container shall always be available to transfer the toxic substances quickly into the stand by storage facility if any defect develops in any of the container resulting in the release of toxic substances.

(6) Any storage facility constructed using non- metallic material such as Fiberglass,

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.

11. 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 lay-out 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.

12. Personal protective equipment.—(1)All workers exposed to the hazards in the processes covered by the Schedule shall be provided with appropriate and approved type of personal protective equipment. Such equipment shall be in a clean, sterile and hygienic condition before issue.

(2) The occupier shall arrange to inform, educate and supervise all the workers in the use of personal protective equipment while carrying out the job.

(3) As regards any doubt regarding the appropriateness of any personal protective equipment, the decision of the Chief Inspector-cum-Facilitator will be final.

13. Alarm systems.

(1) Suitable and effective alarm systems giving audible and visible indications, shall be installed at the control room as well as in all strategic locations where process control arrangements are available so as to enable corrective action to be taken before the operational parameters exceed the predetermined safe levels or lead to conditions conducive to an outbreak of fire or explosion to occur. Such alarm systems shall be checked daily and tested every month at least once to ensure its performance efficiency at all times.

(2) The Chief Inspector-cum-Facilitator may direct such systems to be installed in case of plants or processes where toxic materials are being used and spillage or leakage of which may cause wide-spread poisoning in or around the plant.

14. Control of escape of substances into the work atmosphere.—(1) Effective arrangements such as, enclosure, or by pass, or efficient exhaust draught, maintenance of negative pressure, etc. shall be provided in all plants, containers, vessels, sewers, drains, flues, ducts, culverts and buried pipes and 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.

(2) In the event of the failure of the arrangements for control resulting in the escape of substances in the work atmosphere immediate steps shall be taken to control the process in such manner, that further escape is brought down to the safe level.

(3) The substance that would have escaped into the work atmosphere before taking immediate steps as required in sub-paragraph (2), shall be rendered innocuous by diluting with air or water or any other suitable agent or by suitably treating the substances.

15. Control of dangerous chemical reactions.—Suitable provision, such as automatic and or remote control arrangements, shall be made for controlling the effects of _dangerous chemical reactions‘. In the event of failure of control arrangements automatic flooding or blanketing or other effective arrangements shall come into operation.

16. Testing, examination and repair of plant & equipment.—(1) All parts of plant, equipment and machinery used in the process which in the likely event of their failure may give rise to an emergency situation shall be tested by a competent person before commencing process and retested at an interval of two years 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:—

(a).before the test is carried out, each vessel shall be thoroughly cleaned and examined externally, and as far as practicable, internally also for surface defects, corrosion and foreign matters. During the process of cleaning and removal of sludge, if any, all precautions shall be taken against fire or explosion, if such sludge is of pyropheric nature or contains spontaneously combustible chemicals;

(b) as soon as the test is completed, the vessel shall be thoroughly dried internally and shall be clearly stamped with the marks and figures indicating the person by whom testing has been done and the date of test; and

(c) any vessel which fails to pass the test or which for any other reason is found to be unsafe for use shall be destroyed or rendered unusable under intimation to the Chief Inspector-cum-Facilitator.

(2) All parts of plant, equipment machinery which in the likely event of failure may give rise to an emergent situation shall be examined once in a month by the competent person.

(3) Records of testing and examination referred to in paragraphs (1) and (2) shall be maintained as long as that part of the plant, equipment and machinery are in use.

(4) All repair work including alteration, modification and addition to be carried out to the plant, equipment and machinery shall be done under the supervision of a responsible person who shall evolve a procedure to ensure safety and health of persons doing the work. When repairs or modification is done on pipelines, and joints are required to be welded, butt welding of joints shall be preferred. Wherever necessary the responsible person shall regulate the aforesaid work through a ―permit to work system‖.

17. Staging.—(1)All staging that is erected for the purpose of maintenance work

or repair work or for work connected with entry into confined spaces and used in the processes included in Appendix _A', shall be stable, rigid and constructed out of substantial material of adequate strength. Such staging shall conform to the respective Indian Standard specifications.

(2) Staging shall not be erected over a closed or open vessel unless the vessel is so constructed and ventilated to prevent exposure of persons working on the stages.

(3) All the staging constructed for the purpose of this paragraph shall have appropriate access which are safe and shall be fitted with proper hand rails to a height of one meter and the board.

18. 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 in the atmosphere.

19. Entry into or work in confined spaces.—(1) The occupier of every factory to which the provisions of this Schedule apply, shall ensure the observance of the following precautions before permitting any person to enter or work inside the confined spaces—

(a) identify all confined -spaces and the nature of hazards that are encountered in such spaces, normally or abnormally and arrange to develop the most appropriate safeguards for ensuring the safety and health of persons entering into or working inside, the confined spaces:

(b) regulate the entry or work inside the confined spaces through a

―permit to work system‖ which should include the safeguards so developed as required under sub-clause (a) above;

(c) before testing the confined space for entry into or work in, the place shall be rendered safe by washing or cleaning with neutralising agents; or purging with steam or inert gases and making adequate forced ventilation arrangements or such measure which will render the confined space safe;

(d) shall arrange to carry out such tests as are necessary for the purpose by a competent person and ensure that the confined space is safe for the persons to enter or work. Such testing shall be carried out as often as is necessary during the course of work to ensure its continued safety,

(e) shall arrange to educate and train the personnel who would be required to work in confined spaces about the hazards involved in the work. He shall also keep in readiness the appropriate and approved personal protective equipment including arrangements for rescue, resurrection and first aid, and shall arrange supervision of the work at all times by responsible and knowledgeable person.

(2) The manager shall maintain a log book 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 workers are in service and produced to the Inspector when demanded.

20. Maintenance work etc.—(1) All the work connected with the maintenance of plants and equipment including cleaning of empty containers which have held hazardous substances used in the processes covered in this Schedule, shall be carried out under ―permit to work system‖ employing trained personnel and under the supervision of responsible person, having knowledge of the hazards and precautions required to deal with them.

(2). Maintenance work shall be carried out in such a manner that there is no risk to persons in the vicinity or to persons who pass by. If necessary, the place of such work shall be cordoned off or the presence of unconnected persons effectively controlled.

21. 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 is 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 arrangement shall be available in good working condition near the place of work while carrying out the permit to work system, for use in emergency;

(f) appropriate and approved personal protective equipment shall be used while carrying out the ―permit to work system‖; and

(g) after completion of work subject to the permit to work system the person responsible shall remove all the equipment and tools and restore to the original condition so as to prevent any danger while carrying out regular process.

22. Safety of sampling personnel.—The occupier shall ensure the safety of persons assigned for collection samples by instructing them on the safe procedures. Such personnel shall be provided with proper and approved personal protective equipment, if required.

23. 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.

24. Procedures for meeting emergencies.—(1)The occupier of every factory carrying out the works covered in Appendix ―A‖ shall arrange to identity 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 firefighting and arrangements for making available urgent medical facilities.

(3) The occupier shall send the list of emergencies and the details of procedures and plans formulated to meet the emergencies, to the Chief Inspector -cum-Facilitator.

(4) The occupier shall arrange to install distinctive and recognizable warning arrangements to caution all persons inside the plant as well as the neighbouring community, if necessary, to enable evacuation of persons and to enable the observance of emergency procedures by the persons who are assigned emergency duties. All concerned must be well informed about the warning arrangements and their meaning. The arrangements must be checked for its effectiveness every month.

(5) Alternate power supply arrangements shall be made and interlocked with the normal power supply system so as to ensure constant supply of power to the facilities and equipment meant for compliance with requirements of 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 that area except workers who have been assigned emergency duties.

(7) All the employees of the factory be trained about the action to the 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 objections shall suitably be corrected.

(9) The occupier shall arrange to have 10 per cent of the workers trained in the use of first aid, firefighting 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.

25. Danger due to effluents.—(1) Adequate precautions shall be taken to prevent

the mixing of 1effluents 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

FIREAND EXPLOSIONS RISKS

1. **Sources of ignition including lighting installation.—**(1) No internal combustion engine and no electric motor or other electrical equipment, and fittings and fixtures capable of generating sparks or otherwise causing combustion or any other source of ignition or any naked light shall be installed or permitted to be used in the process area where there could be fire and explosion hazards.

(2) All hot exhaust pipes shall be installed outside a building and other hot pipes or hot surface or surfaces likely to become hot shall be suitably protected.

(3) The classification of work area in terms of its hazards potential and the selection of electrical equipment or other equipment that could constitute a source of ignition shall be in accordance with the respective Indian Standard.

(4) Where a flammable atmosphere may be prevalent or could occur, the soles of footwear worn by workers shall have no metal on them, and the wheels of trucks or conveyors shall be conductive type.

(5) All tools and appliances used for work in this area shall be of non- sparking type.

(6) Smoking in process area where there are risks of fire and explosion shall be prohibited, and warning notices in the language understood by majority of workers shall be posted in the factory prohibiting smoking into specified areas.

2. **Static electricity.—**(1) All machinery and plant, particularly, pipe lines and belt drives, on which static charge is likely to accumulate, shall be effectively earthed/ Receptacles for flammable liquids shall have metallic connections to the earthed supply tanks to prevent static sparking. Where necessary, humidity shall be regulated.

(2) Mobile tanker wagons shall be earthed during filling and discharge and precautions shall be taken to ensure that earthing is effective before such filling or discharge takes place.

3. **Lighting protection.—**Lighting protection arrangement shall be fitted where necessary, and shall be maintained.

4. **Process heating.**—The method of providing heat for a process likely to result in fire and explosion shall be as safe as possible and where the use of naked flame is necessary, the plant shall be so constructed as to prevent any escaping flammable gas, vapour or dust coming into contact with the flame or exhaust gases or other sources likely to cause ignition. Wherever possible, the heating arrangement shall be automatically controlled at a predetermined temperature below the danger temperature.

5. **Leakage of flammable liquids.**—(1)Provision shall be made to confine by means of bund walls, dykes, sumps etc. possible leakages from storage vessels containing flammable Liquids.

(2) Waste material in contact with flammable substances shall be disposed of suitably under the supervision of knowledgeable and responsible persons.

(3) Adequate and suitable fire-fighting appliances shall be installed in the vicinity of such vessels.

6. **Safety valves**—Every still and every closed vessel in which gas is evolved or into which gas is passed, and in which the pressure is liable to rise above the atmospheric pressure, shall have attached to it a pressure gauge, and a proper safety valve or other equally efficient means to relieve the pressure. These appliances shall be maintained in good condition.

7. **Installation of pipeline etc.**—All pipelines carrying flammable or explosive substances shall be protected from mechanical damage and shall be examined by a responsible person once in a week to detect any deterioration or defects, or accumulation of flammable or explosive substances, and record kept of any defects found and repairs made.

8. **Fire fighting systems.**—(1) Every factory employing 500 or more persons and carrying out processes Listed in Appendix ―A‖ shall provide:—

(a).Trained and responsible fire fighting squad so as to effectively handle the fire-fighting and life saving equipment in the event of fire or other emergency. Number of persons in this squad will necessarily depend upon the size of risk involved, but in no case shall be less than 8 such trained persons to be available at any time. The squad shall consist of watch 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 recognized government institution and their usefulness enhanced by providing residence on the premises;

(c).Squad personnel shall be provided with clothing and equipment including helmets, boots and belts.

(2) A muster roll showing the duties allocated to each member of the squad shall be prepared and copies supplied to each leader as well as displayed in prominent places so as to be easily available for reference in case of emergency.

(3) The pump man shall be thoroughly conversant with the location of all appliances. He shall be responsible for maintaining all fire-fighting equipment in proper working order. Any defect coming to his notice shall immediately be brought to the notice of squad leader.

(4) 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 inter linked and placed in a convenient location near such areas.

PART IV

RISKS OF TOXIC SUBSTANCES

1. Leakage.—(1) All plants shall be so designed and constructed as to prevent the escape of toxic substance. Where necessary, separate buildings, rooms or protective structure 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, bund walls, dykes or other suitable safeguards shall be provided to restrict the serious effects of such leakages. Catch pits shall be placed below joints in pipelines where there is danger involved to maintenance and other workers from such leakage.

2. Drainage.—Adequate drainage shall be provided and shall lead to collection tanks specifically provided for this purpose wherein deleterious material shall be 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 cms above the adjoining ground or platform be securely fenced to a height of at least 90 cms above such adjoining ground or platform.

(3) Where such vessels adjoin and the space between them clear of any surrounding brick or other work is either less than 45 cms in width or is 45 or more centimeters in width, but is not securely fenced on both sides to a height of at least 90 cms a 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, draining or filing.

4. Continuous exhaust arrangement.—(1)Any process evolving toxic vapour, gas, fume and substance shall have efficient continuous exhaust draught. Such arrangement shall be interlocked in the process control wherever possible.

(2) In the event of failure of continuous exhaust arrangement means shall be provided to automatically stop the process.

5. Work-bench.—All the work-benches used in processes involving the manipulation of toxic substance, shall be graded properly and shall be made of smooth impervious surface which shall be washed daily after the completion of work.

6. Waste disposal.—(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 receptacles shall be destroyed by burning or using other suitable methods under the supervision of a responsible person.

(2) During the course of manufacture, whenever any batch or intermediate products having toxicity is rejected on consideration of quality, sufficient precautions shall be taken to render them innocuous or otherwise treat them or inactivate them before disposal.

(3) The empty containers of toxic substance 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 crystalized 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 bleaching, acidification, sulphate settling, evaporation, crystallisation centrifugation or packing are carried out to enable quick washing of affected parts of body with running water.

(3) Weekly inspection of hands and feet of all persons employed in chrome process shall be done by a qualified nurse and record of such inspections shall be maintained.

(4) here 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 sputum.

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 the all glass vessels due to breakage, shall be immediately inactivated or rendered innocuous by suitable means such as dilution with water or suitable solvents so as to avoid the risks of fire or explosion or health hazards.

4. **Special precautions for processes involving chlorate manufacture.**—

(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.

PART VI
MEDICAL REQUIREMENTS

1. **Decontamination facilities.**—In all places where toxic substances are used in processes listed in Appendix —**A**‖ the following provisions shall be made to meet an emergency:-

(a) fully equipped first-aid box:

(b) readily accessible means of drenching with water persons, parts of body of persons, and clothing of persons who have been contaminated with such toxic and corrosive substances and such means shall be as shown in the Table 1.

No. of persons employed at any time	No. of drenching showers.
Upto 50 Persons	2
Between 51 to 100	3
101 to 200	3+1 for every 50 persons thereafter.
201 to 400	5+1 for every 100 persons thereafter.
401 and above	7+1 for every 200 persons thereafter.

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

2. Occupational health center:—In all the factories carrying out processes covered in **Appendix —A‖** there shall be provided and maintained in good order an occupational health centre with facilities as per scale laid down here under:—

(1) For factories employing up to 50 workers—

(a) the services of a qualified medical practitioner hereinafter known as Factory Medical Officer, available on a retainer ship basis, in his notified clinic near to the factory for seeking medical help during emergency. He will also carry out the pre-employment and periodical medical 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 center 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 center 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 Medical Officer for every 1000 workers or part thereof.

(b) The occupational health center in this case shall have a minimum of two rooms each having a minimum floor area of 15 sq. m. with floors and walls made of smooth, hard and impervious surface and shall be adequately illuminated, ventilated and equipped.

(c) There shall be one trained nurse, one dresser-cum-compounder and one sweeper- cum-ward boy throughout the working period.

(d) The Occupational Health center in this case shall be suitably equipped to manage medical emergencies.

3. **Ambulance van.**—(1) In every factory carrying out processes covered in **Appendix "A",** there shall be provided and maintained in good condition, a suitably constructed and fully equipped ambulance van as per **Appendix ‗C'** manned by a full time driver-cum- mechanic or 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 first notice during emergencies have been made with the nearby hospital or other places. The ambulance van shall not be used for any purpose, other than the purpose stipulated herein and will always be available near the Occupational Health Centre.

(2) The relaxation to procure Ambulance Van from nearby places provided for in sub-paragraph (1) above will not be applicable to factories employing more than 500 workers.

4. **Medical examination.**—(1) Workers employed in processes covered in **Appendix ‗A'** shall be medically examined by a Factory Medical Officer in the following manner:—

(A).Once before employment, to ascertain physical suitability of the person to do the particular job

(b).Once in a period of 6 months, to ascertain the health status of the workers; and

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

(2) Any findings of the Factory Medical Officer revealing any abnormality or unsuitability of any person employed in the process shall immediately be reported to the Certifying Surgeon who shall in turn, examine the concerned workers and communicate his findings within 30 days. If the Certifying Surgeon is of the opinion that the person so examined is required to be suspended from the process for health protection he will direct the occupier accordingly, who shall not employ the said worker in the same process. However, the person so

suspended from the process shall be provided with alternate placement facilities unless he is fully incapacitated in the opinion of the Certifying Surgeon, in which case the person affected shall be suitably rehabilitated:

Provided that *the Certifying Surgeon on his own may examine any other worker whom he feels necessary to be examined for ascertaining the suitability of his employment in the process covered in* ***Appendix "A"*** *or for ascertaining the health status of any other worker and his opinion shall be final.*

(3) No person shall be newly appointed without the Certificate of Fitness granted by the Factory Medical Officer. If the Factory Medical Officer declares a person unfit for being appointed to work in the process covered in **Appendix "A"** such person shall have a right of appeal to the Certifying Surgeon, whose opinion shall be final in this regard.

(4) The worker suspended from the process owing to the circumstances covered in sub- paragraph (2) shall be employed again in the same process only after obtaining the Fitness Certificate from the Certifying Surgeon and after making entries to that effect in the health register.

PART-VII

Additional Welfare Amenities

1. **Washing Facilities.—**(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 filling 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 processes covered in **Appendix —A‖** and employing 50 workers or more, shall provide for all the workers working in a shift mess-room facilities which are well ventilated and provided with tables and sitting facilities alongwith the provision of cold and hygienic drinking water facilities.

(3) Such facilities shall include suitable arrangements for cleaning and washing and shall be maintained in a clean and hygienic condition.

3. **Cloak-room facilities.—**(1) The occupier of every factory carrying out any process covered in **Appendix "A"** shall provide for all the 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-para (1) shall be located as far as possible near to the facilities provided for washing in pursuance of para (1). If it is not possible to locate the washing facilities, the cloak-room facilities shall have adequate and suitable arrangements for cleaning and washing.

4. **Special bathing facilities—** (1)The occupier of any factory carrying out the process covered under **Appendix "B"** shall provide special bathing facilities for all the 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.

(2) The occupier shall insist all the workers employed in the processes covered in **Appendix "B"** to take bath after the completion of the day's or shift work using the bathing facilities so provided and shall also effectively prevent such of those workers taking bath in any place other than the bathing facilities.

(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 carrying health point of view, to provide special bathing facilities.

PART-VIII

DUTIES OF WORKERS

(1) Every worker employed in the processes covered in **Appendix "A"** and **Appendix —B‖** shall not make any safety device or appliance or any guarding or fencing arrangement, inoperative or defective and shall report the defective condition of the aforesaid arrangements as soon as he is aware of any such defect.

(2) Before commencing any work, all workers employed in processes covered in **Appendix "A"** shall check their work place as well as the machinery equipment or appliance used in the processes and reports any mal-function or defect immediately to the supervisor or any responsible person of the management.

(3) All workers shall co-operate in all respects with the management while carrying out any work or any emergency duty assigned to them in pursuance of this Schedule and shall always use all the personal protective equipment issued to them in a careful manner.

(4) All workers employed in the processes covered in **Appendix —A‖** or **Appendix —B‖** shall not smoke in the process area or storage area. If special facilities are provided by the management only such facilities should be used.

(5) All workers employed in the processes covered in **Appendix —A‖** shall not remain in unauthorised place or carry out unauthorised work or improvise any arrangements or adopt short-cut method or misuse any of the facilities provided in pursuance of the Schedule, in such a manner as to cause risk to themselves as well as or to others employed.

(6) The workers shall not refuse undergoing medical examination as required under these rules.

PART IX

RESTRICTIONS ON THE EMPLOYMENT OF YOUNG PERSONS AND PREGNANT WOMEN

(1) The Chief Inspector-cum-Facilitator may by an order in writing, restrict or prohibit the employment of pregnant women and young persons, in any of the processes covered in **Appendix A** of this Schedule on considerations of health and safety of women and young persons.

(2) Such persons who are restricted or prohibited from working in the process due to the order issued in pursuance of sub-para (1) above shall be provided with alternate work which is not detrimental to their health or safety.

PART X EXEMPTIONS

1. Power of exemption.—The State Government or subject to the control of the State Government, the Chief Inspector-cum-Facilitator may exempt from the compliance with any of the requirements of this Schedule partly or fully, any factory carrying out processes covered in **Appendix A** if it is clearly and satisfactorily established by the occupier that the compliance with any of the requirements is not necessary to ensure the safety and health of persons employed if suitable and effective alternate arrangements are available to any of the requirements covered in his Schedule.

APPENDIX _A':

PROCESSES CARRYINGOUT BY ANY FACTORY‖ WHERE EXEMPTION MAY BE GRANTED FROM THE COMPLIANCE WITH ANYOF THEREQUIREMENTS OF THISSCHEDULE PARTLY OR FULLY BY THE STATE GOVERNMENT OR CHIEF INSPECTOR-CUM- FACILITATOR

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, aluminum, cobalt, nickel, copper, arsenic, antimony, chromium, zinc, solenium, 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 and inorganic compounds of sulphurous, sulphuric, nitric, nitrous, hydrochloric, hydroflouric, hydroiodic, hydro sulphuric,

(iv) hydrobromic, boric;

(v) cyanogen compounds, cyanide compounds, cyanate compounds;

(vi) phosphorusanditscompoundsotherthanorganic phosphorus insecticides;

(vii) chlorine.

(b) hydrogen sulphide is evolved by the decomposition of metallic sulphides, or hydrogensulphide is used in the production of such sulphides;

(c) bleaching powder is manufactured or chlorine gas is produced in chloro- alkali plants;

(d) (i) gas tar or coal tar or bitumen or s hale 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, methyle ethyle ketone peroxide, cobalt carbonyl, tungsten carbide etc. are manufactured or recovered.

APPENDIX _B‘:
CONCERNING SPECIAL BATHING ACCOMODATION IN PURSUANCE OF PARA 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 chlor-alkali 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—

—A wheeled stretcher with folding and adjusting devices. Head of the stretcher must be capable of being lifted upward;

—Fixed suction unit with equipments;

—Fixed oxygen supply with equipments;

—Pillow witch case;

—Sheets;

— Blankets;

— Towels;

— Emesis bag;

— Bed pan;

— urinal;

— Glass;

— Roll of aluminium foils;

— Soft roller bandage 6" x 5 yards;

— Adhesive tape in 3" roll;

— Safety pins;

— Bandage sheets;

— Burn sheet

Poisoning

—Syrup of ipecea

— Activated charcoal;—Pre-packed in doses

— Snake bite kit;

— Drinking Water

Emergency medicines:

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

Safety equipment:

— Flares with life of 30 minutes:—

— Flood lights;

— Flash lights;

— Fire extinguisher dry powder type;

— Insulated gauntlet.

Emergency care equipments:—

Resuscitation:

— Portable suction unit;

— Portable oxygen unit;

— Bag-value mask hand operated artificial ventilation unit;

— Airways;

— Mouth gags;

— Tracheotomy adaptors;

— Short spoine board;

—I.V. Fluids with administration unit;

— B.P. Manometer;

— Cugg;

— Stethoscope.

Immobilization:

— Long and short padded boards;

— Wire ladder splints;

— Triangular bandage;

—Long and short spine boards.

Dressings:

— Gauze pads— 4" x 4";

— Universal dressing 10 x 36";

SCHEDULE - XII MANUFACTURE OF POTTERY

1. Definition—For the purposes of this Schedule—

(a) **—pottery‖** include earthen ware, stone ware, procelain, china tile and any other article made from clay or from a mixture containing clay and other materials such as quartz, flint, felspar and gypsum;

(b) **—efficient exhaust draught‖** means localised 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, sand papering, sand sticking, brushing or any other process of cleaning of pottery ware in which dust is given off;

(d) **—leadless glaze‖** which does not contain more than one per cent of its dry weight of a lead compound, calculated as lead monoxide;

(e) **—low solubility glaze‖** means a glaze which does not yield to dilute hydrochloric acid more than five per cent of its dry weight of a soluble lead compound calculated as lead monoxide when determined in the manner described below:

A weighed quantity of the material which has been dried at 100°C and thoroughly mixed shall be continuously shaken for one hour, at the common temperature with 1000 times its weight of an aqueous solution of hydrochloric acid containing 0.25 per cent by weight of hydrogen chloride. This solution shall thereafter be allowed to stand for one hour and then filtered. The lead salt contained in the clear filtrate shall then be precipitated as lead sulphide and weighed as lead sulphate;

(f) **—ground or powered flint or quart‖** does not include natural sands; and

(g) **—potter‘s shop‖** includes all places where pottery is formed by pressing or by any other process and all places where shaping, fettling or other treatment of pottery articles prior to placing for the biscuit fire is carried on.

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

(i) All processes involving the manipulation or use of a dry and unfretted lead compound.

(ii) The fettling operations of any kind, whether on green-ware or biscuit provided that this shall not apply to the wet fettling, and the occasional finishing of the pottery articles without the aid of mechanical power;

(iii) The shifting of clay dust or any other material for making tiles or other articles by pressure, except where—

(a) this is done in a machine so enclosed as to effectively prevent the escape of dust; or

(b) the material to be shifted is so damp that no dust can be given off—

(iv) the processing 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.

(v) 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.

(vi) The process of loading and unloading of saggars where handling and manipulation of ground and powdered flint, quartz, alumina or other materials are involved.

(vii) The brushing of earthenware biscuit, unless the process is carried on in a room provided with efficient general mechanical ventilation or other ventilation which is certified by the Inspector – cum - Facilitator as adequate, having regard to all the circumstances of the case.

(viii) Fettling of biscuit ware which has been fired in powdered flint or quartz except where this is done in machines so enclosed as to effectively prevent the escape of dust.

(ix) Ware cleaning after the application of glaze by dipping or other process.

(x) Crushing and dry grinding of materials for pottery bodies and saggars, unless carried on in machines so enclosed as to effectively prevent the escape of dust or is so damp that no dust can be given off.

(xi) Sieving or manipulation of powdered flint, quartz, clay grog or mixture of these materials, unless it is so damp that no dust can be given off.

(xii) Grinding of tiles on a power driven wheel unless an efficient water spray is used on the wheel,

(xiii) Lifting and conveying of materials by elevators and conveyers unless they are effectively enclosed and so arranged as to prevent escape of dust into the air in or near any place at which persons are employed.

(xiv) The preparation or weighing out of flow materials, lawning of dry colours, colouring, dusting and colour blowing,

(xv) Mould making, unless the bins or similar receptacles used for holding plaster of pan‘s are provided with suitable covers.

(xvi) 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 conditions so as to secure effectual 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 green ware loading and un- loading saggars.

(b) All processes involving the use of dry lead compound.

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. Restriction on employment of pregnant women and young persons.—No pregnant woman or young person shall be employed or permitted to work in any of the operations specified in clause 2 or at any place where such operations are carried on.

6. Potter‘s wheel.—The potter‘s wheel (Jolly and Jigger) shall *be* provided with screens or so constructed as to prevent clay scrapings being thrown off beyond the wheel.

7. Measures to be taken to prevent dust flowing.—(1) All practical measures shall be taken by damping or otherwise to prevent dust arising during cleaning of floor.

(2) Damp saw dust or other suitable material shall be used to render the moist method effective in preventing dust arising into the air during the cleaning process which shall be carried out after work has ceased.

8. Cleaning of floor.—The floors of potter‘s shops, slip houses, dipping houses and ware cleaning rooms shall be hard, smooth and impervious and shall be thoroughly cleaned daily by a moist method by an adult male.

9. Medical examination.—(1) All persons employed in any process included under clause 2 shall be examined by the Certifying Surgeon within 7 days preceding or following the date of their first employment in process; thereafter all persons employed in any process included under clause 2(i) and 2(xiv) shall be examined by the Certifying Surgeon once in every three calendar months, and those employed in any process included in sub-clauses (ii) to (xiii), sub-clause (xv) and (xvi) of clause 2, once in every 12 months by the Certifying Surgeon. Records of such examination shall be entered by the

Certifying Surgeon in the Health Register and certificate of fitness granted to him under clause 10.

(2) If at any time the Certifying Surgeon is of the opinion that any person employed in any process included in clause 2 is no longer fit to continue in the same job, he may ask the management to provide such a person an alternative job and if the Certifying Surgeon is of the opinion that the person so employed is no longer fit for employment even in any other process on the ground that his continuance therein would involve damage to his health, he shall cancel the certificate of fitness granted to that person.

(3) No person whose certificate of fitness has been cancelled shall be re-employed unless the Certifying Surgeon after examining again, certifies him to be fit for employment in the same process or some alternative process.

10. Certificate of fitness.—A person medically examined under clause 9 and found fit for employment shall be granted by the Certifying Surgeon a certificate of fitness in Form- 33 and such certificate shall be in the custody of the manager of the factory. The certificate shall be kept readily available for inspection by an Inspector and the person granted such a certificate shall carry with him, while at work, a token giving reference to such certificate.

11. 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 water proof or similar material, which can be sponged daily for the use of the dippers, dippers‘ assistants, throwers, jolly workers, casters, mould makers and filter press and pug mill workers.

(3). Aprons provided in pursuance of 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 this 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 of dusty materials and charging of ball mills and plungers without wearing a suitable and efficient dust respirators.

12. Washing facilities.—The occupier shall provide and maintain in cleanly state and in good repair for the use of all persons employed in any of the processes specified in clause 2, awash place under cover with either:

(a) (i) a trough with smooth impervious surface fitted with a waste pipe, without plug, and of sufficient length to allow at least two feet for every five such persons employed at anyone time, and having a constant supply of clean water from taps or jets above the trough at intervals of not more than two feet; or

(ii) at least one tap or stand pipe for every five such persons employed at any one time having a constant supply of clean water, the tap or stand pipe being spaced not less than 4 feet apart; and

(b) a sufficient supply of clean towels made of suitable materials changed daily with sufficient supply of nail brushes and soap.

13. Time allowed for washing.—Before each meal and before the end of the days work at least ten minutes, in addition to the regular meal times, shall be allowed for washing to each person employed in any of the process mentioned in clause 2.

14. Mess-room.—(1) There shall be provided and maintained for use of all persons remaining within the premises during the rest interval, a suitable mess- room or canteen at a distance of at least 50 feet from the main factory providing a minimum accommodation of 10 square feet per head. The washing facilities mentioned above shall be provided near the mess room or canteen and the mess room and canteen shall be furnished with—

(i) a sufficient number of tables and chairs or benches with back rest;

(ii) arrangements for washing utensils;

(iii) adequate means for warming food;

(iv) adequate quantity of drinking water.

(2) The rooms shall be adequately ventilated by the circulation of fresh air and placed under the charge of a responsible person and shall be kept clean.

15. Food, drink, etc. prohibited in work room.—No food, drink, Pan and Supari, or tobacco shall be brought into or consumed by any worker in any work room in which any of the processes mentioned in clause 2 are carried on and no person shall remain in any such room during intervals for meals or rest.

16. Cloak room etc.—There shall be provided and maintained for the use of all persons employed in any of the processes mentioned in clause 2:

(a) a cloak room for clothing put off during working hours which shall be separate from any mess room;

(b) separate and suitable arrangements for the storage of protective equipment provided under clause 11.

17. 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.

18. 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 - XIII

COMPRESSION OF OXYGEN AND HYDROGEN PRODUCED BY THE ELECTROLYSIS OF WATER

1. The room in which electrolysis plant is installed shall be separate from the plant for storing and compressing the oxygen and hydrogen and also the electric generation 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 the register and signed by the persons carrying out such tests:

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

3. The oxygen and hydrogen gases shall not be compressed, if their purity as determined under clause 2 above falls below 98 per cent at any time.

4. In addition to the limit switch in the gas holder a sensitive negative pressure switch shall be provided in or adjacent to the suction main for hydrogen close to the gas-holder and between the gas holder and the hydrogen compressor to switch off the compressor motor in the event of the gas-holder being emptied to the extent as to cause vacuum.

5. Each gasholder shall be fitted with a low level alarm and a trip switch to stop the compression in the event of the bell of the gasholder reaching within 30 cm from its lowest working level.
6. The water, caustic soda and caustic potash used for making Lye shall be of the standards suitable for electrolysis.
7. Electrical connection at the electrolyser cells and at the electric generator terminals shall be so constructed as to preclude the possibility of wrong connections leading to the reversal of polarity and in addition an automatic device shall be provided to cut off power in the event of reversal of polarity owing to wrong connection either at the switch board or at the electric generator terminals.
8. Oxygen and hydrogen gas pipes shall be painted with distinguishing colours. Whenever any 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 that pipe.
9. All electrical wiring and apparatus in the electrolyser room shall be of flame-proof construction or enclosed in flame proof fittings and no naked light or flame shall be allowed to be taken either in the electrolyser room or where compression and filling of the gases is carried on and such warning notices shall be exhibited in prominent places.
10. No part of eletrolyser plant and the gas holders and compressor shall be subjected to welding, brazing, soldering or cutting until steps have been taken to remove any explosive substance from that part and render the part safe for such operations and after the completion of such operations no explosive substance shall be allowed to enter that part until the metal has cooled sufficiently to prevent risk of explosion.
11. No work of operation, repair or maintenance shall be undertaken except under the direct supervision of a person, who by his training, experience and knowledge of the necessary precautions against risk of explosions is competent to supervise such work. No electric generator after erection or repairs shall be switched on to the eletrolyser unless the same is certified by the competent person under whose direct supervision erection or repairs are carried on to be in a safe condition and the terminals have been checked for the polarity as required by clause 7.
12. Every part of the eletrolyser plant and the gas holder and compressors shall have a regular schedule of overhaul and checking and every defect noticed shall be rectified forthwith.

SCHEDULE XIV

HANDLINGANDMANIPULATIONOFCORROSIVESUBSTANCES

1. **Definition.**—For the purpose of this Schedule:

(a) **—Corrosive operation‖** means an operation of manufacturing, storing, handling, processing, packaging or using any corrosive substance in a factory.

(b) **—Corrosive substance‖** includes sulphuric acid, nitric acid, hydrochloric acid, hydrofluoric acid, carbolic acid, phosphoric acid, liquid chlorine, liquid bromine, ammonia, sodium hydroxide and potassium hydroxide and a mixture thereof, and any other substance which the State Government by notification in the Official Gazette specify to be a corrosive substance.

2. **Flooring.**—The floor of every work room of a factory in which corrosive operation is carried on shall be made of impervious, corrosion and fire resistant material and shall be so constructed as to prevent collection of any corrosive substance. The surface of such flooring shall be smooth and cleaned as often as necessary and maintained in a sound condition.

3. **Protective equipment.**—(a) The occupier shall provide for the use of all persons employed in any corrosive operation, suitable protective wear for hand and feet, suitable aprons, face shields, chemical safety goggles, and respirators. 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 absorbed chemicals and by disinfecting. The occupier shall also provide suitable protective creams and other preparations wherever necessary.

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

4. **Water facilities.**—Where any corrosive operation is carried on, there shall be provided as close to the place of such operation as possible, a source of clean water at a height of 210 cms (7 feet) from a pipe of 1.25 cm (1/2) diameter and fitted with a quick acting valve so that in case of injury to the worker by any corrosive substance, the injured part can be thoroughly flooded with water. Whenever necessary, in order to ensure continuous water supply, a storage tank having minimum length, breadth and height of 210 cm, 120 cm, and 60 cm, respectively, or such dimensions as are approved by the Chief Inspector-cum-Facilitator shall be provided as the source of clean water.

5. **Cautionary notice.**—A cautionary notice in the following form and printed in the language which majority of the workers employed understand, shall be

displayed prominently close to the place where any of the operations mentioned in paragraph

2 above is carried out and where it can be easily and conveniently read by the workers. If any worker is illiterate, effective steps shall be taken to explain carefully to him the contents of the notice so displayed.

CAUTIONARY NOTICE

Danger—Corrosive substances cause severe burns and vapours thereof may be extremely hazardous. In case of contact immediately flood the part affected with plenty of water for at least 15 minutes. Get medical attention quickly.

6. Transport.—(a) Corrosive substances shall not be filled, moved or carried except in containers and when they are to be transported, they shall be included in crates of sound construction and of sufficient strength.

(b) A container with a capacity of (11.5 liters) (2½ gallons) or more of a corrosive substance shall be placed in a receptacle or crate and then carried by more than one person at a height below the waist line unless a suitable rubber-wheeled truck is used for the purpose.

(c) Containers for corrosive substances shall be plainly labelled.

7. Devices for handling corrosives.—(a) Suitable tilting or lifting devices shall be used for emptying jars, carboys and other containers of corrosives.

(b) Corrosive substances shall not be handled by bare hands but by means of a suitable scoop or other device.

8. Opening of valves.—Valves fitted to containers holding a corrosive substance shall be opened with a great care. If they do not work freely they shall not be forced open. They shall be opened by a worker suitably trained for the purpose.

9. Cleaning tanks, stills, etc.—(a)In cleaning out or removing residues from stills or other large chambers used for holding any corrosive substances suitable implements, made of wood or other material shall be used to prevent production of arseniurated hydrogen (arsine).

(b) Whenever it is necessary for the purpose of cleaning or other maintenance work for any worker to enter any chamber, tank, vat, pit or other confined space where a corrosive substance had been stored all possible precautions required under the Code, shall be taken to ensure the worker‘s safety.

(c) Whenever possible before repairs are undertaken to any part of equipment in which a corrosive substance was handled, such equipment or

part thereof shall be freed of any adhering corrosive substance by adopting suitable methods.

10. Storage.—(a) Corrosive substances shall not be stored in the same room with other chemicals such as turpentine, carbides, metallic powders and combustible material, the accidental mixing with which may cause a reaction which is either violent or gives rise to toxic fumes and gases.

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

(c) Every container having a capacity of 20 Liters or more and every pipe Line, valves and fitting used for storing or carrying corrosive substances shall be thoroughly examined every year for finding out any defects and defects shall be removed forthwith. A register shall be maintained of every such examination made and shall be produced before the Inspector whenever required.

11. Fire extinguishers and fire-fighting equipments.—An adequate number of suitable type of fire extinguishers or other fire-fighting equipments depending on the nature of chemicals stored shall be provided. Such extinguishers or other equipment shall be regularly tested and refilled. Clear instructions as to how the extinguishers or other equipment should be used, printed in the language which majority of the workers employed understand, shall be affixed near each extinguisher or other equipment.

12. Exemption.—If in respect of any factory on an application made by the manager the Chief Inspector-cum-Facilitator is satisfied that owning to the exceptional circumstances, or the infrequency of the process or for any other reason to be recorded by him in writing, all or any of the provisions of this Schedule are not necessary for the protection of the persons employed therein, he may by a certificate in writing which he may at any time revoke, exempt the factory from such of the provisions and subject to such conditions as he may specify therein.

SCHEDULE XV

MANIPULATION OF STONE ORANYOTHERMATERIAL CONTAINING FREE SILICA

1. **Application.**—This Schedule shall apply to all factories or parts of factories in which manipulation of stone or any other material containing free silica is carried on.

2. **Definitions.—** For the purpose of this Schedule.

(a) **—Manipulation‖** means crushing, breaking, chipping, dressing, grinding, sieving, mixing, grading or handling of stone or any other material containing free silica or any other operation involving such stone or material;

(b) **—Stone or any other material containing free silica‖** means a stone or any other solid material containing not less than 5% by weight of free silica.

3. **Precautions in manipulations.**—No manipulation shall be carried out in a factory or part of a factory unless one or more of the following measures, namely:

(a) damping the stone or other material being processed;

(b) providing water spary;

(c) enclosing the process;

(d) isolating the process; and

(e) providing localized exhaust ventilation;

are adopted so as to effectively control the dust in any place in the factory where any person is employed, at a level equal to or below the maximum permissible level for silica dust as laid down in the Rules.

Provided that *such measures as above said are not necessary if the process or operation itself is such that the level of dust created and prevailing does not exceed the permissible level referred to.*

4. **Maintenance of floors.**—(1) All floors or places where fine dust is likely to settle on and whereon any person has to work or pass shall be of impervious material and maintained in such condition that they can be thoroughly cleaned by moist method or any other method which would prevent dust being airborne in the process of cleaning.

(3) The surface of every floor of every work-room or place where any work is carried out or where any person has to pass during the course of his work, shall be cleaned of dust once at least during each shift after sprayed with water or by any other suitable method so as to prevent dust being airborne in the process of cleaning.

5. **Prohibition relating to young persons.**—No young person shall be employed or permitted to work in any of the operations involving manipulation or at any place where such operation are carried out.

6. **Medical facilities and records of examinations and tests.**—(1) The occupier of every factory to which the Schedule applies, shall:

(a) employ a qualified medical officer for medical surveillance of the workers employed therein whose employment shall be subject to the approval of the Chief Inspector-cum-
Facilitator; and

(b) provide to the said medical officer all the necessary facilities for the purpose referred to in clause (a).

(2) The record of medical examination and appropriate tests carried out by the said medical officer shall be maintained in a separate register approved by the Chief Inspector –cum- Facilitator, which shall be kept readily available for inspection by the Inspector.

7. **Medical examination by Certifying Surgeon.**—(1) Every worker employed in the processes specified in paragraph 1, shall be examined by a Certifying Surgeon within 15 days of his first employment. Such medical examination shall include pulmonary function tests, 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 Certifying Surgeon.

(2) Every worker employed in the said processes shall be re-examined by a Certifying Surgeon at least once in every 12 months. Such examination shall, wherever the Certifying Surgeon considers appropriate, include all the tests as specified in sub- paragraph (1) except X-ray which will be once in 3 years.

(3) The Certifying Surgeon after examining a worker, shall issue a Certificate of Fitness in Form-33 The records of examination and re-examinations carried out shall be entered in the certificate and the certificate shall be kept in the custody of the manger of the factory. The record of each examination carried out under sub- paragraphs (1) and (2) including the nature and the results of the tests, shall also be entered by the Certifying Surgeon in a health register in Form-32.

(4) The Certificate of Fitness and the health register shall be kept available for inspection by the Inspector.

(5) If at any time the Certifying Surgeon is of the opinion that a worker is no longer fit for employment in the said processes on the ground that continuance

therein would involve special danger to the health of the workers, he shall make a record of his findings in the said certificate and the health register. The entry of his findings in these documents should also include the period for which he considers that the said person is unfit for work in the said processes. The person so suspended from the process shall be provided with alternate placement facilities unless he is fully incapacitated in the opinion of the Certifying Surgeon, in which case the person affected shall be suitably rehabilitated.

8. **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 any other reason, all or any of the provisions of this Schedule is not necessary for protection of the worker in the factory, the Chief Inspector-cum-Facilitator may by a certificate in writing, which he may in his discretion revoke at any time, exempt such factory from all or any of such provisions subject to such conditions, if any, he may specify therein.

SCHEDULE XVI

HANDLING AND PROCESSING OFASBESTOS, MANUFACTURE OF ANY ARTICLE OF ASBESTOS AND ANY OTHER PROCESS OF MANUFACTURE OR OTHERWISE IN WHICH ASBESTOS IS USED IN ANY FORM

1. **Application.—**This Schedule shall apply to all factories or parts of factories in which any of the following processes is carried on:

(a) breaking, crushing, disintegrating, opening, grinding, mixing or sieving of asbestos and other processes involving handling and manipulation of asbestos incidental thereto;

(b) all processes in the manufacture of asbestos textiles including preparatory and finishing processes;

(c) making of insulation slabs or sections, composed wholly or partly of asbestos, and processes incidental, thereto;

(d) making or repairing of insulating mattresses, composed wholly or partly of asbestos and processes incidental thereto;

(e) manufacture of asbestos cardboard and paper; (f) manufacture of asbestos cement goods;

(g) application of asbestos by spray method;

(h) sawing, grinding, turning, abrading and polishing in dry state of articles composed wholly or partly of asbestos;

(i) cleaning of any room, vessel, chamber, fixture or appliance for the collection

of asbestos dust; and

(j) any other processes in which asbestos dust is given off into the work environment.

2. Definition.—For the purpose of this Schedule:

(a) **—asbestos‖** means any fibrous silicate mineral and any admixture containing actiolite, amostite, anthophyllite, drysolite, 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 materials,

(c) **—Approved‖** means approved for the time being in writing byte Chief Inspector-cum- Facilitator.

(d) **—breathing apparatus‖** means a helmet or face piece with necessary connection by means of which a person using it breathes air free from dust, or any other approved apparatus,

(e) **—efficient exhaust draught‖** means localised ventilation by mechanical means for the removal of dust so as to prevent dust from escaping into air of any place in which work is carried on. No draught shall be deemed to be efficient which fails to control dust produced at the point where such dust originates,

(f) **—preparing‖** means crushing, disintegrating, and any other processes in or incidental to the opening of asbestos,

(g) **—protective clothing‖** means overalls and head covering which (in either case) will when worn exclude asbestos dust.

3. Tools and equipment.—Any tools or equipment used in process to which this Schedule applied 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 processes and machines:

(a) manufacture and conveying machinery, namely—

(i) preparing, grinding or dry mixing machines;

(ii) carding, card waste and ring spinning machines, and looms;

(iii) machines or other plant fed with asbestos; 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, hopper or other structures into which loose asbestos is delivered or passes;

(d) work-benches for asbestos waste sorting or for other manipulation of asbestos by hand;

(e) work places at which the filling or emptying of sacks, skips or other potable containers, weighing or other process incidental thereto which is effected by hand, is carried on;

(f) sack cleaning machines;

(g) mixing and blending of asbestos by hand; and

(h) any other process in which dust is given off into the work environment.

(2) Exhaust ventilation equipment provided in accordance with sub-paragraph (1) shall, while any work of maintenance of 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 places.

(3) Arrangements shall be made to prevent asbestos dust discharged from exhaust apparatus being drawn into the air of any work room.

(4) The asbestos bearing dust removed from any 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 of ventilating systems. —(1) All ventilating systems used for the purpose of extracting or suppressing dust as required by this Schedule shall be examined and inspected once every week by a responsible person. It shall be thoroughly examined and tested by a competent person once in every period of 12 months. Any defects found by such examination or test shall be rectified forthwith.

(2) A register containing particulars of such examination and tests and the state of the plant and the repair or alterations (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.

(2) Such asbestos shall not be distributed within a factory except in such receptacles or in a totally by 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 not immediately required for use; and

(b) the floors shall be kept free from any material, plant or other articles not immediately required for the work carried on in the room, which would obstruct the proper cleaning of the floor.

(2) The cleaning as mentioned in sub-rule (1) shall, so far as is practicable, be carried out by means of vacuum cleaning equipment so designed and constructed and so used that asbestos dust neither escapes nor is discharged into the air of any work place.

(3) When the cleaning is done by any method other than that mentioned in sub-paragraph (2), the person 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 conditions for use of every person employed :

(a) in chambers containing loose asbestos;

(b) in cleaning, dust settling or filtering chambers or apparatus;

(c) in cleaning the cylinders, including the doffer cylinders, or other parts of a carding machine by means of hand-stickles; and

(d) in filling, beating, or levelling in the manufacture or repair of insulating mattresses; and

(e) in any other operation or circumstances in which it is impracticable to adopt technical means to control asbestos dust in the work environment within, the permissible limit.

(2) Suitable accommodation in conveniently accessible position shall be provided for the use of persons when putting on or taking off breathing apparatus and protective clothing provided in accordance with this rule 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-rule (2) above.

(4) All protective clothing in use shall be dedusted 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 every month by a responsible person.

(6) A record of cleaning and maintenance and of the condition of the breathing apparatus shall be maintained in 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 operations to which -this Schedule applies for storing of personal clothing. This should be - separated from the accommodation provided under sub-paragraph (2) to prevent contamination of personal clothing.

12. Washing and bathing facilities.—(1) There shall be provided and maintained in a clean state and in good repair for the use of all workers employed in the processes covered by the Schedule, adequate washing and bathing places having a constant supply of water undercover at the rate of one such place for every 15 persons employed.

(2) The washing places shall have stand pipe placed at intervals of not less than one meter.

(3) Not less than one-half of the total number of washing places shall be provided with bathrooms.

(4) Sufficient supply of clean towels made of suitable material shall be provided;

Provided that *such towels shall be supplied individually for each worker if so ordered by the Inspector.*

(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 young persons.—No young person shall be employed in any of the process covered by this schedule.

15. Prohibition relating to smoking.—No person shall smoke in any area where processes covered by this Schedule are carried on. A notice in the language understood by majority of the workers shall be pasted in the plant prohibiting smoking at such areas.

16. Cautionary Notice.—(1) Cautionary notice 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; and

(c) prohibition of entry to unauthorised persons, or authorised persons but without protective equipment.

(2) Such notice 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 fiber in the air shall be carried out once at least in every shift and the record of the result 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, and

(b) provide to the said medical practioner 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 Inspectors.\

19. Medical examination by Certifying Surgeon.—(1) Every worker employed in the processes specified in paragraph 1 shall be examined by a Certifying Surgeon within 15 days of his first employment. Such examination shall include pulmonary function tests, tests for detecting asbestos fibers 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 Certifying Surgeon.

(2) Every worker employed in the process referred to sub-paragraph (1) shall be re- examined by a Certifying Surgeon at least once in every twelve calendar months. Such examination shall, wherever the Certifying Surgeon considers appropriate, include all the tests specified in sub-paragraph (1) except chest X- ray which will be carried out once in 3 years.

(3) The Certifying Surgeon after examining a worker, shall issue a Certificate of Fitness in Form-33 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 result of the Certifying Surgeon in a health register in Form-32.

(4) The Certificate of Fitness and the health register shall be kept readily available for inspection by the Inspector.

(5) If at any time the Certifying Surgeon is of the opinion that a worker is no longer fit for employment in the said processes on the ground that continuance therein would involve special danger to the health of the worker, he shall make a record of his findings in the said certificate and the health register. The entry of his findings in those documents should also include the period for which he considers that the said person is unfit to work in the said processes.

(6) No person who has been found unfit to work as said in sub-paragraph (5) shall be re-employed or permitted to work in the said processes unless the Certifying Surgeon, after further examination, again certifies him fit for employment in those processes.

20. Exemption.—If in respect of any factory, the Chief Inspector-cum-Facilitator is satisfied that owing to the exceptional circumstances or infrequency of the processes or for any other reason, all or any of the provisions of this Schedule is not necessary for protection of the workers in the factory, the Chief Inspector-cum-Facilitator may by a certificate in writing, which he may at his discretion revoke at any time, exempt such factory from all or any of such provisions subject to such conditions, if any, as he may specify therein.

SCHEDULE - XVII

MANUFACTURE OR MANIPULATION OF CARCINOGENIC DYE TERMEDIATES

(1) Application.—This Schedule shall apply in respect of all factories or any part thereof, where processes in which the substances mentioned in paragraphs 3 and 4 are formed, manufactured, handled or used and the processes incidental thereto in the course of which these substances are formed, are carried on, the processes indicated in this paragraph shall be referred to hereinafter as ―the said processes‖ and such a reference shall mean any or all the processes described in this paragraph.

(2) Definition.—For the purpose of this Schedule the following definitions shall apply, unless the context otherwise requires:

(a) **—controlled substances‖** means chemical substances mentioned in paragraph 4 of this Schedule.

(b) **—first Employment‖** means first employment in the said processes and also re- employment in such processes following any cessation of employment for a continuous period exceeding three calendar months.

(c) **—efficient exhaust draught‖** means localised ventilation effected by mechanical means for the removal of gas, vapour, dust or fume so as to prevent them from escaping into the air of any place in which work is carried on. No draught shall be deemed to be efficient which fails to remove smoke generated at the point where such gas, vapour, fume or dust originates.

(d) **—prohibited Substances‖** means chemical substances mentioned in paragraph 3 of the Schedule.

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

(a) beta-naphthylamine and its salts;

(b) benzidine and its salts;

(c) 4-amino diphenyl and its salts;

(d) 4-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 per cent of beta-naphthylamine either as a by- product of chemical reaction or otherwise, and its salts;

(b) ortho-tolodine and its salts;

(c) dianisidine and its salts;

(d) dichlorobenzidine and its salts;

(e) auramine; and

(f) Magneta.

(5) Prohibition of employment.—No person shall be employed in the said processes in any factory in which any prohibited substance is formed, manufactured, processed, handled, or used except as exempted by the Chief

Inspector-cum-Facilitator as stipulated in paragraph 23.

(6) Requirements for processing or handling controlled substances.—(a) Wherever any of the controlled substances referred to in paragraph 4 are formed, manufactured, processed, handled, or used, all practical steps shall be taken to prevent inhalation, ingestion or absorption of the said controlled substances by the workers while engaged in processing that substance, and its storage or transport within the plant or in cleaning or maintenance of the concerned equipment, plant, machinery and storage areas.

(b) As far as possible all operations shall be carried out in a totally enclosed system. Wherever such enclosure is not possible, efficient exhaust draught shall be applied at the point where the controlled substance are likely to escape into the atmosphere during the process.

(c) The controlled substances shall be received in the factory in tightly closed containers and shall be kept so except when these substances are in process or in use. The controlled substances shall leave the factory only in tightly closed containers of appropriate type. All the containers shall be plainly labelled to indicate the contents.

(7) Personal protective equipment.—(A) The following items of personal protective equipment shall be provided and issued to every worker employed in the said process:

(a) long trousers and shirts or overalls with full sleaves and head coverings. The shirt or overall shall cover the neck completely.

(b) rubber-gum-boots.

(B) The following items of personal protective equipment shall be provided to everyone separately] for use by workers employed in the said processes when there is danger of injury during the performance of normal duties or in the event of emergency:

(i) Rubber Hand-gloves,

(ii) Rubber aprons, and

(iii) Airline respirators or other suitable respiratory protective equipment.

(C) It shall be the responsibility of the manager to maintain all items of personal protective equipment in a clean and hygienic condition and in good repair.

(8) Prohibition relating to employment of pregnant women and young persons.— No pregnant woman or young person shall be employed or permitted to work in any room in which the said processes are carried on.

(9) Floors of work room.— The floor of every work-room in which the said processes are carried on, shall be;

(a) smooth and impervious to water provided that asphalt or tar shall not be used in the composition of the floor,

(b) maintained in a state of good repair,

(c) with a suitable slope for easy draining and provided with gutters, and

(d) thoroughly washed daily with the drain water being led into a sewer through a closed channel.

(10) 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 being discarded.

(11) Manual handling.—Controlled substances shall not be allowed to be mixed, filled, emptied or handled except by means of a scoop with a handle. Such scoop shall be thoroughly cleaned daily.

(12) Instructions regarding risk.—Every worker on his first employment in the said processes shall be fully instructed on the properties of the toxic chemicals to which he is likely to be exposed to, of the dangers involved and the precaution to be taken. Workers shall also be instructed on the measures to be taken to deal with an emergency.

(13) Cautionary placards.—Cautionary placards in the form specified in Appendix attached to this Schedule and printed in the language of the majority of the workers employed in the said processes, shall be affixed in prominent places frequented by them in the factory, where the placards can be easily and conveniently read. Arrangements shall be made by the manager to instruct periodically all such workers regarding the precautions contained in the cautionary placards.

(14) Medical examination.—(a) Every worker employed in the said processes shall be examined by a Certifying Surgeon within 14 days of his first employment. Such examination shall include tests, which the Certifying Surgeon may consider appropriate and shall include exfoliative cytology of the urine. No workers shall be allowed to work after 14 days of his first employment in the factory unless certified fit for such employment by the Certifying Surgeon.

(b) Every worker employed in the said processes shall be re-examined by a Certifying Surgeon at least once in every six calendar months. Such examination shall include tests which the Certifying Surgeon may consider

appropriate but shall include exfoliative cytology of the urine.

(c) A person medically examined under sub-paragraph (a) shall be granted by the Certifying Surgeon, a certificate of fitness in Form-33 Record of each re-examination carried out under sub-paragraph (6) shall be entered in the certificate. The certificate shall be kept in the custody of the manager of the factory.

(d) The records of each examination carried out as referred to in sub-paragraphs (a) and (b) including the nature and result of the tests, shall be entered by the Certifying Surgeon in a health register in Form-32.

(e) The certificates of fitness and the health register shall be kept readily available for inspection by any Inspector.

(f) If at any time the Certifying Surgeon is of the opinion that a person is no Longer fit for employment in the said processes or in any other work on the ground that his continuance therein would involve damage to his health, he shall make a record of his findings in the said certificate and the health register. The entry of his findings in these documents should also include the period for which he considers that the said person is unfit for working in the said processes] or in any work as the case may be.

(g) No person who has been found unfit to work as said in sub- paragraph (f) shall be re- employed or permitted to work unless the Certifying Surgeon, after further examination again certifies him to be fit for employment.

(15) Medical facilities.—(a) the occupier of every factory in which the said processes are carried on shall engage a qualified medical practitioner for medical surveillance of the workers employed in such processes. His appointment shall be subject to approval of the Chief Inspector-cum-Facilitator.

(b) The occupier shall provide to him all the necessary facilities for the purpose referred to in sub-paragraph (a).

(c) A record of medical examinations and appropriate tests carried out by the qualified medical practitioner shall be maintained.

(16) Obligations of the workers.—It shall be the duty of the persons employed in the said processes to submit themselves for the medical examination including exfoliative cytology of the urine by the Certifying Surgeon or the qualified medical practitioner as provided for under these rules.

(17) Washing and bathing facilities.—(a) The following washing and bathing facilities shall be provided and maintained in a clean state and in good repair

for the use of all workers employed in the said processes:

(i) a wash place under cover having constant supply of water and provided with clean towels, soap, and nail brushes and with at least one stand pipe for every five such workers;

(ii) 50 per cent of the stand pipes provided under clause (i) shall be located in bathrooms where both hot and cold water shall be made available during the working hours of the factory and for one hour thereafter;

(iii) the washing and bathing facilities shall be in close proximity of the area housing the said processes;

(iv) clean towels shall be provided individually to each worker, and

(v) in addition to the taps mentioned under clause (i) one stand pipe, in which warm water is made available, shall be provided on each floor.

(b) Arrangements shall be made to wash factory uniforms and other clothes every day.

(18) Food, drinks etc. prohibited in the work-room.—No worker shall consume food, drinks, pan, supari or tobacco or shall smoke in any work-room in which the said processes are carried on and no worker shall remain in any such room during the intervals for meals or rest.

(19) Cloak room.—There shall be provided and maintained in a clean state and in good repair for the use of the workers employed in the said processes: (a) a cloak- room with lockers having two compartments one for street clothes and the other for work clothes, and (b) a place separate from the locker room and the mess-room, for the storage of protective equipment provided under paragraph (7). The accommodation so provided shall be under the care of a responsible person and shall be kept clean.

(20) Mess room.—There shall be provided and maintained for the use of workers employed in the said processes who remain on the premises during the meal intervals, a mess-room which shall be furnished with tables and benches and provided with suitable means for warming food.

(21) Time allowed for washing.—Before the end of each shift 30 minutes shall be allowed for bathing for each worker who is employed in the said processes. Further, at least 10 minutes shall be allowed for washing before each meal, in addition to the regular time allowed for meals.

(22) Restriction on age of persons employed.—No worker under the age of 40 years shall be engaged in the factory in the said processes for the first time after the date on which the Schedule comes into force.

(23) Exemption.- Prohibited substances.—(a)The Chief Inspector-cum-Facilitator may by a certificate in writing which he may be at his discretion revoke at any time, subject to such conditions, if any, as may specified therein, exempt any process in the course of which any of the prohibited substances is formed, processed, manufactured, handled, or used, from the provisions of paragraph (5) if he is satisfied that the process is carried out in a totally enclosed and hermetically sealed system in such a manner that the prohibited substance is not removed from the system except in quantities not greater than that required for the purpose of control of the process or such purposes as is necessary to ensure that the product is free from any of the prohibited substances.

(b) The Chief Inspector-cum-Facilitator may allow the manufacture, handling or use of benzidine hydrochloride provided that all the processes in connection with it are carried out in a totally enclosed system in such a manner that no prohibited substance other than benzidine hydrochloride is removed therefrom, except in quantities not greater than that required for the purpose of control of the processes or such purposes as is necessary to ensure that the product is free from prohibited substances and that adequate steps are taken to ensure that benzidine hydrochloride, is except while not in a totally enclosed system, kept wet with not less than one part of water to two parts of benzidine hydrochloride at all times.

(24) General exemptions.—If in respect of any factory, the Chief Inspector-cum-Facilitator is satisfied that owing to the exceptional circumstances or infrequency of the processes or for any other reason, all or any of the provisions of this Schedule is not necessary as for the protection of the workers in the factory, the Chief Inspector-cum-Facilitator may by a certificate in writing (which he may in his discretion revoke at any time), exempt such factory from all or any of such provisions subject to such conditions, if any, as he may specify therein.

APPENDIX CAUTIONARY PLA CARD/ NOTICE

1. Dye intermediates which are nitro or amino derivatives or aromatic/hydrocarbons are toxic. You have to handle these chemicals frequently in this factory.
2. Use the various items of protective wear to safeguard your own health.
3. Maintain scrupulous cleanliness at all times. Thoroughly wash hands and feet

before taking meals. It is essential to take a bath before leaving the factory.

4. Wash off any chemical falling on your body with soap and water. If splashed with a solution of the chemical, remove the contaminated clothing immediately. These chemicals are known to produce cyanosis. Contact the medical officer or appointed doctor immediately and get his advice.
5. Handle the dye intermediates only with long handled scoops, never with bare hands.
6. Alcoholic drinks should be avoided as they enhance the risk of poisoning by the chemicals.
7. Keep your food and drinks away from work place. Consuming food, drinks or tobacco in any form, at the place of work is prohibited.
8. Serious effects from work with toxic chemicals, may follow after many years. Great care must be taken to maintain absolute cleanliness of body, clothes machinery and equipment.

SCHEDULE–XVIII

PROCESS OF EXTRACTING OIL SAND FATS FROM VEGETABLES AND ANIMAL SOURCES IN SOLVENT EXTRACTION PLANTS

1. Definitions.— (a) **"Solvent Extraction Plant"** means a plant in which the process of extracting oils and fats from vegetable and animal sources by 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 flammable gas or vapour which may enter or which may originate inside the enclosure without communicating internal inflammation (or explosion) to the external flammable gas or vapour.

(d) **—Competent Person‖** for the purpose of this Schedule shall be at least a Member of the Institution of Engineers (India) or an Associate Member of the said Institution with 10 years experience in a responsible position as may be approved by the Chief Inspector-cum-Facilitator.

Provided that *a Graduate in Mechanical Engineering or Chemical Technology with a specialised knowledge of oils and fats and with a minimum experience of 5 years in a solvent extraction plant shall also be considered to be a competent person:*

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

2. **Location and layout.—**(a) No solvent extraction plant shall be permitted to be constructed or extended within a distance of 30 meters from the nearest residential locality.

(b) A 1.5 meter high continuous wire fencing shall be provided around the solvent extraction plant up to a minimum distance of 15 meters from the plant.

(c) No person shall be allowed to carry any match-box or an open flame or fire inside the area bound by the fencing.

(d) Boiler houses and other buildings where open flame processes are carried on shall be located at least 30 meters away from the solvent extraction plant.

(e) If godowns and preparatory processes are at a distance less than 30 meters from the solvent extraction plant, these shall be at least 15 meters distance from the plant, and a continuous barrier wall of non-combustible material 1.5 meters high shall be erected at a distance of not less than 15 meters from the solvent extraction plant so that it extends to at least 30 meters of vapour travel around its ends from the plant to the possible source of ignition.

3. **Electrical installations.—**(a) All electrical motors and wiring and other electrical equipment installed or housed in solvent extraction plant shall be of flame- proof construction.

(b) All metal parts of the plant and building including various tanks and containers where solvents are stored or are present and all parts of electrical equipment not required to be energised shall be properly bonded together and connected

to earth so as to avoid accidental rise in the electrical potential of such parts above the earth potential.

4. **Restriction on smoking—**Smoking shall be strictly prohibited within 15 meters distance from solvent extraction plant. For this purpose ―No Smoking‖ signs shall be permanently displayed in Hindi and English 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 solvent extraction plant shall be belt driven.

(c) No person shall be allowed to enter and work in the solvent extraction Plant if wearing clothes made of nylon or such other fiber 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 inflammable 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 through 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 a hopper and a magnetic separator shall be provided to remove any piece 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 meters above the ground and 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 sump which should be located within the fenced area, but not closer than 8 meter to the fence.

11. **Ventilation.—**The solvent extraction plant shall be well ventilated and if the plant is housed in a building, the building shall be provided with mechanical ventilation with provision for at least six air changes per hour.

12. **House-keeping.—**(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 meters from the plant shall be kept free from any combustible materials and any spills of oil or solvent, shall be cleaned up immediately.

13. **Examination and repairs.—**(a) The solvent extraction plant shall be examined by the competent persons to determine any weakness or corrosion and wear once in every 12 months. Report of such examination shall be supplied to the Inspector with his observation as to whether or not the plant is in safe condition to work.

(b) No repairs shall be carried out to the machinery or plant except under the direct supervision of the competent person.

(c) Facility shall be provided for purging the plant with inert gas before opening for cleaning or repairs and before introducing solvent after repairs.

14. **Operating personnel:—**the operation of 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 persons to be fit for the purpose and no other person shall be allowed to operate the plant and machinery.

15. **Employment of pregnant women and young persons:—**No pregnant women or young persons shall be employed in the solvent extraction plant.

16. **Vapour detention:—**A suitable type of flame proof and portable combustible gas indicator shall be provided and maintained in good working order and a schedule of routine sampling of atmosphere at various location as approved by the Chief Inspector-cum- Facilitator shall be drawn out and entered in a register maintained for the purpose.

SCHEDULE XIX

MANUFACTURE OR MANIPULATION OF MANGANESE AND ITS COMPOUNDS

1. **Definition.—**For the purpose of this Schedule, the following definitions shall apply:

(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 in 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 localised ventilation, effected by

mechanical means for the removal of dust or fume or mist at its source of origin so as to prevent it from escaping into the atmosphere of any place where any work is carried on. No draught shall be deemed to be efficient which fails to remove the dust or fume or mist at the point where it is generated and fails to prevent it from escaping into and spreading into the atmosphere of a work place.

2. **Application.—**This Schedule shall apply to every factory in which or in any part of which any manganese process is carried on.

3. **Exemptions.—**If in respect of any factory, the Chief Inspector-cum-Facilitator is satisfied that owing to any exceptional circumstances, or infrequency of the process, or for any other reason, application of all or any of the provisions of this Schedule is not necessary for the protection of the persons employed in such factory, he may, by an orderin writing which he may at his discretion revoke, exempt such factory from all or any of the provisions on such condition 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 processes may not be effected 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.—**(1) Every person employed in a manganese process shall be medically examined by Certifying Surgeon within 14 days of his first employment and thereafter at intervals of not more than three months.

(2) If a person medically examined is found fit for employment on a manganese process the Certifying Surgeon shall grant a Certificate of Fitness in Form-33 which shall be kept in the custody of the manager of the factory. The certificate shall be readily produced by the manager whenever required by an Inspector, and the person granted such a certificate shall be provided with a

token made of metal with the number of the certificate inscribed thereon and the said person shall always carry the said token on his person while at work.

(3) If a person is found unfit for work in any manganese process, the Certifying Surgeon shall grant a certificate to that effect and such person shall not be allowed to work in any manganese process.

(4) If the Certifying Surgeon finds that any worker who had been granted a certificate of fitness at a previous medical examination was no longer fit to be employed on any manganese process, he may revoke the previous certificate and no person whose certificate of fitness has been revoked shall be allowed to work on any manganese process.

The Certifying Surgeon may require such person to be produced before him for fresh medical examination after such period as he may specify in writing on the revoked certificate and in the Health Register.

(5) If the Certifying Surgeon is of the opinion that a person had become permanently unfit for employment on any manganese process he shall make an entry to that effect in the certificate and in the Health Register and no such person shall be allowed to work in any manganese process.

(6) If the Certifying Surgeon is of the opinion that any special expert examination or test is necessary for a proper diagnosis in a doubtful case, he may direct the manager and/or the occupier to get the worker examined by such expert, or to get such tests carried out as may be specified by him and the manager or the occupier as the case may be shall comply with the direction given within a specified time and produce the report of examination or test as the case may be, before the Certifying Surgeon.

(7) If the Certifying Surgeon is of the opinion that any person is not fit for employment in any manganese process but is fit to be employed on any other work he may advise the manager or the occupier to employ the said person on such other job as may be a safe for him. The Certifying Surgeon may also advise the worker to undergo such treatment as he may consider necessary.

(8) If any person has any doubt regarding the diagnosis or decision of the Certifying Surgeon he may make an appeal to the Chief Inspector -cum-Facilitator and the Chief Inspector-cum-Facilitator may refer the case to the Medical Inspector of Factories or to a Medical Committee constituted by him for this purpose of which the Medical Inspector of Factories shall be a member. The decision of the Medical Inspector or the Medical Committee, as the case may be, shall be final in the matter.

7. Personal protective equipment.—(1) The occupier of the factory shall provide and maintain in good and clean condition suitable overalls and head

coverings for all persons employed in any manganese process and such overalls and head coverings shall be worn by the persons while working on a manganese process.

(2) 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 work place and the same shall be properly maintained and kept always in a condition to be used readily.

(3) The occupier shall provide and maintain for the use of all persons employed, suitable accommodation for the storage and make adequate arrangements for cleaning and maintenance of personal protective equipment.

8. Prohibition relating to pregnant women and young persons.—No pregnant woman or young person shall be employed or permitted to work in any manganese process.

9. Food, drinks prohibited in the work-rooms.—No food, drink, pan and supari or tobacco shall be allowed to be brought into or consumed by any worker in any work- room in which any manganese process is carried on.

10. Mess room.—There shall be provided and maintained for the use of the persons employed in a manganese process a suitable mess-room which shall be furnished with sufficient tables and benches and adequate means for warming of food. The mess-room shall be placed under the charge of a responsible person and shall be kept clean.

11. Washing facilities.—There shall be provided and maintained in clean state and in good condition, for the use of persons employed on manganese process a wash place under cover, with either:

(a) a trough with a smooth impervious surface fitted with a waste pipe without plug. The trough shall be of sufficient length to allow at least 60 cms for every such person employed at any one time, and having a constant supply of water from taps or jets above the trough at intervals at not more than 60 cms; or at least one wash basin for every five such persons employed at any one time, fitted with a waste pipe and plug and having a constant supply of water; and

(b) Sufficient supply of soap or other suitable cleaning material and nail brushes and clean towels.

12. Cloak room.—If the Chief Inspector-cum-Facilitator so requires there shall be provided and maintained for the use of persons employed in manganese

process a cloak-room for clothing put off during working hours with adequate arrangement for drying the clothing.

13. **Cautionary placard and instruction.—**Cautionary notices in the following form and printed in Hindi and 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 and arrangement shall be made by the occupier to instruct periodically all workers employed in a manganese process regarding the health hazards connected with their duties and the best preventive measures and methods to protect themselves. The notices shall, always be maintained in a legible condition:

CAUTIONARY NOTICE

Manganese and Manganese Compounds:—1. Dust fumes and mists of Manganese and compounds are toxic when inhaled or when ingested.

2. Do not consume food or drink near the work place.
3. Take a good wash before taking meals.
4. Keep the working area clean.
5. Use the protective clothing and equipments provided.
6. When required to work in 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 XX

MANUFACTURE AND MANIPULATIONOF DANGEROUSPESTICIDES

1. **Definitions.—**For the purpose of this Schedule, the following definitions shall apply:

(i) **—Dangerous Pesticides‖** means any product proposed or used for controlling, destroying or repelling any pest or for preventing growth or mitigating effects of such growth including any of its formulations which is considered toxic under and is covered by the Insecticides Act, 1968 and the rules made thereunder and any other product, as may be notified from time to time by the State Government.

(ii) **—Manipulation‖** includes mixing, blending, formulating, filling, emptying, packing or otherwise handling.

(iii) **—Efficient exhaust draught‖** means localised mechanical ventilation for removal of smoke, gas, vapour, dust, fume or other mist so as to prevent them from escaping in the air of any work-room in which work is carried on. No exhaust draught shall be considered efficient if it fails to remove smoke generated at the point where such gas, fume, dust, vapour or mist originates from the process.

(iv) **—First employment‖** shall mean first employment in any manufacturing process to which this Schedule applies and shall also include re-employment in said manufacturing process following any cessation of employment for a continuous period exceeding three calendar months.

(v) **—Suspension‖** means suspension from employment in any process where in a dangerous pesticide is manipulated by written certificate in the Health Register in Form-32 signed by the Certifying Surgeon who shall be competent to suspend all persons employed in such process.

2. Application.—This Schedule shall apply in respect of all factories or any plant thereof in which the process of manufacture or manipulation of dangerous pesticides, hereinafter referred to as the said manufacturing process, is carried on.

3. Instruction to workers.—Every worker on his first employment shall be fully instructed on the properties including dangerous properties of the chemicals handled in the said manufacturing process and the hazards involved. The employees shall also be instructed in the measures to be taken to deal with any emergency. Such instructions shall be repeated periodically.

4. Cautionary notice and placards.—Cautionary notices and placards in the form specified in Appendix I of this Schedule and printed in Hindi and in the language of the majority of the workers shall be displayed in all work places in which the said manufacturing process is carried on so that they can be easily and conveniently read by the workers. Arrangements shall be made by the occupier and the manager of the factory to periodically instruct the workers regarding the health hazards arising in the said manufacturing process and methods of protection. Such notices shall include brief instructions regarding the periodical clinical tests required to be undertaken for protecting health of the workers.

5. Prohibition relating to employment of pregnant women or young persons.— No pregnant woman or young person shall be employed or permitted to work in any room in which the said manufacturing process is carried on or in any room in which dangerous pesticides are stored.

6. **Food and drinks, smoking prohibited.**—(i) No food, drink, tobacco, pan and supari shall be brought in or consumed by any worker into any work room in which the said manufacturing process is carried out.

(ii) Smoking shall be prohibited in any work room in which the said manufacturing process is carried out.

7. **Medical examination.**—(i) Every worker employed in the said manufacturing process shall be examined by the Certifying Surgeon within seven days of the first employment and no worker shall be allowed to work unless certified fit for such employment by the Certifying Surgeon.

(ii) Every worker employed in the said manufacturing process shall be re-examined by a Certifying Surgeon at least once in 6 calendar months.

(iii) Due notice shall be given to the Certifying Surgeon and the concerned workers regarding the arrangements for examination of workers employed in the said manufacturing process after obtaining the consent regarding the arrangements from the Certifying Surgeon.

(iv) Health Register in Form-32 containing names of all workers employed in the said manufacturing process shall be maintained.

(v) No worker after suspension shall be employed without written sanction from the Certifying Surgeon entered in or attached to the health register.

8. **Medical facilities.**—(i) The occupier shall engage a qualified medical practitioner approved by the Chief Inspector-cum-Facilitator who shall examine and when necessary treat on the premises of the factory, all workers who are employed in the said manufacturing process for effects of excessive absorption of the dangerous pesticides atleast once a week..

(ii) The occupier shall make necessary arrangements to ensure quick availability of qualified medical practitioners in emergency.

(iii) The occupier shall provide medicines and antidotes and other equipments required for treatment of excessive absorption of dangerous pesticides.

(iv) Records of such examinations and treatments and tests shall be maintained and shall be made available to Inspector-cum-facilitator.

(v) The Chief Inspector-cum-Facilitator may order suitable clinical test or tests to be carried out at specified intervals in respect of workers in any factory where such manufacturing process is carried on. Charges for such test or tests shall be borne by the employer.

(vi) Every worker in any factory where the said manufacturing process is carried on, shall undergo the prescribed examination, tests and treatment.

9. Protective clothing and protective equipment.—(1) Protective clothing consisting of long pants and shirts or overall with long sleeves and head coverings shall be provided for all workers employed in the said manufacturing process.

(2) (a) Protective equipments consisting of rubber gloves, gum boots, rubber aprons, chemical safety goggles and respirators shall be provided for all workers employed in the said manufacturing process.

(b) Gloves, boots, aprons shall be made from synthetic rubber where a pesticide contains oil.

(3) Protective clothing and equipment shall be worn by the workers supplied with such clothing and equipment.

(4) Protective clothing and equipment shall be washed daily from inside and outside if the workers handle pesticides containing nicotine or phosphorus and shall be washed frequently if handling other pesticides.

(5) Protective clothing and equipment shall be maintained in good repair.

10. Floor and work benches.—(1) Floors in every work-room where dangerous pesticides are manipulated shall be of cement or other impervious material giving a smooth surface.

(2) Floors shall be maintained in good repair provided with adequate slope leading to a drain and thoroughly washed once a day with hose pipe.

(3) Work benches where dangerous pesticides are manipulated shall be made of smooth, non-absorbing material preferably stainless steel and shall be cleaned at least once daily.

11. Spillage and waste.—(1) If a dangerous pesticides during its manipulations splashes or spills on the work bench floor or on the protective clothings worn by a worker immediate action shall be taken for thorough decontamination of such areas or articles.

(2) Cloth, rags, paper or other material soaked or soiled with a dangerous pesticide shall be deposited in a suitable receptacle with tight fitting cover. Contaminated waste shall be destroyed by burning at least once a week.

(3) Suitable deactivating agents, where available, shall be kept in readily accessible place for use while attending to a spillage.

(4) Easy means of access shall be provided to all parts of the plant for cleaning, maintenance and repairs.

12. Empty containers used for dangerous pesticides.—Containers used for dangerous pesticides shall be thoroughly cleaned of their contents and treated with an inactivating agent before being discarded or destroyed.

13. Manual handling.—(1)A dangerous pesticides shall not be required or allowed to be manipulated by hand except by means of a long-handled scoop.

(2) Direct contact of any part of the body with a dangerous pesticides during its manipulation shall be avoided.

14. Ventilation.—(1) In every work room or area where a dangerous pesticides is manipulated, adequate ventilation shall be provided at all times by the circulation of fresh air.

(2) Unless the process is completely enclosed the following operations during manipulation of a dangerous pesticides shall not be undertaken without an efficient exhaust draught:

(a) emptying a container holding a dangerous pesticide;

(b) blending a dangerous pesticides;

(c) preparing a liquid or powder formulation containing a dangerous pesticides;

(d) charging or filling a dangerous pesticides into a container tank, hopper or machine orsmall sized containers.

(3) In the event of a failure of the exhaust draught provided in the above operation, the above operations shall be stopped forthwith.

15. Time allowed for washing.—(1) Before each meal and before the end of the day‘s work at least ten minutes in addition to the regular rest interval shall be allowed for washing to each worker engaged in the manipulation of dangerous pesticides.

(2) Every worker engaged in the manipulation of dangerous pesticides shall have a thorough wash before consuming any food and also at the end of the day‘s work.

16. Washing and bathing facilities.—(1) There shall be provided and maintained in clean state and in good repair for the use of all workers employed in the factory where the said manufacturing process is carried on, adequate washing and bathing places having a constant supply of water under cover at the rate of one such places for every 5 persons employed.

(2) The washing places shall have stand pipes placed [1][at a distance] of not less than one meter.

(3) Not less than one-half of the total number of washing places shall be provided with bath-rooms.

(4) Sufficient supply of clean towels made of suitable material shall be provided:

Provided that *such towels shall be supplied individually for each worker if so ordered by the Inspector.*

(5) Sufficient supply of soap and nail brushes shall be provided.

17. Cloak-room.—There shall be provided and maintained for the use of all

workers employed in the factory, where the said manufacturing process is carried on:

(a) A cloak-room for clothing put-off during working hours with adequate arrangements for drying clothing, if wet.

(b) Separate and suitable arrangements for the storage of protective clothing provided under paragraph 9.

18. Mess-room.—There shall be provided and maintained for the use of all workers employed in the factory in which the said manufacturing process is carried on and remaining on the premises during the rest intervals, a suitable mess-room which shall be furnished with:

(a) sufficient tables and benches with back rest; and

(b) adequate means for warming food.

The mess-room shall be placed under the charge of responsible person and shall be clean.

19. Exemption.—If in respect of any factory the Chief Inspector-cum-Facilitator is satisfied that owing to the exceptional circumstances or infrequency of the said manufacturing process or for any other reason which he shall record in writing all or any of the provisions of this Schedule are not necessary for the protection of the workers employed in the factory exempt such factory from all or any of the provisions, on such conditions as he may specify therein. Such certificate may at any time be revoked by the Chief Inspector-cum-Facilitator after recording his reasons thereof.

20. Manipulation not to be under taken.—Manufacture or manipulation of a pesticide shall not be undertaken in any factory unless a certificate regarding its dangerous nature or otherwise is obtained from the Chief Inspector-cum-Facilitator.

APPENDIX I

CAUTIONARY NOTICE (INSECTICIDES ANDPESTICIDES)

See Clause 4

1. Chemicals handled in this plant are poisonous substances.
2. Smoking, eating food or drinking, chewing tobacco in this area is prohibited. No foodstuff or drink shall be brought in this area.
3. Some of these chemicals may be absorbed through skin and may cause poisoning.
4. A good wash shall be taken before meals.
5. A good bath shall be taken at the end of the shift.
6. Protective clothing and equipment supplied shall be used while working in this area.
7. Containers of pesticides shall not be used for keeping foodstuff.
8. Spillage of the chemicals on any part of the body or on the floor or work bench shall be immediately washed with water.
9. Clothing contaminated due to splashing shall be removed immediately.
10 Scrupulous cleanliness shall be maintained in this area.
11. Do not handle pesticides with bare hands, use scoops provided with handle.
12. In the case of sickness like nausea, vomiting, feeling giddiness the manager should be informed who will make necessary arrangements for treatment.
13. All workers shall report for the prescribed medical tests regularly to protect their own health.

SCHEDULE XXI
CARBONDISULPHIDEPLANTS

1. **Application.**–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.

   These rules are in addition to and not in derogation of any of the provisions or the Act and Rules made thereunder.

2. **Construction-installation and operation.—**(a) The buildings in which electric furnaces are installed and carbon disulphide after generation is condensed and refined shall be segregated from other parts of the factory and shall be of open type to ensure optimum ventilation and the plant lay-out 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 with all their fittings and attachments shall be of good construction, sound material and of adequate strength to sustain the internal pressure to which the furnace or the plant may be subjected and shall be so designed that carbon disulphide liquids and gas are in closed system during their normal working.

(c) The electric furnace supports shall be firmly grouted about a feet in concrete or by other effective means.

(d) Every electric furnace shall be installed and operated according to manufacturers instructions and these instructions shall be clearly imparted to the personnel incharge of construction and operation.

(e) The instructions regarding observance of correct furnace temperature, sulphur dose, admissible current/power consumption and periodical checking of charcoal level shall be strictly complied with.

3. **Electrodes.—**(a) Where upper ring electrode(s), made of steel are used in the electric furnace, they shall be of seamless tube construction and shall have arrangement for being connected to cooling water system through a siphon built in the electrodes or through a positive pressure water-pump.

(b) The arrangements for cooling water referred to in clause (a) shall be connected with automatic alarm system which will actuate in the event of interruption of cooling water in the electrodes and give visible and audible alarm signals in the control room and simultaneously stop the power supply for the furnace

operation and to stop the further supply of water. The alarm system and actuating device shall be checked every day.

4. **Charcoal level indicator and vibrator.**—Means shall be provided on each electric furnace for indicating the correct level of charcoal in the furnace and for vibrating the charcoal. This means shall be employed as often as necessary to maintain correct charge and level of the charcoal.

5. **Charcoal separator**— A cyclone type of charcoal separator shall be fitted on the off take pipe between the electric furnace and sulphur separator to prevent entry of pieces of charcoal into the condensers and piping.

6. **Rupture discs and safety seal.—**(a)At least two rupture discs of adequate size which shall blow off at a pressure twice the maximum operating pressure shall be provided on each furnace and shall either be mounted directly on the top of the furnace or each through an independent pipe as close as possible to the furnace.

(b) A safety water seal shall be provided and tapped from a point between the charcoal separator and the sulphur separator.

7. **Pyrometer and manometers.—**(a) Each electric furnace shall be fitted with adequate number of pyrometers to make a correct assessment of the temperature at various points in the furnace. The dials for reading the temperatures 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 primary and secondary condensers.

8. **Check Valves. —**All piping carrying carbon disulphide shall be fitted with check valves at suitable positions so as to prevent gas from flowing back into any electric furnace in the event of its shut down.

9. **Inspection and maintenance of electric furnaces**— (a) Every electric furnace shall be inspected internally by a competent person:

(i) before being placed in service after installation;

(ii) before being placed in service after reconstruction or repairs; and

(iii) periodically every time the furnace is opened for cleaning or de-ashing or for replacing electrodes.

(b) When an electric furnace is shut down for cleaning or de-ashing:

(i) the brick lining shall be checked for continuity and any part found defective removed;

(ii) after removal of any part of the lining, referred to be in (i) the condition

of the shell shall be closely inspected; and

(iii) any plates forming shell found corroded to the extent that safety of the furnace is endangered shall be replaced.

10. **MaintenanceofRecords.**—Thefollowinghourlyrecordsshallbe maintained in a logbook:

(i) Manometer readings at the points specified in 7(b)(i) and (ii).

(ii) Gas temperature indicated by pyrometers and all other vital points near the sulphur separator and primary and secondary condensers.

(iii) Water temperatures and flow of water through the siphon in the Electrodes.

(iv) Primary and secondary voltages and current and energy consumed..

11. **Electrical apparatus, wiring and fittings.**—All buildings in which carbon disulphide is refined or stored shall be provided with electrical apparatus, wiring and fitting which shall afford adequate protection from the fire and explosion.

12. **Prohibition relating to smoking.**—No person shall smoke or carry matches, fire or naked light or other means of producing a naked light or spark in buildings in which carbon disulphide is refined or stored and a notice in Hindi in Davanagri script shall be pasted in the plant prohibiting smoking and carrying of matches, fire or naked light or other means of producing naked light or spark into such rooms.

13. **Means of escape.**—Adequate means of escape shall be provided and maintained to enable persons to move to a safe place as quickly as possible in case of an emergency. At least two independent staircases or ramps of adequate width shall be provided in every building housing the furnaces at the reasonable intervals at opposite ends. These shall always be kept clear of all obstructions and so designed as to afford easy passage.

14. **Warning in case of fire.**—There shall be adequate arrangements for giving warning in case of fire or explosion which shall operate on electricity and in case of failure of electricity by some mechanical means.

15. **Fire-fighting equipment.**—(a) Adequate number of suitable fire extinguishers or other fire-fighting equipment shall be kept in constant readiness for dealing with risks involved and depending upon the amount and nature of materials stored.

(b) Clear instructions as to how the extinguishers or other equipment should be used printed in [Hindi in Devanagri script] shall be affixed to each extinguisher or other equipment and the personnel trained in their use.

16. **Bulk sulphur.**—(a) Open or semi-enclosed spaces for storage of bulk sulphur shall be cited with due regard to the dangers which may arise from sparks given off by nearby locomotives etc., and precautions shall be taken to see that flames, smoking and matches and other sources of ignition do not come in contact with the clouds of dust arising during handling of bulk sulphur.

(b) All enclosures for bulk sulphur shall be of non-combustible construction, adequately ventilated and so designed as to provide a minimum of lodges on which dust may lodge.

(c) The bulk sulphur in the enclosure shall be handled in such a manner as to minimise the formation of dust clouds and no flames, smoking and matches or other sources of ignition shall be employed during handling and non-sparking tools shall be used whenever sulphur is shovelled or otherwise removed by hand.

(d) No repairs involving flames, heat or use of hand or power tools shall be made in the enclosure where bulk sulphur is stored.

17. **Liquid sulphur.**—Open flames, electric sparks and other sources of ignition, including - smoking and matches, shall be excluded from the vicinity of molten sulphur.

18. **Training and supervision.**—(a) All electric furnaces and all plants in which carbon disulphide is condensed, refined or stored shall be under adequate supervision at all times while the furnaces and plant are in operation.

(b) Workers incharge of operation and maintenance of electric furnaces and the plants shall be properly qualified and adequately trained.

19. **Washing facilities.**—The occupier shall provide and maintain in a clean state and good -repair, for the use of all persons employed, wash place under cover with at least one tap or standpipe, having a constant supply of clean water, for every five such persons, the taps or stand-pipes, being paced not less than 120 cms apart with the sufficient supply of soap and clean towels provided that towels shall be supplied individually to each worker.

All the workers employed in the sulphur storage, handling and melting operations shall be provided with a nail brush.

20. **Personal protective equipment.**—(a) Suitable goggles and protective clothing of overalls without pockets, gloves and footwear shall be provided for the use of operatives:

(i) when operating valves or cocks controlling fluids, etc.

(ii) handling charcoal or sulphur.

(b) suitable respiratory protective equipment shall be provided and stored in the appropriate place for use during abnormal conditions or in an emergency.

(c) Arrangements shall be made for the proper and efficient cleaning of all such protective equipment.

21. Cloak-room.—There shall be provided and maintained for the use of all persons employed in the processes a suitable cloak-room for clothing put off during working hours and a suitable place separate from the cloak-room for the storage of overalls or working clothes. The accommodation so provided shall be placed in the charge of a responsible person and shall be kept clean.

22. Unauthorised persons.—Only maintenance and repair personnel, person directly connected with the plant operation and those accompanied by authorised persons shall be admitted into the plant.

SCHEDULE - XXII

PROTECTION AGAINST HAZARDS OF POISONING ARISING FROM 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, the following definitions shall apply:

(a) **—Substances containing benzene‖** means substances wherein benzene content exceed 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 localised ventilation affected by mechanical means for the removal of gases, vapours and dusts or fumes so as to prevent them from escaping into the air of any work-room. No draught shall be deemed to be efficient if it fails to remove smoke generated at the point where such gases, vapours, fumes or dusts originate.

3 Prohibition and substitution.—(a) 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 is carried out in an enclosed system.

(b) Where suitable substitutes are available, they shall be used instead of benzene or substances containing benzenes. This provision, however, shall not apply to the processes specified in **Appendix ‗A'.**

(c) The Chief Inspector – cum - Facilitator, may subject to confirmation by the State Government, permit exemptions 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 inhalations.—(a)The process involving the use of benzene or substances containing benzene shall as far as practicable be carried out in an enclosed system.

(b) Where, however, it is not practicable to carry out the process in an enclosed system, the workroom in which benzene or substances containing benzene are used, shall be equipped with an efficient exhaust draught or other means for the removal of benzene vapours, to prevent their escape into the air of the workroom so that the concentration of benzene in the air does not exceed 25 parts per million by volume or 80 mg/m^3.

(c) Air analysis for the measurement of concentration of benzene vapours in air shall be carried out every 8 hours or at such intervals as may be directed by the Chief Inspector – cum - Facilitator at places where process involving use of benzene is carried on and the result of such analysis shall be recorded in a register specially maintained for this purpose. If the concentration of benzene vapours in air, as measured by air analysis, exceeds 25 parts per million by volume or 80 mg/m^3, the Manager shall forthwith report the concentration to the Chief Inspector – cum - Facilitator stating the reasons for such increase.

(d) Workers who for special reasons are likely to be exposed to concentration of the work-room exceeding the maximum referred to in clause (b), shall be provided with suitable respirators or face masks. The duration of such exposure shall be limited as far as possible.

5 Measures against skin contact.—(a) Workers who are likely to come in contact with liquid benzene or liquid substances containing benzene shall be provided with suitable gloves, aprons, boots and where necessary vapour tight chemical goggles, made of material not effected by benzene or its vapours.

(c) The protective wears referred to in sub-clause (a) shall be maintained in good condition and inspected regularly.

6 **Prohibition relating to employment of pregnant women and young persons.—** No pregnant woman or young person shall be employed or permitted to work in any work- room involving exposure to benzene or substances containing benzene.

7 **Labelling.—**Every container holding benzene or substances containing benzene shall have the word ―Benzene‖ and approved danger symbols clearly visible on it and shall also display information of benzene content, warning about toxicity and waning about inflammability of the chemical.

8 **Improper use of benzene.—**(a) The use of benzene or substances containing benzene by workers for cleaning their hands or their work clothing shall be prohibited.

(b) Workers shall be instructed on the possible dangers arising from such misuse.

9 **Prohibition of consuming food, etc. in work-room.—**No worker shall be allowed to store or consume food or drink in the work-room in which benzene or substances containing benzene are manufactured, handled or used. Smoking and chewing tobacco or pan shall be prohibited in such work-rooms.

10 **Instruction as regards risks.—**Every worker on his first employment shall be fully instructed on the properties of benzene or substances containing benzene which he has to handle and of the dangers involved. Workers shall also be instructed on the measures to be taken to deal with an emergency.

11 **Cautionary notices.—**Cautionary notices in the form specified in **Appendix B** and presented in Hindi in Devanagri script shall be displayed in prominent places in the work-rooms where benzene or substances containing benzene are manufactured handled or used.

12 **Washing** facilities, **cloak-room and mess-room.—**In factories in which benzene or substances containing benzene are manufactured, handled, or used, the occupier shall provide and maintain in clean state and in good repair:

(a) washing facilities under cover of the standard of at least one tap for every 10 persons having constant supply of water with soap and clean towel provided individually to each worker.

(b) a cloak-room with lockers, for each worker, having two compartments, one for street clothing and one for work-clothing;

(c) a mess-room furnished with tables and benches with means of warming food However, where a canteen or other proper arrangements exist for the workers to take their meals the requirements of mess-room shall be dispensed with.

13 **Medical examination.—**(a) Every worker who is to be employed in processes involving use of benzene or substances containing benzene, shall undergo:

(i) a thorough pre-employment medical examination including blood test for fitness for employment by a Certifying Surgeon.

(ii) Periodical medical examination including blood test and other biological tests at intervals of every 6 months by the factory medical officer with the assistance of a laboratory.

(b) Certificate of pre-employment medical examination and periodical medical examination including tests shall be entered in a Health Register in Form-32**,** which shall be produced on demand by an Inspector.

(c)If the factory medical officer on examination at any time is of the opinion that any worker had developed signs or symptoms of benzene exposure, he shall make *a* record of his findings in the said register and inform the manager in writing. On receipt of the information from the factory medical officer, the manager of the factory shall send the worker so found exposed, to the Certifying Surgeon who shall after satisfying himself with the findings of the factory medical officer and conducting necessary examination, issue orders of temporary shifting of the worker or suspension of the worker in the process.

(d) The medical examination shall be arranged by the occupier or manager of the factory and the worker so examined shall not bear any expenses for it.

APPENDIX—A

[Clause 3(b)]

PROCESSES TO WHICH THE PROVISION SHALL NOT APPLY REGARDING USE OF SUITABLE SUBSTITUTES IF AVAILABLE, TO BE USED INSTEAD OF BENZENE OR SUBSTANCES CONTAINING BENZENES.

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

APPENDIX—B

[Clause (11)]

CAUTIONARY NOTICES TO BE DISPLAYED IN PROMINENT PLACES IN THE WORK-ROOMS WHERE BENZENEOR SUBSTANCES CONTAINING BENZENE ARE MANUFACTUREDHANDLED OR USED (ALSO IN HINDI IN DEVANAGRISCRIPT)

(a) The hazards:

(i) enzene and substances containing benzene are harmful,

(ii) Prolonged or repeated breathing of benzene vapours may result in acute or chronic poisoning,

(iii) Benzene can also be absorbed through skin which may cause skin and other disease.

(b) The Preventive Measures to be taken:

(i) Avoid breathing of benzene vapours.

(ii) Avoid prolonged or repeated contact of benzene with the skin.

(iii) Remove benzene soaked or wet clothing promptly.

(iv) If any time you were exposed to high concentration of benzene vapours and exhibit the sign and symptoms such as dizziness, difficulty in breathing, excessive excitation and losing of consciousness, immediately inform your factory manager.

(v) Keep all the containers of benzene closed.

(vi) Handle, use and process benzene and substances containing benzene carefully in order to prevent their spillage on floor.

(vii) Maintain good house-keeping

(c) The protective equipment to be used:

(i) Use respiratory protective equipment in places where benzene vapours are present in high concentration.

(ii) In emergency, use self-generating oxygen mask or oxygen or air- cylinder mask.

(iii) Wear hand gloves, aprons, goggles and gum boots to avoid contact of benzene with skin and body parts.

(d) The first-aid measures to be taken in case of acute benzene poisoning:—

(i) Remove the clothing immediately if it is wetted with benzene.

(ii) If liquid benzene enters eyes flush thoroughly for at least 15 minutes with clean running water and immediately secure medical attention.

(iii) In case of unusual exposure to benzene vapour, call a physician

immediately. Until he arrives do the following:—

(a) Move him to fresh air in open;

(b) Lay down without a pillow and keep him quiet and warm

(iv) if the exposed person is unconscious—

(a) lay him down preferably on the left side with the head low;

(b) remove any false teeth, chewing gum, tobacco, or other foreign objects which maybe in his mouth;

(c) provide him artificial respiration in case difficulty is being experienced in breathing;

(d) in case of shallow breathing or cyanosis (blueness of skin, lips, ears, finger, nail beds) he should be provided with medical oxygen, or oxygen carbon dioxide mixture, if needed, he should be given artificial respiration. Oxygen should be administered by a trained person only.

SCHEDULE-XXIII

OPERATIONS INVOLVING HIGH NOISE LEVELS

1 **Application.—**ThisScheduleshallapplytoalloperationinany manufacturing process having high noise level.

2 **Definitions.—**For the purpose of this schedule,—

(a) **"Noise"** means any unwanted sound:

(b) **"High noise level"** means any noise Level which measured on the A-weighted scale is 90 dB or above;

(c) **"Decibel"** means one-tenth of "Bel" which is the fundamental division of a logarithmic scale used to express the ratio of two specified or implied quantities, the number of "Bel" denoting such a ratio being the logarithm to the base of 10 of this ratio. The noise level (or the sound pressure level) corresponds to a reference pressure of 20×10^{-6} newtons per square meter or 0.0002 dynes per square centimeter which is the threshold of hearing, that is, the lowest sound pressure level necessary to produce the sensation of hearing in average healthy listeners. The decibel in abbreviated form is dB;

(d) **"frequency"** is the rate of pressure variations expressed in cycles per second or hertz;

(e) **"dBA"** refers to sound level in decibels as measured on a sound level meter operating on the A-weighting network with low 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 a instrument reflects the actual response of

the human ear to the sound measured.

3 Protection against noise.

(1) In every factory, suitable engineering control of administrative measures shall be taken to ensure, so far as is reasonably practicable, that no worker is exposed to sound levels exceeding the maximum permissible noise exposure levels specified in Tables 1 and 2.

(2)

TABLE-1

PERMISSIBLEEXPOSURE IN CASES OF CONTINUOUSNOISE

Total time of exposure continuous or a number of short term exposures per day, in hours	Sound pressure level in dBA
8	90
6	92
4	95
3	97
2	100
1 ¼	102
1	105
¾	107
½	110
¼	115

Notes:

1. No exposure in excess of 115 dBA is to be permitted.
2. For any period of exposure falling in between any figure and the next higher or lower figure as indicated in column 1, the permissible sound pressure level is to be determined by extrapolation on a proportionate basis.

TABLE-2

PERMISSIBLE EXPOSURE LEVELS OF IMPULSIVE OR IMPACT NOISE

Peak Sound pressure level in db	Permitted number of impulses or impacts per day
140	100
135	315
110	1,000
125	3,160
120	10,000

Notes:

1. No exposure in excess of 140db peak sound pressure Level is permitted.

2 (i) For any peak sound pressure level falling in between any figure and the next higher orlower figure as indicated in column 1, the permitted number of impulses or impacts per day is to be determined by extrapolation on a proportionate basis.

(ii) For the purposes of this schedule, if the variations in the noise level involve maxima at intervals of one second or less, the noise is to be considered as a continuous one and the criteria given in Table 1 would apply. In other cases, the noise is to be considered as in pulsive noise and the criteria given in Table 2 would apply.

(iii) When the daily noise exposure is composed of two or more periods of noise exposure at different levels their combined effect should be considered, rather than the individual effect of each. The mixed exposure should be considered to exceed the limit value if the sum of the fractions

C1 + C2 …….Cnexceeds unity- T1 + T2Tn

Where the C_3 C_2 etc. indicate the total time of actual exposure at a specified noise level and T_1 T_2 etc. denote the time of exposure permissible at that level. Noise exposure of less than 90 dBA be ignored in the above calculation.

(iv) Where it is not possible to reduce the noise exposure to the levels specified in sub-rule

(1) by reasonable practicable engineering control or administrative measures the noise exposure shall be reduced to the greatest extent feasible by the such control measures, and each worker so exposed should be provided with suitable ear protectors so as to reduce the exposure to noise to the

levels specified in sub- rule (1).

(v) Where the ear protectors provided in accordance with sub-paragraph (2) and worn by a worker cannot still attenuate the noise reaching near his ear, as determined by subtracting the attenuation value in dBA of the ear protectors concerned from the measured sound pressure level, to a level permissible under Table 1 or Table 2 as the case may be, the noise exposure period shall be suitably reduced to correspond to the permissible noise exposures specified in sub-paragraph(1).

(vi) (a) in all cases where the prevailing sound levels exceed the permissible levels specified in sub-paragraph (1) there shall be administered an effective hearing conservation programme which shall include among other hearing conservation measures, pre-employment and periodical auditory surveys conducted on workers exposed to noise exceeding the permissible levels, and rehabilitation of such workers either by reducing the exposure to the noise levels or by transferring them to places where noise levels are relatively less or by any other suitable means.

(c) Every worker employed in areas where the noise exceeds the maximum permissible exposure levels specified in sub-rule (1) shall be subjected to an auditory examination by a certifying surgeon within 14 days of his first employment and thereafter, shall be re- examined at least once in every 12 months. Such initial and periodical examinations shall include tests which the certifying Surgeon may consider appropriate, and shall include determination of auditory thresholds for pure tones of 125, 250, 500, 1000, 2000, 4000 and 8,000 cycle per second.

SCHEDULE - XXIV

MANUFACTURE OF RAYON BY VISCOSE PROCESS

1. Definition.—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 breaths unpolluted air; or any other approved apparatus;

(c) **"churn"** means the vessels in which alkali cellulose pulp is treated with carbon disulphide;

(d) **"dumping"** means transfer of cellulose xenthate 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 drought shall be deemed to be efficient if it fails to control effectively any gas or vapour generated at the point where such gas or fume originates;

(f) **"fume process"** means any process in which carbon disulphide or hydrogen sulphide is produced, used or given off;

(g) **"life belt"** means belt made of leather or other suitable length of rope attached to it, each of which is sufficiently strong to sustain the weight of a man;

(h) **"protective equipment"** means apron, goggles, face shields, foot wear, gloves and overalls made of suitable materials;

2 **Ventilation:—**(1) In all work-rooms 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.

(3) Notwithstanding the requirement in sub-paragraph (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) a dumping hoppers of dry churns;

(b) spinning machines;

(c) trio rollers and cutters used in staple fiber spinning

(d) hydro-extractors for yarn-cakes;

(e) after treatment processes; and

(f) spin baths.

(4) In so far as the spinning machines and trillers and cutters used in staple fiber spinning are concerned they shall be, for the purpose of ensuring the effectiveness of the exhaust draft to be provided as required in sub-paragraph (1), enclosed as fully as practicable and provided with suitable shutters in sections to enable the required operations to be carried out without giving rise

to undue quantities of carbon disulphide and hydrogen sulphide escaping into the work environment.

(5) No Dry Churn shall be opened after completion of reaction without initially exhausting the residual vapours of carbon disulphide by operation of a suitable and efficient arrangement for exhausting the vapours which shall be continued to be operated as long as the churn is kept open.

(6) Whenever any ventilation apparatus normally required for the purpose of meeting the requirements in sub-paragraphs (2), (3) and (4) is ineffective, fails or is stopped for any purpose whatever, all persons shall be required to leave the work areas where the equipment of processes specified in the above said sub-paragraphs are in use, as soon as possible, and in any case not later than 15 minutes after such an occurrence.

(7) (i) All ventilating systems provided for the purposes as required in sub-paragraphs (2), (3) and (4) shall be examined and inspected once every week by a responsible person. It shall be thoroughly examined and tested by a competent person once in every period of 12 months. Any defects found by such examinations or tests shall be rectified forthwith.

(ii) A register containing particulars of such examinations and tests, and the state of the systems and the repairs or alterations (if any) found to be necessary shall be kept and shall be available for inspection by an Inspector.

3 **Waste from spinning machines.—**Waste yarn from the spinning machines shall be deposited in suitable containers provided with close fitting covers. Such waste shall be disposed of as quickly as possible after decontamination.

4 **Lining of dry churns.—**The inside surface of all dry churns shall be coated with a non-sticky paints so that cellulose xanthate will not stick to the surface of the churn. Such coating shall be maintained in good condition.

5 **Air monitoring.—**(1)To ensure the effectiveness of the control measures, monitoring of carbon-disulphide and hydrogen sulphide in air shall be carried out once at least in every shift and the record of the results so obtained shall be entered in a register specially maintained for the purpose.

(2) For the purpose of the requirement in sub-paragraph. (1) instantaneous gas detector tubes shall not be used. Samples shall be collected over a duration of not less than 10 minutes and analysed by an approved method. The locations where such monitoring is to be done shall be as directed by the Inspector.

(3) If the concentration of either carbon disulphide or hydrogen sulphide exceeds the permissible limits for such vapour or gas as laid down in the Rules, suitable steps shall be taken for controlling the concentrations in air of such

contaminants. A report of such occurrences shall be sent to the Chief Inspector-cum-Facilitator forthwith.

6 **Prohibition to remain in fume process room.**—No person during his intervals for meal or rest shall remain in any room wherein fume process is carried on.

7 **Prohibition relating to employment of young persons.**—No young person shall be employed or permitted to work in any fume process or in any room in which any such process is carried on.

8 **Protective equipment.**—(1) The occupier shall provide and maintain in good condition protective equipments as specified in the Table for use of persons employed in the processes referred to therein.

TABLE

Protective Equipments for use of persons Employed in the processes

Sr. No.	Processes	Protective Equipments
1	Dumping	Overalls, face-shields, gloves and footwear all made of suitable material
2	Spinning	Suitable aprons, gloves and footwear
3	Process involving or likely to involve contact with viscose solution	Suitable gloves and footwear
4	Handing of Sulphur	Suitable chemical goggles
5	Any other process involving contact with hazardous chemicals	Protective equipment as may be directed Chief Inspector-cum-Facilitator by an order in writing

(2) A suitable room, rooms or lockers shall be provided exclusively for the storage of all the protective equipment supplied to workers and no such equipment shall be stored at any place other than the room, rooms or lockers so provided.

9 **Breathing apparatus:**—(1) There shall be provided in every factory where fume process is carried on, sufficient supply of—

(a) breathing apparatus,

(b) oxygen and a suitable appliances for its administration, and

(c) life belts.

(2) (i) The breathing apparatus and other appliances referred to in sub- paragraph (1) shall be maintained in good conditions and kept in appropriate locations so as to be readily available.

(ii) The breathing apparatus and other appliances referred to in clauses (a) and

(b) of sub-paragraph (1) shall be cleaned and disinfected at suitable intervals and thoroughly inspected once every month by a responsible person.

(iii) A record of the maintenance or the condition of the breathing apparatus and other appliances referred to sub-clause (1) shall be entered in a register provided for that purpose which shall be readily available for inspection by an Inspector.

(3) Sufficient number of workers shall be trained and periodically retrained in the use of breathing apparatus and administering artificial respiration so that at least two such trained persons would be available during all the working hours in each room in which fume process is carried on

(4) Breathing apparatus shall be kept properly labelled in clean dry, light- proof cabinets and if liable to be effected by fumes, shall be protected by placing them in suitable containers.

(5) No person shall be employed to perform any work specified in sub-paragraph

(1) for which breathing apparatus is necessary to be provided under that sub-paragraph unless he has been fully instructed in the proper use of that equipment.

(6) No breathing apparatus provided in pursuance of sub-paragraph (l) which has been worn by a person shall be worn by another person unless it has been thoroughly cleaned and disinfected since last being worn and the person has been fully instructed in the proper use of that equipment.

10. Electric fittings.—All electric fittings in any room where carbon-disulphide is produced, used or given off or is likely to be given off into the work environment other than a spinning room, shall be of flame-proof construction and all conductors shall either be enclosed in metal conduits or be lead-sheathed.

11. Prohibition relating to smoking etc.—No person shall smoke or carry matches, fire or naked light or other means of producing a naked light or spark in a room in which fume process is carried on. A notice in the language understood by the majority of the workers shall be pasted in prominent locations in the plant prohibiting smoking and carrying of matches, fire or naked light or other means of producing naked light or spark into such rooms:

Provided that *fire, naked light or other means of producing a naked light or spark may be carried on in such room only when required for the purpose of the process itself under the direction of a responsible person.*

12. Washing and bathing facilities.—(1) There shall be provided and maintained in a clean state and in good repair for the use of all workers employed in the processes covered by the schedule, adequate washing and bathing places having a constant supply of water under cover at the rate of one such place for every 25 persons employed.

(2) The washing places shall have stand-pipes placed at intervals of not less than one meter.

(3) Not less than one-half of the total number of washing places shall be provided with bathrooms.

(4) Sufficient supply of clean towels made of suitable material shall be provided: ***Provided that*** *such towels shall be supplied individually to each worker if so ordered by the Inspector.*

(5) Sufficient supply of soap and nail brushes shall be provided.

13. Rest room:—(1) A rest-room shall be provided for the workers engaged in doing operations of filament yarn spinning process.

(2) Such rest-room shall be provided with fresh-air supply and adequate seating arrangement.

14. Cautionary notice and instruction—(1) The following cautionary notice shall be prominently displayed in each fume process room.

CAUTIONARY NOTICE‖

1. Carbon disulphide (CS2) and Hydrogen Sulphide (HsS) which may be present in this room are hazardous to health.
2. Follow safety instruction.
3. Use protective equipment and breathing apparatus as and when required.
4. Smoking is strictly prohibited in this area.

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

(2)Arrangements shall be made to instruct each worker employed in any room in which a fume process is carried on regarding the health hazards connected with their work and the preventive measures and methods to protect themselves. Such instructions shall be given on his first employment and repeated periodically.

(3) Simple and special instructions shall be framed to ensure that effective measures will be carried out in case of emergency involving escape of carbon

disulphide and hydrogen sulphide. Those instructions shall be displayed in the concerned areas and workers shall be instructed and trained in the actions to be taken in such emergencies.

15. Medical facilities and records of examinations and tests.— (1) The occupier of each factory to which this schedule applies, shall:

(a) employ a qualified medical officer for medical surveillance of the workers employed in the fume process whose employment shall be subject to the approval of the Chief Inspector -cum-Facilitator; and

(b) provide to the said medical officer all the necessary facilities for the purpose referred to in clause (a).

(2) The record of medical examination and appropriate tests carried out by the said medical officer shall be maintained in a separate register approved by the Chief Inspector-cum- Facilitator which shall be kept readily available for inspection by the Inspector.

16. Medical examination by the Certifying Surgeon.(1) Every worker employed in the fume process shall be examined by a Certifying Surgeon within 15 days of his first employment. Such examination shall include tests for estimation of exposure co- efficient (iodine oxide test on urine), and cholesterol, as well as electrocardiogram (ECG) and Central Nervous System (CNS) tests. No worker shall be allowed to work after 15 days of his first employment in the factory unless certified fit for such employment by the Certifying Surgeon.

(2) Every worker employed in the fume process shall be re-examined by a Certifying Surgeon at least once in every 12 calendar months. Such examination shall, whenever the Certifying Surgeon considers appropriate, include all the tests as specified in sub- paragraph (1).

(3) The Certifying Surgeon after examining a worker, shall issue a Certificate of Fitness in Form-33 The record of re-examinations carried out shall be entered in the certificate and the certificate shall be kept in the custody of the manager of the factory. The record of each examination carried out under sub-paragraphs (1) and (2), including the nature and the results of tests, shall, also entered by the Certifying Surgeon in a health register in Form-32.

(4) The Certificate of Fitness and the health register shall be kept readily available for

(5) If at any time the Certifying Surgeon is of the opinion that a worker is no longer fit for employment in the fume process on the ground that continuance therein would involve special danger to the health of the 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 fume process.

(6) No person who has been found unfit to work as said in sub-paragraph (5) above shall be re-employed or permitted to work in the fume process unless the Certifying Surgeon, after further examination again certifies him fit for employment in such process.

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 process or for any other reason, all or any of the provisions of this Schedule is not necessary for protection of the workers in the factory, the Chief Inspector-cum-Facilitator may by a certificate in writing which he may at his discretion revoke, at any time, exempt such factory from all or any of such provisions subject to such conditions if any as he may specify therein.

SCHEDULE - XXV

HIGHLY FLAMMABLE LIQUIDS AND FLAMMABLE COMPRESSED GASES

1 **Application.**—These rules will be applicable to all factories where highly flammable liquids or flammable compressed gases are manufactured, stored, handled or used.

2 **Definition.**—For the purpose of this schedule: (a)‖**Highly flammable liquid**‖ means any liquid including its solution, emulsion or suspension which when tested in a manner specified by Sections 14 and 15 of the Petroleum Act, 1934 (30 of 1934) gives off flammable vapours at a temperature less than 32°C;

(b) ―**Flammable compressed gas**‖ means flammable compressed gas as defined in Section 2 of the Static and Mobile Pressure Vessels (Unfired) Rules, 1981 framed under the Explosives Act, 1884.

3 **Storage.**—(1)Every flammable liquid or flammable compressed gas used in every factory shall be stored in suitable fixed storage tank, or in suitable closed vessel located in a safe position under the ground, in the open or in a store room of adequate fire- resistant construction.

(2)Except as necessary for use, operation or maintenance, every vessel or tank which contains or had contained a highly flammable Liquid or flammable compressed gas shall be always kept closed and all reasonable 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 store room used for storing

highly flammable liquid or flammable compressed gas shall be clearly and in bold letters marked ―Danger—Highly Flammable Liquid‖ or ―Danger—Flammable Compressed Gas‖.

4. **Enclosed systems for conveying highly flammable liquids.—**Wherever it is reasonably practicable, highly flammable liquids shall be conveyed within a factory in totally enclosed systems consisting of pipe lines, pumps and similar appliances from the storage tank or vessel to the point of use. Such enclosed systems shall be so designed, installed, operated and maintained as to avoid leakage or the risk of spilling.

5. **Preventing formation of flammable mixture with air.—**Wherever there is a possibility of leakage or spills of highly flammable liquid or flammable compressed gas from an equipment, pipe line, valve, joint or other part of a system, all practicable measures shall be taken to contain, drain off or dilute such spills or leakage as to prevent formation of flammable mixture with air.

6. **Prevention of ignition.—**(1) In every room work-place or other location where highly flammable liquid or flammable combustible gas is stored, conveyed, handled or used or where there is danger of fire or explosion from accumulation of highly flammable liquid or flammable compressed gas in air, all practicable measures shall be taken to exclude the sources of ignition. Such precautions shall include the following:

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

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

(c) no person shall wear or be allowed to wear any foot wear having iron or steel nails or any other exposed ferrous materials which is likely to cause sparks by friction;

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

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

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

7. **Prohibition of smoking:—**No person shall smoke in any place where highly flammable liquid or flammable compressed gas is present in circumstances

that smoking would give rise to risk of fire. The occupier shall take all practicable measures to ensure compliance with this requirement including display of a bold notice indicating prohibition of smoking at every place where this requirement applies.

8. **Fire fighting:—**In every factory where highly flammable liquid or flammable compressed gas manufactured, stored, handled or used, appropriate and adequate means of fighting a fire shall be provided. The adequacy and suitability of such means which expression includes the fixed and portable fire-extinguishing systems, extinguishing material, procedures and the process of fire fighting, shall be to the standards and levels prescribed by the Indian Standards applicable, and in any case not inferior to the stipulations under the relevant Rule.

9. **Exemption.—**If in respect of any factory, the Chief Inspector-cum-Facilitator is satisfied that owing to the exceptional circumstances or infrequency of the processes or for any other reason, all or any of the provisions of this Schedule is not necessary for protection of the workers in the factory, the Chief Inspector-cum-Facilitator may by a certificate in writing, which he may at his discretion revoke at any time, exempt such conditions, if any, as he may specify therein n.

SCHEDULE - XXVI
OPERATION IN FOUNDRIES

1. **Application.—**Provision of this Schedule shall apply to all parts of factories where any of the following operations or processes are carried on:—

(a) the production of iron castings or, as the case may be, steel castings by casting in moulds made of sand, loam, moulding composition or other mixture of materials, or by shell moulding, or by centrifugal casting and any process incidental to such production;

(b) the production of non-ferrous castings by casting metal in moulds made of sand, loam, metal moulding, composition or other material or mixture of materials, or by shell mouldings, die-casting (including pressure die-casting), centrifugal casting or continuous casting and any process incidental to such production; and

(c) the melting and casting of non-ferrous metal for the production of ingots, billets, slabs or other similar products, and the stripping thereof; but shall not apply with respect to—

(a) any process with respect to the smelting and manufacture of lead and the

electric accumulators;

(b) any process for the purposes of a printing works; or

(c) any smelting process in which metal is obtained by a reducing operation or any process incidental to such operation; or

(d) the production of steel in the form of ingots; or

(e) any process in the course of the manufacture of solder or any process incidental to such manufacture; or

(f) the melting and casting of lead or any lead-based alloy for the production of ingots, billets, slabs or other similar products or the stripping thereof, or any process incidental to such melting, casting or stripping.

2. Definition.— For the purpose of this schedule—

(a) **—approved respirator‖** means a respirator of a type approved by the Chief Inspector-cum-Facilitator;

(b) **—cupola or furnace‖** _includes a receiver associated therewith;

(c) **—dressing or fettling operations‖** includes stripping and other removal of adherent sand, cores, runners, risers, flash and other surplus metal from a casting and the production of reasonably clean and smooth surface, but does not include (a) the removal of metal from a casting when performed incidentally in connection with machining or assembling of castings after they have been dressed or fettled, or (b) any operation which is knock-out operation within the meaning of this schedule;

(d) **—foundry‖** means those parts of a factory in which the production of iron or steel or non-ferrous castings (not being the production of pig iron or the production of steel in the form of ingots) is carried on by casting in moulds made of sand, loam, moulding composition or other mixture of materials, or by shell moulding or by centrifugal casting in metal moulds lined with sand, or die-casting including pressure die-castings, together with any part of the factory in which any of the following processes are carried on as incidental processes in connection with and in the course of, such production, namely the preparation and mixing of materials used in foundry process, the preparation of moulds and cores, knock-out operations and dressing or fettling operations;

(e) **—knock-out operations‖** means all methods of removing castings from moulds and the following operations, when done in connection therewith, namely, stripping, carrying- out and the removal of runners and risers;

(f) **—pouring aisle‖** means an aisle leading from a main gangway or directly from a cupola or furnace to where metal is poured into moulds.

3. **Prohibition of use of certain materials as parting materials.**—(1) A material shall not be used as a parting material if it is a material containing compounds of silicon calculated as silica to the extent more than 5 per cent by weight of the dry material:

Provided that *this prohibition shall not prevent the following being used as a parting material if the material does not contain an admixture of any other silica:*

(a) Zirconium silicate (zircon)

(b) Calcined china clay

(c) Calcined aluminous fire clay

(d) Silimanite

(e) Clacined or fused alumina

(f) Olivile

(g) Natural sand

(2) Dust or other matter deposited from a fettling or blasting process shall not be used as a parting material or as a constituent in a parting material.

4. **Arrangement and storage.**—For the purposes of promoting safety and cleanliness in work-rooms the following requirements shall be observed:

(a) moulding boxes, loam plates, ladles, patterns, pattern plates, frames, boards, box weights, and other heavy articles shall be so arranged and placed as to enable work to be carried on without unnecessary risk;

(b) suitable and conveniently accessible racks, bins or other receptacles shall be provided and used for the storage of other gear and tools;

(c) where there is bulk storage of sand, fuel, metal scrap or other materials or residues, suitable bins, bunkers or other receptacles shall be provided for the purpose of such storage.

5. **Construction of floors.**—(1)Floors of indoor work places 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 work place shall be of sand except where this is necessary by reason of the work done.

(3) All parts of the surface of the floor of any such indoor work place which are of sand shall, so far as practicable, be maintained in an even and firm condition.

6. Cleanliness of indoor workplaces.—(1) All accessible parts of the walls of every indoor work place 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 7.2 meters from the floor at least once in every period of fourteen months. A record of the carrying out of every such effective cleaning in pursuance of this paragraph including the date (which shall be not less than five months or not more than nine months after the last immediately preceding washing, cleaning or other treatment).

(2) Effective cleaning by a suitable method shall be carried out at least once every working day of all accessible parts of the floor of every indoor work place in which the processes are carried on, other than parts which are of sand; and the parts of which are of sand shall be kept in good order.

7. Manual operations involving molten metal.—(1) There shall be provided and properly maintained for all persons employed on manual operations involving molten metal with which they are liable to be splashed, a working space for that operation:

(a) which is adequate for the safe performance of the work; and

(b) which, so far as reasonably practicable, is kept free from obstruction.

(2) Any operation involving the carrying by hand of a container holding molten metal shall be performed on a floor all parts of which where any person walks while engaged in the operation shall be on the same level.

Provided that, *where necessary to enable the operation to be performed without undue risk, nothing in this paragraph shall prevent the occasional or exceptional use of a working space on a different level from the floor, being a space provided with a safe means of access from the floor for any person engaged in the operation.*

8. Gangways and pouring aisles.—(1) In every work-room to which this paragraph applies constructed or reconstructed or converted for use as such after the making of this Schedule and so far as reasonably practicable, in every other work-room to which this paragraph applies, sufficient and clearly defined main gangway shall be provided and properly maintained which:

(a) shall have an even surface of hard material and shall, in particular, not be of sand or have on them more sand than is necessary to avoid risk of flying metal from accidental spillage;

(b) shall be kept, so far as reasonable 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 shall be:

(i) where truck ladles are used exclusively, at least 600 mm wider than the overall width of the Ladle;

(ii) where hand shanks are carried by not more than two men, at least 920 millimetres in width;

(iii) where hand shanks are carried by more than two men, at least 1.2 meters in width; and

(iv) where used for simultaneous travel in both directions by men carrying hand shanks, at least 1.8 meters in width.

(2) In work-room to which this paragraph applies constructed, reconstructed or converted for use as such after the making of this schedule, sufficient and clearly defined pouring aisles shall be provided and properly maintained which:

(a) shall have an even surface of hard material and shall, in particular, not be of sand or have on them more sand than is necessary to avoid risk of flying metal from accidental spillage;

(b) shall be kept so far as reasonably practicable free from obstruction;

(c) if molten metal is carried in hand ladles by not more than two men per ladle, shall be at least 460 millimetres wide, but where any moulds alongside the aisle are more than

510 millimetres above the floor of the aisle, the aisle shall be not less than 600millimetres wide;

(d) if molten metal is carried in hand ladles or bulk ladles by more than two men perladle, shall be at least 760 millimetres wide; and

(e) if molten metal is carried in crane, trolley or truck ladles, shall be of a width, adequate for the same performance of the work.

(3) Requirements of sub-paragraphs (1) and (2) shall not apply to any work- room or part of a work-room if, by reason of the nature of the work done therein, the floor of that work- room or, as the case may be, that part of a work-room has to be of sand.

(4) In this paragraph ―work-room to which this paragraph applies‖ means a part of a ferrous or non-ferrous foundry in which molten metal is transported or used, and a work-room to which this paragraph applies shall be deemed for the purposes of this paragraph to have been constructed, reconstructed or converted for use as such after the making of this schedule if the construction, reconstruction or conversion thereof was begun after the making of this Schedule.

9. Work near cupolas and furnaces.—No person shall carry out any work within a distance of 4 meters from a vertical line passing through the delivery end of any spout of a cupola or furnace being a spout used for delivering molten metal, or within a distance of 2.4 meters from a vertical line passing through the nearest part of any ladle which is in position at the end of such a spout, except, in either case, where it is necessary for the proper use of maintenance of a cupola or furnace that work should be carried out within that distance of that work is being carried out at such *a* time and under such conditions that there is no danger to the person carrying it out form molten metal which is being obtained from the cupola or furnace or is in a ladle in position at the end of the spout.

10. Dust and fumes.—(1) Open coal, coke or wood fires shall not be used for heating or drying ladles inside a work-room unless adequate measures are taken to prevent, so far as practicable, fumes or other impurities from entering into or remaining in the atmosphere of the work- room.

(2) No open coal, coke or wood fires shall be used for drying moulds except in circumstances in which the use of such fires is unavoidable.

(3) Mould stoves, core stoves and annealing furnaces shall be so designed, constructed, maintained and worked as to prevent, so far as practicable, offensive or injurious, fumes from entering into any work-room during any period when a person is employed therein.

(4) All knock-out operations shall be carried out—(a) in a separate part of the foundry suitably partitioned off, being a room or part in which, so far as reasonably practicable, effective and suitable local exhaust ventilation and a high standard of general ventilation are provided; or

(b) in an area of the foundry in which, so far as reasonably practicable, effective and suitable local exhaust ventilation is provided or where compliance with this requirement is not reasonably practicable, a high standard of general ventilation is provided.

(5) All dressing or fettling operations shall be carried out—

(a) in a separate room or in a separate part of the foundry suitably partitioned off; or

(b) in an area of the foundry set apart for the purpose and shall, so far as reasonably practicable, be carried out with effective and suitable local exhaust ventilation or other equally effective means of suppressing dust, operating as near as possible to the point of origin of the dust.

11. Maintenance and examination of exhaust plant.—(1) All ventilating plants used for the purpose of extracting, suppressing or controlling dust or fumes shall be properly maintained.

(2) All ventilating plants used for the purpose of extracting; suppressing or controlling dust or fumes shall be examined and inspected once every week by a responsible person. It shall be thoroughly examined and tested by a competent person at least once in every period of twelve months; and particulars of the results of every such examination and test shall be entered in an approved register which shall be available for inspection by an Inspector. Any defect found on any such examination and test shall be immediately reported in writing by the persons carrying out the examination and test to the occupier or manager of the factory.

12. Protective equipments.—(1) The occupier shall provide and maintain suitable protective equipments specified for the protection of workers:

(a) suitable gloves or other protection for the hands for workers engaged in handling any hot material likely to cause damage to the hands by burn, scald or scar, or in handling the pig iron, rough castings or other articles likely to cause damage to hands by cut or abrasion;

(b) approved respirators for workers carrying out any operations creating a heavy dust concentration which cannot be dispelled quickly and effectively by the existing ventilation arrangements.

(2) No respirator provided for the purposes of clause 1 (b) which has been worn by a person shall be worn by another person if it has not since been thoroughly cleaned and disinfected.

(3) Persons who for any of their time—

(a) work at a spout or attend to a cupola or furnace in such circumstances that material therefrom may come into contact with the body, being material at such a temperature that its contact with the body would cause a burn; or

(b) are engaged in, or in assisting with, the pouring of molten metal; or

(c) carry by hand or move by manual power any ladle or mould containing molten metal; or

(d) are engaged in knocking-out operations involving material at such a temperature that its contact with the body would cause a burn; shall be provided with suitable footwear and gaiters which worn by them prevent, so far as reasonably practicable, risk of burns of his feet and ankles.

(4) Where appropriate, suitable screens shall be provided for protection against flying materials (including splashes of molten metal and sparks and chips

thrown off in the course of any process).

(5) The occupier shall provide and maintain suitable accommodation for the

storage and make adequate arrangements for cleaning and maintaining of the protective equipment supplied in pursuance of this paragraph.

(6) Every person shall make full and proper use of the equipment provided for his protection in pursuance of sub-paragraphs (1) and (4) and shall without delay report to the occupier, manager or other appropriate person any defect in, or loss of, the same.

13. Washing and bathing facilities.—(1) There shall be provided and maintained in clean state and good repair for the use of all workers employed in the foundry:

(a) a wash place under cover with either:

(i) a trough with impervious surface fitted with a waste pipe without plug, and of sufficient length to allow at least 60 centimeters for every 10 such persons employed at any one time and having a constant supply of clean water from taps or jets above the trough at intervals of not more than 60 centimeters; or

(ii) at least one tap or stand pipe for every 10 such persons employed at any one time and having a constant supply of clean water, the tap or stand pipe being spaced not less than 1.2 meters apart; and

(b) not less than one half of the total number of washing places provided under clause

(a) shall be in the form of bath rooms;

(c) a sufficient supply of clean towels made of suitable material changed daily, with sufficient supply of nail brushes and soap.

(2) The facilities provided for the purposes of sub-paragraph—(1) shall be placed in charge of a responsible person or persons and maintained in a clean and orderly condition.

14. Disposal of dross and skimmings.—Dross and skimmings removed from molten metal or taken from a furnace shall be placed forthwith in suitable receptacles.

15. Disposal of waste.—Appropriate measures shall be taken for the disposal of all waste products from shell moulding (including waste burnt sand) as soon as reasonably practicable after the castings have been knocked-out.

16. **Material and equipment left out of doors.—**All materials and equipment left out of doors (including material,) and equipment so left only temporarily or occasionally shall be so arranged and placed as to avoid unnecessary risk. There shall be safe means of access to all such material and equipment and, so far as reasonably practicable, such access shall be by roadways or pathways which shall be properly maintained. Such roadways or pathways shall have a firm and even surface and shall so far as reasonably practicable be kept free from obstruction.

17. **Medical facilities and records of examinations and tests—**(1) The occupier of every factory to which the Schedule applies, shall:

(a) employ a qualified medical practitioner for medical surveillance of the workers employed therein whose employment shall be subject to the approval of the Chief Inspector -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 a separate register approved by the Chief Inspector -cum-Facilitator, which shall be kept readily available for inspection by the Inspector.

18. **Medical examination by Certifying Surgeon.—**(1) Every worker employed in a foundry shall be examined by a Certifying Surgeon within 15 days of his first employment. Such medical examination shall include pulmonary functions tests and chest X-ray. No workers shall be allowed to work after 15 days of his first employment in the factory unless certified fit for such employment by the Certifying Surgeon.

(2) Every workers employed in the said processes shall be re-examined by a Certifying Surgeon at least once in every twelve months. Such examination shall, wherever the Certifying Surgeon considers appropriate, include all the tests as specified in sub- paragraph (1) except chest X-ray which will be once in 3 years.

(3) The Certifying Surgeon after examining a worker, shall issue a Certificate of Fitness in Form-33. The record of examination and re-examinations carried out shall be entered in the certificate and the certificate shall be kept in the custody of the manager of the factory. The record of each examination carried out under sub- paragraphs (1) and (2), including the nature and the results of the tests, shall also be entered by the Certifying Surgeon in a health register in

Form-32.

(4) The Certificate of Fitness and the health register shall be kept readily available for inspection by the Inspector.

(5) If at any time the Certifying Surgeon is of the opinion that a worker is no longer fit for employment in the said processes on the ground that continuance therein would involve special danger to the health of the worker, he shall make a record of his findings in the said certificate and the health register. The entry of his findings in those documents should also include the period for which he considers that the said person is unfit for work in the said processes. The person so suspended from the process shall be provided with alternate placement facilities unless he is fully incapacitated in the opinion of the Certifying Surgeon, in which case the person affected shall by suitably rehabilitated.

(6) No person who has been found unfit to work as said in sub-paragraph (5) above shall be re-employed or permitted to work in the said processes unless the Certifying Surgeon, after further examination, again certifies him fit for employment in those processes.

18. Exemption.— If in respect of any factory, the Chief Inspector-cum-Facilitator is satisfied that owing to the exceptional circumstances or infrequency of the processes or for any other reason, all or any of the provisions of this schedule is not necessary for protection of the 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

FIRE WORKS MANUFACTORIES AND MATCH FACTORIES.

(1) Application—The provision of this Schedule shall apply to all manufactories and process incidental thereto carried on in any fire works manufactory or a match works and shall be in addition to and not in derogation of any provisions of the Code and these rules or of any other Act or rules that are applicable to fire works manufactories and match factories.

(2) Definitions.—

(a) **"fire works manufactory"** means any factory or such parts of any factory wherein the following chemicals or combination of chemicals and material are being used for the manufacture of crackers, sparklers, caps, fuses, blasting powder and rue works:

Saltpeter

Pyrotechnic aluminium powder

Barium Nitrate Charcoal Potassium Chloride Red Phosphorus Gum

Dextrine Strontium Nitrate

Magnesium Powder Copper Coated Wires Steel fillings or iron fillings Galvanised Iron wires

Gun Powder(Black Powder)

(b) **"match works"** means any establishment which manufactures safety matches or colour matches by the use of chemicals mentioned in clause(a) ;

(c) **"breathing apparatus"** means a device covering mouth or nose with necessary connections by means of which a person using it in a poisonous asphyxiating or irritant atmosphere breathes ordinary air or any other suitable apparatus approved in writing by the Chief Inspector-cum-Facilitator in this behalf.

(3) Buildings:— (a) The building of any fire works manufactory or match factory shall conform to the standards prescribed under the Explosives Act, 1884 (Central Act 4 of 1884), and the height of such buildings shall at no time be less than three meters.

(b) No building inside a fire works manufactory shall have a first floor at any time.

(c) In match works, provided with a first floor, there shall be two staircases leading from the first floor to the ground floor irrespective of the number of persons employed in the first floor and one of the stair cases shall be of masonry construction of non- Inflammable materials.

(d) All doors shall open outwards and all the doorways shall be kept free from obstructions.

(e) All doors of workrooms shall not be less than 1.2 meters in width or less than 2 meters in height

(f) The floors of all work rooms including mixing sheds shall be completely covered by a rubber sheet having a smooth surface and having a thickness of at least 3 millimeter. If the floor cannot be covered by a single rubber sheet, more than one rubber sheet may be used, so that each sheet is overlapped by the other atleast 150 millimeter; and

(g) Mixing sheds shall be 30.5 meters away from all other sheds and be separated by baffle walls opposite each exit of the mixing shed.

(4) House-Keeping.—(a) Every part of ways, works, machinery and plant shall be maintained in a clean and tidy conditions.

(b) Any spillage of materials shall be cleaned without delay.

(c) Close platforms, passages and gangways shall be kept free of temporary obstructions.

(5) Electrical Equipment.—(a) If at any time use of electricity is allowed in the factory, all leads, etc, shall be in conduits with flame-proof junctions.

(b) Electrical supply shall never be through a lamp even with a non-conducting handle.

(6) Protective Clothing.—(a) Under no circumstances clothes made of artificial fiber like terelene, etc. be allowed inside the factory.

(b) All workers shall be supplied with asbestos aprons especially to cover the chest, gonads and thighs.

(c) Breathing apparatus shall be used in mixing sheds to avoid workers inhaling poisonous fumes in the event of an untoward reaction.

(d) In mixing sheds where aluminium and magnesium powders are used

"antistat" foot-wear to combat static electricity shall be supplied.

(e) All protective equipments shall be maintained in an efficient, clean and hygienic conditions.

(7) Match Factories.—(i) the residue of the head composition shall not in any way be mixed with the residue of the friction composition;

(ii) the rooms comprising the two mixing departments, namely:-

(a) head composition; and

(b) friction composition; shall be entirely separated from each other and the drains from these two departments shall be kept entirely separate;

(iii) rubbish containing the resinous of the head composition and friction composition shall be kept and burnt separately;

(iv) department in which completed matches (matches with heads on) are stored shall be separated from all other department by means of fire proof walls and doors providing adequate means of escape in case of fire;

(v) Splints, veneers and other materials in excess of the quantity required for the day manufacture, shall be kept in separate room of the factory where no manufacturing process is carried on. No manufactured material shall be stored anywhere in the factory compound for more than five days after the manufacture except in the storage godowns;

Provided that nothing contained in this clause, shall apply to splints and veneers in case stored in peeling and box making departments.

(vi) store rooms for matches shall be entirely separated by fireproof walls from

the buildings used for manufacture;

(vii) the racks in the dipped splints room shall have sides top and the rear part provided with non flammable materials:

(viii) the process of packing shall be done in an area away from the place of manufacturer to the satisfaction of the Inspector; and

(ix) no child shall be employed or permitted to work directly connected with the manufacturing process up to final production of match sticks.

(8) Precaution to be taken in connection with manufacture of fuses in crackers, etc.—(a) Bundles of fuses shall be handled by carrying and not dragging them on the floor.

(b) Drying of fuses after wrapping shall be carried out on platforms away from workrooms.

(c) Cutting shall be done by experienced workers employed only for this Purpose and under proper supervision.

(d) Cutting shall be done on a large masonry platform covered with a tarpaulin and kept free/from grit and pebbles.

(e) Cutting shall be done on a raised platform so that workers can work while standing, cutting must be done by placing the fuse on wooden sleepers kept over blocks of wood. Bricks shall not be used beneath the wooden reapers.

(f) Workers, while on dangerous operations shall not wear clothing sewn with ferrous or steel buttons buckles or attachments. They shall not carry on their persons, iron knives, keys etc.

(9) Employment of pregnant women and children.— Pregnant women workers and young persons shall not be employed on operation where chemicals are mixed and where fuses are cut, children shall not be employed or permitted to work in the manufacturing process of any work operation or process connected therewith or incidental thereto in fireworks manufactory.

(10) General.—(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) During the manufacture of fuses only brass or non –ferrous knives shall be used and drying of fuses shall be away from all workrooms.

(d) Door-mat shall be provided outside the workroom and near all drying platforms and where fuses are cut for the workers to clean their feet.

(e) At no time, mixing materials shall exceed the quantity that is required for the

manufacture of mixing for half an hour operation only.

(f) For filling up chemicals in the inner tube of crackers, only aluminium or plastic rings shall be used and not galvanized iron rings.

(g) Buckets, container, hoops, locks, nails, screws, bolts, nuts, knives, scissors, etc. made of iron shall not be used within the factory premises.

(h) Wooden racks without iron nails shall be used for drying paper cap sheets, in process factories.

(i) Wooden racks used for drying paper cap sheets shall be provided with asbestos or other fire resistant sheets on the three sides leaving the front side open.

(j) Dried paper cap sheets shall be carried in wooden trays with four compartments (partitions), each compartment (partition) carrying a single sheet.

(k) Each manufacturing shed of a fire works shall have at least two doors facing each other. The door provided to the work sheds of adjacent row shall not face each other.

(l) Not more than four persons shall be employed or allowed at any one time in anyone building in which explosive is being manufactured.

(11) Display of notices.—The following notices in the local language understood by the majority of workers shall be displayed at a conspicuous place in the factory:

(a) smoking is strictly prohibited.

(b) No one shall carry matches or other igniting materials into the factory.

(c) No worker shall be in a workroom or area where work has been assigned to him.

(d) If anything untoward happens in any shed, all workers shall dash to the gates, which serve as out gates of the factory and in no circumstances be curious to see what has happened in the affected shed.

(e) Any spillage of materials should be cleaned without any delay.

(f) Wearing of clothes made of artificial fiber like terrene, terelene, etc. is prohibited. Clothing sewn with ferrous or steel buttons or buckles or attachments should not be worn.

(g) Foot wears with iron nails should not be used.

(h) Workers should not carry with themselves iron knives and iron keys etc.

(12) First-aid boxes.—(a) The materials required under sub rule (5) of this Schedule shall be kept in the first aid box. In addition, four stretchers shall be available for every twenty persons employed in the premises.

(b) Adequate amount of burn dressings and 24 ounces of coconut oil to be used if as the first remedy for burns shall be kept in the first aid box.

(c) Persons who are in charge of first aid boxes shall be those who possess the certificate granted by the Saint John‘s Ambulance Associated for rendering first aid.

(13) Exemption.—If the Chief Inspector-cum-Facilitator is satisfied in respect of any factory or any process that owing to the special conditions or special methods of work or by reason of the frequency of the process or for other reason the application of all or any of the provisions of the Schedule to the factory or process, or for the persons employed in such factory or process is not necessary, he may by order in writing exempt such factory or part of the factory or process or any part of the factory or person from all or any of these provisions subject to such conditions as be may deem expedient to ensure safety and health of the worker. The Chief Inspector-cum-Facilitator may at any time in his discretion revoke such order without assigning any reason‖.

SCHEDULE – XXVIII
USE OF OVENS AND DRIERS IN FACTORIES

1. **Application**- this schedule shall apply to ovens and driers, except those used in laboratories and kitchens of any establishment and those which have a capacity below 325 liters.
2. **Definitions-** for the purpose of this schedule, oven or drier means any enclosed structure, receptacle, compartment or box which is used for baking, drying or otherwise processing of any article or substance at a temperature higher than that ambient temperature of air in the room of space in which the oven or drier is situated, and in which the flammable or explosive mixture of air and flammable substance is likely to be evolved with the enclosed structure ,receptacle, compartment or box or part thereof on account of article or substance which is baked or dried or otherwise processed within it.
3. **Separate electric connection-** Electric power supplied to every oven or drier shall be by means of separate circuit provided with an isolated switch.

4. **Design, construction, examination and testing-** (1) 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

defect and safe, if properly used.

(2) no oven or drier shall be taken into use in factory for the first time unless a competent person has thoroughly examined all its parts carried out the tests as are required to establish that the necessary safe systems and control 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 are kept available for inspection.

(3) all parts of an oven or drier 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 tests as have been mentioned in clause (b) have been carried by the competent person and a certificate of such examination and tests signed by that competent person has been obtained and are kept available for inspection.

5. **Safety, Ventilation**- (1) every oven or drier shall be provided with a positive and effective safety ventilation system using one or more motor driven centrifugal fans so as to dilute any mixture of air and flammable substance that may be formed within the oven or drier and maintain the concentration of the flammable substance in the air at safe level of dilution.

(2) The safe level of dilution referred to in clause (a) shall be so as to achieve a concentration of concerned flammable material in air of not more than 25 % of its lower explosive limit;

Provided that level of concentration in the air up to 50% 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:-

(a) Shows continuously the concentration of the flammable substance in air present in the oven or drier at any instant;

(b) Sounds an alarm when the concentration of the flammable substance in air present in any part of oven or drier reaches a level of 50% of explosive limit

(c) Shuts down the heating system of the oven or drier automatically when the

concentration of the flammable substance in air present in any part of oven or drier reaches a level of 60% of lower explosive limit, is provided to the oven or drier and maintained in the efficient working condition.

(d) No oven or drier shall be operated without its safety ventilation system working inefficient manner.

(e) no oven or drier shall be operated with a level of dilution less than what is referred in clause (b)

(f) exhaust ducts of safety ventilation system should be so designed and placed that their ducts discharge the mixture of air and flammable substance away from the workroom and not near windows or doors or other openings from where the mixture could re-enter the work room.

(g) The fresh air admitted into the oven or drier by means of safety ventilation system shall be circulated adequately by means of circulating fans or fans through all parts of the oven or drier so as to ensure that their are no location where the flammable substance can accumulate in the air become pocketed to any dangerous degree.

(h) Throttling dampers in any safety ventilation system should be so designed by cutting away the portion of damper or otherwise that system will handle at least the minimum ventilation rate required for safety when they are set in their maximum throttling position.

6. **Explosion panels –** (1) every oven or drier having an internal total space of not less than half cubic meter shall be provided with suitably design explosion panel so as to allow the release of the pressure of any possible explosion within the oven or drier through explosions vents. The area of opening of any access doors which are provided with suitable arrangements for their release in case of an explosion shall not be less than2200 sq cm for every 1 cu m of the volume of the oven or drier. The design of the explosion panel and doors as stated above shall be such as to secure their complete release under an internal pressure of 0.25 kg/sq cm.

(2) The explosion releasing panel shall, as far as practicable, be situated on the roof of the oven or drier or at those portions of the walls where persons don‘t remain in connection with operation of oven or drier.

7. **Inter locking arrangement** – In each oven or drier efficient inter locking arrangement shall be provided and maintain to insure that

(a)All ventilating fans and circulating fans whose failure would adversely effect the ventilation rate of 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, input into operation

(b) Failure of any of the ventilating or circulating fans will automatically stop any convey or as referred to in clause (a) as may be provided as well as so the fume supply by closing the shut of valve and shut off the ignition in the case of gas or oil fired ovens and in case of electrically heated oven switch off the electrical supply to the heater

(c) The afore said mechanical conveyor is set in operation before the said shut off valve can be energies

(d) The failure of the aforesaid conveyor will automatically closed the said shut off valve in the case of oven and drier heated by gas , oil or steam and deactivate the ignition system or cut off the electrical heater in the case of electrically heated ovens are furnaces

8. **Automatic ventilation; -** Every oven or drier heated by oil, gas, steam or electricity shall be provided with an efficient arrangement for automatic ventilation consisting of at least three volume changes with fresh air by operation of safety ventilation fans and circulating fans so as to effect purging of the oven or drier of any mixture of air and 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 which does not exceed a maximum temperature required in respect of the particular process is being carried out

10. **Multi stage processes** – Whatever material are to be processed in ovens or driers in successive operation suitable arrangements should be provided to ensure that the operating temperature necessary for safe operation at each stage are maintain within the design limit

11. **Combustible substances not to drip on electrical heater or burner flame –** Effecting arrangement shall be provided in every oven or drier to prevent dripping of combustible substances on electrical heater or burner flame used for heating.

12. **Periodical examination, testing and maintenance** – (a) All parts of every oven or drier shall be properly maintain and thoroughly examined and the various control as mentioned in the schedule and the working of the oven or drier shall be tested at frequent interval to ensure its safe operation by a responsible person authorized by the occupier or manager in this behalf who by his experience and knowledge of necessary precaution against risk of explosion, is fit to undertake such work

(b) A register shall be maintained in which the details of various tests carried out from time to time under clause (a) shall be entered and every entry shall be signed by the person making the test.

13. **Training of operator –** No person shall be assigned any task connected with operation of any oven or drier unless his has completed 18 years of a and is

properly trained

14. **Polymerizing machine** – (a) Printed fabric shall be thoroughly dried by passing them over drying canes or through hot flue or other equally effecting means before the same is allowed to pass through polymerizing machines

(b) Infra ray heater of polymerizing machines shall be cut off while running the print

SCHEDULE – XXIX

TEXTILE MACHINERY EXCEPT MACHINERY USE IN JUTE MILLS

1. **Application: -** This Schedule shall apply to the machinery in factories engaged in manufacturing or processing of textiles other than jute textiles excluding the machinery in factories engaged exclusively in the manufacture of synthetic fibers.

2. **Definitions;-**For the purposes of this Schedule.

(a) "Calender" means a set of heavy roller mounted on vertical side frames and arranged to pass cloth between them which may have two to ten rollers or bowls some of which may be heated:

(b) "Card" means a machine consisting of cylinders various sizes and includes flats. Covered with card clothing and set in relation to each so that fibers in ; staple form maybe Separated into individual relationship

(c) "Card clothing" means the material with which the surfaces of the cylinder, Doffer flats, etc. Of a card are covered and consists of a thick foundation material made of either textile fabrics, through which many fine closely spaced specially bent wires or mounted saw toothed wires are passed;

(d) "Comber" means a machine for combing fibers of cotton. Wool etc. The essential parts whereof are device for feeding forward a fringe of fibers at regular intervals and an arrangement of combs or pins, which at the right time, pass through the fringe and by which tangled fibers. Short fibers, and nips are removed and the long fibers are laid parallel;

(e) "Combing machinery" means a general classification of machinery, including combers, silver lap machines. Ribbon lap machines and gill boxes, but excluding cards;

(f) "Continuous bleaching range" means a machine used for bleaching of cloth in rope or open-width form;

Explanation: (1) 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 J. Box 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" 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 will remain hot for a sufficient time to complete the scouring action; it then passes through 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;

Explanation:- 2) by slight modification of the form of the unit, the same process as is explained in Explanation (1), can be applied to open-width cloth;

(g) "embossing calendar" means a calendar with two or more rolls, one of which is engaged for producing figure effects of various kinds on a fabric;

(h) "granett machine" means any number of types of machines for opening hard twisted waste of wool, cotton, silk, etc., essentially consisting of a locker- in- one or more cylinders each having a complement worker and stringer rolls, and a fancy roll and doffer.

Explanation: - 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 granett wire instead of card clothing;

(i) "gill box" means a machine used in the worsted system of manufacturing yarns which functions to arrange it in a parallel order and essentially, it consists of a pair of feed rolls and a series of follower where the followers move at a faster surface speed and perform as combine action;

(j) "in-running rolls" means any pair of rolls or drums between which there is a "nip";

(k) "Inter-locking arrangement" means a device that prevents the setting in motion of a dangerous part of a machine or the machine itself while the guard, cover or door provided to safe- guard against danger is open or un-locked, and which will also hold the guard, cover or door closed and locked- while the machine or the dangerous part thereof is in motion;

(I) "Kier" means large metal vat, usually .a pressure type in which fabrics may be boiled out, bleached etc.

(m) "loom" means a machine for effecting the interlocking of two series of yarns crossing one another at right angles by which the warp yarns are wound on a warp beam and pass through headless and reads and the filling is shot across in a shuttle and settled in place by read and slay, and the fabric is wound on a

cloth beam;

(n) "mule" means a type of spinning frame having a head stock and a carriage as its two main sections, the head stock is stationery and the carriage is movable and its carries the spindles which draft and spin the roving into yarn and extends over the whole of the machine, moves slowly toward and away from the head stock during the spinning operation;

(0) "mercerizing range" means a 3-bowl mangle, a tenter frame, and a number of boxes for washing and scouring, the whole set up where of is in a straight line and all parts operate continuously;

Note:- 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;

(p) "Nip" means the danger zone between two rolls or drums, which by virtue of their positioning and movement create a nipping hazard;

(q) "Openers and pickers" means a general classification of machinery, which includes breaker pickers, intermediate pickers, finisher pickers, single process pickers, 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 and any similar machinery equipped with either cylinders, screen section calender section, rollers or beaters used for the preparation of stock for further processing;

(r) "paddler" means a trough for a solution and two or more squeeze rolls between which cloth passes after being passed through a mordent or dye bath;

(s) "Plating machine" means a machine used to lay cloth into folds of regular length for convenience of subsequent process or use;

(t) "ribbon lapper" means a machine or a part of a machine used to prepare laps for feeding a cotton comb the purpose of which is to provide a uniform lap in which the fibers have been straightened as much as possible;

(u) "rotary staple cutter" means a machine consisting of one or more rotary blades used for the purpose of cutting textile fibers into staple lengths;

(v) "roller printing machine" means a machine used for printing fabrics and consisting of a large central cylinder, or pressure bowl around the lower part of the perimeter of which is placed a series of engraved color rollers (each having a color trough), a furnisher roller, doctor blades, etc.;

(w) "silver lapper" means a machine or a part of a machine in which a number of parallel card silvers are drafted slightly, laid side bye side in a compact sheet

and wound into a cylindrical package;

(x) "starch mangle" means a mangle which is use specifically for starching cotton goods, and generally consists of two large rolls and a shallow open vat with several immersion rolls;

(y) "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 later is in a stretched condition as it curves around feed-in roll;

(z) ―shearing machine‖ means a machine used for shearing cloth in which cutting action is provided by a number of steel blades spirally mounted on a roller which rotates in close contact with a fixed edge blade.

(aa) "singeing machine" means a machine which comprises of a heated roller a plate, or an open gas flame by which the cloth or yarn is rapidly passed over the roller or the plate or through the open gas flame to remove fuzz of hairiness by burning;

(ab) "slasher" means a machine used for applying a size mixture to warp yarns which essentially consists of a 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;

(ac) "tenter frame" means a machine for drying cloth under tension which essentially consists of a pair of endless travelling chains fitted with clips of fine pins and carried on tracks and 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;

(ad) "warper" means a machine for preparing and arranging the yarn intended for the warp of fabric, specifically a beam warper; and

(ae) "Water mangle" means a calendar having two or more rolls used for squeezing water form fabrics before drying or for the finishing of various fabrics.

3. General safety requirements;-

(1) Every textile machine shall be provided with individual mechanical or electrical means for starting and stopping such machines and the belt shifter on machines driven by belts and shafting should be provided with a belt shifter lock or an equivalent positive locking device.

(2) Stopping and starting handles or other controls 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.

(3) All belts, pulleys, gears, chains, sprockets wheel and other dangerous moving parts of machinery which either form part of the machinery or are used in association with it, shall be securely guarded.

4. Openers and pickers ;-(1) In all operating or picker machinery;-

(i) Beaters and other dangerous parts shall be securely fenced by guards so as to prevent contact with them; and

(ii) Guards and doors or covers of openings giving access to any dangerous part of the machinery shall be provided with inter-locking 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 inter, locking arrangement. Such openings may be so fenced by guards which prevent access to any such dangerous part and which is either kept positively locked in position or fixed in such a manner that it cannot be removed without the use of hand tools.

(2) 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.

(3) 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 down and the guard or cover shall be so locked that it cannot be raised until the machine is stopped, and machine cannot be started until the Cover of guard is closed:

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 automatic lap forming device shall not be used unless the automatic lap forming device is in efficient working order.

5. Cotton Cards.-(1) 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 operation shall be carried out only by specially trained adult workers wearing tight —fitting clothing.

(2) The licker-in shall be guarded so as to prevent access to the dangerous parts.

(3) 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 to either shift the main belt to the fast pulley of the machine or dismantle the interlocking mechanism and such an arrangement shall be used only for strip or grinding operations.

6. Garnett Machines. (1) Garnett licker-ins shall be enclosed and the garnett fancy rolls shall be enclosed by guards and shall be installed in a way that keeps work rolls reasonably accessible for removal or adjustment.

(2) The underside of the garnett shall be guarded by a screen mess or other form of enclosures to prevent access.

7. Gill boxes.-(1) The feed and shall be guarded so as to prevent fingers being caught in the pins of the intersecting fillers.

(2) 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 from any nip point through that the maximum width of the opening shall not exceed the following :-

Distance of opening from nip point	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 mrn	32 mm

8. Silver aid ribbon lappers (cotton). – The cylinder drums and the laps pool 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 band guard shall have interlocking arrangement.

10 Spinning Mules.-Wheels on spinning mule carriages shall be provided with substantial wheel guards, extending to within 6 mm of the rails.

11 Warpers.- Swivelled double-bar gates shall be installed on all warpers operating in excess of 410 meters minimum and shall have interlocking arrangements, except for the purpose of inching or jogging.

Provided that top and bottom bars of gates shall be at least 1.05 and 0.53 meters high from the floor or working plate form, and gate shall be locked 38

mm from vertical tangement to the bean head.

12 Slashers: - (1) Cylinder dryers:- a) All open nips of in running rolls shall be guarded by nip guards conforming to the requirements in clause 7.

b) When slashers are operated by control levers, these levers shall be connected to a horizontal bar or treadle located not more than 170mm above the floor to control the operation from any point.

c) Slashers operated by such 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 and if calendar rolls are used, additional buttons shall be provided at both sides of machines at points near the nips, except when slashers are equipped with an enclosed dryer as in such clause (b).

2 Enclosed hot air dryer –

(a) All open nips of the top squeezing rollers shall be guarded by nip guards conforming to the requirement specified in sub-clause (2) of clause 7.

(b) When slashers are operated by control layers, these 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.

(c) Slashers operated by push-button 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 1.83 meters on centers.

13. Looms –

(a) Each loom shall be equipped with suitable guards designed to minimize the danger from flying shuttles.

(b) Beam weights for tension in beam shall be of such construction so as 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 liquids into a kier or any other tank or container into which a person is likely to enter in connection with a process, operation, maintenance or for any other purpose, shall be provided with a suitable lock the valve securely in the closed position and retain the key with him before entering the kier tank or container.

(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 areas, emergency shut off valves which can be controlled from a point not

subject to danger of 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 and the guard shall extend across the entire length of the nip.

17. Mercerizing range (piece goods) :-

(1) A stopping device shall be provided at each end of the machine.

(2) A guard shall be provided at each end of the frame between the in running chain and the clip opener.

(3) A nip guard shall be provided for the in-running rolls of the mangle and washers and the guard shall conform to the requirements specified in sub-clause (2) of clause 7.

18. Tenter frames:-

(1) A stopping device shall be provided at each end of the machine.

(2) A guard shall be provided at each end of the machine frame at the in running chain and clip opener.

19. Paddlers. –

(1) Suitable nip guards conforming to the requirements specified in sub clause (2) of clause 7 shall be provided to all dangerous in-running rolls.

20. Centrifugal extractors. –

(1) Each extractor shall be provided with a guard for the basket, and the guard shall have interlocking arrangement.

(2) 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 of wringer extractor, water mangle, starch mangle, back washer (worsted yarn) crabbing machines and decanting machine: - All in-running rolls shall be guarded with nip guards conforming to the requirements specified in sub-clause (2) of clause 7.

22 Sanforizing and palmer machine: - (i) Nip guards shall be provided on all accessible in-running rolls and these shall conform to the requirements specified in sub-clause (2) of clause 7.

(ii) Access from the sides to the nips of running rolls should be fenced by suitable side guards.

(iii) A safety trip rod, cable or wire center cord shall be provided across the front

and back of all palmer cylinders extending the length of the face of the cylinder, which operate readily whether pushed or pulled and the safety trip shall not be more than 170 cm. Above the level at which the operation stands and shall be readily accessible.

23 Rope washers:- (1) 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 or working surface.

(2) A safety trip rod, cable or wire center cord shall be provided across the front and back of all rope was hers extending the length of the face of the washer which shall operate readily whether pushed or pulled and the 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 tumbler or shaker:

(1) Each drying tumbler, each double cylinder shaker or clothes tumbler, and each washing machine shall be equipped with an interlocking arrangement which will prevent the power operation of the inside cylinder when the outer door on the case or shall is open, and which will also prevent the outer door in the case or shall from being opened without shutting off the power and the cylinder

coming to a stop but which should not prevent the movement of the inner-cylinder by means of a hand operated mechanism or an inching device.

(2) Each closed barrel shall also be equipped with adequate means for holding open the doors or covers of the inner and outer cylinders, of shells while it is being loaded or unloaded.

25. Printing machine (roller type) –

(1) All in-running rolls shall be guarded by nip guards conforming to the requirements specified in sub-clause(2) of clause 7

(2) The engraved roller gears and the large crown wheel shall be guarded.

26. Calendars –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 contracted 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. Plating machines. Access to the trap between the knife and card bar shall be prevented by a guard.

29. Hand baling machine. –An angle iron handle-stop guard shall be installed at right angle to the frame of the machine, the stop guard of which shall be so designed and so located that it will prevent the handle from travelling beyond the vertical position should be handle slips 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 coller ironer shall be equipped with a safety bar or other guard across the entire from 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 will 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 not be less than 1.83 meters.‖

31. Medical examination and records:-

(1) Every worker employed on machinery to which this schedule applies shall be examined by a medical officer within 15 days of his first employment. Such examination shall include pulmonary test, immunoglobin test, Audiometry test etc. 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 said processes shall be re-examined by a medical officer at least once in every twelve calendar months. Such re-examination shall, wherever the medical officer considers appropriate, include tests as specified in sub- paragraph (1).

(3) The medical officer after examining a worker, shall issue a Certificate of Fitness in Form-33. 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 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- 32.

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

(5) if at any time medical officer is of the opinion that a worker is no longer fit for employment in the said process on the ground that continuance therein would involve special danger to the health of the worker he shall make a record of his findings in the said Certificate and the health register. The entry of his

findings in these documents should also include the period for which he considers that the said person is unfit for work in the said processes. The person so suspended from the process shall be provided with alternate placement facilities unless he is fully incapacitated in the opinion of the Medical officer, in which case the person affected shall be suitably rehabilitated.

(6) No person who has been found unfit to work as said in sub-paragraph (5) above shall be re-employed or permitted to work in the said processes unless the Medical officer, after further examination, again certifies him fit for employment in those processes.

SCHEDULE – XXX

PROCESS OF MELTING IN INDUCTION FURNACE

1. Application.- Provisions of this schedule shall apply to all parts of factories operations where melting of metal is done in induction furnace and other allied processes are carried on.

2. Definitions:

(1) ―Induction Furnace‖ means furnace in which a strong magnetic field created by passing an electric current through a coil wrapped around the furnace. The magnetic field in turn creates a voltage across, and subsequently an electric current through, the metal to be melted.

(2) "Coil" means coil of Induction Furnace

(3) "Ladle" means equipment used to carry melted metal

(4) "Mould" means moulds made of steel, sand, loam, moulding composition or other mixture of materials.

(5) **"**Personal Protective Equipment" Personal Protective Equipment (PPEs) refers to protective clothing, helmets, goggles, or other garments or equipment designed to protect the wearer's body from injury or infection.

(6) "Refractory" means lining of refractory bricks made in pit

3. Arrangement and storage – For the purposes of promoting safety and cleanliness in workrooms the following requirements shall be observed:-

(a) moulding boxes, loam plates, ladles, patterns, pattern plates, frames, boards, box weights, and other heavy articles shall be so arranged and placed as to enable work to be carried on without unnecessary risk;

(b) Suitable and conveniently accessible racks, bins, or other receptacles shall be provided and used for the storage of other gear and tools;

(c) Where there is bulk storage of sand, fuel, metal scrap or other materials or

residues, suitable bins, bunkers or other receptacles shall be provided for the purpose of such storage.

4. Construction, maintenance of platform and floors –

(1) The platform of furnace should be of good construction, sound material and adequate strength to withstand explosion

(2) The platform must be of adequate size to accommodate persons working there and raw material to be charged

(3) The platform must be provided with at least two stairs

(4) Floors of indoor workplaces in which the processes are carried on, other than parts which are of sand, shall have been surface of hard material.

(5) 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.

(6) All parts of the surface of the floor of any such indoor workplace which are of sand shall, so far as practicable, be maintained in an even and firm condition.

5. Authorised person : – (1) No person except those authorised to work on platform or near furnace shall be allowed on the platform or near furnace.

(2) Person covered under exception of sub-rule (1) must be trained and provided with prescribed personnel protective equipments.

(3) No person shall carry out any work within a distance of 4 meters from a vertical line passing through the delivery end of any spout of a furnace, being a spout used for delivering molten metal, or within a distance of 2.4 meters from a vertical line passing through the nearest part of any ladle which is in position at the end of such a spout, except, in either case, where it is necessary for the proper use of maintenance of furnace that work should be carried out within that distance of that work is being carried out at such a time and under such conditions that there is no danger to the person carrying it out from molten metal which is being obtained from the cupola or furnace or is in a ladle in position at the end of the spout.

6. Maintenance and examination of exhaust plant –

(1) All ventilation plant used for the purpose of extracting, suppressing or controlling dust or fumes shall be properly maintained.

(2) All ventilating plant used for the purpose of extracting, suppressing or controlling dust or fumes shall be examined and inspected once every week by a responsible person. It shall be thoroughly examined and tested by a competent person at least once in every such examination and test shall be entered in an register in Form-35 which shall be available for inspection by an

Inspector-cum-Facilitator. Any defect found on any such examination and carrying out the examination and test to the occupier of the factory.

7. Ladle

(1) Before the ladle is placed for pouring the hot liquid metal, it shall be thoroughly inspected

(2) Place the ladle below the spout.

(3) Before pouring is started, it shall be ensured that:

(a) Only minimum required nos. of persons shall be present.

(b) They all shall use PPEs like face shield, flame retardant suit, anklets, goggles, hand gloves, helmets and safety shoes.

(4) Ladle shall be removed only after clearance from the Furnace In-charge.

(5) Ladle shall not be transported in tilted condition.

8. Operation and Maintenance of furnace:

(1) The occupier shall operate the furnace as per instructions supplied by manufacturer.

(2) The occupier shall keep the maintenance of furnace as per maintenance schedule supplied by manufacturer.

(3) The coil should be checked at regular intervals

(4) The refractories shall be changed at regular interval

9. Work Permit -The occupier shall issue work permit to the person supposed to work in confined space, at height or on electric equipments.

10. Washing facilities.- The occupier shall provide and maintain, in a clean state and in good repair for the use of all persons employed a wash place under cover with sufficient supply of water and soap, towel etc.

11. Protective equipment.- The occupier shall provide and maintain suitable PPEs for all persons employed in process as specified in sub-rule (2).

12. Prohibition of employment of Woman and Adolescent – No woman or adolescent shall be employed in any of the process covered by this schedule

13. Medical examination by medical officer – (1) every worker employed in the processes specified in paragraph 1 shall be examined by a Medical officer within15 days of his first employment. Such examinations shall include skin test, Audiometric test, Pulmonary test and no worker shall be allowed to work after 15 days of his first employment in the factory unless certified fit for such employment by the Medical officer.

(2) Every worker employed in a manganese process shall be re-examined by a Medical officer at least once in every 12 months and such examination shall, wherever the Medical officer considers appropriate, include all the tests in

subparagraph(1).

(3) The Medical officer after examining a worker, shall issue a Certificate of Fitness in Form-33 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 occupier of the factory. The record of each examination carried out under sub-paragraph (1) and (2) including the nature and the results of these test, shall also be entered by the Medical officer in a health register in Form-32.

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

(5) If at any time the 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 to work in the said process shall be provided with alternate placement facilities unless he is fully incapacitated in the opinion of the Medical officer , in which case the person affected shall be suitably rehabilitated.

(6) No person who has been found unfit to work as said in sub-paragraph (5) shall be re- employed or permitted to work in the said processes unless the Medical officer, after further examination, again certifies him fit for employment in those processes.

14. Exemptions – If in respect of any factory, the Chief Inspector-cum-Facilitator is satisfied that owing to the exceptional circumstances or infrequency of the processes or for any other reason, all or any of the provisions of this schedule is not necessary for the protection of the workers in the factory, the Chief Inspector-cum-Facilitator may be a certificate in writing which he may in his discretion revoke at any time, exempt such factory from all or any of such provisions subject to such conditions, if any, as he may specify therein.

SCHEDULE –

XXXI WOOD WORKING MACHINERY

1. Definitions*:* -For the purposes of this Schedule:-

a) Woodworking machine means a circular saw, band saw, planning machine, chain mortising machine or vertical spindle moulding machine, operating on wood or cork.

b) Circular saw means a circular saw working in a bench (including rack bench) but does not include a pendulum or similar saw which is moved towards the wood for the purpose of cutting operation.

c) Band saw means a band saw, the cutting portion of which runs in vertical direction but does not include a log saw or band resaving machine.

d) Planning machine means a machine for overhand planning or thicknessing or for both operations.

2. **Stopping and starting device**: - An efficient stopping and starting device shall be provided on every woodworking 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 machine**: - The space surrounding every woodworking machine in motion shall be kept free from obstruction.

4. **Floors**:- the floor surrounding every woodworking machine 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 loose material,

5. **Training and Supervision**:-

(1) No person shall be employed at a woodworking machine unless he has been sufficiently trained to under the adequate supervision of a person who has a thorough knowledge of the working of the machine.

(2) A person who is being, trained to work woodworking machine shall be fully and carefully and the precautions to be observed to secure safe working of the machine.

6. ***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 form as are of a circle having a radius of not exceeding the radius of largest saw used on bench.

(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 table the distance between the front edge of the knife and the teeth of the saw shall not exceed 12mm.

(iii) For a saw of a diameter of less than 0.6 meter, the knife extend upwards from the bench table to within 25 mm3 of the top of the saw, and for a saw of a diameter of 0.6 meter or over shall extend upwards from the bench teeth of

the saw shall not exceed 12 mm.

(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 fence. 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 the 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 table 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 outwards to a distance of not less then.5cm. Beyond the teeth of the saw- Metal plates, if not headed, shall be of a thickness of at least .25 cm. Or if headed be of a thickness of at least.125 centimeters.

7. Push Sticks: - A push stick or other suitable appliance shall be provided for use at every circular saw and at every vertical spindle molding machine to enable the work to be done without unnecessary risk.

8. Band Saws: - Every band saw shall be guarded as follows:-

(i) Both sides of the bottom pulley shall be completely encased by sheet or expanded metal or other suitable material.

(ii) The front of the top pulley shall be covered with sheet or expanded metal or other suitable material.

(iii) All portions of the blade shall be enclosed or otherwise securely guarded except the portion of the blade between the bench table and the top guide.

9. Planning Machines-

(i) 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.

(ii) Every planning machine used for over hand planning shall be provided with a

"bride" 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 a vertical and horizontal director.

(iii) The feed roller of every planting machine used for thiknessing except the combined machine for overhand planning and thiknessing, shall be provided with an efficient guard.

10. Vertical spindle moulding machines:-

(i) 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.

(ii) The wood being moulded at vertical spindle moulding shall. If practicable be held in a jig or holder of such construction as to reduce as for as possible the risk of accident to the worker.

11. Chain mortising machines: -The chain of every chain mortising machine shall be provided with a guard which shall enclose the cutters as far as practicable.

12. 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 in motion, and

(c) So adjusted as to enable the work to be done without unnecessary risk.

13. Exemption:- Paragraphs 6,8,9, and 10 shall not apply to an woodworking machine 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.

14. Medical examination and records:-

(1) Every worker employed on machinery to which this schedule applies shall be examined by a medical officer within 15 days of his first employment. Such examination shall include pulmonary test, immunoglobin test, Audiometry test etc. 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 said processes shall be re-examined by a medical officer at least once in every twelve calendar months. Such re-examination shall, wherever the medical officer considers appropriate, include tests as specified in sub- paragraph (1).

(3) The medical officer after examining a worker, shall issue a Certificate of Fitness in Form-33. 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 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- 32.

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

(5) if at any time medical officer is of the opinion that a worker is no longer fit for employment in the said process on the ground that continuance therein would involve special danger to the health of the worker he shall make a record of his findings in the said Certificate and the health register. The entry of his findings in these documents should also include the period for which he considers that the said person is unfit for work in the said processes. The person so suspended from the process shall be provided with alternate placement facilities unless he is fully incapacitated in the opinion of the Medical officer, in which case the person affected shall be suitably rehabilitated.

(1) No person who has been found unfit to work as said in sub-paragraph (5) above shall be re-employed or permitted to work in the said processes unless the Medical officer, after further examination, again certifies him fit for employment in those processes.

15. Appointment of person on machinery:-

(1) No person shall be allowed to work on machinery specified in this Schedule unless he:-

(a) has attained the age of eighteen years;

(b) has been trained in accordance with the sub-paragraph (2); and

(2) The training shall include suitable and sufficient practical instructions in the matter in relation to each type of woodworking machinery and safety device.

SCHEDULE –

XXXII RUBBER MILLS

1. **Installation of machines.-** Mills for breaking down, cracking, grating, mixing, refining and warming rubber or rubber compounds shall be so installed that the top of the front roll is not less than 85cm. 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 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-

- Hoppers so constructed or guarded that it is impossible for the operator to come into contact in any manner with the nip of the rolls.
- Horizontal-safety trop 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 1.75 meter above the floor or working level.

(3) Safety-trip rods and tight wire cables 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 –
XXXIII CENTRIFUGAL MACHINES

1. Definition.-—Centrifugal Machinesincludecentrifugalextractors, separators and driers.

2. Every part of a centrifugal machine shall be

(a) Of good design and construction and of adequate strength;

(b) Properly maintained; and

(c) examined thoroughly by a competent person at regular intervals.

3. Interlocking guard for drum or basket-

- The cage housing, the rotating drum or basket of every centrifugal machine shall be provided with a strong lid. The design, construction of the cage as well as the lid should be such that no access is possible to the drum or basket when the lid is closed.
- Every centrifugal machine shall be provided with an efficient interlocking device that will effectively prevent the lid referred to in sub-paragraph (1) 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 in the open position.

4. Braking arrangement:-Every centrifugal machine shall be provided with an effective arrangement capable of bringing the drum or basket to rest within as short a period of time as reasonably practicable after the power is cut off.

5 Operating speed:- No centrifugal machine shall be operated at a speed in excess of the manufacturers rating which shall be legibly stamped at easily visible places both on the inside of the basket and on the outside of the machine casing.

6. Exceptions:—Sub-paragraph (2) of paragraph 3, paragraphs 4 and 5 shall not apply in case of top lung machines or similar machines used in the sugar manufacturing industry.

SCHEDULE –

XXXIV POWERS PRESSES

1. **Application: -** This Schedule shall apply to all types of power presses including press brakes, except when used for working hot metal.

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

- "approved" means approved by the Chief Inspector-cum-Facilitator;
- "fixed fencing" means fencing provided for the tools of a power press being fenced which has no moving part associated with or dependent upon the mechanism of a power and includes that part of a closed tool which acts as a guard;
- "power press" means a machine used in metal or other industries for moulding, pressing, blanking, raising, drawing and similar other purposes;
- "safety device" means the fencing and any other safeguard provided for the tools of a power press.

3. **Starting and stopping mechanism: -** The starting and stopping mechanism shall be provided with a safety stop so as to prevent over running of the press or descent of the ram during tool shutting. Etc.

4. **Protection of tool and die:-**

- Each press shall be provided with a fixed guard with slip plate on the underside enclosing the front and all sides of the tool.
- 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.
- The design, construction and mutual position of the guards referred to in sub-Para-graphs (1) and (2) shall be such as to preclude the possibility of the worker's hand or fingers reaching the danger zone.
- The machine shall be fed through a small aperture at the bottom of the dye guard, but a wider aperture may be permitted for second or subsequent operations if feeding is done through a chute.
- Notwithstanding anything contained in sub-paragraphs (1) and (2) 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 defect, the power shall not be operated unless the defect guard is removed.

5. **Appointment of persons to prepare power presses for use:-**

(1) Except as provided in sub-paragraph (4) of paragraph 4, 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 die proving, or carry out an inspection and test of any safety device thereon required by paragraph 8 unless he:-

(a) has attained the age of eighteen years;

(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, as the case may be belongs.

(2) The training shall include suitable and sufficient practical instructions in the matter 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 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 period of 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 provision shall make a report of examination and test containing the following particulars and every such report shall be kept readily available for inspection;

(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, as the case may be;

(d) Date on which the power press or the safety 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 during such thorough examinations and steps taken to remedy such defects.

7. Defect disclosed through 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 workers 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 workers and in consequence the power press or 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 sub-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 notified under this paragraph, a copy of the report made under sub-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 of the concerned 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) until the said defect has been remedied after the expiration of the specified period.

(4) As soon as is practicable, after any defect of which notification has been notified under sub-paragraph (1), has been remedied, a 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 authorized for the purpose under paragraph 5 has inspected and tested every safety device thereon while it is in position on the said power press and has certified it to in order:

Provided that no inspection, test and certificate shall 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 device remain, in the opinion of the said person in efficient working order.

(2) Every power press and every safety devices 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 proper 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 same to the manager forthwith.

(2) Except as provided in sub-paragraph (3) where any defect is disclosed in a safety device any inspection and test under paragraph 8, the person carrying out the inspection and test shall notify the same to the manager 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 the 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. Training the instructions to operators:-The operators shall be trained and instructed in the safe method of work before starting work on any power press.

12. Exemptions:-

(1) If in respect of any factory, the Chief Inspector-cum-Facilitator of Factories is satisfied that owing to the circumstances or 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 the workers employed on any power press or in the factory, the Chief Inspector-cum- Facilitator may by a certificate in writing (which he may in his discretion revoke at any time), exempt such

factory from all or any of such provisions subject to such conditions, if any, as he may specify therein.

(2) Where such exemption is granted, a legible copy of the certificate, showing the conditions if any, subject to which it has been granted, shall be kept posted in the factory on a place where it may be conveniently read by the persons employed.

SCHEDULE – XXXV

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 stationery resisting edge and used for cutting metallic or non-metallic or non-metallic substances;

(b) ―Shears‖ or ―shearing machine‖ means a machine ordinarily equipped with straight, bevel edged blades operating vertically against resisting edged, or with rotary, overlapping cutting wheels and used for shearing metals or non-metallic substances; and

(c) ―Slitter‖ 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; for the purpose of this schedule, this term includes bread or other food slices equipped with rotary knives or cutting discs.

2. Guillotine and Shears:-

(1) Where practicable, a barrier metal guard of adequate strength shall be provided at the front of the knife, fastened to the machine frame and shall be so fixed as would prevent any part of the operator‘s body to reach the descending blade from above, below or through the barrier guard or from the sides:

Provided that in case of machines 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 bed, there shall be provided suitable staring devices which require simultaneous action of both the hands of the operator or an automatic device when will remove both the hands of the operator from the danger zone at every descent of the blade.

(2) At the back of such machines, an inclined guard shall be provided over which the slit pieces would slide and be collected at a safe distance in a manner as would prevent a person at the back from reaching the descending bladed

(3) Power-driven guillotine cutters, except continuous feed trimmers, shall be

equipped with:-

(a) starting devices which require the simultaneous action of both hands to start the cutting motion and of at least one hand control during the complete stroke of the knife: or

(b) an automatic guard will remove the hands of the operator from the danger zone at every decent of the blade, used in conjunction with one hand starting devices which require two distinct movements of the device to start the cutting motion, and so designed as to return positively to the non-starting position after each complete cycle of the knife.

(4) 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 motion, and at least one hand on a control to complete the cut.

(5) Power-driven guillotine cutters, other than continuous trimmer, shall be provided, in addition to the brake or other stopping mechanism, with an emergency device which will 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 Machine:-

(1) Circular disc type knives on machines for cutting metal and leather, paper, rubber, textile or other non-metallic substances shall, if within reach of operators standing on the floor of working level, be provided with guards enclosing the knife edges at all times as near as practicable to the surface of the material, and which may either:-

(a) automatically adjust themselves to the thickness of the material; or

(b) be fixed or manually adjusted so that the space between the bottom of the guard and the material will not exceed 6 mm (1/4inch) at any time.

(2) Portions of blades underneath the tables or benches of slitting machines shall be covered by guards.

4. Index cutters and Vertical Paper Slotters:- Index cutter, and other machines for cutting strips from the ends of books, and for similar operations, shall be provided with fixed guards, so arranged the fingers of the operators cannot 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 the sliding 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 1 mm (0.04 inch) in think-ness or of other material of equal strength.

SCHEDULE –
XXXVI THERMIC FLUID HEATERS

1. All heaters shall be of such construction that coils are removal for periodic cleaning, visual inspection and hydraulic test.
2. Suitable arrangements shall be made for cooling the furnace effectively in case of power failure.
3. Before restarting the furnace, it shall be effect purged.
4. Velocity or flow of the thermic fluid shall not be allowed to fall below the minimum recommended by the manufactures while the heater is in operation.
5. The thermic fluid shall be circulated in a closed circuit formation with an expansion– cum-de aerator tank. This tank shall be located outside the shed where the heater is installed
6. Every heater shall be provided with a photo-resistor actuated auto-visual alarm to indicate flame failure and automatic burner cut
7. The stack temperature monitor-cum-controller with audiovisual alarm shall be provided so as to warn operator in case the outlet temperature exceeds the specific minimum.
8. Where inspection doors are provided on the furnace they shall be interlocked with the burner itself so that they cannot be opened until burner is shut off and furnace is cooled sufficiently.
9. All heaters shall also be provided with the following safety devices:-
   (i) Level control in the expansion tank
   (ii) temperature control of thermic fluid;
   (iii) differential pressure switch on the outlet line of the heater tubes; and
   (iv) temperature control device for the fuel oil supply to the burner.
10. All devices specified in paragraph (9) shall have interlocking arrangement with burner so that in case of any predetermined limits being crossed, the supply of fuel and air shall automatically be cut-off.

11. All safety interlock when operated shall be indicated on the control panel of the heater by a suitable audio visual alarm
12. Every heater unit shall be provided as a standard accessory an arrangement for shifting with low pressure steam or nitrogen for putting out the fire.
13. Electoral panel for the heater shall be located near the heater but not so close as to be exposed to spilling or leaking oil.
14. The heater shall be located in a place partitioned off with fire proof material from other manufacturing activities.
15. Explosion vent shall be installed that release thanks place at safe location.
16. The heater coil shall be subjected to pressure test by competent person once at least in every twelve months. The test pressure shall not be less than twice the operating pressure.
17. If repairs are carried out to the coil, it shall be tested before taking it into use.
18. The thermic fluid shall conform to the specifications specified by the manufacturers and shall be tested by competent person for suitability at least once in every three months period. Such test shall include test for acidity, suspended matter, ash contents, viscosity and flash point.
19. Cleaning of internal surface of the heater so at check-up of refractory surface on the inside shall be carried out every month or as often as required depending upon working conditions. The coils shall be removed and surface of the coils cleaned thoroughly once at least in a period of six months. The burner, nozzles, oil filters and pumps shall be cleaned once a week during the period of use.
20. A separate register containing the following information shall be maintained:-

(a) weekly checks carried out confirming the effectiveness of the interlock;

(b) weekly checks confirming that all accessories are in good state of repairs; and

(c) information regarding fuel, oil temperature, pressure, thermic fluid inlet/outlet pressure and temperature, fuel gas temperature, recorded at four hourly intervals.

21. The heater when in operation shall always be kept in charges of a trained operator.‖

SCHEDULE - XXXVII

MANUFACTURE OF CHROMIC ACID OR MANUFACTURE OR RECOVERYOF THE BICHROMATE OF SODIUM, POTASSIUM OR AMMONIUM

1. Definition.- the purposes of this schedule –

(a) ―Chrome process‖ means the manufacture of chromic acid or bichromate of sodium or potassium or ammonium or the manipulation, movement or other treatment of these substances in connection with their manufacture.

(b) ―Efficient exhaust draught‖ means localized ventilation effected by mechanical or other means for the removal of gas, vapour, dust or fume so as to prevent them from escaping into the air of any place in which work is carried on. No draught shall be deemed efficient which fails to remove smoke generated to the point where such gas, vapour, fumes or dust originate.

(c) ―Suspension‖ means suspension from employment in any of the chrome process specified by written certificate in the Health Register (Form-32) signed by the Certifying Surgeon, who shall have power of suspension as regards all persons employed in any such process.

2. Prohibition relating to pregnant women and Young Person No pregnant woman or young person shall be employed or permitted to work on any chrome process.

3. Efficient Exhaust System

(1) The following chrome processes shall not be carried on without the use of an efficient exhaust-draught, namely :-

(a) grinding;

(b) sieving;

(c) batch mixing;

(2) (i) All equipment for the extraction or suppression of dust/fumes shall at least once in every six months be examined and tested by competent person, and any defect disclosed by such examination and test shall be rectified as soon as practicable.

(ii) Particulars of such examination and tests shall be kept in Form-35

4. Separation of certain processes.- The following chrome processes namely :-

(a) grinding of raw materials, and

(b) sieving of raw materials, shall be carried on in such manner and under such conditions as to secure effectual separation from any processes.

5. Washing facilities.-

(l) Where acidification, sulphate settling or washing, concentration, crystallization, centrifugation or packing is carried out, there shall be provided close to each worker's station –

(a) wash places installed for washing hands and feet frequently in running water, and

(b) a container holding at least 20 ounces of 10 per cent solution of sodium bisulphite or any other suitable reducing agent.

(2) There shall also be provided and maintained in a cleanly stated and good repair washing accommodation under cover with a sufficient supply of soap 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 1.2 meters apart.

Note.– In computing the total number of taps required for the purposes of this rule, the taps or stand pipes as required under clause 5 (1) (c) shall be included.

6. Time allowed for washing.- Before each meal and before the end of the day's work at least ten minutes, in addition to the regular meal time shall be allowed for washing to each person employed in a chrome process.

7. Floorings.- No woman or young person shall be employed or permitted to work in any room in which the said processes are carried on.

(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.

8. Medical Examination by Medical Officer:

(1) Every worker employed in a process to which this schedule applies shall be examined by a medical officer within 15 days of his first employment. Such examination shall include tests as required by medical officer. 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 said processes shall be re-examined by a medical officer at least once in every twelve calendar months. Such re-examination shall, wherever the medical officer considers appropriate, include tests as specified in sub- paragraph (1).

(3) The medical officer after examining a worker shall issue a Certificate of Fitness in Form-33. 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 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-32.

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

(5) if at any time medical officer is of the opinion that a worker is no longer fit for employment in the said process on the ground that continuance therein would involve special danger to the health of the worker he shall make a record of his findings in the said Certificate and the health register. The entry of his findings in these documents should also include the period for which he considers that the said person is unfit for work in the said processes. The person so suspended from the process shall be provided with alternate

(6) placement facilities 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 (5) 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.

9. Protective Equipments.- The occupier shall provide and maintain for the use of all persons employed –

a. in grinding, sieving or mixing raw materials, sufficient and suitable respirators (issued separately for each individual) the filtering materials of which shall be renewed daily;

b. in roasting process, suitable footwear;

c. in acidification, settling concentration, crystallization, centrifugation or packing suitable aprons and protective coverings for hands and feet.

Arrangements shall be made by the occupier for the examination and cleaning of all the protective equipment at the close of each day‘s work and for the repairs or renewal thereof when necessary.

10. Use of Protective Equipments.- Every person employed in a chrome process shall make use of the protective equipment provided under rule 8

11. Cloak Room.- There shall be provided and maintained in a clean state and in good repair for the use of all persons employed in any chrome process –

a. a cloak-room for street clothing put off during working hours including adequate, arrangements for drying such clothing when wet, such accommodation shall be separate from any mess room;

b. separate and suitable arrangements for the storage of protective clothing provided under paragraph 8.

12. Mess Room.- There shall be provided and maintained for the use of all persons remaining within the premises during the meal intervals a suitable mess-room providing accommodation of at least 0.9 sq. meters per head and furnished with –

a. a sufficient number of tables and chairs or benches;

b. arrangements for washing utensils;

c. adequate means for warming food.

The mess-room shall be placed under the charge of a responsible person and shall be kept clean.

13. Prohibition of foods, drinks etc.- No food, drink, ―pan‖, ―supari‖, or tobacco shall be brought or consumed by any worker or 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.

14. Fencing of Vessel.- 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 91.4 centimeters the adjoining ground or platform be securely fenced to a height of at least 91.4 centimeters above such adjoining ground or platform;

(b) No plank or gang-way shall be placed across or inside any such vessel unless such plank or gang-way is –

(i) at least 45.7 centimeters in width, or

(ii) securely fenced on both sides, either by upper and lower rails to a height of 91 centimeters or by other equally efficient means;

(c) If any two such vessels are near each other and the space between them clear of any surrounding brick-work or other work, is either –

(i) less than 45.7 centimeters in width, or is 45.7 or

(ii) more centimeters in width, but is not securely fenced on both sides to a height of atleast 91.4 centimeters secure barriers shall be placed so as to prevent any passage between them.

15. Cautionary Notices.- A cautionary notice in the form specified by the Chief Inspector-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.

16. Exemption.- If in respect of any factory the Chief Inspector-cum- Facilitator is satisfied that owing to the exceptional circumstances or the infrequency of the 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 be 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 be revoked by the Chief Inspector-cum-Facilitator without assigning reasons.

SCHEDULE XXXVIII

WELDING/CUTTING OPERATION WITH THE USE OF LPG/ACETYLENE/ARGON

1. Applicability.- This Schedule is applicable to all operations in welding/cutting of materials with the use of Liquefied petroleum gas or acetylene gas or argon etc; in on junction with oxygen gas.

2. Equipments.-

(1) Gas cylinders whether filled of empty shall not be stored in rooms where welding or cutting work is being done.

(2) Liquefied gas cylinder, when is use shall always be kept in an upright position and shall be so placed that they cannot be knocked over.

(3) Open flames, lights, lighting of fire and smoking shall be prohibited in close proximity to any cylinder containing flammable gases, except those which are in use for welding, cutting or heating.

(4) All cylinders shall be stored at a safe distance of not less than 10 meters from all operations which produce, flames, sparks of molten metal or result in excessive heat.

(5) Every gas cylinder shall be provided with efficient standard type pressure regulator and back flow of gas will be restricted by second non-return type valve.

(6) All welding/cutting torch shall be of standard type which should be provided with non-return valve.

(7) Suitable type of fire extinguishers shall be provided near the welding/cutting place and also near the gas cylinder storage.

(8) Pipe lines from gas cylinders shall be painted with distinctive colours for identification of each gas.

3. General:

(1) Welding and cutting operation shall be prohibited in areas containing explosive of flammable dusts, gases, oil or vapours.

(2) Welding/cutting operations that are carried out in places where persons other than the welders and their helpers are working or passing shall be enclosed by means of suitable stationary or portable screens at least 2.15 meters (7 ft.) in height.

(3) All equipments like welding/cutting torch, pipe lines, brackets, non-return valves and pressure regulators shall be examined by a competent person having know-how of such equipments, at least once in a period of 15 days.

(4) The welding/cutting process shall be carried out by workers specially trained in

that job and know of the hazards of fire, back-fire and explosion.

(5) A log book of examination of equipments and a register of trained workers for welding

/ cutting operation shall be maintained in the forms as directed by the Inspector-cum- Facilitator.

SCHEDULE XXXIX
EFFLUENT TREATMENT PLANT (ETP), SEWAGE TREATMENT PLANT (STP)

1. **Applicability.-** This Schedule is applicable to every factory or in any part of which Effluent Treatment Plant (ETP), Sewage Treatment Plant (STP) and connected works are carried on.

2.General Safety and Health Requirements:

(1) The workers shall be trained on safety and health aspects and adequate instruction are provided before performing any works. The hazards and safety precautions shall be displayed in language understood by majority of workers.

(2) Unauthorised entry shall be prevented by providing fencing to the entire periphery and exclusive entry and exit gates maintained under and Lock and Key arrangement.

(3) No young persons and pregnant women workers shall be required or allowed to work.

(4) Periodic inspection shall be made by qualified maintenance personnel, and a certification record maintained. The certification record shall include the date of inspection, the signature of the person who performed the inspection and the serial number, or other identifier, for the equipment inspected. The operator shall be instructed to report any equipment defects to his supervisor and the use of the equipment shall be discontinued until safety repairs have been completed.

(5) The locations which are below ground level and have stair case entry for access to routine maintenance, inspection, testing, sampling and repairs shall be provided with safe access.

(6) The fall protection systems which include Full-body harnesses, ladder-safety systems, tripods and hoists shall be provided and utilised while performing works involving fall hazards.

(7) Control systems shall be implemented to control liquid levels and flow rates through the works from exceeding permissible levels to prevent inundation.

(8) Pipeline colour coding shall be ensured as per Indian standard and a board displaying colour code provided and maintained.

(9) A work permit shall be issued and followed up while entering confined space to protect the workers from safety and health hazards arising out of confined space entry.

(10) Routine maintenance, inspections, repairs and testing operations shall ensure that the energized equipment is de-energized or shut down, locked out and tagged by implementing Lock out Tag out (LOTO) System.

(11) All necessary Personal Protective Equipments such as safety glasses, face shields, hard hats, gloves, foot protection, and durable and disposable chemical-protective clothing, Respirators (wherever required, Oxygen aided to be used) and fall protection conforming to applicable Indian standards shall be supplied, maintained, used while working and stored properly after usage.

(12) Emergency equipment shall be provided while storing or handling flammable, explosive and toxic chemicals. The emergency equipment includes first aid supplies, emergency phone numbers, eye wash and shower facilities, fire extinguishers, spill-cleanup supplies and personal protective equipment, all of which shall be readily available.

(13) Appropriate control measures shall be implemented to prevent formation and accumulation of hazardous gases .

(14) work environment studies from time to time shall be conducted to ensure compliance to the permissible exposure limits for various chemicals.

(15) General ventilation including mechanical ventilation shall be provided to dilute emissions of toxic, flammable and explosive chemicals to contain them to the acceptable permissible exposure limits.

SCHEDULE XL

PROCESSING OF HAZARDOUS WASTES

1 **Application**

This schedule is applicable for processing of Hazardous Wastes.

2 **Definitions**

a. **Hazardous waste** means any waste which by reason of any of its physical, chemical, reactive, toxic, flammable, explosive or corrosive characteristics causes danger or is likely to cause danger to health or environment, whether alone or when in contact with other wastes or substances, and shall include wastes approved or authorised by Central/State Pollution Control Board.

b. **Clean-up operation** means an operation where hazardous wastes are removed, contained, incinerated, neutralized, stabilized, cleared-up, or in any other manner processed or handled with the ultimate goal of ensuring safety and health of the workers.

Decontamination means the removal of hazardous waste from Workers and their equipment to the extent necessary to preclude the occurrence of foreseeable adverse health effects.

c. **Health hazard** means a chemical or a pathogen where acute or chronic health effects may occur in exposed Workers.

d. **IDLH or immediately dangerous to life or health** means an atmospheric concentration of any toxic, corrosive or asphyxiant substance that poses an immediate threat to life or would interfere with an individual's ability to escape from a dangerous atmosphere.

e. **Oxygen deficiency** means that concentration of oxygen by volume below which atmosphere supplying respiratory protection must be provided. Oxygen deficiency exists in working environment.

f. **Permissible exposure limit** means the exposure, inhalation or dermal permissible exposure limit specified.

3 **Prohibition relating to pregnant Women and young persons**

No pregnant women or young person shall be permitted or allowed to work in the Collection, processing, sorting, transport, storage and disposal of Hazardous Wastes.

4 **Safety and health program**

(a) The Occupier shall develop and implement a written safety and health program for their workers involved in hazardous waste operations. The program shall be designed to identify, evaluate, and control safety and health hazards.

(b) The safety and health program shall address the safety and health hazards of each phase of operation and include the requirements and procedures for employee protection.

5 **Hazard Prevention and Control**

(a) All suspected conditions that may pose inhalation or skin absorption hazards that are immediately dangerous to life or health (IDLH) or other conditions that may cause death or serious harm shall be identified during the preliminary survey. The identified hazards shall be prevented and controlled, and further evaluated during the detailed survey.

(b) A dedicated, exclusive and sufficient storage area shall be provided and maintained for the intermediate and final storage of hazardous wastes inside the factory premises. The storage area shall be prevented from seepage and leachate hazards.

(c) The hazardous wastes shall be stored only in the designated areas.

(d) Labelling as per the National Standards shall be provided to the storage bins, drums and containers of hazardous wastes.

6 **Personal protective equipment**

Personal protective equipment (PPE) shall be provided and used during entry in accordance with the following requirements:

(a) Personal protective equipment (PPE) shall be selected and used in conformance with National Standards to protect the workers from the hazards.

(b) Positive pressure self-contained breathing apparatus or positive pressure air-line respirators equipped with an escape air supply shall be used when chemical exposure levels present will create a substantial possibility of immediate death, immediate serious illness or injury, or impair the ability to escape.

(c) If positive-pressure self-contained breathing apparatus is not used as part of the entry ensemble, and if respiratory protection is warranted by the potential hazards identified during the preliminary evaluation, an escape self-contained breathing apparatus shall be carried by the workers.

7 **Monitoring**

Monitoring with direct reading instruments for hazardous levels of ionizing radiation and monitoring the air with appropriate direct reading test equipment (i.e., combustible gas meters, detector tubes) for IDLH and other conditions that may cause death or serious harm (combustible or explosive atmospheres, oxygen deficiency, toxic substances) shall be carried out once in every three months.

8 **Risk Prevention and Control**

(a) Once the presence and concentrations of specific hazardous substances and health hazards have been established, the risks associated with these substances shall be identified and accordingly appropriate prevention and control measures shall be implemented. Workers shall be informed of any risks in writing that have been identified.

(b) The information concerning the chemical, physical, and toxicological properties of each substance shall be made available to the workers prior to the commencement of their work activities.

(c) Emergency response procedures shall be laid down for the emergencies related to hazardous wastes.

(d) Food, drinks etc., shall be prohibited in the hazardous wastes storage and handling areas.

9 **Medical examination**

All workers who are or may be exposed to health hazards involving hazardous substances shall be medically examined and certified at least once in a period of every twelve months by the certifying surgeon/factory medical officer.

10 **Engineering controls and work practices**

(a) Engineering controls and work practices shall be instituted to reduce and maintain exposure to or below the permissible exposure limits specified.

(b) Smoking shall be prohibited in the work areas involving hazardous wastes containing flammable and explosive substances.

11 **Handling drums and containers**

(a) Hazardous substances and contaminated liquids, and other residues shall be handled, transported, labelled, and disposed of in a safe manner without causing any risk to the health and safety of the workers.

(b) Damaged drums and containers that cannot be moved without rupture, leakage, or spillage shall be emptied into a sound container using a device classified for the material being transferred.

12 **Material handling equipment**

(a) Material handling equipment used to transfer drums and containers shall be selected, positioned and operated to minimize sources of ignition related to the equipment from igniting vapours released from ruptured drums or containers.

(b) Material handling equipment shall be provided with explosive containment devices or protective shields to protect equipment operators from exploding containers.

(c) Drums and containers shall be identified and classified prior to packaging for shipment.

13 **Decontamination**

(a) Decontamination procedure shall be developed, communicated to workers and implemented before any workers or equipment may enter areas where potential for exposure to hazardous substances exists.

(b) Standard operating procedures shall be developed to minimize worker’s contact with hazardous substances or with equipment that has contacted hazardous substances.

(c) All workers leaving a contaminated area shall be appropriately decontaminated; all contaminated clothing and equipment leaving a contaminated area shall be appropriately disposed-off or decontaminated**.**

(d) All equipment and solvents used for decontamination shall be decontaminated or disposed off by following the established procedures.

(e) Protective clothing and equipment shall be decontaminated, cleaned, laundered, maintained or replaced as needed to maintain their effectiveness.

(f) Workers whose non-impermeable clothing becomes wetted with hazardous substances shall immediately remove that clothing and proceed to shower. The clothing shall be disposed off or decontaminated before it is removed from the work zone.

(g) Showers and change rooms shall be provided outside the contaminated area for the use of workers.

14 **Training**

All the workers exposed to hazardous substances, health hazards, safety hazards and their supervisors and management personnel shall undergo training on safety, health hazards, and they shall also undergo review/refresher training periodically.

15 **Cautionary Notice**

A cautionary notice in the language which majority of the workers employed understand shall be displayed prominently at all the places involving hazardous wastes, depicting hazards, do's and don'ts and safety precautions.

90. Constitution of Site Appraisal Committees (Section 83).- (1) The State Government may, for purposes of advising it to consider applications for grant of permission for the initial location of a factory involving a hazardous process or for the expansion of any such factory, appoint a Site Appraisal Committee consisting of—

(a) the Chief Inspector-cum-Facilitator shall be its Chairman;

(b) a representative of the Haryana State Pollution Control Board.

(c) a representative from Urban Local Bodies Department.

(d) a representative from Town & Country Planning Department;

(e) a representative from Haryana Shahari Vikas Pradhikaran;

(f) a representative from Haryana State Industrial Infrastructure Development Corporation;

(g) a representative from Revenue & Disaster Management Department;

(h) a representative from Health Department;

(i) a representative of the department of Forest and Wild Life;

(j) an expert in the field of occupational safety;

(k) an expert in the field of occupational health; and

(l) a scientist having specialized knowledge of the hazardous process which will be involved in the factory,

(2) The Site Appraisal Committee shall examine an application for the establishment of a factory involving hazardous process and make its recommendation to the State Government within a period of thirty days of the receipt of such applications in the prescribed form.

(3) Where any 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.

(4) 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.

91. APPLICATION FOR APPRAISAL OF SITES*[Sections 83].—*

(1) Application for appraisal of sites in respect of the factory involved in hazardous process shall be submitted to the Chairman of the Site Appraisal Committee.

(2) The application for site appraisal alongwith in electronic mode shall be submitted in the Form annexed to this rule. The committee may dispense with furnishing information on any particular item in the Application Form if it considers the same to be not relevant to the application under consideration.

FORMAT OF APPLICATION TO THE SITE APPRAISAL COMMITTEE

1. Name and address of the applicant:

2. Site Ownership Data

Revenue details of site such as Survey No., Plot No., etc.

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 taken.

Whether the proposed site attracts the provisions of Section 3(2) (v) of the Environmental Protection Act, 1986, if so, the nature of the restrictions.

Local authority under whose jurisdiction the site is located.

3. Site Plan

Site Plan with clear identification of boundaries and total area proposed to be occupied and showing details nearby the proposed site—

(a) Historical monument, if any, in the vicinity.

(b) Names of neighboring manufacturing units and human habitats, educational

and training institutions, petrol installations, storage of LPG and other hazardous substances in the vicinity and their distances from the proposed unit.

(c) Water sources (rivers, streams, canals, dams, water filtration plants, etc.) in the vicinity.

(d) Nearest hospitals, fire stations, civil defense stations and police stations and their distances.

(e) High tension electrical transmission lines, pipelines for water, oil, gas or sewerage; railway lines, roads, stations; jetties and other similar installations.

3.2 Details of soil conditions and depth at which hard strata obtained.

3.3 Contour map of the area showing nearby hillocks and difference in levels.

3.4 Plot, plan of the factory showing the entry and exit points, roads within, water drains, etc.

4. Project Report:

A summary of the salient features of the project.

Status of the organization (Government, Semi Government, Public or Private etc.)

Maximum number of person likely to be working in the factory.

Maximum amount of power and water requirements and source of their supply.

Block diagram of the buildings and installations, in the proposed factory.

Details of housing colony, hospital, school and other infrastructural facilities proposed.

5. Organization structure of the proposed manufacturing unit/factory:

Organization diagrams of

—Proposed enterprises in general

—Health, Safety and Environment Protection departmentsand their linkage to Operation and technical departments.

5.2 Proposed Health and Safety Policy.

Area allocated for treatment of waste and effluent.

Percentage outlay on safety, health and environment protection measures.

6. Meteorological data relating to the site:

Average, minimum and maximum of

- Temperature
- Humidity
- Wind velocities during the previous 10 years. Seasonal variations of wind direction.
- Highest water level reached during the floods in the area recorded so far.
- Lightening and seismic data of the area.

7. Communications links:

Availability of telephone/telex/wireless and other communications facilities for outside communication.

Internal communication facilities proposed.

8. Manufacturing process information:

Process flow diagram.

Brief write-up on process and technology.

Critical process parameters such as pressure build up, temperature rise and runaway reactions.

Other external effects critical to the process having safety implications such as ingress of moisture of water, contact with incompatible substances, sudden power failure.

Highlights of the built up safety/pollution control devices or measures/ Incorporated in the manufacturing technology.

9. Information of hazardous materials:

Raw materials, intermediates, products and by-products and their quantities (enclose Material Safety Data Sheet in respect of each hazardous substance).

Main and intermediate storage proposed for raw materials/intermediates/ Products

Transportation methods to be used for materials inflow and outflow, their quantities and likely routes to be followed.

Safety measures proposed for:

—handling of materials;

—internal and external transportation; and

—disposal (packing and forwarding of finished products).

10. Information on dispersal/disposal of wastes and pollutants:

Major pollutants (gas, liquid, solid), their characteristics and quantities average and at peak load).

Quality and quantity of solid wastes generated, method of their treatment and disposal.

Air, water and soil pollution problems anticipated and the proposed measures to control the same including treatment and disposal of effluents.

11. Process hazards information:

Enclose a copy of the report on environmental impact assessment. Enclose a copy of the report on Risk Assessment study.

Published (open or classified) reports, if any on accident situations/ occupational health hazards of similar plants elsewhere (within or outside the country).

12. Information of proposed safety/occupational health measures:

Details of firefighting facilities and minimum quantity of water, $C0_2$ and other firefighting measures needed to meet the emergencies.

Details of in-house medical facilities proposed.

13. Information on emergency preparedness:

Onsite emergency plan.

Proposed arrangements, if any, for mutual aid scheme with the group of neighboring factories.

14. 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.

Name and Signature of the applicant.

92. Compulsory Disclosure of information by occupier (Section 84)

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

i. Requirements of Section 84, 85 and 89 of the Code;

ii. A list of "hazardous processes" carried on in the factory;

iii. Location and availability of all Material Safety Data Sheets as per Rules;

iv. Physical and health hazards arising from the exposure to or handling of substances;

v. Measures taken by the occupier to ensure safety and control of physical and health hazards;

vi. Measures to be taken by the workers to ensure safe handling storage and transportation of hazardous operation;

vii. Personal Protective Equipment required to be used by workers employed, in hazardous process or dangerous operation;

viii. Meaning of various labels and marking used on the containers of hazardous substances as provided under Rules;

ix. Signs and symptoms likely to be manifested on exposure to hazardous substance and to whom to report;

x. Measures to be taken by the workers in case of any spillage or leakage of a hazardous substance;

xi. Role of workers vis-a-vis the emergency plan of the factory, in particular the evacuation procedures.

xii. Any other information considered necessary by the occupier to ensure safety and health of workers.

(2) The information required by sub-rule (1) shall be compiled and made known to workers individually through supply of booklets or leaflets and display of cautionary notices at the work places.

(3) The booklets, leaflets and the cautionary notices displayed in the factory shall be in the language understood by the majority of the workers, and also explained to them.

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

b. **Disclosure of information to the local authority**.- The occupier of a factory carrying on a _hazardous process‘ shall intimate the Local Authority heaving Jurisdiction over the area in which the factory situated, all information having a bearing on preparation of onsite emergency plan and a disaster control and management plan in respect of the factory.

Without prejudice to the generality of this clause, the occupier shall furnish the Local Authority the following:

(a) the information furnished to general public as prescribed in Rules;

(b) a statement of the names and quantities generally stored or in process of hazardous substances

(c) a report on status relating to risk assessment and environmental impact assessment and the measures taken for prevention of accidents;

(d) compilation of Material Safety Data Sheets in respect of hazardous substances used, produced or stored in the factory;

(e) a statement on all possible sources of accidents involving fire, explosion, release or leakage of toxic substances and the plan of the premises where such an accident may occur;

(f) a statement on resources and facilities available for dealing with an emergency including any agreement entered into with a neighbouring factory for and assistance in the event of an emergency;

(g) a map of the area showing the approaches to the factory, location of emergency facilities such as hospitals, police, fire service;

(h) the organization of the management and the responsibility for safety indicating therein the persons responsible for on-site emergency action;

(i) details relating to alert system;

(j) Information on availability of antidotes for poisoning resulting from an accident;

(k) Any other information as may be considered relevant by the occupier or asked for by the Local Authority.

c. **Disclosure of information to district emergency authority.-**The occupier of a factory carrying on a _hazardous process‘ shall intimate the District Emergency Authority designated by the State Government, all information having a bearing

on preparation of onsite emergency plan and a disaster control and management plan in respect of the factory. without prejudice to the generality of this clause, the occupier shall furnish the District Emergency Authority the following:

(a) a report on status relating to risk assessment and environmental impact assessment and the measures taken for prevention of accidents;

(b) compilation of Material Safety Data Sheets in respect of hazardous substances used, produced or stored in the factory;

(c) a statement on all possible sources of accidents involving fire, explosion, release or leakage of toxic substances and the plan of the premises where such an accident may occur;

(d) a statement on resources and facilities available for dealing with an emergency including any agreement entered into with a neighbouring factory for and assistance in the event of an emergency;

(e) a map of the area showing the approaches to the factory, location of emergency facilities such as hospitals, police, fire service;

(f) the organisation of the management and the responsibility for safety indicating therein the persons responsible for on-site emergency action;

(g) details relating to alert system;

(h) information on availability of antidotes for poisoning resulting from an accident;

(i) any other information as may be considered relevant by the occupier or asked for by the District Emergency Authority.

d. **Disclosure of information to general public.-** (1) The occupier of every factory carrying on a _hazardous process‘ shall in consultation with the Local

Authority, take appropriate steps to inform the general public who are likely to be in the area which might be affected by an accident. Such information shall include:

(a) Name of the factory and address where situated;

(b) Identification, byname and position, of the person giving the information;

(c) Confirmation that the factory has approval from the Factories Inspectorate and Pollution Control Board;

(d) An explanation in simple terms of the hazardous process(s) 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 minimise 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 from where further information can be obtained:

(2) The occupier shall also supply any further information:

(a) to general public as directed by the Local Authority, from time to time;

(b) to the elected representative of the general public on request.

(3) The occupier shall endeavor to enter an agreement with the Local Authority for the area, within whose jurisdiction the factory is situated, for the Local Authority to take appropriate steps to inform the general public outside the factory who are likely to be affected by an accident as required in sub- rule (1).

(4) The information prescribed in sub -rule (1) shall be in the regional language and in English or Hindi.

e. **Disclosure of information to the chief inspector-cum-facilitator or Inspector-cum-facilitator.-**(1) The occupier of every factory carrying on hazardous process' shall furnish, in writing to the Chief Inspector-cum- Facilitator a copy of all the information furnished to the workers, local authority and general public.

(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) The occupier shall also furnish any other information asked for by the Chief Inspector- cum-Facilitator from time to time for the purpose of this Act and rules made thereunder.

93. Health and safety policy (Section 84).- (1) The occupier of every factory employing more than 50 workers shall prepare a written statement of his policy in respect of health and safety of workers at work.

Provided that *they are not covered under the First Schedule under Section 2(za) or carrying out processes or operations declared to be dangerous under Section 82of the Code.*

(2) Notwithstanding anything contained in sub-rule (1), the Chief Inspector-cum-Facilitator may require the occupiers of any of the factories or class or description of factories to comply with the requirements of sub-rule (1), if in his opinion, it is expedient to do so.

(3) The Health and Safety Policy should contain or deal with:

(a).declared intention and commitment of the top management to health, safety and environment and compliance with all the relevant statutory requirements;

(b) Organizational set-up to carry out the declared policy clearly assigning the responsibility at different levels; and

(c) arrangements for making the policy effective.

(4) In particular, the policy should specify the following:—

(a) arrangements for involving the workers;

(b) Intention of taking into account the health and safety performance of individuals at different levels while considering their career advancement;

(c) fixing the responsibility of the contractors, sub-contractors, transporters and other agencies entering the premises;

(d) providing a resume of health and safety performance of the factory in its annual report;

(e) relevant techniques and methods, such as safety audits and risk assessments for periodical assessment of the status on health, safety and environment and taking all the remedial measures;

(f) stating its intentions to integrate health and safety, in all decisions including those dealing with purchase of plant, equipment, machinery and material as well as selection and placement of personnel;

(g) arrangements for informing, educating and training and retraining its own employees at different levels and the public, wherever required.

(5) A copy of the declared health and safety policy signed by the occupier shall be

made available to the Inspector having jurisdiction over the factory and to the Chief Inspector-cum-Facilitator.

(6) The policy shall be made widely known by—

(a) making copies available to all workers including contract workers, apprentices, transport workers, suppliers, etc.

(b) displaying copies of the policy at conspicuous places; and

(c) any other means of communication in a language understood by majority of workers.

(7) The occupier shall revise the safety policy as often as may be appropriate, but it shall necessarily be revised under the following circumstances:—

(a) whenever any expansion or modification having implications on safety and health of person at work is made; or

(b) whenever new substance(s) or articles are introduced in the manufacturing process having implications on health and safety of persons exposed to such substances.

94. Information on industrial waste (Section 84).-The information furnished under the Rules shall include the quantity of the solid and liquid wastes generated per day, their characteristics and the method of treatment such as incineration of solid wastes, chemical and biological treatment of liquid wastes, and arrangements for their final disposal.

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

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

95. Emergency plan (Section 84).- (1) The occupier of a factory carrying on a "hazardous process" shall prepare a draft on-site emergency plan and submit it to the Chief Inspector-cum-Facilitator. The Chief Inspector-cum-Facilitator may make such modification in the plan as necessary in consultation with the occupier and approve the same.

(2) The occupier will submit a copy of the approved plan to the Inspector-cum-facilitator and District Authority.

(3) The occupier will intimate the workers of the provisions of the emergency plan

and hold rehearsals of the plan periodically. He shall review the plan from time to time and make necessary changes therein under intimation to the Chief Inspector-cum-Facilitator and the District Authority.

(4) The Chief Inspector-cum-Facilitator may issue guidelines relating to formulation of emergency plans. He may also direct modification of the emergency plan in respect of any factory as may be necessary from time to time.

96. Disaster control and management plan (Section 84).- (1) The occupier of every factory carrying on a _hazardous process‘ shall prepare a draft disaster control and management plan in respect of his factory and submit the same to the Chief Inspector- cum-Facilitator, Inspector-cum-facilitator and the District Authority.

(2) The District Authority on receipt of the plan shall hold consultation with the occupier, representatives of the Chief Inspector-cum-Facilitator, the State Pollution Control Board, local authority as well as police, health, fire brigade and authorities concerned and finalise the plan.

(3)The District Authority shall forward a copy of the final plan to the occupier and all authorities concerned. The occupier shall intimate the workers the contents of the plan.

(4) The occupier in consultation with the District Authority will arrange rehearsals of the plan at least once a year.

(5) The Chief Inspector-cum-Facilitator may issue guidelines for formulation of disaster control and management plans. The Chief Inspector-cum-Facilitator as well as the District Authority may after mutual consultation also direct modification of the disaster control and management plan in respect of a factory as may be necessary from time to time.

97. Collection and development and dissemination of information (Section 84).-

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

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

(i) The identity used on the label;

(ii) Hazardous ingredients of the substance;

(iii) Physical and chemical characteristics of the hazardous substance;

(iv) The physical hazards of the hazardous substance including the potential for fire, explosion and reactivity;

(v) The health hazards of the hazardous substance including signs and symptoms of exposure, and any medical conditions which are generally recognized as being aggravated by exposure to the substance;

(vi) The primary route(s) of entry;

(vii) The permissible limits of exposure prescribed under Section 88 of the Code and in respect of a Chemical not covered by the said Schedule, any exposure limit used or recommended by the manufacturer, importer or occupier;

(viii) Any generally applicable precautions for safe handling and use of the hazardous substance which are known, including appropriate hygienic practices, protective measures during repairs and maintenance of contaminated equipment, procedures of 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 to it; and

(xii) The name, address and telephone number of the manufacturer, importer, occupier or other responsible party preparing or distributing the Material Safety Data Sheet, who can provide additional information on the hazardous substance and appropriate emergency procedures, if necessary.

(b) The occupier while obtaining or developing a Material Safety Data Sheet in respect of a hazardous substance shall ensure that the information recorded accurately reflects the scientific evidence used in making the hazard determination. If he becomes newly aware of any significant information regarding the hazards of a substance, or ways to protect against the hazards, this new information shall be added to the Material Safety Data Sheet as soon as practicable,

(2) Every container of a hazardous substance shall be clearly labeled or marked to identify:

(a) the contents of the container;

(b) the name and address of the manufacturer or importer of the hazardous substance;

(c) the physical and health hazards; and

(d) the recommended personal protective equipment needed to work safely with the hazardous substance.

98. Review of the information furnished to workers, etc. (Section 84).- (1) The occupier shall review once in every calendar year and modify, if necessary, the information furnished under the Rules to the workers, general public, local authority, Chief Inspector-cum-Facilitator and the District Emergency Authority.

(2) In the event of any change in the process or operations or methods of work or when any new substance is introduced in the process or in the event of a serious accident taking place, the information so furnished shall be reviewed and modified to the extent necessary.

99. Confidentiality of information (Section 84).- (1) The occupier of the factory carrying on hazardous process shall disclose all information needed for protecting safety and health of the workers and the general public in the neighborhood to:

a. his workers;

b. District Emergency Authority; and

c. Chief Inspector-cum-facilitator.

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 give an opportunity to the occupier of being heard and pass an order on the representation.

An occupier aggrieved by an order of Chief Inspector-cum-Facilitator may prefer an appeal before the Administrative Secretary within a period of 30 days. The Administrative Secretary shall give an opportunity to the occupier of being heard and pass an order. The order of the Administrative Secretary shall be final.

100. Qualifications, etc. Of supervisors (Section 84).- (1) All persons who are required to supervise the handling of hazardous substances shall possess the following qualification and experience:

(a) (i) A Degree in Chemistry or Diploma in Chemical Engineering or

Technology with five years' experience: or

(ii) A Master 's Degree in Chemistry or a Degree in Chemical Engineering or Technology with two years' experience. The experience stipulated above shall be in process operation and maintenance in the chemical industry.

(b) The Chief Inspector may require the supervisor to undergo training in Health and Safety.

(2) The syllabus and duration of the above training and the organizations conducting the training shall be approved by the Director-General, Factory Advice, Service, Labour Institute or the State Government in accordance with the guidelines issued by the Director-General, Factory Advice Service, Labour Institute.

101. Issue of guidelines (Section 84).- For the purpose of compliance with requirements of sections 84 or 85 the Chief Inspector-cum-Facilitator may, if deemed necessary, issue guidelines from time to time to the occupiers of factories carrying on hazardous process. Such guidelines may be based on National Standards, Codes of Practice or recommendations of International Bodies such as International Labour Organization and World Health Organization.

102. Specific responsibility of the occupier in relation to hazardous processes (Section 85)

A. Medical examination.- (1) Workers employed in a hazardous process shall be medically examined by a qualified medical practitioner hereinafter referred to as Factory Medical Practitioner, in the following manner:—

(a) Once before employment, to ascertain physical fitness of the person to do the particular job;

(b) once in a period of 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 Practitioner it is necessary to do so at a shorter interval in respect of any workers;

(c) The details of pre-employment and periodical medical examinations carried out as aforesaid shall be recorded in the Health Register in Form-32

(2) No person shall be employed for the first time without a certificate of fitness in Form-33, granted by the Factory Medical Practitioner. If the Factory Medical Practitioner declares a person unfit for being employed in any process covered under sub-rule (1) such a person shall have the right to appeal to the Inspector

who shall refer the matter to the "**Medical Officer"** whose opinion shall be final in this regard. If the Inspector himself is also a **"Medical Officer"**, he may dispose of the application.

(3) Any findings of the Factory Medical Practitioner revealing any abnormality or un-suitability 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 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 alternate placement unless he is in the opinion of the **"Medical Officer"**, 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 may conduct medical examination of a worker to ascertain the suitability of his employment in a hazardous process or for ascertaining his health status. The opinion of the **"Medical Officer"** in such a case shall be final. The fee required for this medical examination shall be paid by the occupier.

(5) The worker taken away from employment in any process under sub-rule (2) may be employed again in the same process only after obtaining the Fitness Certificate from the "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.

B. Occupational health center.- (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 service and facilities as per scale laid down hereunder:

(a) for factories employing up to 50 workers

(i) the services of a Factory Medical Practitioner on retainer ship basis, in his clinic to be notified by the occupier. He will carry out the pre-employment and periodical medical examination and render medical assistance during any emergency;

(ii) a minimum of 5 persons trained in first-aid procedures amongst whom at least one shall always be available during the working period;

(iii) a fully equipped first-aid box

(2) for factories employing 51 to 200 workers:—

(a) an Occupational Health Centre having room with a minimum floor area of 15 square meters with floors and walls made of smooth and impervious surface and with adequate illumination and ventilation as well as equipment as per the schedule annexed to this rule;

(b) a part-time Factory Medical Practitioner shall be in overall charge of the center who shall visit the factory at least twice in a week and whose services shall be readily available during medical emergencies;

(c) one qualified and trained dresser-cum-compounder on duty throughout the working period;

(d) a fully equipped first-aid box in all the departments;

(3) for factories employing above 200 workers:—

(i) one full-time Factory Medical Practitioner for factories employing up to 500 workers and one more Medical Practitioner for every additional 1,000 workers or part thereof;

(ii) an Occupational Health Centre having at least two rooms each with a minimum floor area of 15 square meters with floor and walls made of smooth and impervious surface and adequate illumination and ventilation as well as equipment as per the schedule annexed to this rule;

(iii) there shall be one nurse, one dresser-cum-compounder and one sweeper-cum-ward boy throughout the working period.

(4) The Factory Medical Practitioner required to be appointed under sub-rule (1) shall have qualifications included in Schedules to the Indian Medical Degree Act, 1916, or in the Schedules to the Indian Medical Council Act, 1956, and possess a certificate of training in Industrial Health of minimum three months duration recognized by State Government:

Provided that—

(b) a person possessing a Diploma in Industrial Health or equivalent shall not be required to possess the certificate of training as aforesaid;

(c) the Chief Inspector-cum-Facilitator may, subject to such conditions as he may specify, grant exemption from the requirement of this sub-rule, if in his

opinion a suitable person possessing the necessary qualification is not available for appointment;

(d) in case of a person who has been working as a Factory Medical Practitioner for a period of not less than three years on the date of commencement of this rule, the Chief Inspector-cum- Facilitator may, subject to the condition that said person shall obtain the aforesaid certificate of training within a period of three years, relax the qualifications.

(5) The syllabus of the course Leading to the above certificate, and the organizations conducting the course shall be approved by the Directorate General of Factory Advice Service and Labour Institutes or the State government in accordance with the guidelines issued by the Directorate-General, Factory Advice Service, Labour Institute.

(6) Within one month of the appointment of a Factory Medical Practitioner, the occupier of the Factory shall furnish to the Chief Inspector-cum-Facilitator the following particulars:—

1. Name and address of the Factory Medical Practitioner;
2. Qualification;
3. Experience, if any; and
4. the sub-rule under which appointed.

Equipment for occupational health Centre in Factories

1. A glazed sink with hot and cold water always available.
2. A table with a smooth top at least 180 cm x 105 cm.
3. Means for sterilizing instrument.
4. A couch.
5. Two buckets or containers with close fitting lids.
6. A kettle and spirit stove or other suitable means of boiling water
7. One bottle of spiritus ammoniac aromatious (120 ml)
8. Two medium size sponges.
9. Two “Kidney” trays.
10. Four cakes of toilet, preferably antiseptic soap.
11. Two glass tumblers and two wine glasses.
12. Two clinical thermometers.
13. Two teaspoons.
14. Two graduated (120 ml) measuring glasses.

15. One wash bottle (100 cc) for washing eyes.
16. One bottle (one liter) carbolic lotion 1 in 20.
17. Three chairs.
18. One screen.
19. One electric hand torch.
20. An adequate supply of tetanus-toxide.
21. Coramine liquid (63 ml)
22. Tablet—Antihistaminic, Antispasmodic (25 each).
23. Syringes with needles—2 cc, 5 cc and 10 cc.
24. Two needle holders, big and small.
25. Suturing needle and materials.
26. One dissecting forceps.
27. One dressing forceps.
28. One scapels.
29. Rubber-bandage—pressure bandage.
30. One stethoscope.
31. Oxygen cylinder with necessary attachments.
32. One Blood Pressure apparatus.
33. One Patellar Hammer.
34. One Peak-Flow Meter for lung function measurement.
35. One Stomach wash set.
36. Any other equipment recommended by the Factory Medical Practitioner according to specific need relating to manufacturing process.
37. In addition—

(i) For factories employing 51 to 200 workers

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

(ii) For factories employing above 200 workers

1. Eight plain wooden splints 900 mm x 100 mmm x 6 mm

2. Eight plain wooden splints 350 mm x 75 mm x 6 mm
3. Four plain wooden splints 250 mm x 50 mm x 12 mm
4. Two pairs artery forceps
5. Injections—morphia, pathadine, atropine adrenaline, coramine, novocam (4 each)
6. Two surgical scissors.

C. Ambulance Van.- (1) In any factory carrying on _hazardous process‘ there shall be provided and maintained in good conditions, a suitably constructed ambulance van equipped with items as per sub-rule (2) and manned by a full-time Driver-cum-Mechanic and a helper trained in first-aid, for the purpose of transportation of serious cases of accidents or sickness. The ambulance van shall not be used for any purpose other than the purpose stipulated herein and will normally be stationed at or near to the Occupation Health Centre:

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

(a) The ambulance should have the following equipments:—

(a) General

—A wheeled stretcher with folding and adjusting devices; with the head of the stretcher capable of being tilted upward;

—Fixed suction unit with equipment;

—Fixed oxygen supply with equipment;

—Pillow with case, Sheets, Blankets, Towels;

—Emesis bag, Bed Pan, Urinal Glass

(b) Safety equipment

—Falres with life of 30 minutes, flood lights;

—Flash-lights, fire extinguisher dry powder type;

—Insulated guantlets

(c) Emergency Care Equipment

(i) Resuscitation

—Portable suction unit, portable oxygen units;

—Bag-valve-mask, hand operated artificial ventilation unit;

—Airways, mouth gag, trachestomy adaptors;

—Short spine board, I.V. Fluids administration unit;

—B.P. Manometer, cuga, stethoscope.

(ii) Immobilisation

—Long and short-padded board, wire Ladder splints.

—Triangular bandage, long and short spine boards.

(iii) Dressings

—Gauze pads 4" x 46", universal dressing 10" x 36"

—Roll of aluminium foils, soft roller bandages 6" x 5 yards, adhesive tape in 3" roll, safety pins;

—Bandage sheets, Burn sheet.

(iv) Poisoning

—Syrup of Ipecae, activated charocal pre-packed in dozes, snake bite kit;

—Drinking water.

(1) Emergency Medicines

—As per requirement (under the advice of **"Medical Officer"** only)

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

(a) fully equipped first aid box;

(b) readily accessible means of water for washing the workers as well as for drenching the clothing of workers who have been contaminated with hazardous and corrosive substance, and such means shall be as per the scale shown in the Table :—

TABLE

S. No.	No. of Person employed at any time	No. of drenching showers
(i)	UP to 50 workers	2
(ii)	Between 51 to 200 workers	2 + 1 for every additional50 or part thereof
(iii)	Between 201 to 500	5+ 1 for every additional 100 or part thereof
(iv)	501 workers and above	8+1 for every additional 200 or part thereof.

(c) a sufficient number or 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.

E. Making Available Health Records to Workers

1. The occupier of every factory carrying out a hazardous process shall make accessible the health records including the record of worker‘s exposure to hazardous process or, as the case maybe, 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 Practitioner or the Medical Officer, as the case may be, is of the opinion that the worker has manifested signs and symptoms of any notifiable disease as specified in the third Schedule of the Act;
   (c) if the worker leaves the employment;
   (d) if any one of the following authorities so direct:
      (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) theDirector,Employees‘StateInsuranceCorporation(Medical Benefits); and
      (vi) the Director-General, Factory Advice Service and Labour Institutes.
2. A copy of the up-to-date health records including the record of worker‘s exposure to hazardous process or, as the case may be, the medical records shall be supplied to the workers 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.

103. Health & Safety Standards for Hazardous Process {Section 86(1)} - The standards and the safety measures for the factories engaged in the Hazardous process shall be specified by the State Government by notification.

104. Permissible limits of exposure of chemicals and toxic substances {Section 88}.- (1) The maximum permissible threshold limits of exposure of chemical of toxic substances a manufacturing process in any factory shall be of the value indicated in the Table.

(2) The State Government may, at any time, for the purpose of giving effect to any scientific proof obtained from specialized institution or experts in the field, by notification in the official gazette, make suitable changes in the said Table.

TABLE					
(See section 88)					
Permissible limits of exposure of chemicals and toxic substances					
		Permissible Limits of exposure			
Serial No.	Substance	Time-weighted average contraction (8 hrs.)		Short-term exposure limit(15 min)*	
		ppm	Mg./mg**	ppm	Mg./m3**
1	2	3	4	5	6
(1)	Acetaldehyde	100	180	150	270
(2)	Acetic acid	10	25	15	37
(3)	Acetone	750	1780	1000	2375
(4)	Acrolin	0.1	0.25	0.3	0.8
(5)	Acrylonitrile-Skin	2	4.5	-	--
(6)	Aldrin-skin	-	0.25	-	--
(7)	Allyl chloride	1	3	2	6
(8)	Ammonia	25	18	35	27
(9)	Aniline-Skin	2	10	-	-
(10)	Anisidine (o-p-isomers) Skin	0.1	0.5	-	-
(11)	Arsenic & soluble compounds	-	0.2	-	-
(12)	Benzene (S.C.)	10	30	-	-
(13)	Beryllium & compound (asBe) (S,C)	-	0.002	-	-
(14)	Borontrifluride - C	1	3	-	-
(15)	Bromine	0.1	0.7	0.3	2
(16)	Butane	800	1900	-	-
(17)	2 - Butanone (Methyl EthylKetene - MEEK)	200	590	300	835
(18)	N-Butyl acetate 150	710	200	950	-
(19)	N-Butylealcohol-Skin- C	50	150	-	-
(20)	Sce/tert, Butly acetate	200	950	-	-
(21)	Butyl mercaptan	0.5	1.5	-	-
(22)	Cadmium Dusts and salts (as	-	0.05	-	-
(23)	Calcium oxide	-	2	-	-

(24)	Carbaryl (Sevin)	-	5	-	-
(25)	Carbofuran (Furadan)	-	0.1	-	-
(26)	Carbon disolphide - Skin	10	30	-	-
(27)	Carbon monoxide	50	55	400	440
(28)	Carbon to tetrachloride-Skin	5	30	-	-
(29)	Chlordane - Skin	-	0.5	-	-
(30)	Chlorine	1	3	3	9
(31)	Chlorobenzene	75	350	-	-
(32)	Chloroform (S.C.)	10	50	-	-
(33)	bis (Chronometry) ether	0.001	0.005	-	-
(34)	Chromic acid and chromates	-	0.05	-	-
(35)	Chromous salts (as Cr)	-	0.05	-	-
(36)	Copper Fume	-	0.2	-	-
(37)	Cotton dust, raw3	-	0.2*	-	-
(38)	Cresol, all isomers-Skin	5	22	-	-
(39)	Cyanides (as CN)-Skin	-	5	-	-
(40)	Cyanogen	-	10	20	-
(41)	DDT (Dichlorodipheny ltrichloroethane)	-	1	-	-
(42)	Dometon-Skin	0.01	0.1	-	-
(43)	Diazinon-Skin	-	0.1	-	-
(44)	Dibutyl phthalate	-	5	-	-
(45)	Dichlorvos (DDVP)-Skin	0.1	1	-	-
(46)	Dieldrin-Skin	-	0.25	-	-
(47)	Dinitrobenzene (all isomers)-	0.15	1	-	-
(48)	Trinitrotoluene-Skin	-	1.5	-	-
(49)	Diphenyl- (Biphenyl)	0.2	1.5	-	-
(50)	Endosulfan (Thiodan)- Skin	-	0.1	-	-
(51)	Endrin-Skin	-	0.1	-	-

(52)	Ethyl acetate	400	1400	-	-
(53)	Ethyl alcohol	1000	1900	-	-
(54)	Ethylamine	10	18	-	-
(55)	Fluorides (as F)	-	2.5	-	-
(56)	Fluorine	1	2	2	4
(57)	Formaldehyde (S.C.)	1.0	1.5	2	3
(58)	Formic acid	5	9	-	-
(59)	Gasoline	300	900	500	1500
(60)	Hydrazine-.Skin (S.C.)	0.1	0.1	-	-
(61)	Hydrogen chloride-C	5	7	-	-
(62)	Hydrogen cyamide-Skin-C	10	10	-	-
(63)	Hydrogen fluoride (as F)-C	3	2.5	-	-
(64)	Hydrogen peroxide	1	1.5	-	-
(65)	Hydrogen sulphide	10	14	15	21
(66)	Iodine-C	0.1	1	-	-
(67)	Iron-Oxide Fume	-	5	-	-
(68)	(F°20)) (as Isoamyl acetate	100	525	-	-
(69)	Isoamyl alcohol	100	360	125	4500
(70)	Isobutyl alcohol	50	150	-	-
(71)	Lead, inorg, dusts and fumes	-	0.15	-	-
(72)	Lindane-Skin	-	0.5	-	-
(73)	Malathion-Skin	-	10	-	-
(74)	Manganese (as Mn) dust andcompounds-C	-	5	-	-
(75)	Manganese fume (as Mn)	-	1	-	3
(76)	Mercury (as Hg)-Skin-				
	(i) Alkyl compounds	-	0.01	-	0.03
	(i All forms i) exceptalkyl vapour	-	0.05	-	-
(77)	Aryl and inorganic	-	0.1	-	-
(78)	Methyl alcohol (Methanol)-Skin	200	260	250	310

(79)	Methyl Cellosolve (2-Methoxyethanol) Skin	5	16	-	-
(80)	Methyl isobutyl ketone	50	205	75	300
(81)	Methyl isocyanate - Skin	0.02	0.05	-	-
(82)	Naphthalene	10	50	15	75
(83)	Nickel carbonyl (as Ni)	0.05	0.35	-	-
(84)	Nitric acid	2	5	4	10
(85)	Nitric oxide	25	30	-	-
(86)	Nitrobenzene-Skin	1	5	-	-
(87)	Nitrogen dioxide	3	6	5	10
(88)	Oil mist-mineral	-	5	-	10
(89)	Ozone	0.1	0.2	0.3	0.6
(90)	Parathion-Skin	-	0.1	-	
(91)	Phenol-Skin	5	19	-	-
(92)	Phorate (Thimet)-Skin	-	0.05	-	0.2
(93)	Phosgene (Carbonyl chloride)	0.1	0.4	-	-
(94)	Phosphine	0.3	0.4	1	1
(95)	Phosphoric acid	-	1	-	3
(96)	Phosphorus (yellow)	-	0.1	-	-
(97)	Phosphorus pentachloride	0.1	1	-	-
(98)	Phosphorus trichloride	0.2	1.5	0.5	3
(99)	Picric acid-Skin	-	0.1	-	0.3
(100)	Pyridine	5	15	-	-
(101)	Silans (Silicon tetrahydride)	5	7	-	-
(102)	Sodium hydroxide -C	-	2	-	-
(103)	Styrene, monomer (phenylethylene)	50	215	100	425
(104)	Sulphur dioxide	2	5	5	10
(105)	Sulphur hexafluoride	1000	6000	-	-
(106)	Sulphuric acid	-	1	-	-
(107)	Tetraethyl lead (as Pb)-Skin	-	0.1	-	-
(108)	Toluene (Toluol)	100	375	150	560
(109)	O - Toluidine - Skin (S.C.)	2	9	-	-

(110)	Tributyphosphate	0.2	2.5	-	-
(111)	Trichloroethylene	50	270	200	1080
(112)	Uranium, natural (as U)	-	0.2	-	0.6
(113)	Vinyl chloride (H.C.)	5	10	-	-
(114)	Welding fumes	-	5	-	-
(115)	Xylene (o-. m-, p-isomers)	100	435	150	655
(116)	Zinc oxide-				
	(i) Fume	-	5.0	-	10
	(ii) Dust (Total dust)	-	10.0	-	-
(117)	Zirconium compounds (as	-	5	-	10
Ppm3	Parts of vapour or gas per million parts of contaminated air by volume at 25.Cand 760 mm of Hg.				
mg/m2	milligrams of substance per cubic meter of air.				
*	Not more than 4 times a day with at least 60 min. interval between successive exposures.				
**	Molecular weight mg/m2= xppm 24.45				
G	denotes ceiling limit.				
Skin	denotes potential contribution to the overall exposure by the cutaneous route including mucous membranes and eye.				
S.C.	denotes suspected human carcinogens.				
H.C.	denotes confirmed human carcinogens.				
Substance	Permissible time-weighted average concentration (TWA) (8 hours)				
Silica, SiO_2					
(a)	Crystalline				
	(i) Quartz				
	(1) $\frac{10600}{\text{In term of dusts count in mpp/cm}}$ % Quartz+10				

	(2)	10 In terms of respirable dust ---------- mg/m3 % respirable quartz+2		
	(3)	10 In terms of total dust mg/ ---------- m3 % Quartz+3		
		(ii)	Cristobalite	Half the limits given against quartz
		(iii)	Triovmite	Half the limits given against quartz
		(iv)	Silica, fused	Same limits as for quartz
		(v)	Tripoli	Same limit as in formula in item (2) given against quartz
(b)	Amorphous Silicate			10mg/m3, Total dust
	Asbestos (H.C.)			*2 fibers/ml, greater than 5 urn in length and less than 3um in breadth
	Portland cement			10 mg/m3, Total dust containing less than1% quartz
	Coal Dust			2 mg/m3, respirable dust fraction containing less than5% quartz

mppcm-Million particles per cubic meter of air based on impinger samples counted by light- field techniques.

*As determined by the membrane-filter method at 400---

450 x megnification (4 mm objective) phase contrast illumination.

Respirable Dust:

Fraction passing a size-selector with the following characteristics:

Aerodynamic Diameter (um) (Unit density sphere)	% passing selector
2	90
2.5	75
3.5	50
5.0	25
10	0

105. Permissible levels of certain chemical substances in work environment (Section 88).- Without prejudice to the requirement in any other provisions in the Act or the Rule the requirement specified in this Schedule shall apply to all factories.

SCHEDULE

REQUIREMENTS TO APPLY TO ALL FACTORIES

1. Definitions:—For the purpose of this Schedule — (a) **"mg/m^3"**means milligrams of a substance per cubic meter of air.

(b) **"mppcm"** means million particles of a substance per cubic meter of air.

(c) **"ppm"** means parts of vapour or gas per million parts of air by volume at 25°C and 760 mm of mercury pressure.

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

$$\text{Time weighted average Concentration} = \frac{C_1T_1 + C_2T_2 + C_nT_n}{T_1 + T_2 + T_n}$$

Where C1 represents the concentration of the substance for duration T1 (in hours);C2 represents the concentration of the substance for duration T2 (in hours); and Cn represents the concentration of the substance for duration Tn (in hours).

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

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

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

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

(b) the time intervals between any two such periods of higher exposure shall

not be less than 60minutes; and

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

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

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

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

i.e. C1 + C2 + …… Cn

L1 L2 Ln should not exceed unity

Where C1, C2 ..... Cn are the time weighted concentration of toxic substances 1,2, and n respectively, determined after measurement at work location;

and L1,L2 ..... Ln are the permissible time weighted average concentration of the toxic substances 1,2, and n respectively.

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

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

3. Sampling and evaluation procedures.- (1) Notwithstanding provisions in any other paragraphs, the sampling and evaluation procedures to be adopted for

checking compliance with the provisions in the schedule shall be as per standard procedures in vogue from time to time.

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

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

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

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

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

Aerodynamic diameter (Unit density sphere)	Percentage allowed by size selector
2.0	90
2.5	75
3.5	50
5.0	25
10.0	0

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

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

5. **Exemption**.- If in respect of any factory or a part of a factory, the Chief Inspector is satisfied that, by virtue of the pattern of working time of the

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

TABLE 1

***PERMISSIBLELEVELSOFCERTAINCHEMICALSUSTANCES IN WORK ENVIRONMENT**

Substance	Permissible Limits of Exposure			
	Time-weighted average		Short term maximum	
	Concentration		Concentration	
	ppm	mg/m^3	ppm	mg/m^3
Acetic acid	10	25	15	37
Acrolin	0.1	0.25	0.2	0.8
Aldrin-skin	-	0.25	0.3	0.75
Ammonia	25	18	35	27
Aniline-skin	2	10	5	20
Anisidine (o-p-isomers) -skin	0.1	0.5	-	-
Arsenic & Compounds (as As)	-	0.2	-	-
Benzene	10	30	-	-
Bromine	0.1	0.7	0.3	2
2. Butane (Methylethyl Ketone-MEK)	200	590	300	885
n-Butyl acetate	150	710	200	950
Sec./tert/Butyl acetate	200	950	250	1190
Cadmium dust and salts (as	-	0.5	-	0.2
Calcium Oxide	-	2	-	-
Carbaryl (Soevin)	-	5	-	10

Carbofuran (Furaden)	-	0.1	-	-
Carbon disulfide-skin	2	60	30	90
Carbon monoxide	50	55	400	440
Carbon tetrachloride-	10	65	20	130
skin				
Carbonyl chloride(phosgene)	0.1	0.4	-	-
Chlordane-skin	-	0.5	-	-
Chlorobenzene	75	350	-	2
Isobutyl alcohol	50	150	75	225
Lead, inorg, fumes and dusts	-	0.15	-	0.45
Lindane-skin	-	0.5	-	1.5
Malathion-skin	-	10	-	-
Manganese fume (as Mn)	-	1	-	3
Mercury (as Hg)	-	0.05	-	0.15
Mercury (alkyl compound-skin(as Hg)	0.001	0.01	0.003	0.03
Methylalcohol (methanol)-	200	260	250	310
Methyl cellosolve- skin (2mathyly ethanol)	25	80	35	120
Methyl isobutyl Ketone- skin	100	410	125	510
Napthalene	10	50	15	75
Nickel Carbonye (as Ni)	0.05	0.35	-	-
Nitric acid	2	5	4	10
Nitric oxide	25	30	35	45
Nitrobenzene-skin	1	5	2	10
Oil-mist-mineral	-	5	-	10
Parathion-skin	-	0.1	0.3	
Phorate (Thimet) skin	-	0.5	-	0.2
Phenol-skin 5	10	10	38	
Phosgene (carbonyl cloride)	0.1	0.4	-	-
Phosphine	0.3	0.4	1	1
Phosphorous (Yellow)	-	0,1	-	0.3

Phosphorus Pentachloride	-	1	3.3	
Phosphorus trichloride	0.5	3	-	-
Picric acid-skin	-	-.1	-	0.3
Pyridine	5	15	10	30
Silane (Silicon Tetrahydride)	0.5	0.7	1	1.5
Styrene-monomer Phenyl-	100	420	125	525
Chlorine	1	3	3	9
Bis-chloromethyl either	0.001	-	-	-
Chromic acid and chromates	-	0.05	-	-
Chromium, Sel Chromic	-	0.5	-	-
Chromous Salts (as Cr)	-	0.2	-	-
Copper fume	-	0.2	-	-
Cotton dust, raw	-	0.2	-	0.6
Cresol, all isomers-skin	5	22	-	-
Cyanides (as Cn) skin	-	5	-	-
Cyanogen	10	20	-	-
DDT (Dichloro diphenyl-tricholoro-ethane)	-	1	-	3
Demeton-skin	0.01	0.01	0.03	0.3
Diazion-skin	-	0.01	-	0.3
Dibutyl phthalate	-	5	-	10
Dichlorvos (DDVP) skin	0.1	1	0.3	3
Dieldrin-skin	-	0.25	-	0.75
Dinitrobenzene(all isomer s)	0.15	1	0.5	3
Dinitrobenzene(allis	0.15	1	0.5	3
Dinitrotoluene-skin	-	1.5	-	5
Diphenye	0.2	1.5	0.6	4
Endosulfan (thiodan)- skin	-	0.1	-	0.3
Endrin-skin -	0.1	-	0.3	

Ethyl acetate	400	1000	-	-
Ethyl alcohol	1000	1900	-	-
Ethyl amino	10	18	-	-
Forides (As F)	-	2.5	-	-
Flourine	1	2	2	4
Hydrogen Cynanide- skin	10	11	15	16
Hydrogen sulfide	10	15	15	27
Iron oxide fume (Fe203asFe)	-15	-	10	
Isomyl acetate	100	525	125	655
Isomyl alcohol	100	360	125	450
Aulphur dioxide	5	13	-	-
Sulphuric Acid	-	1	-	-
Toluene (To lust) skin	100	375	150	560
O-Toludine	5	22	10	44
Tricholorethylene	100	535	150	800
Vinyl Chloride	5	10	-	-
Welding fumes (NOC)	-	5	-	-
Xylene (e-m-p-isomers)- skin	100	435	150	655

1. Silica

(a) Crystalline

(i) Quartz

1) In terms of dust count:-

2) In terms of respirable dust:

3) In terms of total dust:

TABLE 2

1060

… .....mppcm

% Quartz+10

10

… mg/m3

% respirable quartz+2

30

… mg/m3

% Quartz+3

Half the limits against quartz

Half the limits given against quartz Same limit as for quartz

705 mppcm

2. Silicate having less than 1% free slica by weight

(a)	Asbestos-fibers longer than 5 microns	
	(i) Amosite	0.5 Fibre/Cubic centimeter.
	(ii) Chrystile	2 fiber/cubic centimeter.
	(iii) Crocidolite	0.2 fiber/cubic centimeter.
(b)	Mica	705 mppcm
(c)	Mineral wool fiber	100 mg/m^3
(d)	Porlite	1060 mppcm
(e)	Portland cement	1060 mppcm
(f)	Soap stone	705 mppcm
(g)	Talc (nonabastiform)	705 mppcm
(h)	Tale (fibrous)	Same limit as for asbestos.
(i)	Tremolite	Same limit as per asbestos.

3. Coal dust

(1)	For air borne dust silicon dioxide by weight.	2 mg/m^3 havinglessthan 5%
(2)	For air borne dust having formula over5% silicon dioxide.	Same limits as prescribed by in item (2) against quarter.

Table-3

PERMISSIBLE LIMIT OF EXPOSURE

Substance	**ppm**	**mg/m^3**
Acetic anhydride	5	20
0-Dichloro Benzene	50	300
Formaldehyde	2	3
Hydrogen Chloride	5	7
Manganese & Compounds (as Mn.)	-	5
Nitroglycerin-skin	0.2	2
Nitrogen dioxide	5	9
Potassium hydroxide	-	2
Sodium hydroxide	-	2
2, 4, 6-Trinitrotoluene (TNT)	-	0.5"

106. Power to make rule to exempt (Section 91)

Persons defined to hold positions of supervision or management or confidential position etc. in a factory.- The following persons in factories shall be deemed to hold positions of supervision or management and to be employed in confidential position:-

(a) (i) Chairman, Managing Director, Director, President, Chief Executive or Senior-Vice President, Vice- President or General Manager;

(ii) Managers, Deputy Managers, Assistant Managers.

(iii) Safety Officers, Welfare officers

(iv) Heads of the Departments

(v) Engineers

(vi) Foremen

(vii) Weaving masters and spinning masters in textile mills.

(viii) Head electricians

(b) any other person who, in the opinion of the Chief Inspector-cum-Facilitator, holds a position of supervision or management.

Provided that a list showing the Names & Designation of all persons referred above shall be maintained in the factory.

PART-VI

Plantation

107. Conservancy.-

(1) There shall be provided separately for males and females in every plantation a sufficient number of latrines and urinals of prescribed types so situated as to be convenient and accessible to workers employed therein.

(2) All latrines and urinals provided under sub-section (1) shall be maintained in a clean and sanitary condition.

108. Drinking water.- In every plantation effective arrangements shall be made by the employer to provide and maintain at convenient places in the plantation, a sufficient supply of potable drinking water for all workers.

109. Crèches.-

(1) In every plantation wherein fifty or more women workers (including women workers employed by any contractor) are employed or were employed on any day of the preceding twelve months, or where the

number of children of women workers (including women workers employed by any contractor) is twenty or more, there shall be provided and maintained by the employer suitable rooms for the use of children of such women workers.

Explanation.- For the purposes of this sub-section ―children‖ means persons who are below the age of six years.

(2) The rooms referred to in sub-section (1) shall.-

(a) Provide adequate accommodation;

(b) Be adequately lighted and ventilated;

(c) Be maintained in a clean and sanitary condition;

(d) Be under the charge of a woman trained in the care of children and infants.

110. Canteen.-

(a) The employer shall provide one or more canteens where fifty or more than fifty workers are ordinarily employed.

(b) The canteens shall have adequate accommodation furniture and other equipment.

(c) The food items served at the canteen shall be depicted on a board alongwith their prices.

(d) A managing Committee to run the canteen shall be constituted and five members representing the workers shall be elected through secret ballot.

111. Housing facilities.- It shall be the duty of every employer to provide and maintain for every worker and his family residing in the plantation necessary housing accommodation.

112. Recreational facilities.- Every employer shall provide recreational facilities for the workers employed and their children.

113. Educational facilities.- Where the children between the ages six and twelve of workers employed in any plantation exceed to twenty five in number the employer shall ensure that educational facilities are provided to the children.

114. Use and handling of hazardous chemicals, Insecticides, pesticides and toxic substances in the Plantation {Section 93(2)}:- The State Government may in consultation with experts, as it deems necessary, by notification provide guidelines for the use and handling of hazardous chemicals, insecticides, pesticides and toxic substances and special safeguards for employment of women or adolescents in using and handling hazardous chemicals and

periodical examination of worker, who is exposed to insecticides, pesticides, chemicals and toxic substances.

115. QUALIFICATIONS, ETC. OF SUPERVISORS {Section 93 (3)}—All persons who are required to supervise the use, handling, storage and transportation of insecticides, chemicals and toxic substances shall possess the following qualification and experience:

(i) He shall be a graduate in Agriculture or in Science or he shall possess a Certificate Course on handling of chemicals and toxic substances conducted by the recognized institutes.

(ii) He should be given training from a designated training Institute; and

(iii) He shall also possess a valid certificate from a recognized institute for giving first aid treatment to workers.

116. Uses, handling, transport and storage of insecticides, pesticides, chemical and toxic substances within the plantation {Section 93 (4)}—

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

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

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

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

(5) Any other Safety measure as may be deemed fit by the State Government from time to time.

117. Periodic medical examination to the workers {Section 93 (5)}—-

(1) Every worker who is engaged in the work of handling, dealing. or spraying or mixing insecticides, chemical and toxic substances shall be medically examined initially at the time of employment and thereafter once in six months in the hospitals notified in this behalf.

(2) The medical examination and tests shall be recorded as per the Form 8.

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

Provide that the employer shall maintain a health record of every worker such as annual medical examination or any other examination when required shall be kept in plantation and every such worker shall have access to such record.

118. Washing, bathing and cloak room facilities {Section 93 (7)}—-

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

(2) Protective clothing and equipment.—

(a) Persons handling insecticides, chemicals and toxic substances during its operation, distribution, mixing, spraying shall be adequately protected with appropriate clothing.

(b) The protective clothing shall be made of materials which prevent or resist the penetration of any form of insecticide, chemical and toxic formulations. The materials shall also be washable so that the toxic elements may be removed after each use.

(c) A complete suit of protective clothing shall consist of the following dresses, namely.—

(i) Protective outer garment with hat.

(ii) Rubber gloves or such other protective gloves extend way up to the fore arm made of materials impermeable to liquids.

(iii) Dust proof goggles.

(iv) Boots.

(v) Reusable cloth masks.

119. Display of Notice indicating hazards of insecticides, pesticides, chemicals and toxic substances {Section 93 (9)}—- Every employer of a plantation shall exhibit the following 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.

(g) 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 X
OFFENCES AND PENALTIES

120. Manner of compounding of offences by the authorized officer {section 114(1)}.- (1) The State Government may appoint by notification an Officer or Officers for the purpose of compounding of offences under sub section of section 114

(2) Any person seeking composition of penalty or offence as prescribed under section 114(1) of the Code shall file an application electronically in Form-36 to the officer appointed under sub- rule(1)

(3) The officer appointed under sub rule (1) shall finalize the compounding amount within 7 days and send a notice electronically for depositing the compounded amount, to the person seeking composition. The person so noticed shall deposit the entire compounding amount by electronic transfer or otherwise, within fifteen days of the receipt of the notice.

(4) The Compounding Officer shall issue a composition certificate after the receipt of composition amount, to such person from whom such amount has been received in satisfaction of the composition notice.

(5) If a person so noticed fails to deposit the composition amount within the one month from the date of issuance of such notice, the prosecution shall be proceeded with before the competent Court.

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

(7) Amount of composition received shall be transferred every month to the Social Security Fund established under Section 115 for the unorganized workers.

(8) Amount of compounding collected and transferred shall be recorded in register to be maintained in Form-37.

CHAPTER-XI

SOCIAL SECURITY FUND

121. Social Security Fund. {Section 115} - The Designated Officer of Haryana State Social Security Board shall maintain record of fund, to be used for welfare of unorganized workers.

(1) Fund administered shall be credited to the Haryana State Social Security Board.

(2) Fund may also be expended on welfare schemes of the Haryana State Social Security Board.

(3) The other sources of fund administered under section 115 of the Code may be;

(a) grant and subsidies to the Board made by the Central or State Government;

(b) all voluntary donations;

(c) any sum borrowed

(d) Employer of every establishment at the time of registration shall be liable to pay Rupees 50 per worker for which registration sought.

CHAPTER-XII

APPEALS

122. Appeal against the order of Inspector-cum-Facilitator in case of Factory (Section 90)

(1) **Appropriate Authority for Appeal.-** The Chief Inspector-cum-Facilitator, Haryana shall be the Appellate Authority for the appeal against any order of Inspector cum Facilitator under Section 90 within 30 days.

(2) Appeal against any order of Chief Inspector-cum-Facilitator shall be made to the Administrative Secretary within 30 days.

(3) **Procedure In Appeals-** (1) An appeal presented under Section 90 shall be in the form of a memorandum setting forth concisely the grounds of objection to the order and shall be accompanied by a copy of the order appealed against. The application for appeal shall be made in the following format:-

FORMAT

Application to Appropriate Authority

a. Name of occupier or manager:

b. Name and Address of factory:

c. Details of grievance:

d. Reasons of claim:

e. Details of documents attached:

Signature of Occupier/Manager

123. **Manner of holding enquiry under sub-section (1) of section 111:** The Chief Inspector-cum-Facilitator shall hold the enquiry and impose penalty in such a manner as may be prescribed under Sub-Section (1) of Section 111.

124. **Form and manner of preferring appeal and the fee to accompany such appeal under sub-section (3) of Section 111.-** (1) The employer aggrieved by the order of enquiry officer, may appeal against such order before the Administrative Secretary within thirty days from the date of receipt by him of such order, electronically or by registered post or by speed post along with fees at the rate of twenty-five percent of penalty imposed to be deposited electronically or otherwise.

2. Where the memorandum of appeal is in order, the appellate authority shall admit the appeal, acknowledge it and intimate admission of such appeal, and shall register the appeal in electronic form or otherwise to be kept for the purpose called the register of appeals.

3. When the appeal has been admitted, the appellate authority shall send the notice of the appeal to the enquiry officer, against whose order the appeal has been preferred and the enquiry officer shall thereupon send the records of the case to the appellate authority online electronically or otherwise**.**

4. On receipt of the appeal, the appellate authority shall send a notice to the appellant to appear before him on such date and time as may be specified in the notice for the hearing of the appeal electronically or by registered post or speed post.

5. If on the date fixed for hearing, the appellant does not appear, the appellate authority may dismiss the appeal for default of appearance of the appellants by sending the copy of the order to the applicant electronically or by registered

post or speed post.

6. Where an appeal has been dismissed, the appellant may apply electronically or by registered post or speed post to the appellate authority for the restoration of the appeal within thirty days from the date of receipt of the order and if the appellate authority is satisfied that the appellant was prevented by sufficient cause from appearing, the appellate authority shall restore the appeal subject to costs at the discretion of the authority.

7. The order of the appellate authority shall be communicated electronically or by registered post or speed post to the appellant and copy thereof shall be sent to the enquiry officer against whose order the appeal has been preferred and shall be disposed of within a period of thirty days from the date of receipt of appeal

CHAPTER-XIII
MISCELLANEOUS

125. Manner of survey on situation relating safety and health as prescribed under sub-section (2) of section 121:- (1) The Chief Inspector-cum-Facilitator, Officer or the Committee so appointed by the State Government to undertake survey in accordance with the provisions of sub-section (2) of section 121, may, at any time during the normal working hours of an establishment, or at any other time as is found by him or the committee to be necessary, after giving notice in writing to the employer or Manager of the establishment or to any other person, who is for the time being, in charge of the establishment, undertake survey relating to safety and health in the establishment and outside.

(2) Employer or Manager or other person shall afford all facilities for such survey, including facilities for the examination and testing of plant and machinery and collection of samples and other data relevant to the survey.

(3) For the purpose of facilitating surveys every employee and person in near vicinity, if so required by the person or persons conducting the survey, present himself to undergo such medical examination as may be considered necessary by such person and furnish all information in his possession and relevant to the survey.

(4) Any time spent by a employee for undergoing medical examination or for furnishing information under sub-paragraph (3) shall be, for the purpose of calculating wages and extra wages for overtime work, deemed to be time during which such employee worked in the establishment.

FORM-1

APPLICATION FOR GRANT OF CERTIFICATE OF COMPETENCY TO A PERSON

[RULE-4 (3)]

1. Name
2. Date of Birth
3. Name of the organization (If not self- employed)
4. Designation
5. Educational qualifications
   (copies of testimonials to be attached)
6. Details of professional experience (In chronological order)

Name of the Organization	Period of Service	Designation	Area of Responsibility

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 code& Rule 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 organization, I will promptly inform the Chief Inspector, cum facilitator

(b) to maintain the facilities in good working order, calibrated periodically as per manufacturer‘s 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 organization for the purposes of being declared as a Competent Person under the Code. I also undertake that I will—

(a) notify the Chief Inspector cum Facilitator in case the competent person leaves our employment;

(b) provide and maintain in good order all facilities at his disposal as mentioned above;

(c) notify the Chief Inspector cum Facilitator any change in the facilities (either addition or deletion).

Signature.....

Designation.....

Date…….. Telephone/Mobile No. .....

Official seal

FORM- 2

APPLICATION FOR GRANT OF CERTIFICATE OF COMPETENCY TO AN INSTITUTION

[RULE- 4 (3)]

1. Name and full address of the organization…….
2. Organization‘s status……...……. (Specify whether Government, Autonomous, Cooperative, Corporate or Private).
3. Whether the organization has been declared as a Competent Person under this or any other statute. If so, give details.
   ……..
   .....
   .....
4. Purpose for which competency certificate is sought (specify section(s) of the Act)
   .....
5. Particulars of persons employed and possessing qualifications and experience as set out in Schedule annexed to sub-rule (1) of Rule 3.

Sr. No.	Name & Designation	Qualification	Experience	Section (s) and the Rules under which competency is sought for

6. Details of facilities (relevant to item 3 above) and arrangements made for their maintenance and periodical 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 manufacturer‘s instructions, or as per National Standards; and

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

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

Place and Date……

Designation……..

FORM-3

FORM OF CERTIFICATE OF COMPETENCY ISSUED TO A PERSON OR AN INSTITUTION

[RULE-4 (3)]

I, ... in exercise of the powers conferred on me under Section 2(L) of the code and the rules made thereunder, hereby recognize …….(name of the institution) Shri…….(Name of the person)employed in…….....…… (Name of organization).....…..…… 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…….of the code and the Rules made thereunder. This certificate is valid from…… to ……

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

(ii) Tests, examinations and inspections shall be carried out in accordance with the provisions of the Code and the Rules made thereunder.

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

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

(v) The institution recognized as a competent person shall keep the Chief Inspector cum Facilitator informed of the names, designations and qualifications of the persons authorized by it to carry out tests, examinations and inspections.

Station Signature of the Chief Inspector cum Facilitator

Date……... Official seal Date

Note: A separate certificate should be issued under each relevant section. A person or an institution may be recognized competent for the purpose of more than one section of the Code.

FORM-4

[See Rule-5(1)]

APPLICATION FOR REGISTRATION FOR EXISTING ESTABLISHMENTS/NEW ESTABLISHMENT/AMENDMENT TO CERTIFICATE OF REGISTRATION

A. Establishment Details.

1. Retrieve details of Establishment through LIN:
2. HUM (Haryana Udhyam Memorandum) number of Establishment:
3. Name of Establishment:
4. Location and Address of the Establishment:
5. 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 alongwith plan approval details	Name and address of the occupier and manager	Maximum number of workers to be employed on any day
1	2	3	4

5 (b) For building and other construction work:

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

6. Ownership Type/Sector:
7. Activity as per National Industrial Classification:
8. Details of Selected NIC Code:
9. Identification of the establishment e-sign/ digital sign of employer/ representative:

B. Details of Employer:-

1. Name & Address of Employer / Occupier / Owner/ Chief Executive etc. :
2. Designation :
3. Father's/ Husband's Name of the Employer :
4. Email Address, Telephone& Mobile No :

C. Manager Details

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

3. Email Address, Telephone& Mobile No :

D. Contractor Details

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

E. Others Details:-

Dated:- Signature/ E-sign/digital sign of employer

Place;-

FORM-5

CERTIFICATE OF REGISTRATION OF ESTABLISHMENT

[See Rule-5(3)]

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 (No.37of 2020) to (Name of the establishment)

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

a. Factory	c. Contract Work
b. Building and Other Construction Works	d. any other work (not covered above)

2. **Detail of Establishment**

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

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

c. Total Number of Contractors and their details:

d. Number of inter-state migrant workers engaged:

3 (a) For factories

Details of the manufacturing process	Full postal address and situation of the factory along with plan approval details	Name and address of the occupier and manager	Maximum number of workers to be Employed on any day
1	2	3	4

3 (b) For building and other construction work

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

4. Amount of registration fee paid
5. Remarks of registering officers

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

Place:

Date:

Conditions of Registration

(1). Every certificate of registration issued shall be subject to the following conditions, namely:

(a) the certificate of registration shall be non-transferable;

(b) the number of workers employed in an establishment directly and contract employees shall not, on any day, exceed the maximum number specified in the certificate of registration; and

(c) Save as provided in these rules, the fees paid for the grant of registration certificate shall be non- refundable.

(2) The employer shall intimate the change, if any, in the number of workers or the conditions of work to the registering officer within 30 days

(3) The employer shall, within thirty days of the commencement and completion of any work, intimate to the Inspector-cum-Facilitator, having jurisdiction in the area where the proposed establishment or as the case may be work is to be executed, intimating the actual date of the commencement or, as the case may be, completion of establishment such work in **Form-7** annexed to these rules electronically.

(4) A copy of the certificate of registration shall be displayed at the conspicuous places at the premises where the work is being carried on.

FORM-6

REGISTER OF ESTABLISHMENT

[See Rule-5(11)]

Sr. No.	Nature of work	Registration No. and Date	Name and Address, location of the establishment registered	Name, Address and Contact Details of Employer	Total number of Workers	Total number of contract Workers	Remarks
1	2	3	4	5	6	7	8
	(a) Factories (b)Building and other Construction work (c) Contract work (d) Interstate Migrant Work (e) Any other work (not covered above)						

FORM-7

NOTICE OF COMMENCEMENT / CESSATION OF ESTABLISHMENT

[See Rule-5(12) and Rule-7]

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

..... dated.....is likely to commence/cessation is likely to be completed with effect from (Date)/.. On (Date)

I/We hereby intimate that the work of establishment having registration No.

In case of cessation of work:

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

Signature of the Employer

To,

The Inspector-cum-Facilitator

FORM-8

HEALTH EXAMINATION

[See Rule-8 and 69(1)]

PART –A

1. Name of employee ……
2. HREX Registration number of Employee ……
3. UAN or ESIC Number of employee ……..…
4. Sex…. …..
5. Date of Birth……..
6. Department & Designation …….
7. Work profile ……..
8. Address of employee ……
9. Name & Address of Establishment …….
10. HUM Number of Establishment ……..……
11. Mobile /Phone ……
12. Email……
13. Medical illness (Current) and under treatment & medication, If any……
14. Nature of Job (furnish more details, if hazardous and work-related viz. Physical, Chemical, Biological, Ergonomic etc) ……

Date: Signature of Employee

PART-B:

15. Medical Test Carried out & Reports to be attached as Annexure. Medical Officer's interpretation/ Opinion of the Tests below (To indicate only if abnormal , referring the attached Test reports) :
    a. Ht. Wt. Chest, Respiratory Rate, Body Mass Index: ……
    b. Vision (Ophthalmologist tests):
        i. Visual Acuity both Right & left eyes …….
        ii. Colour Vision……..
    c. Blood Pressure ……..
    d. Complete Blood Count: ……
    e. Blood Sugar (Fasting/PPBS/HbAC1)…….
    f. Kidney Function Test (KFT)…..……..

g. Lever Function Test……..

h. Lipid profile……..

i. ESR……..

j. Thyroid profile…….

k. X-ray Chest etc……

l. ECG……

m. Others if any…….

16. Final Diagnosis/ Opinion / Treatment if any, advise by qualified medical practitioner ……

17. Does the person have seizure (s) related disorders or difficulties working at Height? If yes, explain the works to be avoided: Yes/No/ NA (Not applicable)

I certify that I have personally examined Mr/Ms….....and he/she is fit for Employment as per his work profile.

Date: Signature of the qualified medical practitioner

SEAL

FORM-9

NOTICE OF ACCIDENT OR DANGEROUS OCCURRENCE

[See Rule-10]

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) Sex:
   (b) Age (at the last birthday):
   (c) Occupation of the injured person:
7. Local E.S.I.C. Office to which the injured person is attached:
8. Date, shift and hour of accident or dangerous occurrence:
9. (a) Hour at which the injured person started work on :
   the day of accident or dangerous occurrence
   (b) whether wages in full or part are payable to him for:
   the day of the accident or dangerous occurrence
10. Cause or nature of accident or dangerous occurrence:
   (a) 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
   (b) State exactly what the injured person was doing at : the time of accident
   or dangerous occurrence
   (c) In your opinion, was the injured person at the time : of accident or
   dangerous occurrence
      (i) acting in contravention of provisions of : any law applicable
      to him; or

(ii) acting in contravention of any orders given by or : on behalf of his employer; or

(iii) acting without instructions from his employer? :

(d) In case reply to (d) (i), (ii) or (iii) is in the affirmative, state : whether the act was done for the purpose of and in connection with the employer‘s trade or business.

11. In case the accident or dangerous occurrence took place while travelling in the employer‘s transport, state whether -

(a) the injured person was travelling as a passenger to : or from his place of works;

(b) the injured person was travelling with the express or : implied permission of his employer;

(c) the transport is being operated by or on behalf of the : employer or some other person by whom it is provided in pursuance of arrangements made with the employer; and

(d) the vehicle is being/not being operated in the ordinary : course of public transport service

12. In case the accident or dangerous occurrence took place while meeting emergency, state-

(a) its nature; and :

(b) whether the injured person at the time of accident or dangerous : occurrence was employed for the purpose of his employer‘s trade or business in or about the premises at which the accident or dangerous occurrence took place.

13. Describe briefly how the accident or dangerous occurrence took place :

14. Names and addresses of witnesses :

1…… 2…….

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

(b) Location of injury (e.g. right leg, left hand, left eye, etc.):

16. (a) If the accident or dangerous occurrence was not fatal, state : whether the injured person was disabled for more than 48 hours

(b) date and hour of return of work :

17. (a) Physician, dispensary or hospital from whom or which the : injured person received or is receiving treatment

(b) Name of dispensary/panel doctor elected by the injured person:

18. (a) Has the injured person died ? :

(b) If so, date of death :

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

Signature and Name and Designation of owner/ employer/manager:

Date of dispatch of report : Place:

agent

FORM-10

NOTICE OF PERIODS OF WORK

[See Rule-32]

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		

On working days

From –

To – From – To – On partial Working Days

From –To –From –To –Date on which this notice is first exhibited:

Signature of manager:

Date :

FORM-11

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

[See Rule-33(a)]

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

Name of the Establishment:

Name of the Employer:

Name of the Owner:

PAN/TAN of the Employer:

Labour Identification Number (LIN):

Sr.no. in Employee Register	Name of the employee	Designation / Department	Work Performed	Duration of Payment of Wages (Monthly / Fortnightly /Weekly/ Daily/ Piece rated)	Wage Period From- To	Total no. of days worked during the period	Total overtime (hours worked or production in case of piece workers)	Rates of wages		
								Basic	DA	Allowances
1	2	3	4	5	6	7	8	9	10	11

Overtime earning	Nature of acts and omissions for which fine imposed with date	Amount of fine imposed	Damage or loss caused to the employer by neglect or default of the employee	Amount of deduction from wages	Total amount of wages paid	Date of Payment	Attendance	
							Date	Signature
12	13	14	15	16	17	18	19	20

FORM-12

REGISTER OF ACCIDENTS AND DANGEROUS OCCURRENCES

[See Rule-33(b)]

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

FORM 13
ANNUAL RETURN
[See Rule-36]
UNIFIED ANNUAL RETURN FORM FOR THE YEAR ENDING

Single Integrated Return to be filed On-line under the Occupational Safety, Health and Working Conditions Code, 2020, the Code on Industrial Relations, 2020, the Code on Social Security , 2020, and the Code on Wages, 2019

Instructions to fill up the Annual Return

(1) This return is to be filled-up and furnished on or before 28th or 29th February every year.

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		
4.	Email ID		
5.	Telephone No.		
6.	Mobile number		
7.	Premise name		
8.	Sub-locality		
9.	District		
10.	State		
11.	Pin code		
12.	Geo Co-ordinates		
B(a).	**Hours of Work in a**		
B(b).	**Number of Shifts**		

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

D. Details of contractors engaged in the Establishment:

Sl. No	Name with LIN 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**	**Instructions for filling**
1.	Whether facility of Canteen provided (as per section 24(v) of OSH Code, 2020)	Tick yes or no in the box	Applicable to all establishments where in hundred or more worker including contract labour were ordinarily employed
2.	Creches (as per section 67 of Code on Social Security Code, 2020 and Section 24 of the OSH Code 2020)	Tick yes or no in the box	Applicable to all establishments where fifty or more workers are employed
3.	Ambulance Room (as per section 24(2)(i) of OSH Code, 2020)	Tick yes or no in the box	Applicable to all the establishments wherein more than five hundred workers are ordinarily employed
4.	Safety Committee (as per Section 22(1) of OSH Code, 2020.	Tick yes or no in the box	Applicable to all establishments employing 150 or more workers / employees and 50 or more workers / employees for the establishments which manufactures store or handle an

			hazardous substance or carry out the hazardous process under the Code.
5.	Qualified Medical Practitioner (as per Section 12 (2) of OSH Code 2020.	No. of Qualified Medical Practitioner appointed.	There is no specification for minimum number of Qualified Medical Practitioner employed in establishment. However, this detail is required to have data on occupational health.

F. The Industrial Relations:						**Instructions for filling**
1.	Is the Works Committee has been functioning. (section 3 of IR Code, 2020)		Yes/No			Industrial establishment in which 100 or more workers are employed
(a)	Date of its constitution.					
2.	Whether the Grievance Redressal Committee constituted (section 4 of IR Code, 2020)		Yes/No			Industrial establishment employing 20 or more workers are employed
3.	Number of Unions in the establishments.					
4.	Whether any negotiation union exist (Section 14 of IR Code, 2020)		Yes/No			
5.	Whether any negotiating council is constituted (Section 14 of IR Code, 2020)		Yes/No			
6.	Number of workers discharged, dismissed, retrenched or whose services were terminated during the year:					
Discharged	**Dismissed**	**Retrenched**	**Terminated or Removed**	**Grand Total**		
7.	**Man-days lost during the year on account of**					
Sl. No.	Reasons	Period / Date	No. of man- days	Loss in term of money		
(a)	Strike					

(b)	Lockout				
8.	**Details of retrenchment / lay off**				
Sl. No.	No. of persons retrenched during the period	Details of payment paid to retrenched employees	No. of workers laid off during the period	No. of man-days lost due to lay-off	

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	

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

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

S N	Total number of accidents by which a person injured is prevented from working for a period of 48 hours or more as per Section 10 of the OSH Code, 2020.	Total number of fatal accidents and names of the deceased as per Section 10 of the OSH Code, 2020.	Total number of Dangerous Occurrences as defined under Section 11 of the OSH Code, 2020	Total number of cases of Notifiable Diseases specified in Third Schedule of the OSH Code, 2020 along with the details of affected persons

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

Sl.	**Accident/Dangerous Occurrence**	**Man days lost**	**Production Lost**

Certified that the tables in prescribed format are duly filled in and information and/ figures given in all the tables are correct to the best of my knowledge.

Signature of Owner/Agent/Manager with seal

Place: Dated:

FORM-14

REGISTER FOR LEAVE WITH WAGES

[See Rule-37]

Part I - Adults

Part II - Adolescents

Establishment: Name of worker:

Department: Father's Name:

Sl. No	Sl. no. in the register of workers	Date of entry into service	Interruptions				
			Sickness and accidents	Authorized Leave	Lock Out or Legal Strike	Involuntary unemployment	Others
1	2	3	4	5	6	7	8

Leave due with effect from	Whether leave not desired during the next 12 months	Date from which the worker is allowed leave	Wages for Leave Paid in	Discharged worker		Remarks
				Date of Discharge	Date & amount of payment made in lieu of leave due	
9	10	11	12	13	14	15

Note:- Separate page shall be allotted to each worker

FORM-15

Muster-Roll

[See Rule 38(1)]

Name and Address of establishment:

Periods of work and rest period (time and coding)

S. No.	Name	Gender	adult/ adolescent register entry number	Whether local or Inter-State Migrant	social security number(UAN/ESI)	O/T hours	weekly-off

FORM-16

Attendance Card

[See Rule 39]

Month:

1 Name and address of the establishment:2 Name of the worker

3 Father`s name

4 Serial number in Adult Workers Register.

5 Designation

Period of Work		
Date	From	To

FORM-17

NOTICE OF INTENTION TO HAVE SAMPLE ANALYSED

[See Rule 42(2)]

Number: date:

To

.....

.....

Take notice that it is intended to have analyzed the sample of* .....whic h has been taken today, the .....day of.....20 .....from *

.....

(Name of the Inspector-cum-Facilitator who orders sampling).

(Seal)

Date .....

FORM-18

REPORT BY LABORATORY

[See Rule 42(7)]

Report No. .....

Date .....

I hereby certify that I ..... Analyst working in.....duly received on the .....day of ..... 20.from .....a sample offor analysis.

The sample was in a condition fit for analysis as reported below.

I further certify that I have analyzed the aforementioned sample on .....and declare that

the result of the analysis to be as follows:

**.....

..

The condition of seals, fastening of samples on receipt was as follows:

Signed this .....day of.....20.....

Address .....

Signature

(laboratory

Analyst)

FORM-19

IMPROVEMENT NOTICE AND PROHIBITION

[See Rule-43(1) and 53(2)]

ORDER PART I

PROHIBITION ORDER

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

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

An inspection of the above named establishment, lifting appliances, loose gears, lifting devices, transport equipment, ladders and staging was made on.

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

CONTRAVENTIONS

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

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

No.

Dated at_____this_____day of 20 _____

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

REQUIREMENTS

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

Sir,

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

Sir,

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

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

To

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

PART - II

Improvement Notice

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

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

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

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

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

Contraventions No. ……Dated ……this day of 20…….. ……

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

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

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

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

To

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

FORM-20

CERTIFICATE OF FITNESS

[See Rule 48(2)]

Certificate Number: date:

1. Name of Adolescent:
2. Father`s Name:
3. Address:
4. Gender:
5. Age:
6. Descriptive marks
7. Remarks

Name and Signature of Medical Officer

FORM-21

REGISTER OF MEDICAL EXAMINATION OF ADOLESCENTS

[See Rule 48(7)]

Sr. No.	Name of Adolescent	Address	Date of examination	Date of deposit of fee	Whether fit or unfit	Signature of adolescent	Signature of medical officer

FORM-22

APPLICATION FOR LICENSE

[See Rule-52(1) and 54]

On Line Application for License/ Renewal of License/Amendment of License (including Common/single license)						
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 license required:						
1. Name of Establishment:						
2. Address of establishment						
(a) Head Office address along with email Id :						
(b) Corporate office address along with email Id:						
3. Telephone Number :						
4. Activity as per National Industrial Classification : (Select all applicable activities given)						
5. Details of selected NIC Code:						
6. Nature of work carried on in main establishment :						
7. Identifier 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 license is required work wise)						
Locations of worksites	Name and nature of works	Activity as per national industrial classification	Date of commencement	Date of completion	Name of Establishments in which contract labour is/proposed to	Name Address ,email id of the Site In charge

					be employed	
1.	2.	3.	4.	5.	6.	7.
5. Maximum number of workmen proposed to be employed on the Establishment on any date:						
6. Amount of License 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 Establishment	Name & Address of establishment	(i) Nature of work carried out in the establishment (ii) Activity as per National Indl. classification	Date of commenced	Permanent establishment or probable date of completion	Maximum number of employees employed/ proposed to be employed	Maximum number of employees employed/ proposed to be employee
1	2	3	4	5	6	7

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

Name of States in which the establishments are situated	Name and nature of each work allotted.	Maximum number of labour will be/is employed	Date of commencement	Permanent establishment or probable date of completion	Maximum number of employees employed / proposed to be employed (category wise i.e. Unskilled, Semi- Skilled, skilled and	Registration number, if obtained, then details thereof

					higher skilled)	
1	2	3	4	5	6	7

Signature of Contractor
(e-sign/DSC)
Note: This is an online application summary applied on Shram Suvidha Portal.
APPLICATION FOR RENEWAL OF LICENCE
1. Licence No. Date :
LIN & PAN
2. Name and address of the establishment:
3. Date of expiry of previous license :
4. Whether the license of the employer/contractor was suspended or revoked:
5. Details of Fees paid: (Enclose e-payment receipt): Amount …. date of payment :
E-sign /digital sign of the employer/contractor date:
APPLICATION FOR AMENDMENT OF LICENCE :
1. License No Date:
2. LIN & PAN
3. Name and address of the establishment:
4. Details for which amendment is sought :
(a). Maximum number of worker presently employed: (If there is increase in the maximum number of workers to be employed, then additional fees/security deposit as per law needs to be deposited:
(b). Details of fees paid through e payment date on which made :
(c). Other details requiring amendment in the license issued (Necessary documents may be uploaded in support of change required)

E-sign /digital sign of the employer/contractor date of application.

FORM-23

PROFORMA OF LICENSE

[See Rule-52(12) and 54]

License No. ---------- Reg. No. ---------- Date of Reg. ----------

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

The.....20...

Issuing Authority

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

AMENDMENTS:

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

FORM-24

REGISTER OF CONTRACTORS

[See Rule-54(3)]

S. No	License number and date	Name and address of the employer	Name and address of the Contractor	Nature activity to be under taken by the contractor	Maximum Workers to be employed on any day	Probable date of commencement	Date of cessation	Details of amendment, if any	Renewed up to
1	2	3	4	5	6	7	8	9	10

FORM-25

EXPERIENCE CERTIFICATE OF CONTRACT EMPLOYEE

[See Rule-61]

To whom so ever concerned
1. Name of contractor/employer*:
2. LIN/PAN No. of the contractor/employer *:
3. Email Id of the contractor /employer *:
4. Mobile No. of the contractor/employer *:
5. Nature and location of work:
6. Name of Principal Employer*:
7. LIN/PAN No. of the Principal Employer :*
8. Email Id of the Principal Employer : *
9. Mobile No. of the Principal Employer :*
10. Name of the worker*:
11. UAN / Aadhaar No.:
12. Mobile No. :
13. Serial Number in the Employee Register :
14. Registration number, date and name of the Board if the building and other construction worker is registered as a beneficiary:
15. Period of Employment:
16. Designation:
Seal and Signature of Contractor
*Please strike off whichever is not applicable.

FORM-26

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

[See Rule-73(4)]

1. Applicant‘s name .....

   Applicant‘s calling in relation to factory .....

   Applicant‘s address .....

2. Full name and postal address of factory .....

   …….....

   .....

   .....

   .....

   .....

   If above or below the ground level them floor on which it is situated……

3. Nature of work carried out in the factory .....

Date ..... Signature (DSC) of the Occupier.....……

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

(a) A flow-chart of the manufacturing process supplemented by a brief description of the process in its various stages.

(b) Plans, in triplicate, drawn to scale, showing:

(i) the site of the factory and immediate surrounding including adjacent building and other structures, roads, drains etc; and

(ii) the plan elevation and necessary cross-sections of the various buildings indicating all relevant details relating to natural lighting, ventilation and means of escape in case of fire. The plans shall also clearly indicate the position of the plant and machinery, aisles and passage-ways; and

(c) Such other particulars as the Chief Inspector may require.

FORM-27

PARTICULARS OF ROOMS IN THE FACTORY

[See Rule-73(4) and 77(3)]

Name and Address of the Factory…….

Name of the Room in Factory			Dimension in feet and inch							
			Height			Area				
	Length (in Feet)	Breadth (in Feet)	Maximum (In Feet)	Minimum (In Feet)	Average (in Feet)	Deductible Area (in square Feet)	Total area (in square Feet)	Floor area occupied by machinery in the room	Breathing space (in cubic Feet)	Total volume of air in the room (in cubic feet)
1	2	3	4	5	6	7	8	9	10	11

Ventilation							
Number and size of the doors/window opening/mechanical ventilation	Number of skylight / openings	Total area (in square feet)	Maximum capacity of the	Maximum number of person intended to be employed in the	Whether room is to be used as work room or any other purpose	Date of construction	Remark

			room	room			
12	**13**	**14**	**15**	**16**	**17**	**18**	**19**

Signature(DSC) of the Occupier……

Questionnaire annexed to form-27

[See Rule-73(4) and 77(3)]

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 plan should be drawn to a minimum scale of 100' = 1" and the other plans drawn to a minimum scale of 10‘=1".

1 (a) Is the Form-28 submitted filled in for all work-rooms, godowns, etc., which are proposed to be constructed or extended?

(b) Is the sectional elevation of each room or shed, etc., shown separately?

(c) Is the minimum height of every room, shed, etc., shown clearly in sectional elevation?

(d) Is the material of which the roof is constructed indicated in the sectional elevation?

(e) Are the position of various machines fitted or proposed to be fitted, shown in the drawings together with their names?

(f) Are the minimum number of persons working or proposed to be working in different rooms, sheds, etc., mentioned in the drawing?

(g) Are all new buildings, parts of buildings or alterations in existing building shown by the boundaries duly marked by a distinctive colour?

2. Form-27 - Is the breathing space of a work room, sheds, etc., calculated as shown in below?

(a) Floor area of a room multiplied by height of the room (the maximum height for calculation, should not exceed 14 feet).

(b) Is the maximum of persons shown, as the lower value of the two calculations as shown below?

(i) Floor area of a room less area occupied by machinery in the room divided by 36.

(ii) Breathing space as in (a) above divided by 500.

(c) Is the window and sky light area provided at the minimum area of 1 sq. ft. to every 15 sq. ft. of floor area of room? (It is recommended that window and sky-light may be provided one opposite another so as to provide best cross-ventilation)

3. Doors—

(a) Is every work-room provided with at least two doors?

(b) Is the minimum size of every door 6' - 6" x 3'-3‖?

(c) Are all the doors opening outwards?

4. Fire escapes.—If any factory building is of more than one storey:

(a) Are two fire-escapes provided on either side of building?

(b) Are the fire-escapes accessible from every room in the building?

(c) Is the material used in construction of the fire-escape non- combustible?

(d) Are the windows or doors giving access to an external staircase arranged to open immediately frominside?

5. Latrines and urinals.—

(a) Are the latrines and urinals provided separately?

(b) Are these sufficient to meet the requirements as prescribed under the code and rules framed thereunder?

(c) Is the minimum distance of the nearest building shown?

(d) Is the minimum distance of the nearest well shown?

(e) Is the surrounding ground up to a distance of 4 feet all round made of impermeable material?

(f) Is the surrounding ground raised to at least six inches above ground level?

(g) Is any latrine, ventilator or opening in the proximity of any opening of main building?

(h) Are these latrines flush-type?

(i) Are all the drains, pipe, sewers for carrying sullage, sewage water, effluent and waste products running in factory premises constructed of impermeable material?

(j) Are the drains of flush-type latrine connected to drainage system of the Local Board?

(k) Is an efficient system of sceptic tanks provided, if no drainage system exists?

(l) Are the latrines provided with roofing?

6. Drinking water.—(a) Is the drinking water provided from a source provided by Local Board? If not, whether the source from which the drinking water is supplied, has been approved by the deputy Chief Medical Officer, Health, or any of the laboratories recognized by the Water Pollution Board, Haryana, or

the State Public Health authorities.

(b) Is any well-constructed in the premises of the factory for drinking water or humidification purpose?

(c) Is the cylinder of the well pucca and impervious to water throughout and up to a depth not less than the lower level of sub-soil water?

(d) Are the positions of water centers shown in the plans?

7. After showing the above details, the plan, site plan, this questionnaire and Form- 28 should be submitted in electronic mode to the Chief Inspector–cum-Facilitator for approval.

8. A certificate of stability signed by a person having the qualifications laid down under Rules shall be submitted on Form-29, before the manufacturing process with the aid of power is begun in the building.

Signature (DSC) of the occupier……

Date …….

FORM-28

CERTIFICATE OF STABILITY OF A FACTORY OR PART OF A FACTORY

[See Rule-75]

"I hereby declare that I have personally inspected the spot, examined the plans and specifications of the building described below, the heights of the roofs, the actual materials and method used in its construction and the finished building and satisfied that its construction is such that its stability will be satisfactory when used as a factory for the purpose herein declared and the heights of the roofs conform to the heights shown in the plans. The building is structurally sound and that its/their use as a factory/ part of the factory for the manufacture of ..... for which the machinery, plant etc. installed is intended. The building is safe against various loads, forces and effects due to process to be carried out in the factory or due to natural forces.

Description of Building

1. Name and address of the factory
   .....
2. Name of the
   occupier……...
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 the certificate is granted giving reference to Plan No
   ……..

.....

6. Nature of manufacturing process to be carried on in the above room/building
   .....
7. Nature and amount of moving power .....

8. Signature (DSC) .....

9. Date .....

—Note.: The person competent to give the certificate of stability shall possess—

(i) Degree in Civil or Structural Engineering;

(ii) A minimum of 5 years experience in the design or construction or testing or repair of structures;

(iii) Knowledge of non-destructive testing, various codes of practices that are current and the effect of the vibrations and natural forces on the stability of the building; and

(iv) Ability to arrive at a reliable conclusion with regard to the safety of the structure or the building.

(v) Age of competent person shall not be above the age of 60 years and shall be physically fit for the purposed of carrying out the tests, examination and inspection.

Provided that *no person, except in the case of buildings occupied or erected by any Government where a certificate may be granted by an officer not below the rank of Executive Engineer, shall be authorized to sign a certificate of stability if he* is in the full employment of the owner or the builder of the buildings.

“

FORM-29

APPLICATION FOR GRANT OF COMMON LICENSE AS A FACTORY AND/OR INDUSTRIAL PREMISES FOR BEEDI OR CIGAR AND/OR ENGAGEMENT OF CONTRACTOR UNDER OCCUPATIONAL SAFETY, HEALTH AND WORKING CONDITIONS CODE, 2020.

FOR THE YEAR……

[See Rule-67(2), 70(2), 80(1), 82(2) and 83(2)]

1. Application for license as a factory and/or for engagement of contractor and/or industrial premises for beedi and cigar work: ……..…….
2. Full name of the establishment: ……..
3. Postal address the establishment: ……
4. Registration Number provided under section 3: ……Date……..…….
5. Haryana Udhyam Memorandum (HUM) number: ……..
6. Details of Employer:-

(a) Name ……

(b) Permanent address …….

(c) Local address …….

(d) Email …….

(e) Mobile number …….

7. Full name and address of the owner of the Premises or building (including the precincts thereof) referred to in Section 80:…….
8. Nature of manufacturing process/processes carried on in the factory preceding or to be carried on during the next 12 months: ……...……
……

a. Core activities in the factory as per section 2(p):
…….

b. (i) Hazardous process as per section 2(za): …….....

(ii) No. of workers employed or to be employed on hazardous process ……..

c.National Industrial Classification (NIC) code: ……

9. Category of the establishment (Major Accident Hazardous / Hazardous / Non-Hazardous):

……..

10. Names & values of principal products manufactured during the last twelve months:

…….....
.....

11. Sanctioned load/power installed (in KW):……..

12. Details of Workers:-

(a) Maximum number of Workers proposed to be employed:-

i. Directly: Male…...….Female……Transgender……Total…….

ii. Through Contractors: Male…...….Female……Transgender……Total…….

iii. Grand Total (i+ii): Male…...….Female……Transgender……Total……

(b) Maximum Number Workers employed during last calendar year:

i Directly: Male…...….Female……Transgender……Total…….

ii Through Contractors: Male…...….Female……Transgender……Total……...

iii Grand Total (i+ii): Male…...….Female……Transgender……Total……

.

13. Detail of Inter-State Migrant Workers:-

Sr. No.	Name of the native State	Male Workers	Female Workers	Transgender Workers	Total
1.					
2.					

14. Particulars of the contractors:

Sr. No.	Name & address of Contractor	Nature of work in which contract labour is employed	Estimated date of the commencement of contract work	Estimated date of completion of contract work	Detail of Contract workers			
					Male	Female	Transgender	Total
2.								

15. Particulars of Beedi & Cigar Work (if applicable):

(a) Whether the employer is a trade mark holder registered under the Trade and Merchandise Marks Act, 1958 …….

(b) Source of obtaining tobacco …….

(c) Whether the beedies of 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. ……

16. (a). Detail of approval of plans from Chief Inspector-cum-facilitator for site whether for old or new building and for construction or extension:

Sr. No.	Reference no. of approval	Date of approval
1.		
2.		

(**Note: if approved more than one time, give details of all such approvals in the above table**)

b. Detail of arrangement made for the disposal of trade waste and effluents and the name of the authority granting such approval:…….

14. Details of fee paid under Rule 81:

Sr. No	**Particular**	**Amount**	**Transaction/GRN number**	**Date**
a	Factories			
b	Engagement of contract workers			
c	Industrial premises for beedi and cigar work			

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

Digital signature of Employer

FORM-30

LICENSE FOR FACTORY AND/OR BEEDI & CIGAR WORK AND/OR ENGAGING CONTRACT LABOUR UNDER THE OCCUPATIONAL SAFETY, HEALTH AND WORKING CONDITIONS CODE 2020

[See Rule-67(2) and 81(1)]

License number: Date of issue:

A license is granted for factories and/or for engaging contract labour and/or industrial premises for beedi and cigar work for the purpose of The Occupational Safety, Health And Working Conditions Code, 2020 and rules made there under. The details are as under:-

1. Name of Employer: .....
2. Name of the Establishment .....
3. Address of the Establishment .....
4. Registration number and date (under section 3 of the Code) .....
5. Nature of Manufacturing Process .....
6. Maximum number of Workers .....
7. Sanctioned load/power installed (in KW) .....
8. Reference no. of approval of plans Date
9. Detail of contractors: Given in Annexure
10. Detail of fees paid: (i) Amount ……
    (ii) Date ……...
11. Valid upto .....

Name & Digital Signature of issuing authority

This license is being issued subject to the conditions specified below:-

1. The employer shall comply with various provisions as contained under the Occupational Safety, Health and Working Conditions Code, 2020 and rules made there under as amended from time to time.
2. This license will not provide immunity to any provisions of any other Act/Rules/Regulation.
3. If any infringement of the Code remains unnoticed the department reserves the right to suspend the license when such infringement come to its notice after given as opportunity of

being heard and department shall stand indemnified against any claim on this account.

4. The license shall not be exercised by any establishment at any other location.

5. The license shall not be used for any other purpose except the provisions of this Code.

6. The license shall not be transferrable.

ANNEXURE

Sr. No	Name & address of Contractor	Nature of work in which contract labour is employed	Estimated date of the commencement of contract work	Estimated date of completion of contract work	Number of Contract workers

RENEWALS

Date of renewal	Date of expiry	Signature (DSC) of Chief Inspector-cum-Facilitator

AMENDEMENTS

Reasons for Amendment	Date of Amendment	Changed Category	Additional Fees	Signature (DSC) of Chief Inspector- cum-Facilitator

Form-31

Record of outside work

[Rule 72(2)]

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	Remarks
1	2	3	4	5

FORM-32

HEALTH REGISTER
[See Rule-89]
[Schedule – II, III, IV, V, X, XV, XVI, XVII, XX, XXII, XXIV, XXVI, XXIX, XXX, XXXI & XXXVII]

Sr. No	Depart men/ Works	Name of workers	Sex	Age at last birthday	Date of employment in present work	Date of living or transfer(with reasons for discharge or transfer	Nature of job or occupation	Raw- material or by products handled and likely to be exposed to	Date of medical examination and the result thereof Date
1	2	3	4	5	6	7	8	9	10

Signs and symptoms observed during examination	**Nature of tests and results thereof**	**Result: Fit or Unfit** 13	**If declared unfit for work, state period of suspension with reason in detail** 14	**Whether certificate of un- fitness issued to the worker**	**Date on which certified fit to resume duty**	**Signature of Registered Medical Practitioner**
11	**12**			**15**	**16**	**17**

FORM-33

CERTIFICATE OF FITNESS

[Rule-89]

[Schedule – II,VI, X, XII, XV, XVI, XVII, XIX, XXIV, XXVI, XXIX, XXX, XXXI & XXXVII]

1. Serial No……..
2. Date……..... ....
3. Name of Factory…….
4. Process of Department …….
5. Name of Worker……..
6. Father‘s / Husband‘s Name…….
7. Address……
8. Date of Birth or Certified Age……
9. Physical Fitness……
10. Descriptive Marks……
11. Whether certificate granted……
12. Whether declared unfit and certificate refused earlier ……..
13. Reason for……..

(i) Refusal of Certificate…….

(ii) Certificate being revoked……...

I hereby certify that I have personally examined……..son/ daughter of…….residing at…..... who is desirous of being

employed as……the factory M/s…….. and that his age is ornearly as can be ascertained from my examination is… years and that he is, in my opinion, fit / unfit for employment work involving in…… (Name of hazardous / non-hazardous process) as an adult worker. His descriptive marks are:

i. He is fit to be employed

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

iii. He has gone undergone following tests/examination:

Sr. No.	Name of test/examination	remarks

iv. Remarks of Medical Officer……

Signature of Medical Officer

1) The counterfoil should be retained by the Certifying Surgeon and maintained in a bound book or in a file.

2) The paragraph which does not apply may be cancelled.

FORM-34

RETURN FOR THE MONTH ENDING ON……

[See Rule-89(3)]

Name of factory…….....

Full Postal Address……..... District……..

Name of the hazardous process undertaken…….....

Number of workers normally employed during the month	**Numbers of workers employed in the hazardous manufacturing process**	**Hours of work per day and per week**	**Date of examination of the worker engaged in the hazardous manufacturing**	**Name and address of the examining Medical Officer**	**Number of workers examined**	**Number of workers declared fit**	**Number of worker declared unfit with details**	**Details of alternative work given to workers who have been declared unfit**
1	2	3	4	5	6	7	8	9

Signature (DSC) of the Occupier

FORM-35

TEST REPORT (DUST EXTRACTION SYSTEM)

[See Rule-89]

[Schedule –V, XXX & XXXVII]

1. Description of system……

2. Hood

(a) Serial No. of hood…….

(b) Contaminant captured……

(c) Capture velocities…….. (points to be specified).

Design value…….. Actual value……

(d) Volume exhausted at hood……

(e) Hood static pressure……..

3. Total pressure drop at:

(a) Joints……

(b) Other points of system (to be specified)…….

4. Transport velocity in duct at points along ducts (to be specified).

5. Air Cleaning Device……

(a) Type used……

(b) Velocity at inlet……..

(c) Static Pressure at inlet…….

(d) Velocity at outlet……

(e) Static pressure at outlet…….

6. Fan:

(a) Type used……

(b) Volume handled……

(c) Static pressure……..

(d) Pressure drop at outlet of fan……..

7. Fan Motor:

(a) Type……

(b) Speed and horse power……

8. Particulars of defects, if any, disclosed during test in any of the above components……

I certify that on this…… day of .....the above extraction system was thoroughly cleaned and (so far as its construction permits) made accessible for thorough examination. I further certify that on the said date, I thoroughly examined the above dust extraction system including components and fittings and that the above is true report of any examination.

Signature…… Qualifications……..….

Address…….

If employed by a company or association, give name and address.

FORM-36

APPLICATION UNDER SUB-SECTION (1) OF SECTION 114 FOR COMPOSITION OF OFFENCE

[See Rule-120(2)]

To,

The Compounding Officer-cum-

.....

.....

1. Name of applicant ……..
2. Father‘s / Husband‘s name of the applicant…….….
3. Address of the applicant ……..…….
4. Name and Address of establishment in relation to applicant.....
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 first offence or the applicant had committed any other offence prior to the offence, if had committed, then, full detail of the offence

   ……

   ……

   ……
10. Any other information which the applicant desires to provide

    ……

    ……

    ……

Applicant

(Name and signature) Dated:

FORM-37

COMPOUNDING/COMPOSITION REGISTER

[See Rule-120(8)]

Office of .....(Address of office)

For the month of..... (Name of month with year)

S.N	Name and address of person of whom offence compounded	Name and address of establishment in relation to person of whom offence compounded	Date and number of reference of composition/ compounding	Offences which are compounded	Amount of penalty	Date of deposit	Whether appeal preferred	Signature of officer	Remarks
1	2	3	4	5	6	7	8	9	10

(a) Total penalty collected at the end of month:

(b) Details of transfer of amount to fund:

(i) Date:

(ii) Amount:

(iii) Bank details of transfer:

Signature and seal of Competent Officer

12593—C.S.—H.G.P., Pkl.