Office of the Labour Commissioner, Uttarakhand, Shram Bhawan, Nainital Road, Haldwani

Letter No.: 13 46 4-122/2018-19 The Occupational Safety, Health & Working Conditions Code,2020

Date: 2/3/2021

The following draft rules, which the Central Government proposed to make in exercise of powers conferred by Sections 133 of the Occupational Safety, Health and Working Conditions Code, 2020 (37 of 2020) read with section 24 of General Clauses Act, 1897(10 of 1897) and in supersession of the-

- 1- The Uttarakhand (U.P. Factories Rules, 1950) Adaption and Modification order, 2002;
- 2- The Uttarakhand (U.P. Factories Welfare Officers Rules, 1955) Adaption and Modification order, 2002
- 3- The Uttarakhand (U.P. Factories Safety Officers Rules, 1984) Adaption and Modification order, 2002
- 4- The Uttarakhand (U.P. Factories Control of Industrial Major Accident Hazards Rules, 1996) Adaption and Modification order, 2002
- 5- The Uttarakhand (U.P. Contract Labour (Regulation and Abolition rules, 1975) Adaption and Modification order, 2002;
- 6- The Uttarakhand (U.P. Inter-State Migrant Workmen Regulation of Employment and Conditions of Service, Rules, 1983) Adaption and Modification order, 2002.
- 7- The Uttarakhand Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Rules,2005

except as respects things done or omitted to be done before such supersession, are hereby published as required by Section 137 of the above code for information of all persons likely to be affected thereby and notice is hereby given that the said draft rules will be taken into consideration after the expiry of a period of 45 days from the date on which the copies of these draft rules are made available to the public electronically or otherwise.

Objections and suggestions, if any, may be addressed to The Labour Commissioner, Shram Bhawan, Nainital Road, Haldwani Uttarakhand, through registered post or through E.mail on lcukhld0@gmail.com. The objections and suggestions should be sent in a proforma containing columns (1) specifying the name and address of the persons and organizations and column (2) specifying the chapter and rule or sub-rule which is proposed to be modified and column (3) specifying the revised rule or sub-rule proposed to be submitted and column (4) reasons therefor;

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

(Deepti Singh)

Labour Commissioner, Uttarakhand

Uttarakhand Occupational Safety, Health and Working Conditions Rules, 2021

Chapter I

PRELIMINARY

1. Short title, extent and commencement.-

- i. These rules may be called the Uttarakhand Occupational Safety, Health and Working Conditions Rules, 2021.
- ii. These Rules shall extend to the whole of the Uttarakhand.
- iii. It shall come into force from the date of their publication in Official Gazette.

2. Definitions

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

- i. "Code" means The Occupational Safety, Health and Working Conditions Code, 2021
- ii. "section" means section of the code,
- iii. "building or other construction work" means nothing contrary to the code, in addition to conditions specified in section 2(1)(h) whereon ten or more workers are working, or were working on any day of the preceding twelve months, and also includes an residential building of any individual or group of individuals wherein total cost of such work exceeds rupees fifty lakhs.
- iv. "Major Accident Hazard (MAH) installations" means a factory defined in rule 2(ja) of MSIHC
- v. "state Government" means Government of Uttarakhand,
- vi. "Labour commissioner" means Labour Commissioner of Uttarakhand
- vii. "Chief Inspector-cum-Facilitator" means Chief Inspector-cum-Facilitator of Uttarakhand
- viii. "rule" means Uttarakhand Occupational Safety, Health and working Conditions Rules, 2020
 - ix. "Form" means a form annexed to these rules,
 - x. "Registering Officer" means Chief Inspector-cum-Facilitator or any other registering officer(s) appointed by the state government for the purpose of the rules,
- xi. "Manager" means a person nominated or appointed by the employer of the establishment for the purposes of the Code and rule.
- xii. "Maintained" means maintained in an efficient state, in efficient working order and in good repair.
- xiii. "Electronically" means i) legible colored scanned document or Form of original one or digitally signed soft copy to the official email address of concerned office or to the state government web portal as the case may be , if it is to be sent, or submittedor necessary details are filled and requisite documents are uploaded in state government web portal ,as required in it. or
 - ii) efficient and authentic pay roll software so that the requisite information can be seen in a systematic manner in case of maintaining attendance register, muster roll, leave

- register, overtime register or wage register. Or
- iii) Downloading from the official web portal of state government by the applicant or by the government official for registration or licensing by a registering officer, or
- iv) Any other method or means which state government may specify in his general or special order if it becomes expedient.
- xiv. "Worker "using the power under section 133 of the Code for the Uttarakhand worker will mean employees for these rules.
- xv. "Apprentice" means an apprentice as defined under clause (aa) of section 2 of the Apprentices act, 1961.
- xvi. "Other apprentice" means a person who is undergoing any contractual training under a contract with employer other than that of Apprentices Act, 1961.
- xvii. "Quarter" means a period of three consecutive months beginning on the 1st of January, the 1st of April, the 1st of july or the 1st of October.
- xviii. "Workroom" means any place occupied by employees engaged in any manufacturing Process, with or without the aid of power.
- xix. "Qualified Nurse" means a person who possesses a qualification in nursing recognized under the Indian Nursing Council Code, 1947, and who is registered with the U. P Nurses and Midwives Council, or otherwise, or a similar registered body of any other State in India.]
- xx. "Hazardous substance" means the Chemicals which are prescribed under rule 2 (e) as per Schedule 1, Part-1 and Part-2 MSIHC or any other such substances which the state Government or Central Government may notify from time to time.
- xxi. "Establishment" includes factory and building and other construction work
- xxii. "Person" means a man, a women or a human being
- xxiii. "Continuous Process" means a Process in a factory or a part of factory wherein the Processes carried on as declared in scheduled "C"
- xxiv. All other words and expressions used herein in these rules and not defined shall have the meanings respectively assigned to them under the Code.
- xxv. "MSIHC" means The Manufacture, Storage and Import of hazardous Chemicals Rules 1989"

Chapter II

[Section 3]

Registration

3. Registration of certain establishment:

- i. The employer of every establishment shall apply for registration on the official web portal of the State Government by furnishing details of the establishment, ownership, type of building and other construction work or manufacturing Process and other details as specified in Form 01 annexed with the rule. The applicant shall also upload the requisite documents on the official web portal of state government:

 It shall be the responsibility of applicant for the veracity of all the information and uploaded documents on the said portal:
- ii. Any change in the ownership, management or any particular furnished in Registration Form 01 submitted on the said portal, shall be updated by the employer as early as possible but within thirty days of such change:

Provided that in accordance with provisions of Part VII of Chapter XI of the Code for the purpose of the approval of plan and issuing a licence for a factory defined in section 2(1) (w) or section 81, the manner of online application with other requisite Forms, fee and documents is prescribed in Part IV of Chapter IX of the rule.

The applicant shall pay the fee online along with the application

4. Fee shall be paid as specified below –

Number of worker employed in the establishment	Amount of fees in rupees
Ten or more but less than twenty workers*	500.00
twenty or more but less than fifty workers	1500.00
Fifty or more but less than hundred workers	3000.00
hundred or more but less than two hundred workers	4000.00
Two hundred or more but less than five hundred workers	5000.00
five hundred or more workers	10000.00

^{*}Also for an establishment which is factory under section 2(1)(v)(iii)

Where an employer has not submitted his application for registration within sixty days as required under sub-section (1) of section 3, he shall submit the application along with late fee.

The late fee shall be ten percent per annum of the prescribed fee for the category.

5 .Notice for Commencement and Cessation of Operation: [Section 5]

i. The Employer of every establishment shall submit a notice of commencement or cessation of operation of any industry, trade, business, manufacturing or occupation

- electronically to the inspector cum facilitator of the region and registering officer within thirty days from the date of such commencement or cessation.
- ii. The Notice of such Commencement or cessation shall be submitted in Form -02 and Form-2A.

Chapter III

6. Duties of Employer and Employees etc.

Annual Health Examination of Employees of certain establishment.-[Section 6(c)]

1. The employer shall ensure a health examination of every employee who has completed forty five years of age, at least once in every twelve months. The employee who had met an accident resulting in a serious bodily injury shall also be examined so. The employees shall also be medically examined within 15 days of their induction or prior to employment. The expense of such examination shall be born by the employer:

Provided that the employees engaged in hazardous Process or dangerous operations shall be examined after every six month or earlier in accordance with the provisions specifically provided in the code or rule for the same

2. The health examination shall be conducted by a qualified medical practitioner. Records of such annual examination shall be maintained in Form-03 as a Health Register and if the conducted examination is for new employment, it shall be maintained in Form-04 as a Certificate of fitness. Findings of such examination shall be shared with the concerned employee.

The health examination shall include –

- a. Full medical and occupational history,
- b. Clinical examination with particular reference to-
- i) General Physical examination
- (ii) **Vision** it shall include visual acuity and fundoscopy examination.
- (iii) **Hearing** audiometry test, if required
- (iv) **Breathing** –Pulmonary function test or X ray, if required.
- (v) **Spine** Adequately flexible for the job concerned.
- (vi) **General** Mental alertness and stability with good eye, hand and foot coordination.
- (c) Complete blood count test; and any other test or examination which the qualified medical practitioner considers necessary

7. Appointment Letter and Identity Card – [Section 133(1) and Section 6(1)(f)]

- 1)The employer shall issue a letter of appointment to every employee in the establishment on his appointment or prior to commencing his work. The letter of appointment shall include the particulars specified in Form-05:
- (2) The employer shall also ensure the systematic allotment of a distinct number or code for every employee and shall issue an identity card bearing such employee code and other necessary particulars within one month of his appointment:

Provided that such letter and Identity cards may be issued to all the employees within three months of coming into force of this rule.

(3) If the identity card of an employee is damaged or lost, the employer shall issue a new

Identity card to the employee within a month. He may charge rupees Ten to the employee for issuing new one but upto rupees 50 for any subsequent issuance within a calendar year subject to provisions of section 22 of code on wages,2019.

(4) Employer shall also ensure that the contract of training has been made with other apprentices and thereof identity card has been issued within one month.

8. Notice of Accident and Dangerous occurrence - [Section 10 and Section 11].-

- (1) When any accident which results in the death of any person or which results in such bodily injury to any person as is likely to cause his death, or any dangerous occurrence specified in Schedule"A" takes place in a factory, the Manager of the factory shall forthwith send a notice thereof by telephone, special messenger or electronically to the Inspector cum facilitator of Factories and the Chief Inspector-cum-Facilitator.
- (2) When any accident or any dangerous occurrence specified in Schedule "A", which results in the death of any person or which results in such bodily injury to any person as is likely to cause his death, takes place in a factory, notice as mentioned in sub-rule (1) shall also be sent to:—
- (a) the District Magistrate or Sub-Divisional Officer,
- (b) the Officer-in-charge of the nearest police station, and
- (c) the relatives of the injured or deceased person.
- (d) Officer-in-charge in the Regional Labour Office.
- (3) Any notice given as required under sub-rules (1) and (2) shall be confirmed by the Manager of the factory to the authorities mentioned in the above sub-rules within 12 hours of the accident or the dangerous occurrence by sending them a written report in Form 06 in the case of an accident or dangerous occurrence causing death or bodily injury to any person and in Form 06-A in the case of a dangerous occurrence which has not resulted in any bodily injury to any person.
- (4) When any accident or dangerous occurrence specified in Schedule "A" takes place in a case of a dangerous occurrence which has not resulted in any bodily injury to any person. factory and it causes such bodily injury to any person as prevents the persons injured from working for a period of 48 hours or more immediately following the accident or the dangerous occurrence, as the case may be, the Manager of the factory shall send a report thereof to the Inspector cum facilitator of the region as well as to the Chief Inspector-cum-Facilitator in Form No. 06 within 24 hours after the expiry of 48 hours from the time of the accident or the dangerous occurrence:

Provided that if in the case of an accident or dangerous occurrence, death occurs of any person injured by such accident or dangerous occurrence after the notice and reports referred to in the foregoing sub-rules have been sent, the Manager of the factory shall forthwith send a notice thereof by telephone, special messenger or electronically to the authorities and persons mentioned in sub- rules (1) and (2) and also have this information confirmed in writing within 12 hours of the death:

Provided further that, if the period of disability from working for 48 hours or more referred to in sub- rule (4) does not occur immediately following the accident, or the dangerous occurrence but later, or occurs in more than one spell, the reports referred to shall be sent to the Inspector-cum-facilitator of Factories as well as to the Chief Inspector-cum-Facilitator in Form No. 06 within 24 hours immediately following the hour when the actual total period of disability from working results from the accident or the dangerous occurrence becomes 48 hours.

(5) No person shall be allowed to disturb the site at which a fatal accident has occurred or any objects involved in the accident before the arrival of the Inspector-cum-Facilitator, or a police officer, not below the rank of a Sub-Inspector, or without the consent of such officer, provided that such condition may be taken as may be necessary to prevent a further accident or to secure persons from danger.

[section 12]

9. Notice of certain Diseases-

- 1) Where any worker in an establishment contracts any disease specified in third schedule, the manager of the factory shall send a notice electronically or otherwise in Form-07 to Inspector- cum-Facilitator, Chief Inspector-cum-Facilitator and Chief Medical Officer of the district within seven days from the date on which it comes to the knowledge of the employer or manager of the establishment.
- 2) If any qualified medical practitioner attends on a person who is or has been employed in a establishment and who is or is believed by the qualified medical practitioner, to be suffering from any disease specified in the Third Schedule of the Code, he shall forthwith send a report electronically or otherwise to 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 factory in which the patient is or was last employed.

[section 13]

10. Other duties of Employees:

- (1) If an employee comes to know of any unsafe or unhealthy condition in the establishment, he shall report to the employer or manager or safety officer, as soon as practicable, electronically or in writing or telephonically.
- (2)Every employee shall in general, wear or keep with him the identity card provided by the employer during his working hours in the establishment. The employee shall report to the manager, in writing if his identity card is lost or damaged. No employee shall misuse the card.
- **11. Report of Existence of imminent Danger-** If at any time employer or any employee has reasonable apprehension of likelihood of imminent serious personal injury or death or imminent danger to health, he shall take immediate remedial action and sent a report on imminent danger and action taken thereon, electronically or otherwise to the Inspector-cum-Facilitator of Factories.

Chapter-IV

Occupational Safety and Health

12. Constitution, Procedure and Other Matters relating to State Advisory Board-

The State Occupational, Safety and Health advisory board shall consist of :-

- (a) The Principal Secretary/Secretary, Department of Labour ex-officio Chairperson.
- (b) Additional Secretary, Labour– ex-officio Deputy Chairperson.
- (c) The Labour Commissioner/ Chief Inspector-cum-Facilitator,Uttarakhand ex-officio member.
- (d) Additional Labour Commissioner, Uttarakhand Member Secretary,
- (e) Director of fire services, Uttarakhand Government.
- (f) Director of Industries Department of Uttarakhand Government.
- (g) Representative of health services Uttarakhand Government.
- (h) Representative of Uttarakhand State disaster management authority
- (i) Member Secretary, Uttarakhand Pollution Control Board.
- (j) Representative of The Uttarakhand building and other constructions workers welfare Board.
- (k) Four representatives from recognized Trade Unions or Federations as nominated by the State Government.
- (l) Four representatives of employers (Establishment) nominated by the State Government.
- (m) Three eminent persons connected with the field of occupational, safety and health as nominated by State Government.

13. Term of Office.-

- (n) Non-Official members of the Board shall hold office for the period of three year from the date of their nomination.
- (o) Provided State Government may at any time before the expiry of period of term remove any non- official member from his office.
- (p) A non official member may, at any time by a letter addressed to the State Government, resign from his office and his seat shall be deemed vacant from the date of acceptance of his resignation.

14. Disposal of the Business.-

- 1- The board shall meet at least once in one year or as often as necessary to discharge the function as specified in section 16(1) at the time and place fixed by the Chairperson.
- 2- The meeting of the Board shall be called by the member secretary with the prior approval of Chairperson.
- 3- The Chairperson shall preside every meeting of the Board in which he is present and in his absence the meeting shall be presided by the Deputy

Chairman.

- 4- Ordinarily fifteen days notice shall be given to the members of proposed meeting,
- 5- Provided in case of any matter is of urgent importance, a notice of lesser period shall be deemed sufficient.
- 6- No business, which is not on the list of businesses, shall be considered without permission of the chairperson.
- 7- No business shall be transacted at any meeting unless at least six members are present,
- 8- Provided that if at any meeting less than six members are present, the Chairperson may adjourn the meeting to another date informing members present and giving notice to other members that he proposes to dispose of the business at the adjourned meeting whether there is prescribed quorum or not, and thereupon it shall be lawful to dispose the business at the adjourned meeting irrespective of number of members attending the meeting.
- 9- The non-official members of the Board shall be paid travelling allowance and daily allowance for attending the meeting of the Board at such rate as are admissible to lowest of Group "A" Officer of the State Government.
- 10- Every decision taken at the meeting of the Board shall be recorded in a minutes book, which shall be a permanent record
- **15. Function of State OSH Board**. (1) The Board shall be responsible for securing the health, safety welfare of employees in factories and establishments.
 - (2) Without prejudice to the generality of the powers conferred in the foregoing clause the Board shall be responsible for -
 - (a) Minimizing accidents, gas leakage, fire,etc in the factories. For this purpose the board may prescribe the procedure and frequency of inspection , mock drills and enquiry of all serious accidents.
 - b) The board shall review all such accidents in any establishments where five or more persons have died.
 - (c) preparation and submission of the annual report to the Government on the activities of the Board;
 - (d) proper maintenance of accounts;
 - (e) collection of contributions to the fund and other charges;
 - (f) appoint Committees for disposal of the business of the Board or for advice in various matters pertaining to the objects of the Board;
 - (g) hear and deal with the complaints;
 - (h) secure the fulfillment of any contract and agreement entered into;
 - (i) authorize any person to enter into negotiations and execute contract and to rescind and vary all such contracts;
 - (j) open account with the Bank and authorize officers of the Board to operate on them as well as draw, accept, endorse and execute cheques, bills of exchange etc. on behalf of the Board;
 - (k) lay down rules for affixation and safe custody of common seal of the Board;

- (l) invest the fund money and deposits within Nationalized Banks, Government securities or in institutions wholly owned by the Government;
- (m) Delegate from time to time all or any of its powers to the Secretary or any other officer of the Board as may be necessary for the efficient administration of the affairs of the Board.
- **16. Technical Committee or Advisory Committee of State Advisory Board-**The State Government may constitute as many technical committees or advisory committees of State Advisory Board on the recommendation of State Advisory Board to assist the State Government or State Advisory Board in discharge of their functions. The technical committee shall include not less than two officers from directorate of factories. The term, function, procedures and allowances of these committees shall be as determined by the State Government.

[section-18]

17. Occupational safety and health standards

The central government will declare, by notification, standards on occupational safety and health for workplace relating to factories and other establishments.

[section 22(1)]

18. Safety Committee.-

In every establishment:-

- (a) Wherein 250 or more employees are ordinarily employed; or
- (b) which carried on any Process of operation declared to be dangerous under section 82 of the Code; or
- (c) which carried on 'hazardous Process' as defined under section 2(1)(zb) of the Code a Safety Committee shall be constituted.
- 2 The representatives of the management in Safety Committee shall include :
 - (a) The employer shall be the chairman of the safety committee.
 - A senior official, who by his position in the organization can contribute effectively to the functioning of the Committee, ,shall be the Deputy Chairman
 - (b) A Safety Officer, wherein required by the rule, or a responsible person of production department
 - , shall be the Secretary of the Committee.
 - (c) Three representative one each from the production, maintenance and ,purchage departments.
 - (d) six representatives of workers chosen by a general consensus among them or more.
 - (e) 3 The tenure of the Committee shall be two years.
 - (f) 4 Safety Committee shall meet as often as necessary but at least once in every quarter. The minutes of the meeting along with follow-up action plans shall be recorded in a register and shall be produced to the Inspector-cum-Facilitator on demand. A scanned copy thereof shall be sent to the Inspector-cum-Facilitator of Factories electronically or otherwise.
 - (a) Data on accidents as well as data resulting from surveillance of the working environment and of the health of employees exposed to hazardous substances so far as the factory is concerned, provided that the Committee under-takes to use the data on measures to improve the working environment and the health and safety of the

employees.

- 6 Function and duties of the Safety Committee shall include
 - (a) Assisting and cooperating with the management in achieving the aims and objectives outlined in the 'Health and Safety Policy' of the establishment;
 - (b) Dealing with all matters concerning health safety and environment and to arrive at solutions to problems encountered;
 - (c) Creating safety awareness amongst all employees;
 - (d) Undertaking educational, training and promotional activities;
 - (e) Discussing reports on safety, environment and occupational health surveys, safety audits, risk assessment, emergency and disaster management plans and implementation of the recommendations made in the reports;
 - (f) Carrying out health and safety surveys and identify causes of accidents
 - (g) Looking into any complaint made on the likelihood of an imminent danger to the safety and health of the employees and suggesting corrective measures; and
 - (h) Reviewing the implementation of the recommendations made by it.
 - i) To discuss the report of inquiry into accident, dangerous occurrences etc. and make appropriate recommendation;
 - ii) To formulate and implement appropriate safety campaign based on analysis of accidents and dangerous occurrences
 - iii) To serve as a forum for communication on Safety and occupational health matter and
- iv) To discuss the Standard Operating Procedures prepared for different operations. Where owing to the size of the establishment, or any other reason, the functions referred to in sub-rule
- (6) can not be effectively carried out by the Safety Committee, it may establish sub-committees as may be required to assist it:

Provided that in any establishment wherein more than 1000 employees are ordinarily employed not less than two sub-committees shall be formed departmentwise or otherwise and an employee to the rank of departmental head shall be head of the sub-committee . The minutes of meeting shall be shared with the secretary of safety committee.

8. The constitution of safety committee shall be communicated to Inspector-cum-Facilitator of Factories electronically or otherwise.

[section 22(2)]

19. Safety Officers- .-

- 1) In every establishment which is a
 - i) factory wherein Five Hundred or more workers, or
 - ii) Factory carrying on hazardous PROCESS wherein two hundred fifty workers or more
 - building and other construction work wherein two hundred and fifty workers or more are ordinarily employed or:
 - iv) Major Accident Hazard installation irrespective of number of workers therein,
 - v) not less than one safety officer shall be appointed by the employer.

Provided that a). for a factory specified in sub-clause (i), one additional safety officer shall be

appointed if number of workers employed are more than 1000 but not exceeding to 1500. And another safety officer shall be appointed for every additional 1000 workers or part thereof.

- (b). for an establishments specified in sub-clause(ii), one additional safety officer shall be appointed if number of workers employed are more than 500 but not exceeding 750. And another safety officer shall be appointed for every additional 500 workers or part thereof.
- 2. Duties, qualifications and other requirements shall be as set out in schedule B annexed to this rule.

Chapter VII [section 25]

HOURS OF WORK AND ANNUAL LEAVE WITH WAGES

20. Daily and weekly hours:

1) **Daily hours-** No employee shall be required or allowed to work in an establishment for more than eight hours in any day:

Provided that total number of hours of work may be extended upto ten hours in pursuance of provisions of section 27 and rule made thereunder and subject to the conditions prescribed therein.

2) Weekly hours- 1) No employee shall be required or allowed to work in an establishment for more than 48 hours in any week:

Provided that total number of hours of work may be extended upto 60 hours in accordance with the provisions of section 27 and rule made thereunder and subject to the conditions prescribed therein.

- 2) Where, any worker works on the first day and has had a holiday on one of the three days immediately before it, that first day shall, for the purpose of calculating his weekly hours of work, be included in the preceding week.
- 3) Intervals for rest The periods of work of employees in an establishment each day shall be so fixed that no period shall exceed five hours and that no employee shall work for more than five hours before he has had an interval for rest of at half an hour.

[Explanation: interval for rest shall not be compromised owing to extra hours of work.]

4) Spread over- The periods of work of an employee in an establishment shall be so arranged that inclusive of his intervals for rest under sub-rule (3), they shall not spread over more than ten and a half hours in any day:

Provided that in pursuance of provisions of section 27 and rule made thereunder such spread over may be increased upto twelve hours..

[section 26]

21. Weekly holiday-

1) No worker shall be required or allowed to work in an establishment on the first day of the week, (hereinafter referred to as the said day):

unless he has or will have a holiday for a whole day on one of the three days immediately before or after the said day:

provided that the employee shall not work continuously for more than 10 days

Provided that inspector cum facilitator may approve, in writing, any other day as first day of week for any particular area or a class of establishments,

The Manager shall keep record of such substituted holiday under sub-rule (1) and will intimate to Inspector cum facilitator electronically.

- 3) Notwithstanding anything contained in sub rule (1) and sub-rule(2), a factory or a part of factory or a class of factories which comes under the perview of continuous Process factory as set out in Schedule "C" annexed to the rule, are allowed to work on the daily basis and the first day of week for groups of employees may be different for the purpose of weekly holiday.
- 4) Any exemption granted under section 27, shall be subject to the following conditions, namely-
- i) It shall be under the provisions of section 27.
 - ii) worker will be intimated properly that his working on the said day is on overtime, .
- iii) no worker will be deprived of next weekly holiday after such overtime.
 - 5) For the purpose of shift changing of a worker, a holiday of 24 hours shall also be ensured subject to section 28.
 - 6) The manager shall keep record of such overtime in form no. 11 and holiday. He shall produce it on demand or in writing by inspector cum facilitator.
- 7) No substituition will be allowed for next weekly holiday.

[section 27]

22. Overtime:

- 1) an employee may be allowed to work overtime upto 2 hours in any working day subject to the following conditions
 - a) There shall be no overlapping of shifts for such hour of overtime.
 - b) an employee will not be allowed to work on overtime more than 4 days in one stretch in any week.
 - c) Employer shall ensure that such extra hour will not affect the health and safety of worker adversely owing to engagement in Dangerous operations or Hazardous Process.
 - d) for any such overtime, supervision of work , health and safety of workers shall not be compromised.
 - e) the worker shall be intimated in writing or electronically for such hours of overtime before he starts working for such hour.
 - f) the basic criterion for allocation of overtime work will be such that it shall not be for mere production volume increment on a regular basis but to fulfill some

- genuinely urgent work.
- g) the spread over, inclusive of intervals for rest, shall not exceed 12 hours in any one day.
- h) consent of employee shall be taken on quarterly basis and on the day or the day before of overtime work or extra hour. But for a part of factory which engages the worker in such continuous Process or otherwise that absence of consent of the employee may endanger the life of employees or public in the vicinity.
- i) women worker shall not be allowed to work extra hour exceeding 1 hour on any day.
- j) extra hours under rule 20) will not exceed 8 hours with a spread over of 10.5 hours including rest of interval.
 - 2) The spread over shall not exceed 12 hours on any working day of the week including intervals for rest.
 - 3) the total number of hours of work in any week, including overtime, shall not exceed sixty;
 - 4) the total number of hours of overtime shall not exceed 100 for any quarter.
 - 5) In calculating the wages from overtime payment point of view for a worker, the daily wages shall be $1/26^{th}$ of his monthly wages and likewise for fortnightly. For weekly wage period, it shall be 1/6 of the wage.

[section 31]

23. Notice of period of work-

- 1. Notice of period of work for the employees shall be in Form No.08 and it shall be displayed at conspicuous place in the establishment at or near the main entrance. It shall also be kept updated under the provisions of section 31.
- 2. No person shall be allowed to work in an establishment otherwise than in accordance under sub-rule-(1):

Provided that if a person or persons are working on over time, the period of such hour and such workers shall be displayed duly signed by manager at the conspicuous place.

Chapter VIII

MAINTENANCE OF REGISTERS, RECORDS AND RETURNS

24. Maintenance of registers and records

- 1. Employer of every establishment shall maintain the records ,registers, testing cerficates ,examination , Forms , reports , different licences and no objection certificates as prescribed in the code or rules. These shall be readily available within the premises of the establishment.
- 2.Every section, sub-section or department of the establishment shall maintain a Log Book in which the work done by the workers shall be entered by concerned supervisor, engineer or manager on daily basis.
- 3. The wage register for employees and receipts for payment to them shall be in accordance with the provisions of Code on wages, 2019. The wage slip for the payment of overtime shall be separate from that of any wage period payment and over time hours worked by worker shall be mentioned it. The wage period for the payment of overtime work, under the provisions of section 27, shall not be more than that of normal wage period for the concerned

employee.

- 4. **Leave with wages:-** The Employer or Manager shall keep a register for every employee in Form No. 09 hereinafter called the leave with wages register, under the provisions of section 32, which shall be filled weekly or fortnightly or at least once a month:
- 5. Leave Book: (i) The Employer or Manager shall provide each employee with a book in Form No. 10 (hereinafter called the leave book) under the provisions of section 32. The leave books shall be the property of the worker and the Manager or his agent shall not demand it except to make entries of the dates of leave or interruption in service and shall not keep it for more than a week at a time. Workers shall submit the leave book when required by the Manager within three days.
- (ii) If a worker loses his leave book, the Manager shall provide him with another copy on the payment of rupees ten, subject to the provisions of section 21 of code on wages,2019 and shall complete it from his record.
- 6. The employer or manager shall maintain a register for the overtime work of employees under the provision of section 27 and rule no 22 made therein in form no 11.

[Section 33]

25. Register of employees.—

- (i) The manager or employer of every establishment shall maintain a register of an employee when any work is being carried on in the factory, showing—
- (a) the name of each adult worker in the factory;
 - (b) the nature of his work;
 - (c) the group, if any, in which he is included;
 - (d) where his group works on shifts, the relay to which he is allotted;
- (e) such other particulars as may be prescribedii) No employee shall be required or allowed to work in any establishment unless his name and other particulars have been entered in the register of adult workers.
- iii) the register of employees shall be maintained in form no. 12.
- iv) The Employer or manager of every factory shall maintain a register of all accidents and dangerous occurrences, which occur in the factory as prescribed in rule 8 under section 10 and 11 in Form No. 13.
- V) A register for adolescent employees, if any, shall also be maintained separately in form 12.
- vi). Wage slips [section 33(C)]- Every Employee of the establishment shall be provided the wage or salary slip electronically or otherwise within seven days of the end of the wage period or earlier under the time-limit provision of code of wages, 2019.
- **26.**The Employer or Manager of every establishment shall furnish to Inspector-cum-Facilitator of region and any other officer or officers designated by Government the following returns namely:
 - (i) On or before January 15, every year an annual return in the Form No. 14...;

Provided that in the case of a factory in which work is carried on only during a certain season or seasons of the year, the occupier or Manager shall submit the return within 15 days after the close of that season or last of these seasons, as the case may be.

27. Display of notices.-

- 1) In addition to the notices required to be displayed in any establishment by or under this Code or rule, there shall be displayed in every establishment a notice containing such abstracts of this Code, notifications of central government for health, safety and welfare under section 18, 23 and 24 and of rules as may be prescribed and also the name and address of the Inspector-cum- Facilitator of region. Such abstract shall not contain less than 3000 words.
- (2) All notices required by or under this Code to be displayed in a factory shall be in Hindi, English and in language understood by the majority of the employees in the factory, and shall be displayed at some conspicuous and convenient place at or near the main entrance to the factory, and shall be maintained in a clean and legible condition.
- (3) The Chief Inspector-cum-Facilitator may, by order in writing served on the manager of any factory, require that there shall be displayed in the factory any other notice or poster relating to the health, safety or welfare of the employees in the factory.
- (4) Every occupier and manager shall display a painted sign board ,with conspicuous letter written in white or luminous paint of any colour at the main entrance of every factory in such a manner which is visible from outside giving following particulars
- 1. Registration or licence number of the factory.
- 2. Name of the factory
- 3. Address of the factory (giving plot no, locality, street no., pin code etc.)
- 4. Name of the occupier.
- 5. Name of the factory manager.
- **28.Inspection book-** The Manager of every factory shall maintain a bound Inspection Book .The Inspection Book shall be of the size 13"x8 1/2". It shall contain at least 180 sheets. Every fourth sheet thereof shall be serially numbered and the two unnumbered sheets, between each two serially numbered sheets, shall have a vertical perforated straight line on the left-hand side at a margin of 1". Form No. 25, shall be kept posted up to date and Form No. 28, shall be filled in .
- **29.**Employer or occupier shall maintain a Health Register Form No. 3 under the provisions of section 6(ii), section 82, section 85 and rules prescribed therein. He shall also maintain the Certificate of fitness under these sections and rules therein in Form No. 4.
- **30.** Payment of wages if the worker dies.—
- (1) Where a worker dies before he resumes work, the balance of his pay, due for the period of leave with wages not availed of shall be paid to his nominee within one month of the receipt of intimation of the death of the worker.
- (2) Each worker shall submit a nomination in Form No. 16, duly signed by himself or herself and attested by two witnesses. The nomination shall remain in force until it is

revised or cancelled by another nomination.

- (b) All registers, records required to be maintained under the Code and these rules and shall be produced or shown on demand by an Inspector-cum-facilitator or Medical Officer.
- c) All registers, forms, certificates, records required to be maintained under the code and these rules shall be preserved for three years to which they relate, including the records of testing and medical examination of employees. Medical recordsof employees who contracted any notifiable diesese or had been declared unfit or suffered due to any Occupational diesese or accident shall be preserved for Five years.

Chapter IX

INSPECTOR-CUM-FACILITATOR AND AUTHORITY

[Section-34(5)]

31. Qualification for the post of Chief Inspector-cum-Facilitator:--

Labour Commissioner, Uttarakhand will be the Chief Inspector-cum-facilitator.

[section 35]

- 32. Powers of inspector cum facilitators-
- 1) An inspector-cum-facilitator shall for the purposes of the execution of the Code have power to do all or any of the things specified in section 35:

Provided that the powers of the public officers, who do not possess the qualifications as prescribed for the post of Assistant Director of Factories/Boilers in the **Uttarakhand Labour Service (Technical) Rules -2002** as are appointed to inspector-cum-facilitator or additional inspector- cum-facilitator under section 34(9) or otherwise shall not include administration of following provisions of the Code, namely the provisions relating to-

- i) Occupational safety and health (chapter IV)
- ii)Factories (part VII of chapter XI)
- iii)Notice of accidents section 10 and 11 iv)Clause(b) of section 6

Provided further that in case of an inspector cum facilitator who a Medical officer is appointed under section 42 shall have power to carry out such medical examination as may be necessary for the purpose of his duties under the code and he shall also deal with Health register and Certificate of fitness of workers.

- (2) Identification cards:-
- (a) All Inspecting Officers shall if requested, produce an authorised identification card.
- (b) Identification cards would be issued for Medical officers appointed under section 42, by Director of Medical and Health Services or the Labour commissioner. For inspector cum facilitator, the Identification cards would be issued by the Labour Commissioner or the Chief Inspector-cum-Facilitator.
- **33.** Competent person[section **2(1)(l)].**—(1) The Chief Inspector-cum-Facilitator may recognize any person as 'competent person' within such area and for such period as may be specified for the purposes of carrying out tests, examinations and inspections for such buildings, dangerous machinery, hoists and lifts, lifting machines and lifting tackles,

pressure plant, confined space, ventilation system and such other processes 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 schedule "D" 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 also that the 'competent person recognized under this provision shall not be above the age of 65 years and shall be physically fit for the purpose of carrying out the tests, examinations and inspections.

- (2) The Chief Inspector-cum-Facilitator may recognize an institution of repute, having persons possessing qualifications and experience as set out in the Schedule annexed to subrule (1) for the purpose of carrying out tests, examinations and inspections for buildings, dangerous machinery, hoists and lifts, lifting machines and lifting tackles, pressure plant, confined space, ventilation system and such other processes or plant and equipment as are stipulated in the Code and the Rules made thereunder, as a competent person, within such area and for such period as may be specified.
- 3) The Chief Inspector-cum-Facilitator may on receipt of an application in the prescribed form, from a person or an institution intending to be recognised as a 'competent person' for the purposes of the Code and the Rules made thereunder, register such application and within a period of sixty days of the date of receipt of application, reject the application for reasons to be recorded in writing or if satisfied about the competence and facilities available at the disposal of the applicant, recognise the applicant as a 'competent person' and issue a certificate of competency in the prescribed form.
- (4) The Chief Inspector-cum-Facilitator may, after giving an opportunity of being heard to the person recognized as a 'competent person' revoke the certificate issued to him under sub rule(3)--
 - (i) if he has reason to believe that the competent person:
 - (a) has violated any of the conditions stipulated in the certificate;
 - (b) has carried out a test, examination and inspection or has otherwise carried in a manner inconsistent with the intent or the purpose of the Code or the Rules made thereunder; or
 - (c) has omitted to Code 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 machines, lifting tackles, pressure plant or ventilation system, as the case may be which has been certified by a competent person outside the State.

[section 37]

34. Third Party Auditor

- 1- The State Government or Chief Inspector-cum-Facilitator will publish in public to obtain applications from experts with required qualification for the purpose of such start-up establishments or class of establishment to be specified separately by the Government.
- 2- The experts empanelled under sub-section (1), shall,—
 - (a) be assigned the third party audit and certification in a randomized manner, by the appropriate Government through a web-based scheme;
 - (b) carry out the audit and certification in the manner and for the purpose specified in the scheme referred to in sub-section (I);
 - (c) perform such duties as may be specified in such scheme and submit his report to the concerned employer and to the Inspector-cum-Facilitator.
- 3- On the basis of applications received a committee of experts will be formed under the chairmanship of the Labour Commissioner /Chief Inspector-cum-Facilitator.
- 4- The experts empanelled will inspect, advise health and safety provisions to minimize the accidents, perform safety audit, may organize safety training programs and provide certificates to the trainees and may also provide the certificates to concerned establishments.
- 5- The Departmental committee for empanelment of Third Party Auditors will from time to time fix the total number of such Safety Auditors to be recognized depending on the total quantum of work available in the State/UT and also the manner in which applications are to be invited.
- 6-The Chief Inspector-cum-Facilitator may, after giving an opportunity of being heard to the person recognized as a 'Third Party Auditor cum Expert' revoke the certificate issued to him under rule 34.
 - (i) if he has reason to believe that the Third Party Auditor:
- a) has violated any of the conditions stipulated in the recognition;
- b) has carried out a Audit, test, examination and inspection or has otherwise carried in a manner inconsistent with the intent or the purpose of the Code or the Rules made there under; or
- c) has omitted to Code as required under the Code and the Rules made there under; or
 - (ii) for any other reason to be recorded in writing.

7- Academic Qualification and Experience.-

- I. degree in branch of Chemical, Mechanical, Electrical or Production Engineering from recognized institution and having ten years' of experience in manufacturing, maintenance, design, project or safety department in the supervisory or above capacity in factories; or
- II. diploma in branch of Chemical, Mechanical, Electrical, Production Engineering and diploma in industrial safety from recognized institution and having fifteen years' of experience in manufacturing, maintenance, design, project or safety department in the supervisory or above capacity in factories; or degree of Bachelor of Science with Physics and/or Chemistry and diploma in industrial safety from recognized institution and having fifteen years' experience in manufacturing or maintenance or safety Department of any establishment in the supervisory or above capacity in factories, andone year full time Diploma in Industrial Safety recognized by the Board of Technical Education or All India Council of Technical Education or recognized University; or Central or Regional LabourInstitutes.
- III. 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 fifteen years of experience in the DGFASLI or Central Labour Institute or Regional Labour Institutes of DGFASLI.

8- Duties and Responsibilities of Experts

- I. Safety Auditor shall maintain a log book of all safety audits undertaken by him indicating the name and address of the audited establishment, 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.
- II. It shall be scrutinized and approved by jurisdictional officers of the Chief Inspectorcum-Facilitator office.
- III. Safety Auditor and the person authorized to carry out shall not conduct a Safety Audit of any establishment where such auditor or person is employed, or an occupier, partner, director, or manager of that establishment, or of any establishment owned, operated, managed, or conducted by immediate family members, relatives or extended family members or wherein that auditor or such person has any direct or indirect interest whatsoever. An auditor or such person shall not carry out the safety audit of those factories to which that auditor or such person supplies any plant, machinery, raw material, safety equipment or other materials or equipment.
- IV. Safety Auditor and the person authorized to carry out safety audit shall not disclose, even after ceasing to be a recognized auditor or employee of the institution, any manufacturing or commercial secrets or working 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, the auditor shall be liable revocation of recognition under the rule and he shall not be eligible for recognition in future.

- 9- **Standards of Safety Audit.-** The Safety Audit shall be carried out as per the standards laid down under IS: 14489: 1998 in the Indian Standard Code of Practice on Occupational Safety and Health Audit or any such standards prevailing at the relevant time whichever is latest by the Safety Auditor or in case of an institution, by the person or employee possessing the qualification, experience and other requirements as set out in sub-rule (2) as a Safety Auditor.
- 10- **Periodicity for conducting Safety Audit:** The Safety Audit shall be conducted once in every two years in General Category factories & for 2cb and MAH industry Safety audit shall be conducted every year.
- 11- **Safety Audit Report.-** The Safety Auditor shall within one month from the date of completion of safety audit shall forward his report with recommendations regarding improvement of the occupational safety and health in an establishment to the occupier and a copy of the same to be submitted to office of the Chief Inspector-cum-Facilitator.

Provided that if the auditor notices any hazard, which is likely to pose danger of causing an accident, during the safety audit, he shall immediately communicate the same in writing to the Occupier & the jurisdictional Inspector and Chief Inspector-cum-Facilitator.

12- **Compliance report on Audit Report.-** The Occupier shall, within thirty days of the receipt of the Safety Audit report in the format prescribed in Form appended herewith, forward the same to the jurisdictional Inspector along with the action taken report in pursuance to the recommendations made in the Safety Audit Report. The Inspector-cumfacilitator shall send a proposal to the Chief Inspector-cum-Facilitator for approval of Audit Report.

Section 42(1)

35. Medical Officer:-

- (1) The Factory Medical Officer required to be appointed shall have qualifications included in Schedule to the Indian Medical Degrees Code, 1916 or in the Schedule to the Indian Medical Council Code, 1956 and possess a Certificate of Training in Industrial Health of a minimum of three months duration recognised by the State Government Provided that -
 - (i) person possessing a Diploma in Industrial Health or its equivalent shall not be required to possess the certificate of training as aforesaid;
 - (ii) the Chief Inspector-cum-Facilitator may, subject to such conditions as he may specify, grant exemption from the requirement of this sub-rule, if in his opinion a suitable person possessing the necessary qualification is not available for appointment;
 - (iii) in case of a person who has been working as a Factory Medical Officer for a period of not less than three years on the date of commencement of this rule, the Chief Inspector-cum-Facilitator may, subject to the condition that the said person shall obtain the aforesaid certificate of training within a period of three years, relax the qualification.
- (2) The syllabus of the course leading to the above certificate, and the organisations

conducting the course shall be approved by the Directorate General of Factory advice Service and Labour Institutes or the State Government in accordance with the guidelines issued by the Directorate General of Factory Advice Service and Labour Institutes.

- (3) Within one month of the appointment of Factory Medical Officer, the occupier of the Factory shall furnish to the Chief Inspector-cum-Facilitator the following particulars:
- (a) Name and address of the Factory Medical Officer,
- (b) Qualifications,
- (c) Experience, if any, and
- (d) The sub-rule under which appointed.

36. Duties of Medical Officer.—

(1) On receipt of a reference under clause (c) sub section (2) of section 42 of the code, the Medical Officer shall, after giving prior notice regarding date, time and place for medical examination and upon examining the person sent for such examination, prepare the age and fitness certificate and deliver the same to the manager of the mine concerned after retaining a copy thereof.

The medical officer may seek opinion of specialists like radiologist, dentist and orthopaedic surgeon as the case may be, for the purpose of determination of age.

- (2). Medical Officer shall carry out such examination and furnish such report as central government may direct:
 - a) For examination and certification of workers in an establishment in such dangerous occupation or processes as specified in First Schedule annexed to 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 diseases Third Schedule of the code.
 - e) to assess the age and fitness of adolescent for employment in an establishment or class of establishment.

CHAPTER-X

SPECIAL PROVISION RELATING TO EMPLOYMENT OF WOMEN

Section-(43)

37. The women employee may be employed before 06:00 AM and beyond 07:00 PM in any establishment subject to following conditions-

- 1. No woman employee shall be required or allowed to work for more than eight hours in any day nor for more than 48 hours in any week; provided that provisions of section 27 and rule made therein shall remain applicable.
- 2. The factory shall make necessary arrangements at the expense of the transport of women workers from their residence to the factory and back.
- 3. The occupier shall intimate the arrangement proposed by him to the Inspectors cum facilitator of region for verification affording him a minimum period of seven days for such verification.
- 4. No woman worker will be bound to work without her consent before 06:00 AM and after 07:00 PM.
- 5. Employer shall ensure the sufficient supervision during such working hours and journey therof.
- 6. Employer shall ensure the toilets, washrooms and drinking facilities are well lit and near to workplace.

[Section-44]

38. Other Restriction of women employee in dangerous operations-

- 1: No woman worker shall be required or allowed to work in the following processes or part of the process
- a. Electroplating near the bath.
- b. Any lead processes
- c. Metal buffing, Polishing and grinding.
- d. any processes in which hydrochloric acid fumes or ammonia vapours are given off from the following operations-
- (i) evaporation of brine in open pans;
- ii) stoving of salt;
- (iii) work at a furnace where the treatment of zinc is carried on; and
- (iv) the cleaning of workrooms where the Process

mentioned in (iii) is carried on.

- e): in any workroom involving exposure to benzene or substances containing benzene.
- f): Solvent Extraction Plant
- g): dangerous pesticideis
- h): Dying Process

i): for pressing cotton in which a cotton opener is at work

Chapter X1

SPECIAL PROVISIONS FOR CONTRACT LABOUR AND INTER-STATE MIGRANT WORKERS, ETC.

39. Special Provisions for Contract Labour and Inter-State Migrant Workers, etc.

Part I Contract Labour

40. Form and manner of License-

- (1) Every application by a Contractor for grant of license or modification or amendment of the license shall be made electronically in Form "17" on official portal of Government of Uttarakhand.
- 2) Every Application for grant of license or modification or amendment shall be accompanied by a certificate by the employer in Form "18".
- (3) The application shall be accompanied with a declaration of applicant that the information submitted by him for grant of license or modification or amendment is correct in all respect and he qualifies the requirement prescribed in Rule 42.
- (4) Fees to be paid for grant of license shall be as specified below:-Number of workers employed by the contractor in the establishment Amount of fees in rupees

More than fifty but less than hundred workers

500.00 hundred or more but less than two

hundred 1000.00

Two hundred or more but less than five hundred

3000.00 More than five hundred 5000.00

- 5) The Contactor shall deposit the security amount calculated at the rate of Rupees one thousand for each of the Workman to be employed as a contract labour in respect of which application for license has been made
- (6) If application for modification is in respect of increase in the number of contract labour, the additional fees as prescribed in sub-rule (4) and additional security as prescribed in sub-rule (5) shall be deposited by the applicant.
- 36 Matters to be taken into Account in granting or refusing a License- In granting or refusing to grant a license, following matters shall be taken into account:-
- (1) Whether the applicant is a minor, or is of unsound mind and stands so declared by a competent Court, or is an un discharged insolvent, or has been convicted (at any time during a period of five years immediately preceding the date of application) of an offence which, in the opinion of Authority, involves moral turpitude
- (2) Whether there is an order of the State or Central Government or an award or settlement for the abolition of Contract Labour in respect of particular type of work in the establishment for which the applicant is contractor

- 3) Whether any order has been made within three years immediately preceding the date of application any order has been made suspending or revoking license.
- (4) Whether fees for application and security has been deposited at the specified rate.
- **41. Manner of granting license-** If the application for license or modification or amendment is complete in all respect the license shall be granted automatically by the portal,

Provided that if at any time, the information given by contractor in application is found incorrect, the license automatically granted by the portal may be revoked by the licensing authority and fee and security deposit may be forfeited.

- **42.** Terms and Conditions of license and responsibilities of Contractor- Every License granted shall contain the responsibilities of Contractor and shall be subject to following conditions:-
- (1) Every license granted by the Portal shall be in Form "19".
- 2) Every license granted under sub-rule (1) or renewed as the case may be shall be subject to following conditions, namely:-
- (i) The license shall be non-transferable;
- (ii) The number of workmen employed as a contract labour in the establishment shall not, on any day, exceed the maximum number specified in the license.
- iii) Save as provided in these rules, the fees paid for the grant or as the case may be, for renewal of the license shall be non-refundable.
- (iv) The rates of wages payable to the workmen by the contractor shall not be less than the rates prescribed under the Code on Wages, 2020 or the Minimum Wages Act, 1948 (II of 1948)

as the case may be, for such employment where applicable, and where the rates have been fixed by agreement, settlement or award, not less than the rates so fixed;

(v) (a) in cases where the workmen employed by the contractor perform the same or similar kind of work as the workmen directly employed by the principal employer of the establishment, the wage rates, holidays, hours of work and other conditions of service of the workmen of the contractor shall be the same as applicable to the workmen directly employed by the principal employer of the establishment on the same or similar kind of work:

Provided that in the case of any disagreement with regard to the type of work the same shall be decided by the Labour Commissioner, U.P., whose decision shall be final;

(b) in any other cases the wages rate, holidays, hours of work and conditions of dervice of the workmen of the contractor shall be such as may be specified in this behalf by the

Labour Commissioner, Uttarakhand.

Explanation- while determining the wage rate, holidays, hours of work ad other conditions of

work and other conditions of service under clause (b) above, the Labour Commissioner, U.P., shall have due regard to the wage rates, holidays, hours of work and other conditions of service obtaining in similar employments;

- 43. Information regarding Work Order to be given to Authority under Section 119.-
- (1) When a Contractor receives work order from an establishment either to supply Contract Labour in the establishment or to execute Contract through Contract Labour in the establishment, he shall within fifteen days from the date of receipt of such order intimate electronically or otherwise or through Official Portal of the State Government to Authority appointed under Section 119 of the Code.
- (2) Where the Contractor fails to give intimation the designated authority may after giving a show- cause notice of at least fifteen days and after affording him reasonable hearing may suspend or cancel the license electronically or otherwise.
- 44. Responsibility of Contractor for payment of wages.-
- (1) The responsibility of Contractor for the payment of wages to contract labour shall be such as that of employer in Code of Wages, 2019 and rules made thereunder.
- (2) The Contractor shall provide to principal employer of the establishment, the details of wages and copy of register of wages within seven days from the date of such payment.
- (3) Where under proviso of sub-section (2) of Section 55, it is not practicable to disburse payment in the mode specified in sub-section (2) of Section 55 the payment shall be made strictly in the presence of authorized representative of principal employer with the prior intimation to inspector cum facilitator electronically or otherwise.
- **45.** Form of Experience Certificate.- The concerned contractor shall issue, on application of contract labour experience certificate in Form "20".
 - 46. Form and Manner of Application for Declaration of Core Activity.-
 - (1) If a question arises as to whether any activity of an establishment is a core activity or otherwise, the aggrieved party may make an application in Form "21" to State Government for decision.
 - (2) The application shall contain the complete detail of the activity in question and manufacturing Processes of the establishment.
 - (3) The application shall also contain the justification for application.
 - (4) The application shall also be accompanied with such documents as deems necessary by the applicant.
 - 5) The application may be submitted to the State Government directly or through the Labour Commissioner, Uttarakhand.

(6) Where the appropriate government refer any such question suo-moto or refer the application to designated authority under Clause (a) of sub-section (2) of Section 57, such designated authority shall send a report to the State Government within a period of two months from the date of receipt of such question or application and thereafter the State Government shall decide the question within two months from the date of receipt of such report.

PART II

Inter-State Migrant Workers.

47. Journey Allowance.

- (1) The contractor shall pay to the migrant workman the return fare from the place of employment to the place of residence in the home-state of the migrant workman on the expiry of the period of employment and also on his.-
- (a) Termination of service before the expiry of the period of employment for any reason whatsoever;
- (b) Being in-capacitated for further employments on account of injury or continues
- ill-health duly certified as such by a registered medical practitioner.
- (c) Cessation of work in the establishment which is not due to any fault on the part of the migrant workman; and
- (d) Resignation from service on account of non-fulfillment of terms and conditions of his employment by the contractor.
- 2) If the migrant worker is employed for more than six month, he shall be given journey allowance which will be equivalent to two and fro fare from place of employment place of residence, after expiry of every six month.
- (3) The fare shall not be less than second class railway ticket of shortest distance.
- (4) The journey allowance shall be paid by the principal employer in advance electronically as far as practicable.
- **48. Toll-Free number** The State Government may provide a toll-free helpline to inter-state migrant worker in the manner as determined by the State Government by order.

49. Study of Inter-State Migrant worker-

(1) State government may at any time as it deems necessary may or shall if directed by Central Government, conduct a study of Inter-State Migrant Worker from State of Uttarakhand or to the

State of Uttarakhand.

(2) The manner of such study, composition of study team and other matters shall be such as decided by State Government.

PART III

AUDIO-VISUAL WORKERS

50. Agreement-

- (1) The Agreement between audio-visual worker, producer of audio-visual program or contractor if any shall be in Form "22".
- (2) Such agreement shall contain the following particulars.-
- (a) Name of the audio-visual program
- (b) Name and address of the producer and contractor (if any).
- (c) Name and address of audio-visual worker.
- d) Nature of Employment of audio-visual worker(e) Duration of employment.
- (f) Terms and Conditions of employment such as wages and other benefit, health and working conditions, safety, hours of work, welfare facilities, dispute resolution process or mechanism, which shall not be less than the entitlement of audio-visual worker in the code.
- (3) If such audio visual workers is covered under the provision of an enactment for the time being in force for providing benefit of provident fund to him, copy of such agreement shall be forwarded by the producer of audio visual program to concerned provident fund authorities of Central
- **51.** Dispute resolution mechanism, constitution and other details- The dispute resolution mechanism, Process and constitution of authorities and courts shall be such as provided in Code on Industrial Relations, 2020 and rules made there under by Uttarakhand Government

PART IV MINES

The central government will make the rules for mines as enforcement agency is central government

PART V

BEEDI AND CIGAR WORKERS

52. Form of application for grant of license.—

- (1) Every application under sub-section (2) of Section 74 for a license to use or allow to be used any place or premises as an industrial premises shall be made in Form "23" on the official portal of the State Government.
- (2) The application shall be accompanied by plans showing —
- (a) the site of such place or premises, the areas therein to be used for manufacturing Processes and the immediate surroundings of such place or premises, including adjacent buildings, structures, roads, drains, and the like, and
- (b) the plan, elevation and necessary cross-sections of, the details relating to natural lighting, ventilation, means of escape in case of fire, position of the plant and machinery, if any, used, aisles and passage-ways in or in relation to, the various buildings which are intended to be used for manufacturing Processes.
- (3) The fee for license shall be paid through the portal

53. Renewal of License.

- (1) Every application for renewal of license shall be made on the Official Portal of the State Government along with required fees Fees.-
- (1) The fees to be paid for grant or renewal of license shall be as specified in table below. Number of employees proposed to be employed on any day during the financial year for Rs.

Does not exceed twenty 500

Exceeds twenty but does exceed fifty

1000 Exceed fifty but does not exceed

hundred 1500 Exceed hundred 2000

- (2) Fee to be paid for grant of duplicate license shall be Rupees One Hundred.
- (3) Fees payable in respect of appeal under Section 75 shall be Rupees One Hundred
- **54. Record of Outside Work**.- 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 "24".

PART VI

BUILDING AND OTHER CONSTRUCTION WORKERS

The establishment under the control of Central Government will follow central Rule and

will be prepared by central Government

The establishments under the control of state Governments will follow these rules. All the provisions containing the Uttarakhand Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Rules, 2005 will be followed for the time being need not to publish again.

PART VII

FACTORIES

- 55. Approval of plans.— Approval of plans, registration of factories and grant of license -
- (1) No site shall be used for the location of a factory and no building on such site or in a factory shall be constructed, extended or taken into use as a factory or part of a factory unless previous permission is obtained from the state government or the Chief Inspector-cum-Facilitator online application for such permission shall be made to the Chief Inspector-cum-Facilitator which shall be accompanied by the following documents:-
- (a) Form No. 25 duly filled in by the applicant electronically.
 - (b) The Process flow diagram of manufacturing Process indicating safety devices, fittings and mountings on each plant and machinery, the various Process and their design conditions, supplemented by a brief description of Process and safety devices in its various stages and also indicating the names of raw materials, intermediates and products with their inventories. In the case of chemical substances, their chemical names should also be mentioned;
 - (c) Plans in drawn to scale showing (i) the site plan of the factory and immediate surroundings including adjacent building, hospitals, educational institutions, petrol pumps, storage of inflammable and explosive materials and other structures, roads, water sources, drains etc, and location of nearest residential area, village, town settlement with its distance from the site.; and
 - (ii) the detail plan, elevation and necessary cross sections of the various buildings indicating all relevant details relating to all natural lighting, ventilation and means of escape in case of fire. The Plans shall also clearly indicate the position of the plant and machines aisles and passageways.

All the site plan and detailed plan may be submitted in soft copy by using any efficient software (Auto CAD etc.);

Provided by the time such soft copy is not feasible, it may be submitted in hard copy in triplicate of suitable scale as mentioned in form 25.

- (d) replies to the questionnaires annexed to the Form no. 25;
- (e) letter of no objection for the location of the factory from Nagar Nigam, Nagar Panchayat or notified area, as the case may be;
- (f) a letter of no objection from state pollution control board,
- (g) a letter of no objection from Fire Department;
- (h) Licence / NOC issued under the Petroleum Rules, 1976 for storage of petroleum as defined in the Petroleum Rules, 1976;

- (i) certificate of stability in Form No. 26 duly singed by the competent authority & applicant;
- (j) duly filled form No. 4 by the applicant;
- (k) Payment of license fee prescribed in rule 6 through treasury challan, e-challan or online payment.
- 2) if the Chief Inspector-cum-Facilitator is satisfied that the plans are in consonance with the requirement of code, he shall, subject to such conditions as he may specify, approve them by approving it electronically.
 - (3) No manufacturing Process shall be started or carried on in any building, or part of a building until a certificate of stability of the building, or part of building in Form No. 26 signed by a person possessing the qualifications prescribed in sub rule(4) has been delivered online to the Chief Inspector-cum-Facilitator and accepted by him. No extended portion of any factory shall be used as a part of the factory any time after the extension or any plant or machinery shall be added in any factory or brought into use any factory, nor brought into use any time after such addition until a certificate in respect of such extension or plan has been delivered to the Chief Inspector-cum-Facilitator and accepted by the Chief Inspector-cum-Facilitator electronically.
 - (4) The person signing the Form no.26 shall possess the same qualification and experience as prescribed in the schedule to rule-33 for this purpose.
 - (5) No person except in the case of a building occupied by Government shall be authorized to sign the certificate of stability, who is in the employment of the owner of the builder of the building in respect of which the certificate is given.
 - No manufacturing Process shall begin or carried on in any building, or part of a building until a certificate of stability of the building, or part of building in Form No. 2 signed by a person possessing the qualifications prescribed in subrule (4) has been delivered to the Chief Inspector-cum-Facilitator and accepted by Chief Inspector-cum-Facilitator. No extended portion of any factory shall be used as a part of the factory any time after the extension nor any plant or machinery shall be added in any factory, nor brought into use any time after such addition until a certificate in respect of such extension or plan has been delivered to the Chief Inspector-cum-Facilitator and accepted by the Chief Inspector-cum-Facilitator.
 - (7) The plan of a factory shall be disposed of within thirty days including site visits, after receiving of online application at the portal of the department. The plans which are not rejected within the said time limit shall be deemed to have been approved and licence shall also be deemed to have been granted and considering such plans as approved and licence as granted, the site plans approval letter and the licence shall be issued by Chief Inspector-cum-Facilitator immediately and Chief Inspector-cum-Facilitator shall also inform the applicant electronically.
- (8) The licence of the factories whose site plans are approved within the time limit given in sub-rule (6), shall be granted on the same day, The site plan and detailed

plan shall be approved and the plan letter will be issued electronically. The digitally signed license shall be issued by Chief Inspector-cum-Facilitator who shall send the license to the applicant electronically.

56. (i) The internal height of a workroom shall be not less than 14 feet measured from the floor level to the lowest part of the roof, and if the roof is of corrugated iron, which is neither covered with tiles nor has an inner ceiling or lining of heat-resisting material with an air space of at least four inches between it and the corrugated iron, the internal height shall be not less than 20 feet:

Provided that in case of the buildings having a brick or concrete roof, or a combination of the two, the minimum height may be 10 feet, if approved by the Chief Inspector-cum-Facilitator:

Provided further that in case of all factories registered under Section 2 (w)(ii), and factories registered under Section 2(w)(i) of the Code employing up to 50 employees, the Chief Inspector-cum-Facilitator may, where he is satisfied that the conditions of work are reasonably good, exempt such factories from the provisions of this sub-rule.

- (ii) 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 the area that occupied by machinery and a breathing space of at least 500 cubic feet.
- (iii) Particulars of each of the rooms, verandahs and other enclosures of the factory shall be entered in Form25,

The provisions of sub-rule (i) of Rule 55 shall not apply to rooms intended for storage, godowns and like purposes and also rooms intended solely for office purposes. Where only clerical work is done.

57. Mode of application.—The occupier of every factory shall submit to the Chief Inspector-cum-Facilitator an application electronically together with Form No.28, prescribed under Section-79, On- line for registration of the factory and grant of a license, at least fifteen days before he begins to occupy, or use, the premises as a factory:

Provided further that the occupier shall, before he begins or continues to use any premises as a factory, obtain a licence or renewal thereof, in accordance with the provisions of these rules.

58. Registration and grant of license.—(1) As soon as the plan, as rule-55 is approved, the factory shall be registered a and a licence for a factory shall be granted by the Chief Inspector-cum-Facilitator in Form 27 and on payment of the fees specified in the Schedule

Quantity of Maximum number of persons to be employed on any day during the H.P. calendar year. installed from 51 Up to From From From From Above (Maximum 50 to 150 151 to 251 to 501 to 1001 to 2500 H.P.) 250 500 1000 2500 Rs. Rs. Rs. Rs. Rs. Rs. Rs. NII 800 2400 3200 5600 11300 32200 40300 Up to 50 1900 5600 8900 12100 19300 48300 56400

Above 50 but not above 100	4000	8900	12100	18500	32200	64400	72500
Above 100 but not above 500	8100	17700	23400	31400	46700	80500	88600
Above 500 but not above 1000	16100	24200	30600	40300	57800	96600	104700
Above 100 but not above 2000	19300	32200	37000	48300	61200	104700	112700
Above 2000 but not above 5000	22500	40300	48300	56400	77300	112700	120800
Above 5000	25800	43500	51500	59600	80500	120800	128800

Provided that license renewal fee to be taken from the factories shall be increased by 10% every 5 years the next increased shall be effective from 01.01.2025.

- (2) Every licence granted under these rules shall remain in force For the whole year from the date on which first application is received..
- (3) Licence shall be renewed online for the period prescribed in rule 60 by the Chief Inspector-cum-Facilitator after the application for renewal is received.
- **59. Amendment of licence and Plan.**—(1) A licensee shall get his licence amended when the factory exceeds the limits specified in the licence in regard to horse-power or the number of persons employed. (2)The fee for the amendment of a licence shall be hundred 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.]
- (3) if the previous permission for the site on which the factory is to be extended or amended, the application for the amendment of licence and Plan shall be submitted online at least 15 days before such amendment:

Provided that if any such factory shall not be deemed to be extended within the meaning of this rule by reason only of the replacement of any plant or machinery or within such limits as may be, of the addition of any plant or machinery if such replacement or the addition does not reduce the minimum clear space required for safe working around the machinery or plant:

Provided further that if any amendment adversely affects the environmental conditions from the evolution or emission of steam , heat or dust or fumes injurious to health , such amendment shall be get approved as per rule.

60. Renewal of licence-(1) The license of a factory shall be deemed to be renewed automatically for the period (Maximum 10 years) for which the factory owner has applied online on payment of requisite fee specified in the Schedule to Rule- 58 subject to below

condition:

- a) In case of renewal, requisite fee will be 10 times of fees applicable in the year of application.
- b) For General Category Factories may be renewed for such a period provided inspection reports by department/Audit Report by Third party Auditors or establishment under self certification scheme submitted online to the department once in two years.
- c) For Hazardous and MAH categories Factories may be renewed for such a period provided inspection reports by department or audit report by third party auditors recognized as such by the Chief Inspector-cum-Facilitator is submitted online to the office of the Chief Inspector-cum-Facilitator once in a year.
 - Provided that if the application for renewal is not received within the time specified in sub-rule(2) the license shall be renewed only on payment of a 50% in excess of the fee ordinarily payable for the renewal of the license.
- (2) Every application for the renewal of license shall be submitted online in Form No. 4b so as to reach the office of the Chief Inspector-cum-Facilitator before the 31st October of the year concerned and if the application is so made then the factory premises shall be held to be duly licensed till the date up which application is renewed.
- **61. Transfer of licence.**—(1) The holder of a licence may, at any time before the expiry of the licence, apply for permission to transfer his licence to another person.
- (2) Such application shall be made to the Chief Inspector-cum-Facilitator along with notice of occupation Form-28 and such other documents as may be required ,who shall, if he approves of the transfer, enter upon the licence, electronically to the effect that the licence, has been transferred to the person named.
- (3) A fee of hundred rupees shall be charged on each such application.
- (4) The person to whom the licence is so transferred shall enjoy the same powers, and be subject to the same obligations under the licence as the original holder.
- **62. Procedure on death or disability of licensee.**—If a licensee dies or becomes insolvent or otherwise disabled, the person carrying on the business of such licensee shall not be liable to any penalty, under the Code or these rules for exercising the powers granted to the licensee by the licence during such time as may reasonably be required to allow him to make an application for the transfer of the licence under Rule 10 in his own name for the unexpired portion of the original licence.
- **63. Payment of fees.**—(1) Every application under these rules shall be accompanied by a treasury receipt showing that the appropriate fee has been paid into the local treasury head of account " " 0230 -श्रम और सेवायोजन, 104-फैक्ट्री अधिनयम के अंतंगत वसूल फीस,
- (2) if an application for grant, renewal or amendment of a licence is rejected, the fee paid shall be refunded or adjusted.
- **64. Suspension of licence.**—(1) If before two months of expiry of the licence, of any year an occupier notifies his intention in writing to the Chief Inspector-cum-Facilitator that during the year following, the premises, in respect of which licence is issued will not be used for the working of the factory, the Chief Inspector-cum-Facilitator shall suspend the licence granted in respect of such factory and will be communicated online to the factory.

- (2) A licence suspended under sub-rule (1) may be revived on receipt of an application for renewal accompanied by the licence and Form No. 4 for the remaining quarters of the year on payment of the fees for such quarters and a surcharge of 25 percent of the fees for the quarters for which the licence remained suspended.
- **65.** Cancellation of licence.—The State Government, or the Chief Inspector-cum-Facilitator, with the approval of the State Government may after giving the licensee concerned, reasonable opportunity to show cause against the proposed Code, cancel any licence, if it/he is satisfied that the licence was obtained by the licensee through fraud, or by misrepresentation of Codes and on such cancellation of licence the licensee shall not be entitled to the refund of the licence fee and Legal proceedings shall be done.
- **66. Notice of change Manager:**—The notice of change of manager shall be in Form No. 28A. The application for change of manager shall be submitted online. The endorsement of change of manager will be made electronically by the Chief Inspector-cum-Facilitator of factories.

67. Guidelines instructions and records.—

- (i) Without prejudice to the general responsibility of occupier to comply with provisions of section 6 Chief Inspector-cum-Facilitator may from time to time issue guidelines and instructions regarding the general duties of occupier relating to health safety and welfare and working conditions of all employees while they are at work in the factory
- (ii) The occupier shall maintain such records as may be prescribed by the Chief Inspectorcum-Facilitator in respect of monitoring of work involvement in the factory.

[Section 81]-

68. Certain other premises-

All the provisions of the code expect those in section 32 thereof and rules made thereunder shall apply to any place in Uttarakhand where in any manufacturing Process specified in the schedule here to annexed is carried on, notwithstanding that

If the number of person employed there in is less than 20 but not less than ten if working with aid of power and less than 40 but not less than twenty if working without aid of power

Or

ii)the person working there in are not employed by the owner there of but are working with the permission of are under agreement with such owner and

will be deemed to be a factory under section 2(1)(w):

Provided that the manufacturing Process is not being carried on by the owner with the aid of his family.

Schedule

1. Manufacturing of leather shoes or boots. 2 cutting grinding of glass

bangles

3 metal polishing, grinding, buffing, scrapping, and electroplating 4 dal milling and rice milling 5 sawing of timber (saw mill)

6 repair and maintenance of automobiles 7 power looms, handlooms 8 manufacturing of ice

9 manufacturing and treatment of lead and compound of lead 10 chemical work

- 11 .Handling and manipulation of corrosive substances
- 12. Manufacture or manipulation of dangerous pesticides.
- 13 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 .
- 14 Highly flammable liquids, and flammable compressed gases. 15 Dichromate manufacture 16 manufacture and repair of electric accumulators 17 manufacturing Process of cane crushing 18manufacturing of carpet 19 dye and dye stuffs

20 manufacturing handling and uses of benzene and benzene product

[Section 82]

69. Dangerous manufacturing process of operations.—

- (1) The following manufacturing Process or operations when carried on in any factory are declared to be dangerous manufacturing process or operations under Section 82 :
- (iii) Manufacture of aerated water and Process incidental thereto. (ii) All types of Electroplating process Manufacture and repair of electric accumulators.
- (iv) Glass manufacture.
- (v) Grinding or glazing of metals.
- (vi) Manufacture and treatment of lead and certain compounds of lead.
- (vii) Generation of gas from dangerous petroleum.
- (viii) Cleaning or smoothing of articles by a jet of sand, metal shot or grit or other abrasive propelled by a blast of compressed air or steam.
- (ix) Liming and tanning or raw hides and skins and Process incidental thereto.

- (x) All types of Printing Process including paper, fabrics, plastics and others .
- (xi) Dichromate manufacture.
- (xii) Chemical works.
- (xiii) Manufacture or manipulation of Carcinogenic Dye Intermediates.
- (xiv) Manufacture, handling and usage of benzene and substances containing benzene.
- (xv) Manufacture of pottery.
- (xvi) Manipulation of stone or any other material containing free silica.
- (xvii) Handling and processing of asbestos, manufacturing of any article of asbestos and any other Process of manufacture or otherwise in which asbestos is used in any form.
- (xviii) Handling or manipulation of corrosive substances.
- (xix) Compression of oxygen and hydrogen produced by electrolysis of water.
- (xx) process of extracting oils and fats from vegetable and animal sources in solvent extraction plants.
- (xxi) Manufacture of manipulation of manganese and its compounds.
- (xxii) Manufacture or manipulation of dangerous pesticides.
- (xxiii) Manufacturing process or operations in carbon di-sulphide plants.
- (xxiv) Operation involving High Noise Levels.
- (xxv) Manufacture of Rayon by Viscose process.
- (xxvi) Highly Flammable Liquids and Flammable Compressed Gases.
- (xxvii) Carpet and woollendrugget making or any work incidental thereto or connected therewith.
- (xxviii) Brassware making or any work incidental thereto or connected therewith.
- (xxix) Lock and hardware making or any work incidental thereto or connected therewith.
- (xxx) Hot metallurgical Process and any work incidental thereto or connected therewith
- (xxxi) Welding Process and any work incidental thereto or connected therewith
- (2) The provisions specified in the Schedules I to XXXI annexed shall apply to any class or description of factories wherein dangerous manufacturing PROCESS is or operations specified in each Schedule are carried out.

Constitution of site appraisal committee [Section-83]

70. Site Appraisal Committee -

- (1) Construction: The following provisions shall govern the functioning of the Site Appraisal Committee, hereinafter referred to as the "Committee" in these rules-
- (a) the State Government may constitute or reconstitute the committee as and when necessary;
- (b) the Labour Commissioner/Chief-Inspector-cum-Facilitator will be the Chairman of the Committee;
- (c) the State Government, to assist the Chief-Inspector-cum-Facilitator, may co-opt the following persons as members of the Committee;
- (i) a representative of the Fire Service Organization of the State Government;
- (ii) a representative of the Department of Industries of the State Government;
- (iii) a representative of the Director General of Factory Advice Service and Labour Institute,

Mumbai:

(2) Applications for appraisal of Sites- In respect of the factories covered under section 2 (1)(za) of the Code shall be submitted to the Chairman of the Committee along with 15 copies thereof in form annexed to this rule. The committee may dispense with the furnishing of the information on any particular item in the application under consideration.

(3) Chairman of the Committee will devise a mechanism to-

- (a) Rregister the applications received for appraisal of site in a separate register and acknowledge the same within a period of 7 days.
- (b) fix up meeting in such a manner that all the applications received and registered are referred to the Committee within a period of one month from the date of their receipt.
- (c) The Committee may adopt a procedure for its working keeping in view the need for expeditious disposal of applications.
- (d) The Committee shall examine the application for appraisal of a site with reference to the prohibitions and restrictions on the location of industry and the carrying on the Process and operations in different areas as per the provisions of Rule 5 of the Environment (Protection) Rules, 1986 framed under the Environment Protection Code, 1986.
- (e) The Committee may call for documents examine experts, inspect the site, if necessary, and take other steps for formulating its view in regard to the suitability of the site.
- (f) Wherever the proposed site requires clearance by the Ministry of Industry or the Ministry of Environment and Forests of the Government of India site appraisal will be considered by the Committee only after such clearance has been received.
- (4) Traveling Allowance The Committee will decide from time to time as per existing State Service/Financial Rules.

(The information should be supplemented by enclosing copies documents, maps or blue prints etc. wherever necessary)

- 1. Name and address of the applicant.
- 2. Site ownership Data.

Revenue details of site such as Survey number, plot number, Allotment /Registration number etc. Whether the site is classified as forest and if so, whether approval of the Central Government under section 5 of the Indian Forests Code, 1927 has been obtained.

- 2.3. Whether the proposed site attracts the provisions of section 3 (2) (V) of the Environment Protection Acts, 1986, if so, the nature of the restrictions.
- 2.4 Local authority under whose jurisdiction the site is located.
- 2.5. Documentary evidence of ownership.
- 3. Site Plan -
- 3.1. Site Plan with clear identification of boundaries and total area proposed to be occupied and showing the following details nearby the proposed site -
- (a) Historical monument, if any, in the vicinity.
- (b) Names of neighboring manufacturing units and human habitats, educational and training institutions, petrol installations, storages of liquefied petroleum gas and other hazardous substances in the vicinity and their distances from the proposed unit.
- (c) Water sources (river, streams, canals, dams and water filtration plants etc.) in the vicinity.
- (d) Nearest hospitals, fire-stations, civil defense stations and police stations and their distances from the proposed unit.

(e) High tension electrical transmission lines, pipelines for water, oil, gas or sewerage: railway lines, roads, stations, jetties gas and other similar installations in the vicinity.

details of soil conditions and depth at which hard strata obtained.

Contour map of the factory showing nearby hillocks and difference in levels.

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 persons likely to be employed in the factory.

Maximum requirement of power and water and sources of their supply.

Block diagram of the buildings and installations, in the proposed unit.

Details of the proposed housing colony, hospital, school and other infrastructural facilities.

5. Organizational structure for proposed manufacturing unit / factory.

Organization diagram of -

- Proposed enterprise in general and.
- health, safety and environment protection departments and their linkage to operation and technical department.

Proposed health and safety policy.

Area allocated for treatment of wastes and effluents.

Percentage of outlay on safety, health and environment protection measures.

6. Meteorological data relating to the site -

Average, minimum and maximum of -

- Temperature
- Humidity, and
- wind velocities.

during the previous ten years.

Seasonal variations of wind direction.

Highest water level reached during the floods in the area recorded so far.

6.4 Lightening and seismic data of the area.

7. Communication Links:

Availability of telephone /telex/wireless and other communication facilities for outside communication. Proposed internal communication facilities.

Manufacturing processes Information: Processes flow diagram in detail indicating processes parameters, e.g. temperature, pressure, etc. at various stages of manufacturing processes or Process.

Brief write-up on processes and technology.

Critical processes parameters, such as pressure build-up, temperature rise and runaway reconditions.

Other external effects critical to the processes having safety implications, such as ingress of moisture or water, contact with incompatible substances, sudden power failure.

Highlights of the built - in safety/pollution control devices or measures incorporated in the manufacturing technology.

8. Information on 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 intermediates, storages proposed for raw materials/ intermediates/ products (maximum quantities at any time to be stored).

Transportation methods to be used for inflow and outflow of materials 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.)
- 9. Information of Disposal of Wastes and Pollutants.

Major pollutants (gas, liquid, solid) their characteristics and quantities (average and at peak loads).

Quality and quantity of solid wastes generated, methods 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.

10. PROCESS Hazards Information:

A copy of the report on environmental impact assessment be enclosed.

A copy of the report on Risk Assessment study be enclosed.

Published (open or classified) reports, if any on accident situations / occupational health hazards or similar plants elsewhere (within or outside the country).

11. Information of proposed safety and Occupational Health Measures.

Details of fire fighting facilities and minimum quantity of water, Carbon dioxide and/or other fire fighting measures needed to meet the emergency.

Details of the proposed in house medical facilities.

12. Information on emergency Preparedness:

On-Site emergency plan and detailed disaster control measures.

Proposed arrangements, if any, for mutual aid scheme with the group of neighboring factories.

13. 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.

Signature of the Applicant

Applicant's full name and address

Section(84)

Compulsory disclosure of information by occupier

- **71.** All the provisions contained in The "Manufacture, Storage and Import of Hazardous Chemicals(MSIHC)" Rules-1989 and "Rules on Emergency Planning, preparedness, Response for Chemical accidents-1996" framed under the "Environment Protection Code-1986" by Central Government will be the part of this Rule.
- 72. Material Safety Data Sheet Collection and development and Dissemination of information -
- (1) The occupier of every factory carrying on a hazardous Process shall arrange to obtain or develop information in the form of Material Safety Data Sheet (MSDS) in respect of every hazardous substance or material handled in the manufacture, transportation and storage in the factory. It shall be accessible, upon request, to a worker for reference -
- (a) every such material Safety Data Sheet shall include the following information-
- (i) the identification mark used on the label;
- (ii) hazardous ingredients of the substance;
- (iii) physical and chemical characteristics of the hazardous substance;
- (iv) the physical hazards of the hazardous substance, including the potential for fire, explosion and reactivity;
- (v) the health hazards of the hazardous substance, including signs and symptoms of exposure, and any medical condition which are generally recognised as being aggravated by exposure to the substance;
- (vi) the primary route or routes of entry;
- (vii) the permissible limits of exposure prescribed in schedule "E"
- (viii) any generally applicable precautions for safe handling and use of the hazardous substance, which are known, including appropriate hygienic practices, protective measures during repairs and maintenance of contaminated equipment, procedures for clean up of spills and leaks;
- (ix) any generally applicable control measures, such as appropriate engineering controls work practices, or use of personal protective equipment;
- (x) emergency and first-aid procedures;
- (xi) the date of preparation of the Material Safety Data Sheet, or the last change in 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 become newly aware of any significant information regarding the hazards, the new information shall be added to the Material Safety Data Sheet as soon as practicable.
- (c) An example of such Material Safety Data Sheet is given in the Schedule to this Rule Labelling2) Every container of a hazardous substance shall be clearly labelled or marked to identify:-
- (a) The contents of the container;
- (b) The name and address of the manufacturer or importer of the hazardous substances.
- (c) the physical and health hazards; and
- (d) the recommended personal protective equipment needed to work safely with the hazardous substance.

Schedule

MATERIAL SAFETY DATA SHEET

1. Chemical Identify:

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Chemical Name Chemical Classification		
Synonyms Trade Name		
Formula C. A. S. No. U. N. No.		
Regulated Identification Shipping Name	Hazechem No.	
Codes/Label		
Hazaradous Waste I.D. No.		
Hazardous Ingredients C.A.S. No. Hazaradous	Ingredients C.S.A. No.	
1. 3.		
2.4		
2. Physical and Chemical Data		

Boiling Ragne / Point 0C	Physical State Appearance	
Melting / Freezing Point 0	C Vapour Pressure	Odour
Vapour Density (Air- 1)	@ 35^0 C mmHg	Others
	Solubility in Water	
	30^0 C mm Hg	
Specific Gravity	pН	
Water – 1		
3. Fire and Explosion Haz	ard Data :	
Flammability Yes /No	UEL % Flash point	0 C Autoignition Temperature^ 0 C
TDG Flammability	UEL % Flash point	0 C Hazardous Products of combustion
,	-	
Explosion Sensitivity to In	nnact Evnlosion	n Sensitivity to Static Electricity
Explosion sensitivity to in	ilpact Explosion	I Sensitivity to Static Electricity
Hazardona Dolumorication		
Hazardous Polymerisation	1	
		Corrosive Material
Combustible Liquid Flammable Material	Explosive Material Oxidiser	Corrosive Material Others
Combustible Liquid	Explosive Material	
Combustible Liquid Flammable Material	Explosive Material Oxidiser	
Combustible Liquid Flammable Material Pyrophoric Material	Explosive Material Oxidiser	
Combustible Liquid Flammable Material Pyrophoric Material 4. Reactivity Data:	Explosive Material Oxidiser	
Combustible Liquid Flammable Material Pyrophoric Material	Explosive Material Oxidiser Organic Peroxide	
Combustible Liquid Flammable Material Pyrophoric Material 4. Reactivity Data: Chemical Stability	Explosive Material Oxidiser Organic Peroxide	
Combustible Liquid Flammable Material Pyrophoric Material 4. Reactivity Data: Chemical Stability Incompatibility with other	Explosive Material Oxidiser Organic Peroxide Materials	
Combustible Liquid Flammable Material Pyrophoric Material 4. Reactivity Data: Chemical Stability	Explosive Material Oxidiser Organic Peroxide Materials	
Combustible Liquid Flammable Material Pyrophoric Material 4. Reactivity Data: Chemical Stability Incompatibility with other	Explosive Material Oxidiser Organic Peroxide Materials	
Combustible Liquid Flammable Material Pyrophoric Material 4. Reactivity Data: Chemical Stability Incompatibility with other Reactivity Hazardous Prod 5. Health Hazard Data:	Explosive Material Oxidiser Organic Peroxide Materials ducts of Reaction	
Combustible Liquid Flammable Material Pyrophoric Material 4. Reactivity Data: Chemical Stability Incompatibility with other Reactivity Hazardous Production	Explosive Material Oxidiser Organic Peroxide Materials ducts of Reaction	
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Permissible Exposure limit ID 50	ppm. mg/m3	Order ppm	Threshold Mg / m3 LD50
NFPA Hazard Signals	Health Flammal	bility S	Stability Special
6. Preventive Measures :			
6. Freventive Weasures .			
Personnel Protective Equipments			
Handling and Storage Precautions			
7 European de Finet Aid Monne			
7. Emergency and First Aid Measu	ire:		
Fire	Fire Extingui	shing Media	
	Special Proce		
	-		
	Unusual H		
Exposure	First Aid		
	Antidotes / 1		
Spills	Steps to b		
	Waste Dispos	al Method	
8. Additional Information / Refere	nces:		
9. Manufacturer / Suppliers Data :	Contact Dougan i	n Emanagenery	
	Contact Person i	Local Bodies	involved
Name of Firm Mailing Address		Local Boules	Ilivoiveu
Telephone / Telex nos. Telegraphi	c		
Address			
	Standard P	Packing	
	Tremeard Detail	s / Reference	
Others			
10. Disclaimer :			
10. Disciullici .			

Information contained in this material data sheet is believed to be reliable but no representation, guarantee or warranties of any kind are made as to its accuracy, suitability for a particular application of results to be obtained from them. It is up to the manufacturer / seller to ensure that his information

contained in the material Safety data sheet is relevant to the product manufactured / handled or sold by him as the case may be. The Government marks no warranties expressed or implied in respect of the adequacy of this document for any particular Purpose:

73. Disclosure of information to the employees -

- (1) The occupier of every factory carrying on a hazardous PROCESS supply to all employees the following information in relation to handling of hazardous materials or substances in the manufacture, transportation, storage and other Process:-
- (a) Requirements of Section 84, 85 and 89 of the Code;
- (b) a list of hazardous Process carried on in the factory;
- (c) location and availability of all Material Safety Data Sheets as per Rule 70.
- (d) Physical and health hazards arising from the exposure to or handling or, substances;
- (e) measures taken by the occupier to ensure safety and control of physical and health hazards;
- (f) measures to be taken by the employees to ensure safe handling, storage and transportation of hazardous substances;
- (g) personal protective equipment required to be used by employees employed in hazardous processes of dangerous operations;
- (h) meaning of various labels and markings used on the containers of hazardous substances as provided under +;
- (i) signs and symptoms likely to manifest on exposure to hazardous substances and to whom to report :
- (j) measures to be taken by the employees in case of any spillage or leakage of a hazardous substance;
- (k) role of employees vis-a-vis the emergency plan of the factory, in particular the evacuation procedures;
- (l) Any other information considered necessary, by the occupier to ensure safety and health of employees.
- (2) The information required by sub-rule (1) shall be complied and made known to employees 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 employees and shall also be explained to them.
- (4) The Chief Inspector-cum-Facilitator or may direct the occupier to supply further information to the employees as deemed necessary.

74. Disclosure of information to the Chief Inspector-cum-Facilitator:-[Section-84(1)]

- (1) The occupier of every factory carrying on a hazardous PROCESS shall furnish, in writing, to the Chief Inspector-cum-Facilitator a copy of all the information furnished to the employees.
- (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 the Code and the Rules made there- under.

Section-84(2)

75. Health and Safety Policy -

- (1) The occupier of every factory, except as provided for in sub-rule (2), shall prepare a written statement of his policy in respect of health and safety employees at work.
- (2) All factories -

- (a) covered under section 2 (1) (w)(i) but employing less than 50 employees.
- (b) covered under section 2 (1) (w)(ii) but employing less than 100 employees. are exempted from requirements of sub-rule (1):

Provided that they are not covered under the First Schedule under section 2 (1)(za)or operations declared to be dangerous under section 82 of the Code.

- (3) Not withstanding anything contained in sub-rule (2), 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.
- (4) The Health and Safety Policy 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.
- (5) In particular, the Policy should specify the following -
- (a) arrangements for involving the employees;
- (b) intention of taking into account the health and safety performance of individuals at different levels while considering their career advancement;
- (c) the responsibility of the Contractors, sub-Contractors, transporters and other agencies entering the premises;
- (d) a resume of health and safety performance of the factory in its Annual Report;
- (e) relevant techniques and methods such as safety audits and risk assessment like Hazop study etc and other safety techniques for periodical assessment of the status on health, safety and environment and taking all the remedial measures;
- (f) 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 employees at different levels and the public, wherever required.
- (6) A copy of the declared health and Safety Policy signed by the occupier shall be made available to the Chief Inspector-cum-Facilitator.
- (7) The policy shall be made widely known by -
- (a) making copies available to all employees including contract employees, apprentices, transport employees, suppliers, etc.
- (b) displaying copies of the policy at conspicuous places; and
- (c) any other means of communication; in a language understood by the majority of employees.
- (8) The occupiers shall revise the Safety Policy as often as may be appropriate, but it shall necessarily be revised under the following circumstances -
- (a) Wherever any expansion or modification having implications on safety and health of persons at works is made, or
- (b) whenever new substances or articles are introduced in the manufacturing processes having implications in health and safety of persons exposed to such substances or articles.

Section-84(3)

76. Information on industrial wastes:-

(1) The information furnished under rules 65 and 66 shall include the quantity of the solid and liquid wastes generated per day their characteristic and the methods of treatment such as incineration of solid wastes, chemical and biological treatment of liquid wastes, and arrangements for their final disposal.It shall also include information on the quality and quantity of gaseous waste discharge through the

stacks or other openings and arrangements such as provisions of scrubbers, cyclone separators, electrostatic precipitators of similar such arrangements made for controlling pollution of the environment.

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

(4) Review of the Information furnished to employees:-

- (1) The occupier shall review once in every Calendar year and modify, if necessary, the information furnished under Rules 65 and 66 to the employees and the Chief Inspector-cum-Facilitator.
- (2) In the event of any change in the processes or operations or methods of work or when any new substance is introduced in the processes or in the event of a serious accident taking place the information so furnished shall be reviewed and modified to the extent necessary.

77. Confidentiality of information:-

The occupier of a factory carrying on a 'hazardous processes ", shall disclose all information eeded for protecting safety and health of the employees to -

- (a) his employees, and
- (b) Chief Inspector-cum-Facilitator,
- as required under rules 65 and 66 if the occupier is of the opinion that the disclosure of details regarding the processes and formulations will adversely affect his business interests, he may make a representation to the Chief Inspector-cum-Facilitator stating the reason for with holding such information. The Chief Inspector-cum-Facilitator shall pass an order on the representation after giving an opportunity to the occupier of being heard.
- (2) An occupier aggrieved by an order of the Chief Inspector-cum-Facilitator may prefer an appeal to the State Government within a period of 30 days and the State Government may after giving an opportunity to the occupier of being heard shall pass order and the order of the State Government shall be final.

Section-85

Specific responsibilities of occupier in relation to hazardous Process

78. Medical Examination:-

- (1) Employees employed in a 'hazardous PROCESS' shall be medically examined by a qualified medical practitioner, hereinafter referred to a Factory Medical Officer, in the following manner -
- (a) once before employment, to ascertain physical fitness of the person to do a particular job;
- (b) once in a period of 6 months, to ascertain the health status of all the worker in respect of occupational health hazards to which they are exposed, and at a shorter interval in respect of a worker in whose case the Factory Medical Officer is of the opinion that it is necessary to do so;
- (c) the details of pre-employment and periodical medical examinations carried out as aforesaid shall be recorded in the Health register in Form No. 4.
- (2) No person shall be employed for the first time without a certificate of fitness in Form No. 3, granted by the Factory Medical Officer, if the Factory Medical Officer declares a person unfit for employment in a processes covered under sub-rule (1) he shall have the right of appeal to the Inspector whose opinion shall be final in this regard. If the Inspector is also a Certifying Surgeon, he may dispose of the application himself.
- (3) Any finding of the Factory Medical Officer revealing any abnormality or unsuitability of any person employed in the processes shall, in turn, examine the concerned worker and communicate his findings to the occupier within 30 days. If the qualified medical practitioner is of the opinion that the worker so examined is required to be taken away from the processes for health protection, he will direct the occupier accordingly, who shall not employ the said worker in the same processes. However, the worker so taken away shall be provided with alternative placement unless he is in the opinion of the

Certifying Surgeon fully incapacitated in which case the worker affected shall be suitably rehabilitated.

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

79. Occupational Health Centers -

- (4) In respect of any factory carrying on 'hazardous processes' there shall be provide and maintained in good order an occupational Health Center with the services and facilities as per scale laid down hereunder:
- (a) for factories employing up to 50 employees -
- (i) the services of a Factory Medical Officer on retainer ship basis in his clinic to be notified by the occupier. he will carry out pre-employment and periodical medical examinations as stipulated in rule 76 and render medical assistance during an emergency.
 - (ii) a minimum of 5 persons trained in first aid procedures of whom at least one shall always be available during the working period.
 - (iii) a fully equipped first aid box in all the departments.
 - **(b)** for factories employing 51 to 200 employees -
 - (i) an Occupational Health Center having a room with a minimum floor area of 15 square metre 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;
 - (ii) a part time factory Medical Officer shall be in over all 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.
 - (iii) one qualified and trained dresser-cum-compounder on duty through out the working period;
 - (iv) a fully equipped first aid box in all departments.
 - (c) for factories employing above 200 employees -
 - (i) one full-time Factory Medical Officer for factories employing up to 500 employees and one more Medical Officer for every additional 1000 employees or part thereof;
 - (ii) an occupational Health Center having at least two rooms each with a minimum floor area of 15 square metre with floors 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;
 - (iv) the Occupational Health Center shall be suitably equipped to manage medical emergencies.

SCHEDULE

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 of at least 180 cm x 105 cm.
- 3. Means for sterilizing instruments.

- 4. A couch.
- 5. Two buckets or containers with closely fitting lids.
- 6. A kettle and spirit stove or other suitable means of boiling water.
- 7. One bottle of spiritusamoniane aromatics (120 ml.)
- 8. Two medium sizes sponges.
- 9. Two 'Kidney' trays.
- 10. Four cakes of toilet soap, preferably antiseptic, soap.
- 11. Two glass tumblers and two wine glasses.
- 12. Two clinical thermometers.
- 13. two tea spoons.
- 14. two graduated (120 ml.) measuring glasses.
- 15. One wash bottle (1000 cc) for washing eyes.
- 16. One bottle (one litre) carbolic lotion in 20.
- 17. Three chairs.
- 18. One screen.
- 19. One electric hand torch.
- 20. An adequate supply of tetanus toxoid.
- 21. Coramine liquid (60 ml.)
- 22. Tablets -antihistaminic, antispasmodic (25 each).
- 23. Syringes with needles-2 cc and 10 cc.
- 24. Two needle holders, big and small.
- 25. Suturing needles and materials.
- 26. One pair of dressing forceps.
- 27. One pair of dressing forceps.
- 28. One scapel.
- 29. One stethescope.
- 30. Rubber bandage-pressure bandage.
- 31. Oxygen cylinder with necessary attachments.
- 32. One blood pressure apparatus.
- 33. One pateller Hammer.
- 34. One Peak-flow meter for lung function measurement.
- 35. One stomach wash set.
- 36. Any other equipment recommended by the Factory Medical Officer according to specific relating to manufacturing processes
- 37. In addition -
- (a) for factories employing 51 to 200 employees :
- 1. four plain wooden splints of 900 mmx100mmx6mm;
- 2. four plain wooden splints of 350 mmx75mmx6mm;
- 3. two plain wooden splints of 250 mmx50mmx12mm;
- 4. one pair of artery forceps;
- 5. injections-morphia, pethidine, atropine, adrenaline, coramine, novacan (2 each): and
- 6. one pair of surgical scissors;
- (b) For factories employing above 200 worker:
- 1. eight plain wooden splints of 900 mmx100mmx6mm;
- 2. eight plain wooden splints of 350 mmx75mmx6mm;
- 3. four plain wooden splints of 250mmx50mmx12mm;
- 4. two pairs of artery forceps;

- 5. Injection-morphia, pethidine, atropine, adrenaline, coramine, novocan (2 each); and
- 6. two pairs of surgical scissors.

80. Ambulance Van. -

(1) In every factory carrying on a 'hazardous PROCESS' there shall be provided and maintained in good condition, a suitably constructed ambulance van equipped with items as per sub-rule (2) and manned by a full time Driver-cum-Mechanic and a Helper trained in first aid, for the purposes of sickness. The ambulance van shall not be used for purposes other than the purpose stipulated herein and will normally be stationed at or near the occupational Health Centre:

Provided that a factory employing less than 150 employees may make arrangements for procuring such facility at a short notice from a nearby hospital or other places to meet emergency.

- (2) **The ambulance van** should have the following equipment:
- (a) General:

As wheeled stretcher with folding and adjusting devices; with the head of the stretcher capable of being titled upward;

- fixed suction unit with equipment;
- fixed oxygen supply with equipment;
- pillow with case; sheets; blankets towels;
- emesis bag, bed pan; urinal; glass;
- (b) Safety equipment:
 - flares with life of 30 minutes; flood lights;
 - flash light; fire extinguisher-dry powder type;
 - insulated gauntlets.
- (c) Emergency Care Equipment:
- (i) suscitation -
 - portion suction unit; portable oxygen unit;
 - bag valve-mask, hand operated artificial;
 - ventilation unit;
 - airways; mouth bags; tracheetomyadapters;
 - short spine board; I. V. fluids with Administration unit;
 - B. P. manometer; Cugg; stethescope;
- (ii) Immobilization -
 - long and short padded boards wire ladder splints;
 - triangular bandage; long and short spine boards.
- (iii) Dressings -
 - gauze pads -4"x4" universal dressing 10"x36";
 - roll of aluminium foils; soft roller bandages 6"x5" Yards; adhesive tape in 3" roll; safety pins;
 - bandage sheets; burn sheet;
- (iv) Poisoning -
 - syrup of Ipecae ;Codeivated Charcoal prepacketed in doses ; snake bite kit ;
 - drinking water;
- (v) Emergency medicines -
 - as per requirement (under the advice of Medical Officer only)
- 85. Decontamination facilities -

In every factory carrying out hazardous PROCESS the following provisions shall be made to meet an emergency;

- (a) fully equipped first aid box;
 - (b) readily accessible means of water for washing by employees as well as for drenching of clothing

of employees who have been contaminated with hazardous and corrosive substance; and such means shall be as per the scale shown in the table below:

Number of person employed at any time

Number of drenching showers

(i) Upto 50 employees 2

(ii) Between 51 and 200 employees.
 (iii) Between 201 and 500 employees
 (iv) 501 employees and above.
 2+1 for every additional 50 or part thereof
 5+1 for every additional 200 or part thereof.
 8+1 for every additional 200 or part thereof.

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

81. Making available health records to employees -

- (1) The occupier of every factory carrying out a "hazardous processes" shall make accessible the health records; including the record of worker's exposure to the hazardous processes or, as the case may be, the medical records of any worker for his perusal under the following conditions:
- (a) once in every six months or immediately after the medical examination whichever is earlier;
- (b) if the Factory Medical Officer or the Certifying Surgeon, as the case may be, is of the opinion that the worker has manifest signs and symptoms of any noticeable disease as specified in the third Schedule to the Code;
- (c) if the worker leaves the employment;
- (d) if any one of the following authorities, so direct -
- the Chief Inspector-cum-Facilitator of Factories;
- the Health Authority of the central or State Government;
- Commissioner of workmen's Compensation;
- the Director General, Employees' State Insurance Corporation;
- The Director, Employees State Insurance Corporation (Medical Benefits); and
- the Director General, Factory Advice Service and labour Institute.
- (2) A copy of the upto date health records including the record of employees exposure to hazardous PROCESS or, as the case may be, the medical records, shall be supplied to the worker on receipt of an application from him. X-ray plates and other medical diagnostic reports may also br made available for reference to his medical practitioner.

82. Qualification, etc. of Supervisors:-

- (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 processes operation and maintenance in a chemical industry;

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

83. Issue of guidelines:

For the purposes of compliance with the requirements of section 84 or of section 85 the Chief

Inspector-cum-Facilitator may, if deemed necessary, issue guidelines from time to time to the occupiers of factories carrying on 'hazardous processes'. Such guidelines may be based on national standards, Code of practice or recommendations of international bodies such as International LabourOrganisation and World Health Organisation."

84. Permissible limits of exposure of chemical and toxic substances.[Section 88]

- (1) The maximum permissible threshold limits of exposure of chemical and toxic substances in manufacturing Processes (whether hazardous or otherwise) in any factory shall be of the value indicated in Schedule "E".
- (2) The Central Government may, at any time, for the purpose of giving effect to any scientific proof obtained from specialised institutions or experts in the field, by notification in the Official Gazette, make suitable changes in the said Schedule.

Appeal against the order of Inspector-cum-Facilitator Section-90

85. Occupier of any factory aggrieved by an order by inspector-cum-facilitator may, within fifteen days from the date on which the order is communicated to him, may make an appeal to the Dy Chief Inspector-cum-Facilitator or where such order is by the Dy Chief Inspector-cum-Facilitator, to Chief Inspector-cum-Facilitator, as the case may be, who shall, after giving the appellant-an opportunity of being heard, dispose of the appeal as expeditiously as possible:

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

[Section(91)]

86. Exemption to certain employees

- 1...The employees, who are not covered under section2(1) (zzl) and the employees who are holding a confidential position in an establishment, the provision under section 25 with respect to daily hours and section 27 with respect to extra wages shall not apply subject to following conditions-
- 1. a) such employees shall be given at least such equivalent hours of extra hour as compensatory off.

Or

- B) wages at the rate of normal wages in respect of such extra hour of work shall be paid; or
- c) any equivalent of sub-clause (a) or (b)
- 2. Weekly holidays shall remain as per provisions of code and rules.
- 3. Maximum hours of any day shall be 16 hours, subject to provisions of continuous Process.
- 4. -The following persons shall be deemed to hold confidential positions in an establishment:
 - (i) Stenographers,
 - (ii) Personal Assistants,
 - (iii) Personal Secretaries,
 - (iv) Office Superintendent,
 - (v) Head Clerk, where there is no Office Superintendent,
 - (vi) Head Munim where there is no Office Superintendent or Head Clerk,

- (vii) Head Accountant,
- (viii) Head Cashier,
- (ix) Cashier,
- (x) Head Time-keeper,
- (xi) Telephone Operator,
- (xii) Receptionist:
- (xiii) Any other person, who in the opinion of the State Government, holds a confidential position and is so declared in writing by it:

Provided that such employees may be called at any time for any work under emergency situations.

87. Other Apprentice-Section [133(1) and section 6]

Provisions of the code and rules made thereunder with respect to safety, health, welfare and working conditions for every apprentice, nothing contrary to the provision of the Apprentice Act, 1961 shall be applicable. For "other apprentice" engaged in a factory, these provisions shall also remain applicable along with working hours.

PART VIII

PLANTATION

88. Housing accommodation-

- (1) Every employer shall provide for every worker and his family residing in a plantation, rent freehousing accommodation as near as possible to the place of work. It shall be open to an employer to provide such accommodation in the course of several years provided that houses shall be built at least five per cent of the resident workers every year.
- (2) All housing accommodation for workers in a plantation shall conform to such standards and specifications as may be approved by the State Government on the recommendation of the Advisory Board.
- (3) The housing accommodation shall be provided on dry well-drained land which, consistent with the requirements regarding distance from the plantation, has supplies of wholesome drinking water within a reasonable distance. In malarial tracts the houses shall be provided at a safe distance from the swamps and marshes and above the highest flood level.
- (4) Adequate lighting arrangements shall be provided in and around the area in which housing accommodation is rovided.
- (5) The employer shall maintain in good condition the approach roads and paths to the area where houses are located as also the sewers and drains in that area.
- (6) The employer shall not deny to the public free access to those parts of the plantation where the workers are housed.
- (7) The employer shall cause the vicinity of all houses to be kept clear of refuse and excreta and the latrines and drains to be cleaned out daily and all refuse in or near them to be collected, removed and disposed of hygienically.
- **89. Housing Scheme-** Within six months of the date of publication of these rules, every employer shall- submit to the Chief Inspector-cum-Facilitator for approval a scheme in regard to the provision by him of housing accommodation for workers. The scheme shall provide for the following matters:
- (a) Specification of the period during which housing accommodation is proposed to be provided in respect of all resident workers in a plantation, such period being not later than the period referred to in Rule 6.
- (b) The type design which is proposed to be adopte'd for the construction of houses, such design being in conformity with the standards and specification as may be approved by the State Government, under Rule 47.

- (c) Plan and site-plan, in duplicate, of the buildings to be constructed or remodelled for use as workers ' houses.
- (d) All houses shall be built in accordance with the scheme as approved in writing by the Chief Inspector-cum-Facilitator. With a view to showing the progress made in providing houses according to the approved scheme every employer shall submit to the Chief Inspector-cum-Facilitator. a report in Form No. 4 on July 31 every year.

90. Maintenance of houses

- (1) The employer shall, at his own expense, execute such repairs to the houses as may be required from time to time and maintain the houses in fit and safe condition for occupation.
- (2) A worker occupying a house may, and an Inspector cum facilitator appointed under the code shall bring to the
- notice of the employer any defect in the condition of a house which made it dangerous to the health and safety of the workers. Where an Inspector cum facilitator so brings such defects to notice, it shall be the duty of the employer to rectify them with the least possible delay.
- (3) The employer shall get all the houses lime-washed at least once every year and all the doors, windows and other wooden structure varnished or painted once in three years. A record of dates on which lime-washing or painting was carried out shall be maintained in a register in From No. 5.

91. Allotment and occupation of houses

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

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

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

- (2) The employer may allot houses to workers not having families at the rate of one house for not more than four such workers.
- (3) The occupant of a house shall not make any unauthorised additions to or alterations in the house.
- (4) The occupant of a house shall not exchange the house with the occupant of another house except with the written permission of the employer.
 - (5) The occupant shall not let the house or any portion thereof to any person.
 - (6) All workers and members of their families occupying the houses shall use the latrines provided and shall not pollute the soil and shall keep the houses and the precincts thereof clean and tidy and shall not waste drinking water.
 - (7) No cattle or goats shall be kept in the living rooms or verandahs and no windows or air spaces shall be blocked up.
 - (8) The employer shall bring to the notice of each worker to whom housing accommodation has been provided the conditions governing the occupation of such accommodation in writing in a language which the latter can understand

92. Occupation of accommodation after termination of employment-

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

- (a) In the case of death, transfer or termination of service, for a period not exceeding two months;
- (b) In the case of retirement or resignation, for a period not exceeding one month:
- (c) In the case of leave, for the period of leave; and
- d)In the case where discharge or dismissal of a worker results in an industrial dispute, for so long as the case is not finally disposed of.

93. Drinking Water-

- (1) An adequate supply of drinking water shall be made available in every plantation at every sites, at all times during working hours.
- 2) Drinking water shall not be supplied from any open well or reservoir unless it is so constructed, situated, protected and maintained as to free the possibility of pollution by chemical or bacterial and extraneous impurities.
 - (3) Where drinking water is supplied from such well or reservoir, the water in it shall be sterilized periodically as required by the Inspector cum facilitator by written order, and the date on which sterilizing is carried out shall be recorded:
 - Provided that this requirement shall not apply to any such well or reservoir if the water therein is filtered and treated before it is supplied for consumption.
- (4) The Inspector-cum-facilitator may, by order in writing, direct the employer to obtain at such time or at such intervals as he may direct, a report from the qualified medical practitioner or the Certifying Surgeon, if the former is not available, as to the fitness for human consumption of the water supplied to workers and in every case to submit to the Inspector cum facilitator a copy of such report as soon as it is received from the qualified medical practitioner or Certifying Surgeon.
 - Drinking water shall be supplied at work sites at conveniently accessible points through panwalas or by tankers, etc.

94. Latrine accommodation-

- (1) Latrine accommodation shall be provided in every plantation on the scale of one latrine for every fifty acres of the area under cultivation or part thereof:
- Provided that there shall be at least one latrine each for either sex.
- (2) The latrine shall be conveniently situated and shall have exclusive access for either sex.
- (3) The walls, ceilings and partitions of every latrine and urinal shall be white- washed and colour-washed and the white-washing or colour-washing shall be repeated at least once in every period of four months.(4) The latrine should conform to public health requirements and latrines other than those connected with an efficient water-borne sewage system, shall comply with the requirements of the Public Health authorities.
- (5) Every latrine shall be under cover and so partitioned off as to secure privacy and shall have a proper door and tenings.
- (6) Where workers of both, sexes are employed, there shall be displayed outside each latrine or latrine block, a notice in Hindi and also in the language understood by the majority of workers "For Men Only" or "For Women only" as the case may be. The notice shall also bear the figure of a man or of a woman as the case may be.

(7) Where piped water supply is available, a sufficient number of water taps, conveniently accessible shall be provided in or near such latrine accommodation.

Provided that if piped water supply is not available, sufficient quantity of water shall be kept stored in suitable receptacles near the latrines.

95. Urinal accommodation.—

- (1) Urinal accommodation shall be provided on the scale of one urinal for every 10 acres of the area under cultivation or part thereof. The urinals shall be conveniently situated for both males and females and shall have exclusive for either sex.
- (2) Urinals should conform to public health requirements, urinals other than those connected with an efficient water-borne sewage system shall comply with the requirements of the Public Health authorities.

%. Construction and maintenance of drains.—

All drains carrying waste or sullage water shall be constructed in masonry or other impermeable materials and shall be regularly flushed and the effluent disposed of by connecting such drains with a suitable drainage line:

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

97. Creches.—

- (1) In every plantation wherein fifty or more women workers are employed or were employed on any day of the preceding twelve months, the employer shall provide and maintain a creche or creches for the use of their children who are below the age of six years according to the standards laid down in these rules.
- (2) Every creche shall be conveniently accessible to the mothers of the children accommodated therein.
- 3) There shall be not less than 15 square feet of floor area for each child to be accommodated in a creche.
- (4) The building in which the creche is situated shall be of sound construction with a good plinth.
- (5) The plain of the creche building shall be in accordance with the standard plan or plans laid down by the Inspector cum facilitator:

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

- (6) The creche shall be furnished with suitable furniture and a cradle for each child below the age of two.
- (7) A suitably fenced and shady open air playground shall be provided for the older children.
- (8) The employer shall appoint—
- (a) a woman as Creche-in-charge to look after children during the absence of their mothers, who shall possess such qualifications and training as may be approved by the State Government; and (b) such other staff on a scale approved by the said authority.

- (9) There shall be in or adjoining the creche a suitable wash-room and toilet
- (10) At least half a pint of clean pure milk if possible otherwise powdered milk approved by the Certifying Surgeon shall be made available for each child on every day it is accommodated in the creche and the mother of such child shall be allowed in the course of her daily work two intervals of sufficient time to visit the creche and feed the child. For children above two years of age there shall be provided in addition an adequate supply of wholesome refreshment.
- (11) The creche staff shall be provided with suitable clean clothes for use while on duty in the creche.
- (12) An adequate supply of clean clothes, soap and oil shall be made available for each child while it is in the creche.
- (13) Subject to provisions of sub-rule (1) to sub-rule (13) a grou of employer may jointly provide and maintain crèche and share its expenses.

98. Educational facilities for workers' children.—

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

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

Provided further subject to the provisions of sub-rule (1) of Rule 41, a group of employers may jointly provide and maintain a primary school and share its expenses.

- (2) Every school to be provided and maintained under Rule 40 shall be conveniently situated and within a distance of one mile from the workers' quarters.
- (3) The school building shall be constructed in accordance with the standard plan or plans which may be laid down by the State Government:

Provided that where is no standard plan or where it is proposed to deviate from a standard plan,

- 4) the State Government's approval of the plan of the school building shall be obtained.4 Where adequate space is available, an open air playground with suitable accessories shall also be (provided for the children attending the school
- (5) The employer or employers as the case may be shall provide for every primary school maintained under Rule 40 such educational and other equipment as may be considered necessary by the State Government.
- (6) The employer or employers concerned shall appoint one teacher for every forty children attending the primary school.
- (7) The employer or employers concerned shall appoint one teacher for every forty children attending the primary school.

The teacher shall possess the qualifications prescribed by the State Government for teachers in Government primary schools:

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

(8) The curriculum, duration, standard and syllabus of the course of instruction to be imparted in

the primary school shall be such as may be approved by the State Government.

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

91 Health facilities.- The plantation workers shall be provided with adequate medical facilities as notified by State Government in consultation with Department of Heath and Family Welfare from time to time.

99. Recreation Facilities.-

- (1) Every employer shall provide and maintain—
- (a) a recreation centre or centres for workers with provision for indoor games suitable for adult and child workers;
- (b) where adequate flat open space is available within a reasonable distance, a playground or playgrounds for adult and child workers with necessary sports equipment for outdoor games:
- Provided that subject to the provisions of code and Rules a group of employers may with the approval of the Chief Inspector-cum-Facilitator, provide and maintain joint recreation centres and playgrounds and share their expenses.
- 2) Every recreation centre to be provided and maintained under Rule 38 shall be conveniently situated (as near as possible to the workers'* quarters.
- 100. Use and handling of hazardous Chemicals, Insecticides, pesticides and toxic substances in the plantation. 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 expose to insecticides, pesticides, chemical and toxic substances.
- **101.** Display of Notice indicating hazards of insecticides, pesticides, chemicals and toxic substances.-

Every employer of a plantation shall exhibit precautionary notice at the site of plantation.

CHAPTER XII [Section-111]

OFFENCES AND PENALTIES

102. Power of officers of State Government to impose penalties in certain cases.

- 1. The officer for holding enquiry will be a class one gazzeted officer atleast one level above the officer against whom the enquiry is set up.
- 2. The appelent officer shall be at least one level above the enquiry officer.

103. Composition of certain Offences-

The procedure for Compounding of offences and penalties shall be done in the following manner –

The inspector of factories of the region will first insure for the compliance of the violence indicated during inspection for which a period of one month will be given to the employer, Only notice shall be sent to the employer to comply the provisions. If the employer fails to comply the compounding procedures will be initiated.

Firstly a notice will be served to the employer to opt for compounding. If after notice he opts for compounding the inspector of the region in the capacity of recommending officer will forward the matter for compounding to the Dy. Chief Inspector-cum-Facilitator of factories of his zone.

The Dy. Chief Inspector-cum-Facilitator of the zone in the capacity of examining officer will examine the matter and will forward to The LabourCommissionor with the endorsement, whether compounding is to be done or not.

The LabourCommissoner in the capacity of compounding authority shall impose the penalty in a manner as mentioned in the notification to be issued by the Government of Uttarakhand.

CHAPTER XIII SOCIAL SECURITY FUND

104. Detail order will be issued by the Uttarakhand Government to create social Security fund for the welfare of unorganized workers as per the procedure laid down under section 115 of the Code.

CHAPTER XIV MISCELLANEOUS

- **105.** The The Uttarakhand Government will act according to the notification to be issued by central Government.
- **86.** A common licence is required for contractor, factories, establishments, and industrial premises by the central Government of the State Government. The state Government will use the same proforma as prescribed in Form no- for those contractors who will employ the workers for this state only.

Under Section 133 And 135

106. The State Government will make the rule by publication and issue the notification as and when required.

Schedule" A"

The Classes of Dangerous Occurrences.- The following are the classes of dangerous occurrences, whether or not they are attended by personal injury or disablement—

- (a) Bursting, of any plant or pipeline or equipment containing petroleum, steam, compressed air or other substance at a pressure greater than the atmospheric pressure;
- (b) Collapse or failure of a crane, derrick, winch hoist or other appliances used in raising or lowering persons or goods, or any part thereof, on the overturning of a crane.
- (c) Explosion, fire, bursting out, leakage or escape of any molten metal, or hot liquid or gas or vapour or fume.
- (d) Explosion of a receiver or container used for the storage at a pressure greater than atmospheric pressure of any gas or gases (including air) or any liquid or solid resulting from the compression of gas.
- (e) 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;
- (f) collapse of any wall, floor, gallery, roof bridge, tunnel, excavation, chimney, building or subsidence of soil or any other structure, platform, staging, scaffolding or any means of access including formwork.
- (g) Spillage or leakage of hazardous substances and damage to their container;

- (h) collapse, capsizing, toppling or collision of transport equipment within the establishment;
- (i) 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
- (j) Uncontrolled emission of petroleum or chemical spillage from the establishment.

Schedule B

- 1. A person shall not be eligible for appointment as a Safety Officer unless he:—
- (a) possesses a Degree in any branch of Engineering or Technology of a University established by law and has had practical experience of working in a factory in a supervisory capacity in production or maintenance or Safety Department for a period of not less than two years; or
- (b)possesses a master degree in Physics or Chemistry of a University established by law and has had practical experience of working in a factory in a supervisory capacity in production or maintenance or Safety Department for a period of not less than five years; orprocess a diploma in any branch of Engineering or Technology recognised by the State Government and has had practical experience of working in a factory in a supervisory capacity in production or maintenance or safety department for a period of not less than five years; or
- (d) possesses a recognised degree in any branch of Engineering or technology and has had experience of not less than two years in a department of the Central or the State Government; or
- (e) possesses a recognised degree in any branch of Engineering or Technology and has had at least five years experience of working in institutions dealing with training, education, consultancy or research in the field of accident prevention in industry or in any institution; and
- (f)Possess degree or diploma or industrial safety recognized by the state government in this behalf or Possesses a B.Tech/M tech degree in health, safety and environment or fire engineering or post graduate diploma in health safety and environment or any other equivalent qualification granted by any university duly established by law.

Provided that Chief Inspector-cum-Facilitator may relax the qualification in respect of clause (f) and (g) with the conditions, in writing, for any establishment or a class of establishments.

2. Duties of Safety Officers- The duties of the Safety Officers shall be to advise and assist the factory management in the fulfillment of its obligations, statutory or otherwise concerning prevention of personal injuries and maintaining a safe working environment. These duties shall also include the

following, namely—

- (a) to advise the departmental heads, supervisors and other such officers in planning and organising measures necessary for the effective control of personal injuries;
- (b)to advise on safety aspects in all job studies, and to carry out detailed job safety studies of selected jobs;
- (c)to check and evaluate the effectiveness of the action taken or proposed to be taken to prevent personal injuries;
- (d)to advise the personnel of store purchase department in ensuring high quality and availability of personal protective equipments etc.;

(e)to advise on matters relating to carrying out plant safety inspections;

to carry out plant safety inspections in order to observe the physical conditions of work and the work practice procedures followed by the employees and to render advice on measures to be adopted for reducing the unsafe physical conditions and preventing unsafe Conditions by employees;

- (f)to render advice on matters relating to reporting and investigation of industrial accidents and diseases:
- (g)to investigate fatal and serious accidents and to suggest remedial measures to the management;
- (h)to investigate the cases of industrial disease contracted and dangerous occurrences reportable under section 10 and section 11 of the code;
- (i)to advise on the maintenance of such records as are necessary relating to accidents; dangerous occurrences and industrial diseases;
- (j)to promote setting up of safety committees and to act as an adviser and catalyst to such committees;
- (k) to organise in association with the concerned department, campaign, competitions, contests and other activities which will develop and maintain the interest of the employees in establishing and maintaining safety conditions of work and procedure;
- (1) to submit quarterly report ,along with minutes of safety committee meeting , to the inspector cum facilitator of the region through his employer in respect of the work in promoting safety , Health and hygiene of workers in the establishment by him or safety department for the previous quarter. The report will be submitted by chief safety officer in case of more than one safety officer.
- (m)to design and conduct either independently or in collaboration with the organisations, departments imparting industrial safety training, suitable training and educational programme for the prevention of personal injuries and to hold safety seminars at least once in a year;
- (n)to prepare an annual report of accidents and industrial diseases suggesting their remedial measures and to put it up before the annual meeting of the Board of Directors.
- 3.Status.—The Chief Safety Officer or the Safety Officer in the case of factories where only one Safety Officer is required to be appointed shall be given the status of a departmental head or a senior executive in the factory and he shall work directly under control of the Chief Executive of the factory. Every other Safety Officer shall be given appropriate status corresponding the status of an officer holding a position next below other departmental heads in the factory:

Provided that where any dispute arises as to the status of a Safety Officer or Chief Safety Officer, the case shall be referred to the State Government whose decision shall be final.

4. Prohibition performances of other duties.—No Safety Officer shall be required or allowed to do any work which is inconsistent with, or detrimental to the performance of his duties specified in this Rule.

Schedule "C"

Continuous Process Factories

[rule23(3)]

1. The following classes of work in the under mentioned classes of factories shall be deemed to be of the nature of continuos process referred to in rule under Section 25 and section 133(1) and shall be exempt from the provisions of Section 25 of the code and rule therein subject to the conditions stated below:

Classes of Factories	Class of work				
(i) Electrical Generating stations and Distributing substations.	Work of male workers attending to boilers turbines, engines, generators, motors, boosters, switchboards, transmission machinery, cables, batteries and auxiliaries.				
(ii) Waterworks and water		Work of male workers attending to boilers, engines, motors, switchboards, pumps and auxiliaries.			
pumping stations.					
(iii) Sugar Factories and refineries working on the vacuum pan system.	Work	of male workers attending to-			
	(a)	boilers, engines, motors, switchboards and pumps;			
	(b)	handling and crushing cane and handling gur to melting blow-ups;			
	(c)	engaged in filtration, clarification and crystallization and cane juice and gur liquor;			
	(d)	engaged in evaporation and concentration of cane juice and gur liquor;			
	(e)	engaged in curing the massacuite;			
	(f)	engaged in drying, crushing and bagging of sugar;			
	(g)	engaged in the burning of lime stone and sulphur, for production of carbon dioxide and sulphur dioxide gases, for the clarification of cane juice.			
(iv) Distilleries	The v	vork of male workers attending to-			
	(a)	boilers, engines, motors, switchboards and pumps;			
	(b)	diffusion of mahua;			

	(c)	working of molasses;		
	(d)	fermentation of wash;		
	(e)	yeast propagation;		
	(f)	distillation process.		
(v) Breweries	The work of male adult workers attending to-			
	(a)	boilers, engines and pumps;		
	(b)	melting, coppers, hopback, coolers and refrigerators.		
(vi) Rosin and Turpentine.	The v	work of male workers attending to-		
	(a)	boilers, engines, pumps, motors and switch-board;		
	(b)	distillation of rosin;		
	(c)	refining of turpentine;		
	(d)	filtration and casting of rosin.		
(vii) Ice factories	The v	work of male workers attending to-		
	(a)	boilers and ice-making machinery;		
	(b)	receptacles for the production of ice.		
(viii) Chemical works	The work of male workers attending to-			
	(a)	boilers, pumps and compressors;		
	(b)	the manufacture of sulphuric, nitric and hydrochloric acids, ammonia, magnesium sulphate, alum, hyposulphite and sulphite of soda, sodium sulphate, sodium sulphide, nitrate of potash, alumina and bichromate of potash.		
	The v	vork of male workers attending to boilers and distillation sses.		
(x) Plate and sheet glass factories and glass bangles factories.	The v	work of the following classes of male adult workers-		
	(a)	gas producers, window and plate glass machinemen, tankmen, sheet-glass carriers and lift attendants and workers employed on glass blowing machines in tank and pot furnaces when run in conjunction with the glass furnace;		
	(b)	firemen, engine and boiler attendants.		
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(xi) Straw-boards factories.	The v	vork of male workers attending to-			
	(a)	boilers, engines, turbines, generators, motors, switch-boards and pumps;			
	(b)	cooking, milling, beating and straw-board machines.			
(xii) Kiln, seasoning of timber and bobbin stone enamelling.	The v	vork of male workers attending to-			
	(a)	boilers, engines, pumps, motors, dynamos and switch-boards;			
	(b)	Timber, seasoning Kiln.			
	(c)	stone-enamelling chamber.			
(xiii) Vegetable oil Hydrogenation factories.	The work of male workers attending to-				
	(a)	boilers, generators, motors, transformers, switch- boards and water softening plants;			
	(b)	refining, bleaching, distillation (deodorization) and hardening plants, soldering, labelling, packing and storing of containers;			
	(c)	the production and compression of hydrogen and oxygen gases;			
(xiv) Production and or compression of oxygen and acetylene gases.	The v	e work of male workers attending to generator and compressors.			
(xv) Soap factories	The work of male workers attending to-				
	(a)	boilers, generators, motors, switch-boards; and			
	(b)	boiling, scrutching and framing.			
(xvi) Paper mills	The work of male workers attending to-				
	(a)	boilers, engines, turbines, generators, motors, switch- boards and pumps;			
	(b)	b) cooking, milling, beating, straw-board and paper manufacturing machines.			

(xvii) Electrical steel smelting furnaces.	Work of male workers attending to transformers, electrode controls, hydraulic pumps, scrap cutting and transporting, furnacemen, ladenmen, pitside workers and workers attending to moulds for ingot.			
(xviii) Rolling mills	Ingot transporters, furnacemen, furnace coolies, tongsmen working at various rolling mills (such as roughers and loopers) workers on the cooling bed, motormen, straighteners, workers engaged in stacking of finished material and attendants of shares and other auxiliary machinery.			
(xix) Starch factories	by-pr	of male workers engaged in the manufacture of starch and its oducts, except those employed in the engineering departments workshops.		
(xx) Glue and Gelatine mills.	Work of male workers engaged in the manufacture of glue and gelatine, including soaking, boiling, spreading, chopping and drying.			
(xxi) Biscuits, Noodles & Pasta factories	Work of male workers engaged in the mixing of the dough, baking, drying, and packing biscuits.			
(xxii) Cement factories	The work of adult workers-			
	(a)	attending to boilers, engines, motors, switch- boards and pumps;		
	(b)	engaged in preparation of raw materials, cement mills, working in conjunction with the continuous kilns, cement grinding, packing and storing.		
(xxiii) Cold storage factories.	Work	of male workers attending to motors and compressors.		
(xxiii-A) Capacitors making factories.	Work of male workers engaged in Anodic, forming of Aluminium foils and other connected processes.			
(xxiv) All factories	Work of male workers attending boilers.			
(xxv) Manufacture of Audi-Video, magnetic tape	Work of male workers-			
	(a)	engaged in operations and process of mixing coating, calendering, and utility services, and		

- (b) attending to plane, tery mixing machine, high speed dissolver, puddle mixer, media mill, tank mixer, sand mill filter unit; coating machine, calendering machine; air compressors, air handling unit, chilling plant and cooling towers.
- **2.** The Chief Inspector-cum-Facilitator may declare any other classes of work or classes of factories for any technical reason as a continous process by his general or special order.

Conditions

- (i) Such workers shall be employed on three eight-hour shifts system. An interval for rest of half an hour shall be allowed to every such worker some time during each shift he is required to work.
- (ii) No such workers shall be employed for more than fourteen consecutive days without a holiday of twenty-four consecutive hours.
- (iii) The total daily hours of work shall not exceed 10 with a spread over of 12 hours except in an emergency when it is necessary to employ a shift worker for more than 8 hours in any day to enable him to work whole or part of the subsequent shift. In no case shall the worker be employed for more than 16 hours in a period of 24 hours from the commencement of work, and the total number of hours of overtime shall also not exceed 100 in any quarter:

Provided that where subsequent shift or any part thereof during which a shift worker is employed as aforesaid falls on a weekly holiday, compensatory period of rest shall also be given on a day which is neither a festival nor a weekly holiday.

The Manager shall also enter the period of extra time worked and the extent of compensatory period of rest in the respective registers and shall note therein the time of commencement of such extra time work before its commencement.

- (iv) The system of shifts shall be approved by an Inspector-cum-facilitator of Factories before enforcement.
- (V) All workers working in excess of 8 hours a day or 48 hours a week in a factory shall be paid in respect of such additional hours at the rate of twice the ordinary rate of any in -accordance with the provisions of section 27 of the Code.
- (vi) Every worker shall be given a compensatory holiday in accordance with Section 26 of the code and rule therein.

Schedule "D"

Form of application	for grant of C	Certificate of C	Competency to	a person unde	er rule 33 of
Section 2(1)(1).:					

- 1. Name
- 2. Date of Birth
- 3. Name of the Organisation (if not self-employed)
- 4. Designation

Place:

- 5. Educational qualification (copies of testimonials to be attached)
- 6. Details of professional experience (in chronological order):

Name of the organisation Period of service Designation Area of responsibility

- 7. Membership, if any, of professional bodies
- 8.(i) Details of facilities (examination, testing, etc.) at his disposal.
 - (ii) Arrangements for calibrating and maintaining the accuracy of these facilities
- 9. Purpose for which certificate of competency is sought (section or sections of the Code should be stated)
 - 10. Whether the applicant has been declared a competent person under any statute (if so, the details)......
 - 11. Any other relevant information.......
 - 12. Declaration by the applicant....

hereby declare that the information furnished above is true; I undertake-

- (a) that in the event of any changes in the facilities at my disposal (either addition or deletion) or my leaving the aforesaid organi•sation, 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 fulfil 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.

Date:	Signature	of	the	applican

Declaration by the Institution (if employed),...... certify that Shri whose details are furnished above, is in our employment and nominate him on behalf of the organisation for the purposes of being declared as a competent person under the Code. I also undertake that I shall—

- (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 factories (either addition or deletion).

Date:	Signature	
	Designation	
	Telephone No	

Official Seal

Note.—This declaration should be made by the Managing Director of the company or the partner of the firm or the proprietor, as the case may be.

Form of application of grant of Certificate of Competency to an Institution under under rule 33 of Section 2(1)(1).

- 1. Name and full address of the Organisation.....
- 2. Organisation's status (specify whether Government, Autonomous, Cooperative, Corporate or Private)......
- 3. Purpose for which certificate of competency is sought (specify section(s) of the Code).
- 4. Whether the Organisation has been declared as a competent person under this rule or any other statute and if so, give details.
- 5. Particulars of persons employed and possessing qualifications and experience as set out in Schedule annexed to under rule 33 of Section 2(1)(1);

Serial No.	Name and designation	Qualifications	Experience	Section(s) and the Rule under which certificate of competency is sought for
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- 6. Details of facilities (relevant to Item 3 above) and arrangements made for their maintenance and periodic calibration.
- 7. Any other relevant information.
- 8. Declaration...... 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 perio•dically as per manufacturer's instructions or as per National Standards; and
- (ii) to fulfil and abide by all the conditions stipulated in the certificate to competency and instructions issued by the Chief Inspector-cum-Facilitator from time to time.

Place: Signature of Head of the Institution

Date: or of the person authorised to sign on behalf

Designation

Form of Certificate of Competency issued to a person or an Institution in pursuance of Rule 33 made under Section2(1)(l).

in exercise of the powers under Section 2(1)(l). of the Code and Rule made thereunder, hereby recognise.

Shri in the employment of (Name of the institution)

Or (Name of organisation) as a competent person for the purpose of carrying out tests, examinations and inspections and certification of such building, dangerous machinery, lift and hoists, lifting machine and lifting tackles, pressure plants, confined space, ventilation system and such other process or plant and equipment

as the case may be, used in factory located in under Section and the rule made thereunder.

This certificate is valid from to...

This certificate is subject to the following conditions namely:-

- (1) tests, examination and inspections shall be carried out in accordance with the provision of the Code and the. Rule made thereunder;
- (\ddot{u}) tests, examination and inspections shall be carried out under direct supervision of the competent person or by a person so authorised by an institution recognised to the competent person;
- (iii) the certificate of competency issued in favour of a person shall stand cancelled if the person leaves the organisation mentioned in his application;
- (iv) the institution recognised as a competent person shall keep the Chief Inspector-cum-Facilitator to informed of the names, designations and qualifications of the persons authorised by it to carry out tests, examinations and inspections.

Place: Signature of the Chief Inspector-cum-Facilitator

Date: Official Seal

Note.—A separate certificate should be issued under each relevant section. A person or an institution may be recognised as a competent person for the purposes of more than one section of the Code.

SCHEDULE

Serial No.	Section or rule under which competency is recognised	Qualifications required	Experience for the purpose	command
1	Rules made under Section2(1)(1). Certificate of stability for buildings.	A degree in Civil or Structural Engineering or a degree equivalent thereto.	(1) A minimum experience of 10 years in the design or construction or testing or repairs of structures; (0 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.	5

2.			(i) A minimum experience of 7 years in— (a) design or operation or	Gauges measurement; instruments
	Rules made under Section 18(2)(f) 'Dangerous machines'.Section18(2)(f)—Lifts and Hoists'	A degree in Electrical or Mecha- nice! or Textile Engineering or a degree equivalent thereto. A degree in Electrical or Mechanical Engineering or a degree equivalent thereto.	maintenance; or (b) testing, examination and inspection of relevant machi•nery, their guards, safety devices and appliances.He shall—be conversant with safety devices and their proper functioning. (I) A minimum experience of 7 years in— (a)design or erection or maintenance ; or (b) inspection and test	Facilities for lo measurement and any other equipm ent, required determining the safe working conditions of Hoists and Lifts.
			procedure of Lifts and Hoists. He shall be—(a) conversant with relevant codes of practices and test procedures that are current; (b) conversant with other statutory requirements covering the safety of the Hoists and Lifts.	

Section 18(2)(f) —Lifting Machines, chains, ropes and lifting tackles.	A degree in Elec•trical orMechanical or Metallurgical Engineering or a degree equivalent thereto.	(i) A minimum experience of 7 years in— (a) design or erection or maintenance; or (b) testing, examination and inspection of lifting machines, chains, ropes and lifting tackles. (it) He• shall be— (a) conversant with the relevant code of practices and test procedures that are current; (b) conversant with frActure mechanics and metallurgy of the material of construction. (c) conversant with heat treatment, stress relieving techniques as applicable to stress bearing components and parts of lifting machines and lifting tackles.	Facilities for load testing, tensile testing, heat treatment equipment gadget forme asurement, gauges and such other equipment to determine the safe working conditions of the lifting machines, chains, ropes and lifting tackles.
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4.	Section 18(2)(f) - 'pressure plant'	A degree in Chemical or Electrical or Metallurgical Engineering or a degree equivalent thereto.	 (i) A minimum experience of 10 years in— (a) design or erection or maintenance, or (b) testing, examination and inspection of pressure plants. (ii) He shall be— conversant with the relevant codes of practice and test procedures relating to pressure vessels; (b) conversant with statutory requirements concerning the safety of unfired pressure vessels and equipment operating under pressure; (c) conversant with non destructive testing techniques as are applicable to pressure vessels. 	Facilities for carrying out hydraulic test, non-destruct•ive test, gauges equipment/gadgets for measurement and other equipment or gauges to determine the safety in the use of pressure vessels.
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dangerous fumes' Chemical Engineering. Calibrated and certified for out the tests certifications of chemicals and their permissible limit values;	carrying and of safety
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6.	Ventilation system as required under various Schedules framed under Section 82 such as Schedules on— (I) grinding or glassing of metals and Process incidental thereto. (ii) cleaning or smoothing, roughering, etc. of articles by a jet of sand, metal shot or grit or other abrasive propelled by a blast of compressed air or steam. (iii) handling and PROCESSing of asbestos. (iv) manufacture of Rayon by viscose PROCESS, (v) foundry operations.	A degree in Mechanical or Electrical Engineering a degree equivalent thereto.	(c)be conversant with the current techniques of sampling and analysis of the environmental contaminants. (4)- A minimum experience of 7 years in the design, fabrication, installation, testing of ventilation systems and systems used for extraction and collection of dusts, fumes and vapours and other ancillary equipment. He shall be conversant with relevant codes of practice and test procedures that are current in respect of Ventilation and extraction system for fumes.	Facilities for testing the ventilation system, instruments and gauges for testing the effectiveness of the extrCodeion systems for dust, vapours and fumes and any other equipment neede for dtermining the efficiency and adequacy of these systems. He shall have the assistance of a person having a postgraduate degree in Physics or diploma
	operations.			

SCHEDULE - E

(See section 88)

PERMISSIBLE LEVELS OF CERTAIN CHEMICAL SUBSTANCES IN WORK ENVIRONMENT

	Permissible limits of exposure					
Substance	Time	e-weighted	Shor	t-term		
	average	concentration	exposure limit			
		(8 hrs)	(15	min)		
	ppm	Mg/m ³	ppm	Mg/m ³		
Acetaldehyde	100	180	150	270		
Acetic acid	10	25	15	37		
Acetone	750	1780	1000	2375		
Acrelein	0.1	0.25	0.3	0.8		
Acrylonitrile—skin	2	4.5				
Aldrin-skin		0.25		0.75		
Allychloride	1	3	2	6		
Ammonia	0.25	18	35	27		
Aniline-Skin	2	10	5	20		
Anisidine (o., Pisoners)—skin	0.1	0.5				
Arsenic and compounds (as As)		0.2				
Benzene	10	20	25	75		
Beryllium		0.20				
Boron trifluoride	0.1	0.3				
Bromine	0.1	0.7	0.3	2		
Butane	800	1900				
2-Butanone (Methyl-ethyl Ketone-MEK)	200	590	300	885		
n-Butyl acetate	150	710	200	950		
n-Butyle alcohol-Skin	C50	C150				
sec/tert. Butyl acetate	200	950	250	1190		
Butyl Mercaptan	0.5	1.5				
Cadmium-Dusts and salts (as Cd)		0.05		0.2		

Calcium oxide	• •	2	• •	• •
Carbaryl (Sevin)	• •	5	• •	10
Carbofuran (Furadan)		0.1		• •
Carbon disulphide—Skin	10	30	• •	• •

* Ins. by Act 20 of 1987, s. 45 (w.e.f. 1-6-1988).

	ppm	Mg/m ³	ppm	Mg/m ³
Carbon monoxide)	50	40	400	440
Carbon to trachloride—skin	m5	30	20	125
Carbonyl Chloride (Phosgene)	0.1	0.4		
Chlorobenzene (Monochloro-benzene)	75	350		
Chlordane-skin		0.5		
Chlorine	1	3	3	9
Chloroform	10	50	50	225
Bis-Chloromethyl ether	0.001	0.005		
Chromic acid and chromates (as Cr)		0.05		
Character Calte (as Ca)		0.05	• •	
Chromous Salts (as Cr)	• • •	0.05		
Copper fume		0.2	• •	• •
				0.6
Cotton dust, raw	• • •	0.2		
Crosol, all isomers—skin	5	22	• •	•••
Cyanides (as CN)—skin		5		
Cyanogen	10	20		
DDT (Dichlorodiphenyl Trichloroethane)		1		3
demeton-skin	0.01	0.1	0.03	0.3
deflicton-skin	0.01	0.1		0.3
Diazinon-skin		0.1	• •	0.3
Dibutyl Phythalate		5		10
<u> </u>			0.3	3
Dichlorvos (DDVP)—skin	0.1	1		

				0.75
Dieldrin—skin		0.25	• •	0.73
			0.5	
Dinitrobenzene (all isomers)—skin	0.15	1	0.5	3
		1.5		5
Dinitrotolune-skin	• • •	1.5	• •	3
Diphenyl	0.2	1.5	0.6	4
				0.4
Endosulfan (Thiodan)—skin		0.1	• •	
				0.3
Endrin—skin	• •	0.1	• •	
	400	1.100		
Ethyl acetate	400	1400		
Tal. 1. 1. 1. 1.	1000	1000		
Ethyl alcohol	1000	1900	• •	
Ethylomina	10	18		• •
Ethylamine	10	10	• •	
Fluorides (as F)		2.5		
	• •		••	
Fluorine	1	2	2	4
Formic Acid	5	9		
Hydrazine—skin	0.1	0.1		
Hydrogen Chloride	C5	C7		
	ppm	Mg/m ³	ppm	Mg/m ³
Hydrogen Cyanide—skin	C10	C10		
Hydrogen fluoride (as F)	3	2.5	6	5
Hydrogen Peroxide	1	1.5	2	3
Hydrogen Sulphide	10	14	15	21
Iodine	C0.1	C1		
Iron-Oxide Fume (Fe _z O ₃) (as Fe)		5		10
Isoamyl acetate	100	525	125	665
Isoamyl alcohol	100	360	125	450

Isobutyl alcohal	50	150	75	225
Lead, inorg, dusts and fumes (as Pb)		0.15		0.45
Lindane-skin		0.5	• •	1.5
Malathion-skin	• •	10		
Manganese (as Mn) dust and compounds		C05		
Fume		1		0.3
Mercury (as Hg)—skin Alkyl compounds		0.01		0.03
A11.6		0.05		
All forms except alkyl vapour	• •	0.05		
Aryl and inorganic compounds		0.1	• •	
Methyl alcohol (methanol)—skin	200	260	250	310
Methyl cellosolve—skin (2 methoxy ethanol)	5	16		
Methyl isobutyl ketone—skin	50	205	75	300
Methyl Isocyanate	0.02	0.05		
Napthalene	10	50	15	75
Nickel carbonyl (as Ni)	0.05	0.35		
Nitric acid	2	5	4	10
Nitric oxide	25	30	35	45
Nitrobenzene—skin	1	5	2	10

Nitrogen dioxide	3	6	5	10
Oil mist, minerals		5		10
Oxone	0.1	0.2	0.3	0.6
Parathion—skin		0.1	• •	0.3
Phenol—skin	 5	19	10	38
Phorate (Thimet)—skin		0.05		0.2
Phosgene (Carbonyl Chloride)	0.1	0.4		
Phosphine	0.3	0.4	1	1

	ppm	Mg/m ³	ppm	Mg/m ³
Phosphorus (yellow)		0.1	• •	0.3
Phosphorus pentachloride	0.1	1		
Phosphorus trichloride	0.2	1.5	0.5	3
Picric acid—skin		0.1		0.3
Pyridine	5	15	10	30
Silane (silicon tetrahydride)	5	7		
Sodium hydroxide		C2	• •	• •
Styrene, monomer (phanylethylene)	50	215	100	425
Sulphur dioxide	2	5	5	10
Sulphur hexafluoride	1000	6000	1250	7500
Sulphuric acid		1		
Toluene (Toluol)	100	375	150	560
0-Toluidinz—skin	2	9		• •
Tributyl phosphate	0.2	2.5	0.4	5
Trichloroethylene	50	270	200	1080
Uranium, natural (as U)		0.2		0.5
Vinyl chloride	5	10		• •

Welding fumes	• •	5	• •	
Xylene (o-, m-, P-isomers)	100	435	150	655
Zirconium compounds (as Zr)	• •	5	• •	10

C denotes ceiling limit

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

Substance	Permissible	time-	average concentration		
	(8 hours)	weighted			
(i) Silica					
(a) Crystalline					
(b) Quartz					
(1) In term of dusts count	10600			mnnem	
				mppcm	
	% Quartz+10				

Substance	Permissible	time- average concentra		concentration
	(8 hours)	weighted		
	10			2
(2) In terms of respirable dust				mg/m ³
	% respirable quartz+2			
	10			
(3) In terms of total dust				mg/m^3
	% Quartz+3			
(ii) Cristobalite	Half the limits given against quartz.			
(iii) Tridymite	Half the limits given against quartz.			
(iv) Silca, fused	Same limits as for quartz.			
(v) (a) Tripoli	Same limit as in formula in item 2 given against			
	quartz.			
(b) Amorphous	705 mppcm.]			

Schedule of Dangerous operations, Welfare aminiteis, Sanitary Facilities, Protective equipments and Medical Examinations etc.

Schedule-I

Manufacture of Aerated Waters and Process 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, a fragment of a bursting bottle or syphon from striking any person employed in the factory.
- 2. Face-guards and gauntlets.—(1) The occupier shall provide and maintain in good condition for the use of all persons engaged in filling bottles or syphons—
- (a) suitable face-guards to protect the face, neck and throat, and
- (b) suitable gauntlets for both arms to protect the whole-hand and arms:

Provided that-

- (i) Paragraph 2(1) shall not apply where bottles are filled by means of an automatic machine so constructed that no fragment of a bursting bottle can escape, and
- (ii) where a machine is so constructed that only one arm of the bottler at work upon it is exposed to danger, a gauntlet need not be provided for the arm, which is not exposed to danger.
- (2) The occupier shall provide and maintain in good condition for the use of all persons engaged in corking, crowning, screwing, wiring, foiling, capsuling, sighting or labelling bottles or syphons:
- (a) suitable face-guards to protect the face, neek and throat, and
- (b) suitable gaundets for both arms to protect the arm and at least half of the palm and the space between the thumb and forefinger.
- 3. Wearing of face-guards and gauntlets.—All persons engaged in any of the Process specified in paragraph 2 shall while at work in such Process, wear the face-guards and gauntlets provided under the provisions of the said paragraph.

Schedule-II

All types of Electroplating process.

- 1. Definition.—For the purposes of this schedule—
- (a) "Electrolytic process" means the electrolytic plating or oxidation of metal articles
 - (b) "Bath" means by vessel used for an electrolytic chromium process or for any subsequent process .
- (c) "Employed" means in paragraphs 5, 7, 8 and 9 of this schedule, employed in any process involving contact with liquid from a bath.
- (d) "Suspension" means suspension from employment in any process involving contact with liquid from any bath by written certificate in the health register, signed by the Certifying Surgeon, who shall have power of suspension as regards all persons employed in any such process .
- 2 Exhaust draught.—An efficient exhaust draught shall be applied to every vessel in which an electrolytic chromium process is carried on. Such draught shall be provided by mechanical means and shall operate on the vapour or spray given off in the process as near as may be at the point of origin. The exhaust draught appliance shall be so constructed, arranged and maintained as to prevent the vapour or spray entering into any room or place in which work is carried on.
- 3. Prohibition relating to women and young persons.—No woman, adolescent or child shall be employed or permitted to work at a bath.
- 4. Floor of workrooms.—The floor or every 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 clothing.—(1) The occupier of the factory shall provide and maintain in good and clean condition the following articles of protective clothing 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 clothing shall be worn by the persons concerned:
- (a) Water-proof aprons and bibs, and
- (b) for persons Actually working at a bath, loose fitting rubber gloves and rubber boots or other water-proof footwear.
- (2) The occupier shall provide and maintain for the use of all persons employed, suitable accommodation for the storage and adequate arrangements for the drying of the protective clothing.
- 6. Medical requisites.—The occupier shall provide and maintain a sufficient supply of suitable ointment and impermeable water-proof plaster in a separate box readily accessible to the employees and used solely for the purposes of keeping the ointment and plaster.
- 7. Medical examination.—(a) Every person employed shall be examined by the Qualified medical practitioner once in every 14 days and such examination shall take place at the factory.
- (b) A health register in the prescribed Form No. 17 shall be kept by the occupier of the factory and in it shall be entered the names of all persons employed together with such entries as the Qualified medical practitioner may make from time to time.
- (c) No person after suspension shall be employed without written sanction from the Qualified medical practitioner entered in or attached to the health register.
- 8. Cautionary placard.—A cautionary placard in the form specified by the Chief Inspector-cum-Facilitator and printed in the language of the majority of the employees employed shall be affixed in a prominent place in the factory where ii can be easily and conveniently read by the employees.
- 9. Weekly examination.—A responsible person appointed in writing by the factory shall twice in every week inspect the hands forearms of the persons employed and shall keep a record of such inspections in the health register.

Schedule-III

Manufacture and Repairs of Electric Accumulators

- 1. Savings.—This schedule shall not apply to the manufacture or repair of electric accumulators or parts thereof not containing lead or any compound of lead; or to the repair on the premises, of any accumulator forming part of a stationary battery.
- 2. Definitions.—For the purposes of this schedule—
- (a) "Lead process" means the melting of lead or any material containing lead, casting, pasting, lead burning, or any other work, including tribbing, 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 (Form No. 17) signed by the Certifying Surgeon, who shall have power of suspension as regards all persons employed in any such process.
- 3. Prohibition relating to workmen and young persons.—No women or young person shall be employed or permitted to work in any lead process or in any room in which the manipulation of raw oxide of lead or pasting is carried on.
- 4. Separation of certain Process —Each of the following Process —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 so as to secure and maintain efficient ventilation to all parts of the room.
- 7. Distance between employees in the pasting room.—In every pasting room the distance between the centre of the working position of any paster and that of the paster working nearest to him shall not be less than five feet.
- 8. Floor of work-rooms.—The floor of every room in which a lead process is carried on shall be—
- (a) of cement or similar material so as to be smooth and impervious to water;
- (b) maintained in sound conditions;
- (c) kept free from materials, plant or other obstruction not required for, or produced in, the process carried on in the room.
- (2) In all such rooms other than grid casting shops the floor shall be cleaned daily after being thoroughly sprayed with water at a time when other work is being carried on in the room.
- (3) In grid casting shops the floor shall be cleansed daily.
- (4) Without prejudice to the requirements of sub-paragraphs (1), (2) and (3), where manipulation of raw oxide of lead of pasting is carried on the floor shall also be—
- (a) kept constantly moist while work is being done;
- (b) provided with suitable and adequate arrangements for drainage;
- (c) 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--
- (c) be cleansed daily either after being thoroughly damped or by means of a suction cleaning apparatus, at a time when no other work is being carried on thereat;
- and, all such work-benches in grid casting shops, shall—
- (d) be cleansed daily;
- and every work-bench used for pasting shall-
- (e) be covered throughout with sheet lead or other impervious material;
- (f) be provided with raised edges;
- (g) be kept constantly moist while pasting is being carried on.
- 10. Exhaust draught.—The following process 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 workroom;
- (c) Pasting;
- (d) Trimming, brushing, filing or any other abrading or cutting of pastered 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 of 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 of dross.—A suitable receptacle with tightly fitting cover shall be provided and used for dross as it is removed from every melting pot. Such receptacle shall be kept covered while in the work-room except when dross is being deposited therein.
- 13. Container for lead waste.—A suitable receptacle shall be provided in every work-room in which old plates and waste material, which may give rise to dust shall be deposited.
- 14. Racks and shelves in drying room.—The racks or shelves provided in any drying room shall not be more than 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 shelves shall be cleansed only after being thoroughly damped unless an efficient suction cleaning apparatus is used for the purpose.

- 15. Medical examination.—(a) Every person employed in a lead process shall be examined by the Qualified medical practitioner within seven days preceding or following the date of his first employment in such process and thereafter shall be examined by the qualified medical practitioner 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 No. 17, containing the names of all persons employed in lead process shall be kept.
- (c) No person after suspension shall be employed in a lead process without written sanction from the Qualified medical practitioner 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;
- (c) the formation room;

and such clothing shall be worn by the persons concerned. The protective clothing shall consist of a water-proof apron and water-proof footwear; and, also, as regards persons employed in the manipulation of raw oxide- of lead or in pasting, head covering. The head coverings 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 die 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 provided under die charge of a responsible person, and shall be kept clean.

- 18. Cloak-room.—There shall be provided and maintained for the use of all persons employed in a lead process —
- (a) a cloak-room for clothing put off during working hours with adequate arrangements for drying the clothing, if wet. Such accommodation shall be separate from any mess-room;
- (b) separate and suitable arrangements for the storage of protective clothing provided under paragraph 16.
- 19. Washing facilities.—There shall be provided and maintained in a cleanly state and in good repair for the use of all persons employed in a lead process:
- (a) A wash place under cover, with either—
- (i) a trough with a smooth impervious surface fitted with a waste pipe, without plug, and of sufficient length to allow of at least two feet for every such five 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
- (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 die case of pastors and persons employed in die manipulation of raw oxide of lead, shall include a separate marked towel for each such worker; and (iv) a sufficient supply of soap or other suitable cleansing material and of nail brushes.
- (b) There shall in addition be provided means of washing in close proximity to die 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 days, 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 bough for each sue.-person this "ale 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. Food, drink, etc. prohibited in work-room.—No food, drink, pan and supari or tobacco shall be consumed or brought by any worker into any workroom in which any lead process is carried on.

Schedule-IV

Glass Manufacture

1. Exemption.—If the Chief Inspector-cum-Facilitator of Factories satisfied in respect of any factory or any class of process that, owing to the special methods of work or the special conditions in a factory or otherwise, any of the requirements of this schedule can be suspended or relaxed without danger to the persons employed therein, or that the application of this schedule or any part thereof is for any reason impracticable, he may by a certificate in writing authorise such suspension or relaxation as may be indicated in

the certificate for such period and on such conditions as he may think fit.

- 2. Definitions—For the purposes of this schedule—
- (a) "Efficient exhaust draught"" means localized ventilation affected by mechanical means, for the removal of gas, vapour, dust or fumes so as to prevent them (as far as practicable under the atmospheric conditions usually prevailing) from escaping into the air of any place in which work is carried on. No drought 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 1,000 times its weight of an aqueous solution of hydrochloric acid containing 0.25 per cent by weight of hydrogen chloride. This solution shall thereafter be allowed to stand for one hour and then filtered. The lead salt contained in the clear filtrate shall then be precipitated as lead sulphide and weighed as lead sulphate.

- (c) "Suspension" means suspension from employment in any process specified in paragraph 3 by written certificate in the Health Register Form No. 17 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 Process shall not be carried on except under an efficient exhaust draught or under such other conditions as may be approved by the Chief Inspector-cum-Facilitator:
- (a) The mixing of raw materials to form a "batch".
- (b) The dry grinding, glazing and polishing of glass or any article of glass.
- (c) All process in which hydrofluoric acid fumes or ammoniclevapours are given off.
- (d) All processes in the making of furnace moulds or "pots" including the grinding or crushing of used "pots".
- (e) All Process involving the use of a dry lead compound.
- 4. Prohibition relating to women and young persons.—No women or young person shall be employed or permitted to work in any of the operations specified in paragraph 3 or at any place where such operations are carried on.
- 5. Floors and workbenches.—The floor and work-benches of every room in which a dry compound of lead is manipulated or in which any process is carried on giving off silica dust shall be kept moist and shall comply with the following requirements:
- (a) the floors shall be—
- (i) of cement or similar material so as to be smooth and impervious to water;
- (ii) maintained in sound conditions; and
- (iii) cleansed daily after being thoroughly sprayed with water at a time when no other work is being carried on in the room.
- (b) The work-benches shall—
- (i) have a smooth surface and be maintained in sound condition, and
- (ii) be cleansed daily either after being thoroughly damped 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 rooms in which glass is treated with hydrofluoric acid—
- (a) there shall be inlets and outlets of adequate size so as to secure and maintain efficient ventilation in all parts of the room;
- (b) the floor shall be covered with guttapercha and be tight and shall slope gently down to a covered drain;
- (c) the work places shall be so enclosed in projecting hoods tiiat openings required for bringing in the objects to be treated shall be as small as practicable; and
- (d) the efficient exhaust draught shall be so contrived that the gases are exhausted downwards.
- 7. Storage and transport of Hydrofluoric Acid.—Hydrofluoric acid shall not be stored or transported except in cylinders or reception made of lead or rubber.
- 538. Food, drinks, etc. prohibited in workroom.—No food, drink, pan and supari or tobacco shall be brought into or consumed by any worker in any room or work place wherein any process specified in paragraph 3 is carried on.
- 539. Protective clothing.—The occupier shall provide, maintain in good repair and keep in a clean condition for the use of all persons employed in the Process specified in paragraph 3, suitable protective clothing, footwear and goggles according to the nature of the work and such clothing, footwear, etc. shall be worn by the persons concerned.
- 5310. Washing facilities.—There shall be provided and maintained in cleanly state and in good repair for the use of all persons employed in the Process specified in paragraph 3:
- (a) a wash place with either—
- (i) a trough with a smooth impervious surface fitted with a waste pipe, without plug, and of sufficient length to allow of at least two feet for every five such 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
- (ii) at least one wash basin for every five such persons employed at any one time, fitted with a waste pipe and plug and having an adequate supply of water laid on or always readily available;
- a sufficient supply of clean towels made of suitable materials renewed daily with a sufficient supply of soap or other suitable cleansing material and of nail brushes,
- (b) a sufficient number of stand-pipes with taps—the number and location of such stand-pipes shall be to the satisfaction of the Chief Inspector-cum-Facilitator
- 11. Medical Examination.—(a) Every person employed in any process specified in paragraph 3 54and on glass blowing shall be examined by the Qualified medical practitioner within seven days preceding or following the date of his first employment in such process and thereafter shall be examined by the Qualified medical practitioner 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 giving to all concerned.

- (b) A Health Register in Form No. 17 containing die names of persons employed in any process specified in paragraph 3 54and on glass blowing shall be kept.
- (c) No person after suspension shall be employed in any process specified in paragraph 3 54and on glass blowing without written sanction from the Qualified medical practitioner entered in or attached to the health register.

Schedule-V

Grinding or Glazing of Metals and process Incidental thereto

- 1. Definitions.—For the purposes of this schedule—
- (a) "Grindstone" means a grindstone composed of natural or manufactured sandstone but does not include a metal wheel or cylinder into which blocks of natural or manufactured sandstone are fitted.
- (b) "Abrasive wheel" means a wheel manufactured of bounded emery or similar abrasive.
- (c) "Grinding" means the abrasion by aid of mechanical power, of metal, by means of a grindstone or abrasive wheel.
- (d) "Glazing" means 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 revolving grindstone by the application of a rod, bar or strip of metal to such surface.
- 2. Exceptions.—(a) Nothing in this schedule shall apply to any factory in which only repairs are carried on except any part thereof in which one or more persons are wholly or mainly employed in the grinding or glazing of metals.
- (b) Nothing in this schedule except paragraph 4, shall apply to any grind-ng or glazing of metals carried on intermittently and at which no person is employed for more than 12 hours in any week.
- (c) The Chief Inspector-cum-Facilitator rmay, by certificate in writing, subject to such conditions as he may specify therein, relax or suspend any of the provisions >f this schedule in respect of any factory, if owing to the special methods of work or otherwise such relaxation or suspension is practicable without danger :o the health or safety of the persons employed.
- 3. Equipment for removal of dust.—No racing, dry grinding or glazing hall be performed without—
- (a) a hood or other appliance so constructed, arranged, placed and maintained as substantially to intercept the dust thrown off; and
- (b) a duct of adequate size, airtight and so arranged as to be capable of carrying away the dust, which duct shall be kept free from obstruction and shall be provided with proper means of access for inspection and cleaning, and where practicable, with a connection at the end remote from the fan to enable the Inspector to attach thereto any instrument necessary for ascertaining the pressure of air in the said duct; and
- (c) a fan or other efficient means of producing a draught sufficient to exhaust the dust:
- Provided that the Chief Inspector-cum-Facilitator rmay 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 Codeual process of grinding or glazing upon a grindstone, abrasive wheel or glazing appliance :
- Provided that this paragraph shall not prohibit the employment of persons to assist in the manipulation of heavy or bulky articles at any such grindstone, abrasive wheel or glazing appliance.
- 5. Glazing.—Glazing or other Process , except Process , incidental to wet grinding upon a grindstone, shall not be carried on in any room in which wet grinding upon a grindstone is done.
- 6. Hacking and rodding.—Hacking or rodding shall not be done unless during the process either (a) an adequate supply of water is laid on at the upper surface of the grindstone, (b) adequate appliances for the interception of dust are provided in accordance with the requirements of paragraph 3.
- 7. Examination of dust equipment.—(a) AH equipment for the exhaust or suspension of dust shall, at least once in every six months, be examined and tested by a competent person, and any defect disclosed by such examination and test shall be rectified as soon as practicable.
- (b) A register containing particulars of such examination and test shall be kept in a form approved by the Chief Inspector-cum-Facilitator.

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 such provisions, subject to such condition as he may specify therein.
- 2. Definitions.—For the purposes of this schedule—
- (a) "Lead Compound" means any compound of lead other than galena which when treated in the manner described below, yields to an aqueous solution of hydrochloric acid, a quantity of soluble lead compound exceeding, when calculated as lead monoxide, five per cent of the dry weight of the portion taken for analysis. In the case of points and similar products and other mixtures containing oil or fat the "dry weight" means the dry weight of the material remaining after the substance has been thoroughly mixed and treated with suitable solvents to remove oil, fats, varnish or other media.

The method of treatment shall be as follows:

A weighed quantity of the material, which has been dried at 100°C. and thoroughly mixed shall be continuously shaken for one hour, at the common temperature, with 1,000 times its weight of an aqueous solution of hydrochloric acid containing 0-25 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 localized ventilation affected 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 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 vapour, fumes or dust originate.
- 3. Application.—This schedule shall apply to all factories or parts of factories in which any of the following operations are carried on:
- (a) Work at a furnace where the reduction or treatment of zinc or lead ores is carried on.
- (b) The manipulation treatment or reduction of ashes containing lead, the desilvering of lead or the melting of scrap lead or zinc.
- (c) The manufacture of solder or alloys containing more than ten percent of lead.
- (d) The manufacture of any oxide, carbonate, sulphate chromate, acetate, nitrate or silicate of lead.
- (e) Handling or mixing of lead tetraethyl.
- (f) Any other operation involving the use of a lead compound.
- (g) The cleaning of work-rooms where any of the operations aforesaid are carried on.
- 4. Prohibition relating to women and young persons.—No women or young persons 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.—The person so employed has been granted by a Qualified medical practitioner a certificate of fitness and such certificate is 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 Qualified medical practitioner within 14 days of his first employment in such process and thereafter shall be examined by Qualified medical practitioner at intervals of not more than three months and a record of such examination shall be entered by the Qualified medical practitioner in the special certificate of fitness granted under paragraph 7.
- (2) If at any time the Qualified medical practitioner 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.
- 9. Food, drinks, etc., prohibited in work-rooms.—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 Process specified in paragraph 3 are carried on and no person shall remain in any such room during intervals for meals or rest.
- 10. Protective clothing.—Suitable protective overalls and head coverings shall be provided, maintained and kept clean by the factory occupier and such overalls and head covering shall be worn by the persons employed.
- 11. 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.
- 12 Washing facilities.—(1) The occupier shall provide and maintain for the use of all persons employed suitable washing facilities consisting of—
- (a) a trough with a smooth impervious surface fitted with a waste pipe without plug and of sufficient length to allow at least two feet for every ten persons employed at any one time, and having a constant supply of clean water from taps or jets above the trough at intervals of not more than two feet; or
- (b) at least one wash-basin for every ten persons employed at any one time, fitted with a waste pipe and plug and having a constant supply of clean water;

together with, in either case, a sufficient supply of nail brushes, soap or other suitable cleaning material and clean towels.

- (2) The facilities so provided shall be placed under the charge of a responsible person and shall be kept clean.
- 13. 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, 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.
- 14. 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 women and young persons.—No women or young persons 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.—AH plants for generation of gas from dangerous petroleum erected after the coming into force of the provision 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 any easily accessible position near the plant for generation of gas from dangerous petroleum.
- 5. Plant to be approved by Chief Inspector-cum-Facilitator Petrol gas shall not be manufactured except in a plant for generating petrol gas the design and construction of which has been approved by the Chief Inspector-cum-Facilitator.
- 6. Escape of petrol.—Effective steps shall be taken to prevent petrol from escaping into any drain or sewer.
- 7. Prohibition relating to smoking, etc.—No person shall smoke or carry matches, fire or naked light or other means of producing a naked light or spark in the generating room or building or in the vicinity thereof and warning notice in the language understood by the majority of the employees shall be posted in the factory prohibiting smoking and the carrying of matches, fire or naked light or other means of producing a naked light or spark into such room or building.
- 8. Access to petrol or containers.—No unauthorized person shall have access to any petrol or to a vessel containing or having Actually contained petrol.
- 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 outward; 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 or building.
- 11. Repair of containers.—No vessel that has contained petrol shall be repaired in a generating room or building and no repairs to any such vessels shall be undertaken unless live steam has been blown into the vessel and until the interior thoroughly steamed out or other equally effective steps have been taken to ensure that it has been rendered free from petrol or inflammable vapour.

Schedule-VIII

Cleaning or Smoothing of Articles by a Jet of Sand, MetalShot or Grit or other Abrasive propelled by a Blast of CompressedAir or Steam

- 1. Definition.—For the purpose of this schedule "Sandblasting" means the blasting of any articles by a jet of sand, metal shot, grit or other abrasive.
- 2. Sand blasting to be done in enclosed chamber.—Sand blasting shall not be done in any room except in an enclosed chamber or cabinet in which no other work is performed and at which efficient means are provided, arranged and maintained to prevent the escape of dust to the outside of such chamber or cabinet.
- 3. Prohibition relating to employment of women and young persons.—No women or young person shall be employed or permitted to work at any operation of sand blasting.
- Protective equipment.—(1) Unless he is wearing a suitable protective helmet and gauntlets—
- (a) no person shall be employed or permitted to work at blasting in the open air or work within thirty feet of sand blasting apparatus in operation in the open air; and
- (b) no person shall be employed or permitted to work or allowed in a blasting chamber whilst the sand blasting apparatus is in operation.
- (2) The occupier of the factory shall provide and maintain in good condition all helmets, overalls and gauntlets that are necessary to comply with the requirements of this schedule.
- (3) Every protective helmet shall carry the distinguishing mark of the person by whom it is to be used and shall be provided with a sufficient supply of pure air for breathing and ventilation, together with suitable arrangements to permit the escape of the expired air.
- (4) No person shall wear a protective helmet that has been worn by another person unless such protective helmet shall have been thoroughly disinfected.
- (5) All persons engaged in sand blasting while at work shall wear the protective equipment provided under the provisions of this paragraph.

Schedule-IX

Liming and Tanning of Raw Hides and Skins and process Incidental thereto

- 1. Cautionary notices.—(1) Cautionary notices as to anthrax in the form specified by the Chief Inspector-cum-Facilitator shall be affixed in prominent positions in the factory where they may be easily and conveniently read by the person employed.
- (2) A copy of a warning notice as to anthrax in the form specified by the Chief Inspector-cum-Facilitator shall be given to each person employed when he is engaged and subsequently if still employed, on the first day of each calendar year.
- (3) Cautionary notices as to the effects of chrome on the skin shall be affixed in prominent positions in every factory in which chrome solutions are used and such notices shall be 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 cupboards 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 notices specified in paragraphs 1, 2 and 4 and if chrome solutions are used in the factory, die contents of the notice specified in 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 rubber gloves for persons employed in Process involving contact with chrome solutions including the preparation of such solutions;
- (b) protective foot-wear, aprons and gloves for persons employed in the handling of hides or skins other than in Process specified in clause (a):

Provided that gloves shall not be required for persons flashing by hand or where there is no risk of contrCode with lime, sodium sulphide or other caustic liquor.

- 3. Washing facilities, mess-room and cloakroom.—There shall be provided and maintained in a cleanly state and in good repair for the use of all persons employed—
- (a) a trough with a smooth impervious surface fitted with a waste pipe without plug, and of sufficient length to allow at least two feet for every ten persons employed at any one time, and having a constant supply of water from taps or jets above the trough at intervals of not more than two feet; or
- (b) at least one wash basin for every ten such persons employed at any one time, fitted with a waste pipe and plug and having a constant supply of water, together with, in either case, a sufficient supply of nail brushes, soap or other suitable cleaning materials and clean towels;
- (c) a suitable mess-room adequate for the number remaining on the premises during the meal intervals, which shall be furnished with (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 hides or skins are stored, treated or manipulated, (2) be separate from the cloak-room, and (3) be placed under the charge of a responsible person;

- (d) suitable accommodation for the clothing not worn during working hours with adequate arrangements for drying the clothing, if wet. The accommodation so provided shall be placed under the charge of a responsible person.
- 4. Food, drinks, etc. prohibited in work-rooms.—No food, drinks, 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 arrangements.—The occupier shall (a) arrange for an inspection of the hands of all persons coming in to contact with chrome solutions to be made twice a week by a responsible person; (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

Certain lead process carried on Printing Presses and Type Foundries

- 1. Exemption.—Where the Chief Inspector-cum-Facilitator satisfied that all or any of the provisions of this Schedule are not necessary for the protection of persons employed, he may, by certificate in writing exempt any factory from all or any of such provisions subject to such conditions as he may specify therein. Such certificate may at any time be revoked by the Chief Inspector-cum-Facilitator.
- Definitions.—In these regulations—
- "Lead material" means material containing not less than five percent of lead.
- "Lead process '15 means—
- (a) the melting of lead or any lead material for casting and mechanical composing; and
- (b) the re-charging of machines with used lead material, or
- (c) any other work including removal of dross from melting pots, cleaning of plungers;
- (d) manipulation, movement or other treatment of lead material.
- "Efficient exhaust draught" means localized ventilation affected by heat or mechanical means for the removal of gas, vapour, dust or fumes at the point where they originate so as to prevent them from escaping into the air of any place in which work is carried on.
- 3. Exhaust draught.—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;
- or, unless carried on in such a manner as to prevent free escape of gas, vapour, fumes or dust into any place in which work is carried on, or, unless carried on in electrically heated and thermostatically controlled melting pots. Such exhaust draught shall be affected by mechanical means and so contrived as to operate on the dust, fume, gas or vapour given off as clearly as may be at its point of origin.
- 4. Prohibition relating to women and young persons.—No woman or young person shall be employed or permitted to work in any lead process .
- 5. Separation of certain process .—Each of the following Process 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;
- (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) shall be cleansed throughout daily after being thoroughly damped with water at a time when no other work is being carried on at the place.
- 8. Mess-room.—There shall be provided and maintained for the use of all persons employed in a lead process and remaining on the premises during the meal intervals, a suitable mess-room which shall be furnished with sufficient tables and benches.
- 9. 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 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
- (ii) at least one wash basin for every five such persons employed at any one time, fitted with a waste pipe and plug and having an adequate supply of water laid on or always readily available; and
- (b) a sufficient supply of clean towels made of suitable material renewed daily with a sufficient supply of soap or other suitable cleansing material.
- 10. Medical examination.—(a) Every person employed in a lead process shall be examined by the Qualified medical practitioner within fourteen days of his first employment in such Process and thereafter shall be examined by the Qualified medical practitioner at intervals of not more than three months, and a record of examination shall be entered by the Qualified medical practitioner in the health register in Form No. 17.
- (b) A health register containing names of all persons employed in any lead process shall be kept in Form No. 17.
- (c) If at any time the Qualified medical practitioner is of opinion that any person is no longer fit for employment on any lead process, on the ground that his continuance in such employment will involve special danger to his health, he shall make an entry to this effect in the health register against the name of such person. No such person shall be employed on a lead process without the written sanction of the Certifying Surgeon, entered in the health register.
- 11. Food, 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-XI

Dichromate manufacture

- 1. Separation of certain Process .—Process as indicated below which give rise to noxious dust, fume, vapour or mist should be isolated from others end should either be totally enclosed or provided with hoods with suitable exhaust ventilation arrangements where necessary—
- (i) Soda-mix section, including the place of storage of the mixed chro-mite soda-ash powder.
- (ii) Recorded frit storing.
- (iii) Frit dissolving.
- (iv) Evaporation of the dichromate solution.
- (v) Dichromate weighing and packing or otherwise handling of the dichromate powders.
- 2. Use of respirators.—In operations, which are of shorter duration and in which mechanical exhaust is not practicable, the occupier shall provide respirators for the use of employees.
- 3. Protective equipment.—There shall be provided for the use of all employees suitable footwear, gloves and aprons engaged in the following Process :
- (a) Acidification.
- (b) Concentration.
- (c) Centrifugal Ization.
- (d) Crystallization.
- (e) Packing.
- 4. Floor of work-rooms.—The floor of every work-room shall be—
- (a) of impervious material and allow of easy drainage,
- (b) maintained in sound condition,
- (c) kept free from materials, plank or other obstruction not required for or produced, in the process carried on in the room.
- 5. Cloak-room.—There shall be provided and maintained for the use of all persons employed in the dichromate department a cloak-room for clothing put off during working hours.
- 6. Washing facilities.—There shall be provided and maintained in a clean state and a good repair, for the use of all persons employed in dichromate process —
- (a) trough with an impervious surface fitted with a waste pipe without plug and of sufficient length to allow at least two feet for every ten persons employed at any one time and having a constant supply of clean water from taps or jets above the trough at intervals of not more than two feet, or
- (b) at least one wash basin for every ten persons employed at any one time fitted with a waste pipe and plug and having a constant supply of clean water; together with, in either case, sufficient supply of soap or other suitable cleansing material and clean towels.
- 7. Medical requisites.—The occupier shall provide and maintain a sufficient supply of suitable protective skin cream and nasal ointment, readily available to the employees engaged on dichromate Process at the discretion of the Certifying Surgeon.
- 8. Medical examination.—Every person employed in a dichromate process shall be examined by the Qualified medical practitioner within fourteen days of his first employment in such Process and thereafter shall be examined by the Qualified medical practitioner at intervals of not more than three months and a record of each examination shall be entered by the Qualified medical practitioner in the Health Register in Form No. 17.
- (2) A Health Register containing names of all persons employed in any dichromate process shall be kept in Form No. 17.
- (3) If any time the Qualified medical practitioner is of opinion that any person is no longer fit for employment on any dichromate process, on the ground that his continuance in such employment will involve special danger to his health he shall make an entry to this effect in the Health Register against the name of such person. No such person shall be employed on dichromate process without the written sanction of the Certifying Surgeon, entered in the Health Register.
- 9. Cautionary notices.—Cautionary notices on the nature of health hazards involved together with the control measures for their protection shall be fixed at a prominent position of the factory.

Schedule-XII

Chemical Works

Application.—The provisions of this Schedule shall apply to all manufacturer and Process (Storage, Handling and transportation) incidental thereto carried on in Chemical Works. These provisions shall be in addition to and not in derogation of any provisions of the Factories Code or any other rules made thereunder or of any other Code or Rules.

Definitions:

Chemical works means any factory or such parts of any factory as are named in sub-schedule A of this Schedule.

Breathing apparatus means (1) a helmet or facepiece with necessary connections by means of which a person using it in a poisonous, asphyxiating or irritating atmosphere breathes ordinary air, or (2) any other suitable apparatus approved in writing by the Chief Inspector-cum-Facilitator.

Life-belt means a belt made of leather or other suitable material which can be securely fastened round the body with a suitable length of rope attached to it, each of which is sufficiently strong to sustain the weight of a man.

Efficient exhaust draught means localized ventilation affected 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.

Surgeon means a Qualified medical practitioner appointed under Section 10 of the Factories Code, 1948.

Suspension means suspension by written certificate in the Health Register, signed by the Surgeon from employment in any process mentioned in the certificate.

Bleaching powder means the bleaching powder commonly called chloride of lime.

Chlorate means chlorate or perchlorate.

Caustic means hydroxide of potassium or sodium.

Caustic pot means a metal pot fixed over a furnace or flue and surrounded by brickwork, such as is commonly used for concentrating caustic liquor, whether such pot be used for concentrating or boiling caustic or other liquor.

Chrome process means the manufacture of chromate or bichromate of potassium or sodium, or the manipulation, movement or other treatment of these substances in connection with their manufacture.

Nitro or amino process means the manufacture of nitro or amino derivatives of phenol and of benzene or its homologues and the making of explosives with the use of any of these substances.

Exceptions.—If the Chief Inspector-cum-Facilitator 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 infrequency of the process or for other reasons, all or any of the requirements of the provisions of this Schedule are not necessary for the protection of persons employed in any factory or process , he may by order in writing (which he may in his discretion revoke), exempt such factory or process from all or any of the provisions of this Schedule, subject to such conditions as he may by such order prescribe.

PART I—APPLYING TO ALL THE WORKS IN SUB-SCHEDULE A

General

- 1. Housekeeping.—(a) Every part of the ways, works, machinery and plant shall be maintained in a clean and tidy condition. (b) any spillage of material shall be cleaned up without delay.
- (c) Floors, platforms, stairways, passages and gangways shall be kept free of temporary obstructions.
- (d) There shall be provided easy means of access to all parts of the plant to facilitate cleaning, maintenance and repairs.
- 2. Improper use of chemicals.—(a) No chemicals or solvents shall be used by employees for any purposes apart from the process for which they are supplied.
- (b) Employees shall be instructed on the possible dangers arising from such misuse. These instructions shall further be displayed in bold letters in prominent places in die different sections.
- 3. Storage of food.—(a) No food, drink, tobacco, pan or similar articles shall be stored or consumed on or near any part of the plant.
- (b) Testing.—Employees shall be instructed on the possible dangers arising from the testing of materials, or of the use for drinking purposes of any vessel used in, or in connection with, the manufacture of chemicals. These instructions shall further be displayed in bold letters in prominent places in the different sections.
- 4. process hazards.—Before commencing any large scale experimental work, or any new manufacture, all possible steps shall be taken to ascertain definitely all the hazards involved both from the Codeual operations and the chemical reaction.

The properties of the raw materials used, the final products to be made, and any bye-products arising during manufacture, shall be carefully studied and provision shall be made for dealing with any hazards including effects on employees, which may arise during manufacture. The design of the building and plan shall be based on the information so obtained.

- 5. Unauthorized personnel.—(a) Unauthorized persons shall not be permitted to enter any section of the factory or plant where these are special dangers.
- (b) Visitors.—Visitors shall be provided, where necessary with suitable safety equipment and shall be accompanied round dangerous plants by a responsible official.
- 6. Instruments.—All instruments such as pressure gauges, thermometers, flow meters and weighing machines etc. shall be tested in every six months by a competent person, and records of these tests shall be kept in a register and shall be produced on demand of the inspector of factories of the concerned region .
- 7. Cocks and valves.—Suitable valves shall be provided in all service lines at sufficiently short intervals for convenience in blanking off, etc. All cocks and valves shall be operated at least once in a month. All cockes, valves and pipelines carrying chemicals should be tested in every three months by a competent person, and shall make safety audit report of all service installations in every year and shall send a copy of report of Safety audit to the Chief Inspector-cum-Facilitator of factories and inspector of the region concern and records of these tests and reports shall be kept in a register. A plan of all service installations shall be kept readily available and shall be produced on demand of the inspector of factories of the concerned region.
- 8. Manholes.—No manholes shall be opened for entry until effective fencing has been erected round it.
- 9. Emergency instructions.—Simple and special instructions shall be trained to ensure that effective measures will be carried out in cases of emergency to deal with escape of inflammable, poisonous or deleterious gases, vapours, liquids or dusts. These instructions shall further be displayed in bold letters in prominent places in the different sections. All employees shall be trained and instructed in the Codeion to be taken in such emergencies, and in the general hazards of their employment.
- 10. Protection of reaction mixtures.—Suitable arrangements shall be made to ensure that no foreign matter of any sort can fall into reaction mixtures.
- 11. Electrical apparatus.—Electrical plant, fittings and conductors shall, if exposed to a damp or corrosive atmosphere, be adequately protected. Periodic tests shall be carried out on all circuits.
- 12. Places of work.—(a) Employees shall only be allowed in those places in which they have been given orders to work. (b) In dangerous sections of a factory, the number of employees shall be kept to a minimum compatible with the process.
- 13. Packing, storage and transport of chemicals.—Chemicals shall be packed and stored in containers suitable for the purpose and of adequate strength for storage or transport. All such containers shall be suitably labelled so that they may be stored and transported in such a manner as to ensure that, in the event of spillage, they will neither produce a recording mixture, nor cause the development of toxic or fire risk in contrCode with other products in its vicinity or with walls, floors or dust thereon.

Fire and Explosion Risks

- 14. Site.—(a) Buildings and plants shall be located with due regard to the dangers which may arise from the process involved, and in particular shall be spaced at distances which are deemed safe for the fire and explosive risks connected with the Process in adjacent buildings. Due consideration shall be given to the effect on any Process carried out in adjacent factories.
- (b) Isolation of buildings.—Where special dangers exist, separate buildings shall be used for the different parts of a process . They shall be spaced at sufficient distances apart and shielded to prevent damage to each other in the event of fire or explosion, and shall be safeguarded by the provision of suitable blowout panels or roofs. Where the risk of fire or explosion is considerable, the building shall be divided by blast or protective screen walls.
- (c) Fire resistance.—No combustible materials shall be used in the erection of working buildings, unless there are special reasons necessitating their use, when they shall be rendered fire-resistance. The roof shall be of light fire-resistant construction and floors shall be of impervious fire-resistant material and shall be regularly maintained in such condition.
- 15. Dangers of ignition (including building installation).—(a) No internal combustion engine and no electric motor or other electric equipment, capable of generating sparks or otherwise causing combustion shall be installed or used in a building or danger zone. Electric conductors shall be fitted with screwed steel conduit.
- (b) All hot exhaust pipes shall be installed outside a building and other hot pipes shall be suitably protected.
- (c) Portable electric hand lamps shall not be used unless of an intrinsically safe type, and portable electric tools connected by flexible wires shall not be used, unless of the flames proof type.
- (d) Where an inflammable atmosphere may occur the soles of footwear worn by employees shall have no metal on them, and the wheels of trucks or conveyors shall be of conducting non-sparking materials. Adequate precautions shall be taken to prevent the ignition of explosive or inflammable substances by sparks emitted from locomotives or other vehicles operated in the factory or on public lines.
- (e) No electric arc lamps or naked light, fixed or portable, shall be used, and no person shall have in his possession any match or any apparatus of any kind for producing a naked light of sparking in or on, or about any part of the factory where there is liability to fire or explosion from inflammable gas, vapour or dust and all incandescent electric lights in such parts shall be in double air-tight glass covers.
- (f) Prominent notices in the language understood by the majority of the employees and legible by day and by night prohibiting smoking, the use of naked lights and the carrying of matches or any apparatus for producing a naked light or spark, shall be affixed at die entrance of every room or place where there is the risk of fire or explosion from inflammable gas, vapour or dust. In the case of illiterate employees the contents of the notices shall be fully and carefully explained to them when they commence work in the factory for the first time and again when they have completed one week at the factory.
- (g) Non-sparking tool.—A sufficient supply of spades, scraper and pails made from non-sparking material shall be provided for the use of persons employed in cleaning out or removing residues from any chamber, still, tank or other vessel where an inflammable or explosive danger may occur.

- 16. Static electricity.—(a) All machinery and plant, particularly, pipe lines and belt drives, on which static electricity is likely to accumulate, shall be effectively earthed. Receptacles for inflammable liquids shall have metallic connections to the earthed supply tanks to static sparking. Where necessary, humidity shall be controlled.
- (b) Mobile tank 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.
- (c) Lightning conditions.—Lightning protection apparatus shall be fitted where necessary and shall be maintained in good condition.
- 17. process heating.—The method of providing heat for a process 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 inflammable gas, vapour or dust coming into contact with the flame, or exhaust gases or other hot agency likely to cause ignition. So far as practicable, the heating medium shall be automatically controlled at a predetermined temperature below the danger temperature.
- 18. Escape of materials.—(a) Provision shall be made in all plants, sewers, drains, flues, ducts, culverts, and buried pipes to prevent the escape and spread of any liquid gas, vapour, fume or dust likely to give rise to fire or explosive, both during normal working and in the event of accident or emergency.
- (b) If escape occurs, such substances shall be removed expeditiously and efficiently at the point of liberation. The effluent shall be trapped and rendered safe outside the danger area.
- 19. Leakage of inflammable liquids.—(a) Provision shall be made to confine by means of bund-walls, sumps, etc., possible leakages from vessels containing inflammable liquids.
- (b) Adequate and suitable fixed fire-fighting appliances shall be installed in the vicinity of such vessels'.
- 20. Cleaning of empty containers.—(a) All empty containers which have held inflammable liquids, and metal containers which have held sulphuric acid shall be rendered permanently safe as soon as practicable, and shall not be repaired or destroyed until such cleaning has been completed.
- (b) Storage of combustible materials.—Combustible and inflammable materials shall not be stored in close proximity to chemicals which are liable to cause ignition.
- (c) Rubbish shall be removed from buildings without delay and placed in special metal containers provided with close fitting lids. The contents shall be removed daily and suitably dealt with. Waste products containing inflammable or explosive materials shall not be placed on rubbish heaps but shall be destroyed in an appropriate manner.
- 21. Installation of pipelines for inflammable liquids.—All pipelines for the transport of inflammable liquids shall be protected from breakage, shall be arranged so that there is no risk of mechanical damage from vehicles and shall be so laid that they drain throughout without the collection of any part. All flanged joints, bends and other connections shall be regularly inspected. Cocks and valves shall be so constructed that explosive residues do not get accumulated therein. The open and closed positions of all cocks and valves shall be clearly indicated on the outside.
- 22. Packing of reaction vessels.—Packing and jointing materials for reaction vessels (including covers, manhole covers and exhaust pipes) and in pipe lines and high or low temperature insulating materials, shall not contain materials which are combustible or which react with the products of the plant.
- 23. Safety valves.—Every still and every closed vessels in which gas is produced or into which gas is passed and in which the pressure is liable to rise to a dangerous degree shall have attached to it a pressure gauge, and a proper safety valve or other equally efficient means to relieve the pressure, maintained in good condition. Nothing in this Schedule shall apply to metal bottles or cylinders used for the transport of compressed gases.
- 24. Vigorous or delayed reaction.—Suitable provision, such as automatic and distant control shall be made for controlling the effects of unduly vigours or delayed reaction. Automatic flooding or blanketing shall be provided for in the event of an accident
- 25. Examination, testing and repair of plant.—Examination, testing and repair of plant parts which have been in contact with explosive and inflammable material, or which is under pressure, shall only be carried out under proper supervision.
- 26. Alarm system.—(a) Gravity or pressure feed systems of supplying inflammable materials to the various parts of the buildings or plant shall be fitted with alarm systems, automatic cut-offs or other devices to prevent overcharging or otherwise endangering the plant.
- (b) The amount of inflammable material taken into a building in bulk containers at any one time shall be kept as low as practicable.
- (c) Adequate steps shall be taken to prevent the escape of inflammable and explosive vapours from any container into the atmosphere of any building.

Gas, Vapour, Fume or Dust Risks

- 27. Escape of gases, etc.—Effective steps shall be taken to prevent the escape of dangerous gases, vapours, fumes or dust from any part of the plant, by the total enclosure of the process involved or by the provisions of efficient exhaust draught. Effective arrangements shall be made to ensure that in the event of a failure of the control measure, the process shall stop immediately. Further arrangements shall be made to ensure that in case there is any such escape, the material shall be trapped forthwith so that the danger may be averted.
- 28. Danger due to effluents.—(a) Adequate precautions shall be taken to prevent the mixing of effluents which may produce dangerous or poisonous gases.
- (b) Effluents, which may contain or give rise in the presence of other effluents to such gases, shall be provided with independent drainage systems to ensure that they may be trapped and rendered safe.
- 29. Staging.—(a) Staging shall not be erected over any open vessel unless the vessel is so constructed and ventilated as to prevent the omission of vapour or fumes about such staging.
- (b) Where such staging is provided to give access to higher levels in large plants, effective means shall be provided at all levels with direct means of access to the outside of the room or building and thence to ground level.
- (c) Such staging shall be fitted with suitable handrails and toe boards, and the floors and staging shall be impervious and easily cleaned.

- 30. Instructions as regards risk.—Before commencing work, every worker shall be fully instructed on the properties of the materials they have to handle, and of the dangers arising from any gas, fume, vapour or dust which may be evolved during the process. Employees shall also be instructed in the measures to be taken to cope with any emergency.
- 31. Breathing apparatus.—(a) There shall be provided in every factory where dangerous gas or fume is liable to escape a sufficient supply of—
- (i) breathing apparatus of an approved make for the hazards involved;
- (ii) oxygen and suitable means of its administration; and (tit) life-belts.

The breathing apparatus and other appliances required by this Schedule shall (i) be maintained in good order and kept in an ambulance room or in some other place approved in writing by the Chief Inspector-cum-Facilitator, and (ii) be thoroughly inspected once every month by a competent person, appointed in writing by the occupier and record of their condition shall be entered in a book provided for that purpose, which shall be produced when required by an Inspector.

- (b) Employees shall be trained and given a periodic refresher course in the use of breathing apparatus and respirators.
- (c) Respirators shall be kept properly labelled in clean dry light-proof cabinets, and if liable to be affected by fumes, shall be protected by suitable containers. Respirators shall be dried and cleaned after use and shall be periodically disinfected.
- 32. Treatment of persons.—In every room or place wherever required in writing by the Chief Inspector-cum-Facilitator there shall be affixed the official cautionary notice regarding gasing and burns. Such notices shall be legible by day and by night and shall be printed in the language understood by the majority of the employees.
- 33. Personal protective equipment.—(a) Suitable protective clothing shall be provided for the use of operatives; (i) when operating valves or cocks controlling fluids which by their nature, pressure or temperature would be highly dangerous if a blow-out occurred or when, cleaning chokes in system containing such fluids if pressure is likely to exist behind that chokes, (ii) when there is denote of injury absorption through the skin during the performance of permed duties or in the quent of
- (ii) when there is danger of injury absorption through the skin during the performance of normal duties or in the event of emergency, (iii) whenever there is the risk of injury in handling corrosive substances, hot or cold articles and sharp or rough objects, and (iv) when there is the risk of poisonous material being carried away on their clothes.
- (b) There shall be provided for the use of all persons employed in the Process specified in sub-schedule B of this Schedule an adequate supply of suitable protective equipment including gloves, overalls and protective footwear, and of goggles and respirators. Respirators shall be of a type approved in writing by the Chief Inspector-cum-Facilitator.
- (c) Protective equipment shall be provided and stored in the appropriate place for use during abnormal conditions or in an emergency.
- (d) Arrangements shall be made for the proper and efficient cleaning of all such protective equipment.
- 34. Cloak-rooms.—There shall be provided and maintained for the use of all persons employed in the Process specified in sub-schedule B of this Schedule 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.
- 35. Special bathing accommodations.—(a) There shall be provided for the use of all persons employed in the Process specified in sub-schedule C of this Schedule separate sanitary conveniences, and sufficient and suitable bathing facilities which shall be to the satisfaction of the Chief Inspector-cum-Facilitator-cum-Facilitator.
- (b) A bath register shall be kept containing the names of all persons employed in this Process and an entry of the date when each person takes a bath.
- 36. Entry into vessels.—(a) Before any person entries, for any purposes except that of rescue, any absorber, boiler, culvert, drain, flue, gas purifier, sewer, still tank, tower, vitriol chamber or other place where there is reason to apprehend the presence of dangerous gas or fume, a responsible person appointed in writing by the occupier for the purpose, shall personally examine such place and shall certify in writing in a book kept for the purpose either that such place is isolated and sealed from every source of such gas or fume and is free from danger, or that it is not so isolated and sealed and free from danger. No person shall enter any such place which is certified not to be so-isolated and sealed and free from danger unless he is wearing a breathing apparatus, and (where there are no cross stays or obstructions likely to cause entanglement) a life-belt, the free end of the rope attached to which shall be left with a man outside, whose sole duty shall be to keep watch and to draw out the wearer if he appears to be affected by gas or fume. The belt and rope shall be so adjusted and worn that the wearer can be drawn up head foremost through any manhole or opening.
- (b) A person entering, for the purpose of rescue, any such place for which a clearance certificate has not been issued shall wear breathing apparatus and life-belt in the manner specified.
- 37. Examination and repair of plant.—Where poisonous materials are likely to be present, the examination and repair of plant and piping shall only be done under the supervision of a competent person, and after the plant and piping has been thoroughly cleaned and ventilated. When opening vessels and breaking joints in pipelines, respirators, goggles and protective clothing shall be worn to the extent required by the competent person.
- 38. Storage of acid carboys.—Carboys containing nitric acid or "mixed" acid shall be stored in open-sided sheds detached from other buildings, and placed on a flooring of sandstone, brick or other suitable inorganic material. A passage-way shall be provided and kept free from obstruction between every four rows of such carboys. An ample supply of water shall be available for washing away spilt acid and all precautions shall be taken to prevent employees being exposed to fumes. Corrosive or Deleterious Risk
- 39. Buildings.—All buildings and plants shall be located with due regard to possible dangers from accidental liberation or splashing of corrosive and deleterious liquids, and shall be so designed as to facilitate through washing and cleaning. The construction of staging and other parts of buildings shall be carried out with materials impervious and resistant to corrosion so far as practicable.
- 40. Leakage.—(a) All plants shall be so designed and constructed as to obviate the escape of corrosive liquid. Where necessary, separate buildings, rooms or protective structures shall be used for the dangerous stages of the process and the buildings shall be so designed as to localize any escape of liquid.

- (b) Catch-pits, bund walls or other suitable precautions 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 from such leakage.
- (c) Passages and work station shall not be situated directly below any part of plant where there is risk of escape of dangerous liquid. Access to such parts shall, so far as practicable, be prohibited and danger notices shall be affixed at suitable points.
- 41. Precautions against escape.—Adequate precautions shall be taken to prevent the escape of corrosive or deleterious substances and means shall be provided for rendering safe any such escape.
- 42. Drainage.—Adequate drainage shall be provided and shall lead to special treatment tanks where deleterious materials shall be neutralized or otherwise rendered safe before it is discharged into ordinary drains or sewers.
- 43. Covering of vessels.—(a) Every fixed vessel or structure containing any dangerous materials, and not so covered as to eliminate all reasonable risk of accidental immersion in it of any portion of the body of a worker, shall be so constructed that there is no foothold on the top or the sides.
- (b) Such vessel shall, unless its edge is at least three feet above the adjoining ground or platform be securely fenced to a height of at least three feet above such adjoining ground or platform.
- (c) No plank or gangway shall be placed across or inside any such vessel, unless such plank or gangway is at least 18 inches wide, and is securely fenced on both sides by rails spaced at 9 inches apart to a height of at least 3 feet, or by other equally efficient means.
- (d) Where such vessels adjoin and the space between them, clear of any surrounding brick or other work, is either less than 18 inches in width or is 18 or more inches in width, but is not securely fenced on both sides to a height of at least three feet, secure barrier shall be so placed as to prevent passage between them:

Provided that sub-paragraph (b) above shall not apply to—

- (i) Saturators used in the manufacture of sulphate of ammonia,
- (it) that part of the sides of brine evaporating pans which require raking, drawing or filling.
- 44. Ventilation.—Adequate ventilation shall be provided and maintained at all times in rooms or buildings where dangerous gas, vapour, fume or dust may be evolved.
- 45. Means of escape .—Adequate means of escape from rooms or buildings in the event of a leakage of corrosive liquid shall be provided and maintained.
- 46. Treatment of personnel.—In all places where (strong acids or dangerous) corrosive liquids are used:
- (a) There shall be provided for use in an emergency—
- (i) adequate and readily accessible means of drenching with cold water persons, and the clothing of persons, who have become splashed with such liquids;
- (ii) adequate special arrangements to deal with any person who has been splashed with poisonous material that can be absorbed through the skins;
- (iii) a sufficient number of eyewash bottles, filled with distilled water or other suitable liquid, kept in boxes or cupboards conveniently situated and clearly indicated by a distinctive sign which shall be visible at all times.
- (b) Except where the manipulation of such corrosive liquids is so carried on as to prevent risk of personal injury from splashing or otherwise, there shall be provided for those who have to manipulate such liquids sufficient and suitable goggles and gloves or other suitable protection for the eyes and hands. If gloves are provided they shall be collected, examined and cleansed at the close of the day's work and shall be repaired or renewed when necessary.
- 47. Maintenance.—(a) Before any examination or repairs are carried out or plant or pipe lines, a competent person shall issue a clearance certificate permitting-such examination or repairs.
- (b) Adequate precaution shall be taken to liberate any pockets of gas or liquid which may have been formed in pipe lines and which may cause corrosive spray at the point where dismantling takes place.
- 48. Washing facilities.—(1) There shall be provided and maintained in every factory for the use of employed persons adequate and suitable facilities for washing which shall include soap and nail brushes or other suitable means of cleaning and facilities shall be conveniently accessible and shall be kept in a clean and orderly condition.
- (2) If female employees are employed, separate washing facilities shall be provided and so enclosed or screened that the interiors are not visible from any place where persons of the other sex work or pass. The entrance to such facilities shall bear conspicuous notice in the language understood by the majority of the employees "for women only" and shall also be indicated pictorially.
- 49. Mess-room facilities.—In every factory there shall be provided and maintained for the use of those remaining on the premises during the rest intervals, suitable and adequate mess-room or canteen accommodation which shall be furnished with sufficient tables and chairs or benches with backrests and where sufficient drinking water is available.
- 50. Ambulance Room.—(a) In every factory in which more than 250 persons are employed on the Process to which this Schedule applies, there shall be provided and maintained in good order an Ambulance Room. The Ambulance Room shall be a separate room used only for the purpose of treatment and rest. It shall have a floor space of not less than 100 square feet and smooth, hard and impervious walls and floor, and shall be provided with ample means of natural and artificial lighting. It shall contain all the items shown in sub-schedule D. Where persons of both sexes are employed, arrangements shall be made at the Ambulance Room for their separate treatment. The Ambulance Room shall be placed under the charge of a qualified nurse or other person trained in First Aid, who shall always be readily available during working hours, and shall keep a record of all cases of accidents or sickness treatment in the room.
- (b) In every factory there shall be provided and maintained in good condition a suitably constructed ambulance van for the purpose of the removal of serious cases of accident or sickness unless arrangements have been made with a hospital or other place in telephonic communication with the factory for obtaining such a carriage immediately when required.
- 51. Medical personnel.—There shall be a whole time Medical Officer in every factory employing 250 persons or more. 59[52. Medical examination.—Employees engaged in the manufacture, process ing, formulation or use of the following, shall be examined once in three months by the Qualified medical practitioner and records maintained:
- (i) Hexaethyltetraphosphate.

- (ii) Tetraethyl pyrophosphate.
- (iii) O. O. Diethyl P nitrophenylthiophosphate (Parathion).
- (iv) Nicotine, nicotine sulphate.
- (v) Mercury derivatives.
- (vi) Methyl bromide,
- (vii) Cyanides.
- (viii) Arsenical derivatives.
- (ix) Chrome process compounds.
- (x) Nitro or amino process compounds.
- (a) A Health Register containing the names of all employees so engaged shall be kept in a form approved by the Chief Inspector-cum-Facilitator.
- (b) No person shall be so engaged newly for more than fourteen days without a certificate of fitness granted after examination by the Certifying Surgeon, by a signed entry in the Health Register.
- (c) Every person so engaged newly shall present himself at the appointed time for examination by the Qualified medical practitioner as provided in (b) above.
- (d) The Qualified medical practitioner shall have power of suspension as regards all persons so engaged and no persons after suspension shall be so engaged without written sanction from the Surgeon entered in the Health Register.]
- 53. Duties of employees.—Every person employed shall—
- (a) report to his foreman any defect in any fencing, breathing apparatus, appliances or other requisite provided in pursuance of this Schedule as soon as he becomes aware of such defect;
- (b) used the articles, appliances or accommodations required by this Schedule for the purpose for which they are provided;
- (c) wear the breathing apparatus and life-belt where required under Paragraph 36 (a) and (b) above.
- 54. No person shall.—(a) Remove any fencing provided in pursuance of Paragraph 43 unless duly authorised; or (b) stand on the edge or on the side of any vessel to which Paragraph 43 applies; (c) pass or attempt to pass any barrier created in pursuance of Paragraph 43; (d) place across or inside any vessel to which Paragraph 43 applies, any plank or gangway which does not comply with that Regulation or make use of any such plan or gangway while in such position; (e) take a naked light or any lamp or matches or any apparatus for producing a naked light or spark into or smoke in, any part of the works where there is liability to explosion from inflammable gas, vapour or dust; (f) use a metal spade, scraper or pail when cleaning out or removing the residues from any chamber, still tank, or other vessel wherein were contained sulphuric acid or hydrochloric acid or other substance which might cause evolution of arseniuretted hydrogen; and (g) removes from a First Aid Box or cupboard or from the Ambulance Room any First Aid appliance or dressing except for that treatment of injuries in the works.

SUB-SCHEDULE "A"

"Chemical work" means any work or part of a work in which:

- 1. The manufacture or recovery (Manufacturing, storage ,handling and transportation) of any of the following is carried on—
- (a) Carbonates, cromates, chlorates, oxides or hydroxides or potassium, sodium, iron, aluminum, cobalt, nickel, arsenic, antimony, zinc or magnesium;
- (b) Ammonium and the hydroxide and salts of ammonium;
- (c) Sulphurous, sulphuric, nitric, hydrochloric, hydro-fluoric, hydrosulphuric, boric, phosphoric, oxalic, arsenious, arsenic, lCodeic, acetic, tartaric or citric acids and their metallic or organic salts, all hazardous organic and inorganic compounds; and
- (d) Cyanogen compounds.
- (e) use, storage, handling and transportation of "Hazardous substances".
- 3. A wet process is carried on—
- (a) for the extraction of metal from one or from any by-product or residual material; or
- (b) in which electrical energy is used in any process of chemical manufacture.
- 3. Alkali waste or the drainage therefrom is put to any chemical process for the recovery of sulphur or for the utilization of any constituent of such waste or drainage.
- 4. Carbon disulphide is made or hydrogen sulphide is evolved by the decomposition of metallic sulphides or hydrogen sulphide is used in the production of such sulphides.
- 5. Bleaching powder is manufactured or chlorine gas is made or is used in any process of chemical manufacture.
- 6. (a) Gas tar or coal tar or any compound product or residue of such tars is distilled or is used in any process of chemical manufacture
- (b) Synthetic colouring matters for their intermediates are made.
- 7. Refining of crude shale oil or any process incidental thereto is carried out.
- 8. Nitric acid is used in the manufacture of nitro compounds.
- 9. Explosives are made with the use of nitro compounds.
- 10. Insecticides which may be phosphorous nicotine, mercury, naphthalene, cyanogen, arsenic, fluorine, copper benzene and ethane compounds or derivative and methyl bromide are manufactured, mixed, blended and packed.

SUB-SCHEDULE "B"

- 1. A nitro or amino process (overalls or suits of working clothes and protective footwear).
- 2. Grinding raw-materials in a chrome process (overall suits).
- 3. The crystal department and in packing a chrome process (protective coverings).
- 4. Packing in a chrome process (respirators).
- 5. Any room or place in which chlorate is crystallised, ground or packed (clothing of woollen materials and boots or overshoes, the soles of which have no metal on them).
- 6. Any room in which caustic is ground or crushed by machinery (goggles and gloves or other suitable protection for the eyes and hands).

- 7. Bleaching powder chambers or in packing charges drawn from such chambers (suitable respirators).
- 8. Drawing off of molten sulphur from sulphur pots in the process of carbon disulphide manufacture (overalls, face-shield, gloves and footwear of fire-proof materials).
- 9. (a) Manufacture, mixing, blending and packing of insecticides which are phosphorous, nicotine, naphthalene, cyanogen, arsenic, fluorine, mercury and copper compounds or derivatives and methyl bromide (rubber, aprons, chemical type goggles and suitable respirators and in addition rubber gloves and boots for phosphorous and nicotine derivatives, synthetic rubber aprons, gloves and boots when working with oil solutions and washable, working clothing laundered daily).
- (b) Manufacture, mixing, blending and packing of insecticides which are derivatives of benzene or ethylene (rubber aprons and suitable respirators, separate work clothes laundered frequently).

SUB-SCHEDULE "C"

- 1. A nitro or amino process.
- 2. The crystal department and the packing room in a chrome process.
- 3. The process of distilling, gas or coal tar (other than blast furnace tar) and any process of chemical manufacture in which such tar is used.
- 4. The manufacture, mixing, blending and packing of the insecticides mentioned in sub-schedule "A".

SUB-SCHEDULE "D"

- (i) A glazed zinc with hot and cold water always available;
- (ii) a table with a smooth top;
- (iii) means for sterilising instruments;
- (iv) a couch;
- (v) a stretcher;
- (vi) two buckets or containers with close fitting lids;
- (vii) two rubber hot water bags;
- (viii) a kettle and spirit stove or other suitable means of boiling water;
- (ix) twelve plain wooden splints 36"x4"x1/4";
- (x) twelve plain wooden splints 4"x3"x½";
- (xi) six plain wooden splints, 10"x2"x½";
- (xii) three woollen blankets;
- (xiii) one pair artery forceps;
- (xiv) one bottle of brandy;
- (xv) two medium size sponges;
- (xvi) three hand towels;
- (xvii) two kidney trays;
- (xviii) four carbolic soaps;
- (xix) two glass tumblers and two wine glasses;
- {xx} two clinical thermometers;
- (xxi) graduated measuring glass with teaspoon;
- (xxii) one eyebath;
- (xxiii) one bottle (2 lb.) carbolic lotion, 1 in 20;
- (xxiv) two chairs;
- (xxv) one screen;
- (xxvi) one electric hand torch;
- (xxvii) an adequate supply of anti-tetanus serum; and
- (xxviii) two first aid boxes, each containing—
- (a) 24 small sterilized dressings;
- (b) 12 medium size sterilized dressings;
- (c) 12 large size sterilized dressings;
- (d) 12 large size sterilized burn dressings;
- (e) 12 half ounce packets sterilized cotton wool;
- (f) one snake bite lancet;
- (g) one pair scissors;
- (h) two (1 oz.) bottles of potassium permanganate crystals;
- (i) one (4 oz.) bottle containing a two per cent alcoholic solution of iodine;
- (j) one (4 oz.) bottle of sal volatile having the dose and mode of administration indicated on the label;
- (k) a copy of the first aid leaflet issued by the DGFASLI, Government of India.

PART II

Applying to work or parts thereof in which—

- (i) Caustic pots are used; or
- (ii) Chlorate of bleaching powder is manufactured; or
- (iii) (a) gas tar or coal tar is distilled or is used in any process of chemical manufacture; or
- (b) nitro or amino process is carried on; or
- (c) a chrome process is carried on; or
- (iv) crude shale oil is refined or Process incidental thereto are carried on; or
- (v) nitric acid is used in the manufacture of nitro compounds;
- (vi) the evaporation of brine in open pans and the stoving of salt are carried on ;
- (vii) the manufacture or recovery of hydrofluoric acid or any of its salts is carried on,
- (viii) work at a furnace where the treatment of zinc ores is carried on; and

- (ix) insecticides mentioned in sub-schedule "A" are manufactured, mixed, blended or packed.
- 1. Entry into gas tar or coal tar still.—(1) Before any person enters a gas tar or coal tar still for any purpose except that of rescue, it shall be completely isolated from adjoining tar stills, either by disconnecting—
- (a) the pipe leading from the swan neck to the condenser worm; or
- (b) the waste gas pipe fixed to the worm or receiver;
- and in addition, blank flanges shall be inserted between the disconnected parts, and the pitch discharge pipe or cock at the bottom of the still shall be disconnected.
- 2. Entry into bleaching powder chambers.—No person shall enter a chamber for the purpose of withdrawing the charge of bleaching powder unless and until—
- (i) the chamber is efficiently ventilated; and
- (ii) the air in the chamber has been tested and found to contain not more than 2.5 grains of free chlorine gas per cubic foot. A register containing details of all such tests shall be kept in a form approved by the Chief Inspector-cum-Facilitator
- 3. Special precautions for a nitro and amino Process .—In nitro or amino process : (a) if crystallised substances are broken or any liquor agitated by hand, means shall be taken to prevent as far as practicable, the escape of dust or fume into the air of any place in which any person is employed. The handles of all implements used in the operations shall be cleaned daily; (b) cartridges shall not be filled by hand except by means of a suitable scope; (c) every drying stove shall be efficiently ventilated to the outside air in such a manner that hot air from the stove shall not be drawn into any work room; (d) no person shall enter a stove to remove the contents until a free current of air has been passed through it; (e) every vessel containing nitro or amino derivatives of phenol or of benzene or its homologues shall if steam is passed into or around it, or if the temperature of the contents be at or above the temperature of the boiling water, be covered in such a way that steam of vapour shall be discharged into the open air at a height of not less than 25 feet from the ground or the working platform, and at a point where it cannot be blown back again into the work-room.
- 4. Precautions during caustic grinding, etc.—(a) Every machine used for grinding or crushing caustic shall be enclosed; and (b) where any of the following Process are carried on—
- (i) grinding or crushing of caustic;
- (ii) packing of ground caustic;
- (iii) grinding, sieving, evaporating or packing in a chrome process;
- (iv) crushing or mixing of material or cartridge filling in a nitro or amino process, an efficient exhaust draught shall be provided:
- (v) Insecticides mentioned in sub-schedule "A" are manufactured, mixed, blended, or packed.
- 5. (a) Chlorate shall not be crystallised, ground or packed except in a room or place not used for any other purpose, the floor of which room or
- place shall be of cement or other smooth, impervious and incombustible material and shall be thoroughly cleaned daily.
- (b) Wooden vessels shall not be used for the crystallisation of chlorate, or to contain crystallised or ground chlorate: provided that this regulation shall not prohibit the packing of chlorate for sale into wooden casks or other wooden vessels.
- 6. Restrictions on the employment of young persons and women.—(a) No person under 18 years of age and women shall neither be employed in any process in which hydrochloric acid fumes or ammonia cal vapours are given off from the following operations—
- (i) evaporation of brine in open pans;
- (ii) stoving of salt;
- (iii) work at a furnace where the treatment of zinc is carried on; and
- (iv) the cleaning of work rooms where the process mentioned in (iii) is carried on.
- (b) No person under 18 years of age shall be employed in a chrome process or in nitro or amino process or in a process in which the following materials are used or where the vapour of such material is given off:

Carbon bisulphide, chlorides of sulphur, benzene, carbon tetrachloride trichloroethylene, any carbon chloride compound, or any mixture containing any of each material.

- 7. Every person employed—
- (a) in a process to which Paragraph 33 of this Schedule applies shall where the protective clothing, footwear, respirators, goggles or gloves, provided under Paragraph 33 and shall deposit overall or suit, or working clothing so provided as well as clothing put off during working hours, in the places provided under Paragraph 34;
- (b) in Process to which Paragraph 35 applies shall carefully wash the hands and face before partaking of any food or leaving the premises;
- (c) in any process to which Part II of this Schedule applies shall use the protective appliances supplied in respect of any process in which he is engaged.

Schedule-XIII

Manufacture or Manipulation of Carcinogenic Dye Intermediates Application

- 1. **Application.**—The schedule shall apply in respect of all factories or any part thereof where Process in which the substances mentioned in paragraphs 3 and 4 are formed, manufactured, handled, or used and the Process incidental thereto in the course of which these substances are formed, are carried on. The Process indicated in this paragraph shall be referred to hereinafter as "the said Process" and such a reference shall mean any or all of the Process in this paragraph.
- 2. **Definitions.**—For the purpose of this schedule the following definitions shall apply, unless the context otherwise requires

- (a) "Controlled Substances" means chemical substances mentioned in paragraph 4 of this schedule.
- (b) "Efficient Exhaust Draught" means localised ventilation affected by mechanical means for the removal of gas, vapour, dust or fumes so as to prevent them from escaping into the air of any place in which work is carried on. No drought shall be deemed to be efficient which fails to remove smoke generated at the point where such gas, vapour, fume or dust originated.
- (c) "First Employment" means first employment in the said Process and also re-employment in such Process following any cessation of employment for a continuous period exceeding three calendar months, and
- (d) "Prohibited Substances" means chemical substances mentioned in paragraph 3 of this schedule.
- **3. Prohibited Substances.**—For the purpose of this schedule, the following chemical substances shall be classified as "prohibited substances" except when these substances are present or are formed as a bye-product of a chemical reaction in a total concentration not exceeding one per cent:—
- (a) Beta-naphthylamine and its salts;
- (b) Benzidine and its salts;
- (c) 4-amino diphenyl and its salts;
- (d) 4-nitro diphenyl and its salts; and
- (e) any substance containing any of these compounds.
- **4** Controlled substances.—For the purpose of this schedule, the following chemical-substances shall be classified as "controlled substances" :—
- (a) Alpha-naphthylamine or alpha naphthylamine containing not more than one per cent of beta-naphthylamine either as a bye-product of chemical reaction or otherwise, and its salts,
- (b) Ortho-tolidine and its salts;
- (c) Dianisidine and its salts;
- (d) Dichlorobenzidine and its salts;
- (e) Auramine, and
- (f) Magenta.
- **5. Prohibition of employment.**—No person shall be employed in the said Process in any factory in which any prohibited substance is formed, manufactured, process ed, handled, or used except as exempted by the Chief Inspector-cum-Facilitator of Factories as stipulated in paragraph 23.
- **6. Requirements for process ing or handling controlled substances.**—(1) Where-ever any of the controlled substances referred to in paragraph 4 are formed, manufactured, process ed, handled, or used, all practical steps shall be taken to prevent inhalation, ingestion or absorption of the said controlled substance by the employees while engaged in process ing that substance, and its storage or transport while the plant, or in cleaning or maintenance of the concerned equipment, plant, machinery and storage areas.
- (2) As far as possible all operations shall be carried out in a totally enclosed system. Wherever such enclosure is not possible, efficient exhaust drought shall be applied at the point where the controlled substances. are likely to escape into the atmosphere during the process.
- (3) The controlled substances shall be received in the factory in tightly closed containers and shall be kept so except when 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**.—(1) The following items of personal protective equipment shall be provided and issued to every employees employed in the said Process :
- (a) Long trousers and shirts or overalls with full sleeves and head coverings. The shirt or over alls shall cover the neck completely.
- (b) Rubber gum-boots.
- (2) The following items of personal protective equipment shall be provided in sufficient numbers for use by employees employed in the said Process when there is danger of injury during the performance of normal duties or in the event of emergency:
- (a) Rubber hand-gloves;
- (b) Rubber aprons;
- (c) Airline respirators or other suitable respiratory protective equipment.
- (3) It shall be the responsibility of 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 women and young persons.**—No woman or young person shall be employed or permitted to work in any room in which the said Process is carried on.
- 9. Floors of work-room.—The floor of every work room in which the said Process are carried on shall be:
- (a) smooth and impervious to water provided that asphalt or tar shall no* 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 the sewer through a closed channel.
- 10. Disposal of empty containers.—Empty container 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 Process shall be fully instructed on the properties of the toxic

chemicals to which he is likely to be exposed to, of the danger involved and the precautions to be taken. Employees 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 employees employed in the said Process 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 employees regarding the precautions contained in the cautionary placards.
- **14. Medical examination.**—(1) Every worker employed in the said Process shall be examined by a Qualified medical practitioner within 14 days of his first employment. Such examination shall include tests which the Qualified medical practitioner may consider appropriate and shall include exfoliative cytology of the urine. No worker 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.
- (2) Every worker employed in the said Process shall be re-examined by a Qualified medical practitioner at least once every six calendar months. Such examination shall include tests which the Qualified medical practitioner may consider appropriate but shall include exfoliative cytology of the urine.
- (3) A person medically examined under subparagraph (1) shall be granted by a Qualified medical practitioner a certificate of fitness in Form 26. Record of each re-examination carried out under sub-paragraph (2) shall be entered in the Certificate. The Certificate shall be kept in the custody of the manager of the factory.
- (4) The record of each examination carried out as referred to in subparagraphs (1) and (2) including the nature and the results of the tests shall be entered by the Qualified medical practitioner in a health register in Form 27.
- (5) The certificates of fitness and the health register shall be kept readily available for inspection by any Inspector.
- (6) If at any time the Qualified medical practitioner is of the opinion that a person is no longer fit for employment in the said Process or in any other work on the ground that 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 work in the said Process or in any work as the case may be.
- (7) No person who has been found unfit to work as said in subparagraph (6) 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.**—(1) The occupier of every factory in which the said Process is carried on shall engage a qualified medical practitioner for medical surveillance of the employees employed in such Process . His appointment shall be subject to approval of the Chief Inspector-cum-Facilitator of Factories.
- (2) The occupier shall provide to him all the necessary facilities for the purpose referred to in sub-paragraph (1).
- (3) A record of medical examinations and appropriate tests carried out by the qualified medical practitioner shall be maintained in a form approved by the Chief Inspector-cum-Facilitator.
- **16. Obligations of the employees.**—It shall be the duty of the persons employed in the said Process to submit themselves for the medical examination including exfoliative cytology of urine by the Qualified medical practitioner or the qualified medical practitioner as provided for under these rules.
- **17. Washing and bathing facilities.**—(1) The following washing and bathing facilities shall be provided and maintained in a clean state and in good repair for the use of all employees employed in the said Process:
- (a) A wash place under cover having constant supply of water and provided with clean towels, soap and nail brushes and with at least one stand pipe for every five such employees.
- (b) 50 per cent of the stand pipes provided under clause (a) shall be located in bathrooms where both hot and cold water shall be made available during the working hours of the factory and for one hour thereafter.
- (c) The washing and bathing facilities shall be in close proximity of the area housing the said Process.
- (d) Clean towels shall be provided individually to such workers.
- (e) In addition to the taps mentioned under clause (a), one stand pipe in which warm water is made available shall be provided on each floor.
- (2) Arrangement shall be made to wash factory uniforms and other work clothes every day.
- **18. Food, drink etc. prohibited in the work room.**—No worker shall consume food, drink, pan supari or tobacco or shall smoke in any work room in which the said Process is carried on and no worker shall remain in any such room during 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 employees employed in the said Process :
- (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 provided shall be under the care of a responsible person and shall be kept clean.

- **20. Mess room.**—There shall be provided and maintained for the use of employees employed in the said Process who remain on the premises during the meal intervals, 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 each worker who is employed in the said Process . 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 Process for the first time after the date on which the Schedule comes into force.
- 23. Exceptions—Prohibited substances.—(1) The Chief Inspector-cum-Facilitator of Factories may by a certificate in writing (which he may at his discretion revoke at any time), subject to such conditions if any, as may be specified therein, exempt any process in the course of which any of the prohibited substances is formed, process ed; 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.

- (2) The Chief Inspector-cum-Facilitator of Factories may allow the manufacture, handling or use of benzidine hydrochloride provided that all the Process 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 Process or such purposes as is necessary to ensure that the product is free from prohibited substances and that adequate steps are taken to insure that benzidinehydrochloride 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. Exception—General.**—If in respect of any factory, the Chief Inspector-cum-Facilitator of Factories is satisfied that owing to the exceptional circumstances of infrequency of the Process or for any other reason, all or any of the provisions of this Schedule is not necessary for the protection of the employees in the factory, the Chief Inspector-cum-Facilitator of Factories may by a certificate in writing (which he may in his discretion revoke at any time exempt such factory from all or any of such provisions subject to such conditions, if any as he may specify therein).

APPENDIX

Cautionary Placard-Notice

- 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 chemicals 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-XIV

Manufacture, Handling and usage of Benzene and Substances Containing Benzene

- 1. This Schedule is made to provide protection against hazards of poisoning from benzene and shall apply in respect of factories or parts thereof in which benzene or substances containing benzene are manufactured, handled or used.
- 2. Definitions.—For the purpose of this Schedule :
- (a) 'substances containing benzene' means substances wherein benzene content exceeds 1 per cent by volume;
- (b) 'substitute" means a chemical which is harmless or less harmful than benzene and can be used in place of benzene;
- (c) 'enclosed system' means a system which will not allow escape of benzene vapours to the working atmosphere; and
- (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 workroom. No drought 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.—(1) Use of benzene and substances containing benzene is prohibited in the following Process
- (a) manufacture of varnish, paints and thinners;
- (b) cleaning and degreasing operations.
- (2) Benzene or substances containing benzene shall not be used as a solvent or diluent unless the Process in which it is used is carried or in an enclosed system or unless the Process is carried on in a manner which is considered equally safe as it were carried out in an enclosed system.
- (3) Where suitable substitutes are available, they shall be used instead of benzene or substances containing benzene. This provision, however, shall not apply to the following Process:
- (a) Production of benzene;
- (b) process where benzene is used for chemical synthesis; and
- (c) Motor spirits (use and fuel).
- (4) The Chief Inspector-cum-Facilitator may, subject to confirmation by the State Government, permit exemptions from the percentage laid down in Paragraph 2(a) and also from the provisions of sub-paragraph (2) of this paragraph temporarily under conditions and within limits of time to be determined after consultation with the employers and employees concerned.
- 4. Protection against inhalation.—(1) The process involving the use of benzene or substances containing benzene shall as far as practicable be carried out in an enclosed system.
- (2) 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 or the workroom so that the concentration of benzene in the air does not exceed 25 parts per million by volume or 80 milligrams per cubic metre.
- (3) Air analysis for the measurements 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 results 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 milligrams per cubic metre, the Manager shall forthwith report the concentration of the Chief Inspector-cum-Facilitator stating reasons for such increase

- (4) Employees who for special reasons are likely to be exposed to concentration of benzene in the air or the workroom exceeding the maximum referred in sub-paragraph (2) shall be provided with suitable respirators face masks. The duration of such exposure shall be limited as far as possible.
- 5. Measures against skin contact.—(1) Employees who are likely to come in contact with liquid benzene or liquid substance containing benzene shall be provided with suitable gloves, aprons, boots and where necessary vapour tight chemical goggles, made of material not affected by benzene or its vapours.
- (2) The protective wear referred to in sub-paragraph (i) shall be maintained in good condition and inspected regularly.
- 6. Prohibition relating to employment of women and young persons.—No woman or young person shall be employed or permitted to work in any workroom involving exposure to benzene or substances containing benzene.
- 7. Labelling.—Every container holding benzene or substances containing benzene shall have the word "Benzene" and approved danger symbols clearly visible on it and shall also display information on benzene content warning about toxicity and warning about inflammability of the chemical.
- 8. Improper use of benzene.—(1) The use of benzene or substances containing benzene by employees for cleaning their hands or their work clothing shall be prohibited.
- (2) Employees shall be instructed on the possible dangers arising from such misuse.
- 9. Prohibition of consuming food, etc., in workroom.—No worker shall be allowed to store or consume food or drink in the workroom in which benzene or substances containing benzene are manufactured, handled or used.

Smoking and chewing tobacco or pan shall be prohibited into such workrooms.

- 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. Employees shall also be instructed on the measure to be taken to deal with an emergency.
- 11. Cautionary notices.—Cautionary notices in the form specified in Appendix 'A' and presented in the language easily read and understood by the majority of the employees shall be displayed in prominent places in the workrooms where benzene or substances containing benzene are manufactured, handled or used.
- 12. Washing facilities cloak room and messroom.—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:
- (1) Washing facilities under cover of the standard of at least one tap for every 10 persons having constant supply of water with soap and a clean towel provided individually to each worker if so ordered by the Inspector;
- (2) A cloak room with lockers for each employees, having two compartments one for street clothing and one for work-clothing; and
- (3) A mess room furnished with tables and benches with means for warming food, provided that where a canteen or other proper arrangements exist for the employees to take their meals, the requirements of the mess room shall be dispensed with.
- 13. Medical Examination.—(1) Every worker who is to be employed in Process involving use of benzene or substances containing benzene, shall undergo—
- (a) a thorough pre-employment medical examination including a blood test for fitness for employment by a certifying surgeon; and
- (b) 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.
- (2) Certificates of pre-employment medical examination and periodical medical examination including tests, shall be entered in a health register in Form No. 17, which shall be produced on demand by an Inspector-cum-Facilitator.
- (3) If the factory medical officer on examination at any time is of the opinion that any worker has 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 and on receipt of the information from the factory medical officer, the manager of the factory shall send the worker so found exposed, to the qualified medical practitioner who shall, after satisfying himself with the finding 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 .
- (4) 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.

Schedule-XV

Manufacture of pottery

- **1. Savings.**—These provisions shall not apply to a factory in which any of the following articles, but no other pottery, are made—
- (a) unglazed or salt glazed bricks and tiles; and
- (b) architectural terracotta made from plastic clay and either unglazed or glazed with a leadless glaze only.
- **2. Definitions**.—For the purposes of this Schedule—
- (a) "Efficient exhaust draught" means localized ventilation affected by mechanical or other means for removal of dust or fume so as to prevent it from escaping into air of any place in which work is carried on. No draught shall be deemed efficient which fails to remove effectively dust or fume generated at the point where dust or fume originates;
- (b) "fettling" includes scalloping, towing, sand peppering, sand sticking, brushing or any other process of cleaning of potteryware in which dust is given off;
- (c) "first employment" shall mean first employment in any process mentioned under Paragraph 3 and shall also include reemployment in the said process following any cessation of employment for a continuous period exceeding three calendar months;

- (d) "ground or powdered flint or quartz" does not include natural sands;
- (e) "leadless glaze" means a glaze which does not contain more than one per cent of its dry weight of a lead compound calculated as lead monoxide:
- (f) "low solubility glaze" means a glaze which does not yield to dilute hydrochloric acid more than five per cent of its dry weight, of a soluble lead compound calculated as lead monoxide when determined in the manner described below—
- A weighed quantity of the material which has been dried at 100 degrees centigrade and thoroughly mixed shall be continuously shaken for one hour at the common temperature with 1000 times its weight of an aqueous solution of hydrochloric acid containing 0.25 per cent by weight of hydrogen chloride. This solution shall thereafter be allowed to stand for one hour and then filtered. The lead salt contained in the clear filtrate shall then be precipitated as lead sulphide and weighed as lead sulphate;
- (g) "potter's shop" includes all places where pottery is formed by pressing or by any other process and all places whereby pressing or by any other process and all places where shaping, fettling or other treatment of pottery article prior to placing for the biscuit fire is carried on; and
- (h) "Pottery" includes earthenware, stoneware, porcelain, chinatiles, and any other articles made from such clay or from a mixture containing clay and other materials such as quartz, flint, feldspar, and gypsum.
- **3. Efficient exhaust draughts.**—The following Process shall not be carried on without the use of an efficient exhaust draught:
- (a) all Process involving the manipulation or use of a dry and unfritted lead compound;
- (b) fettling operations of any kind, whether on greenware or biscuit, provided that this shall not apply to the wet fettling, and to the occasional finishing of pottery articles without the aid of mechanical power;
- (c) sifting of clay dust or any other material for making tiles or other articles by pressure, except where—
- (i) this is done in machine so enclosed as to effectually prevent the escape of dust; or
- (ii) the material to be shifted is so damp that no dust can be given off;
- (d) pressing of tiles from clay dust, an exhaust opening being connected with each press, and pressing from clay dust of articles other than tiles, unless the material is so damp that no dust is given off;
- (e) fettling of tiles made from clay dust by pressure, except where the fettling is done wholly on or with, damp material, and fettling of other articles made from clay dust, unless the material is so damp that no dust is given off;
- (f) process of loading and unloading of saggers where handling and manipulation of ground and powdered flint, quartz, alumina or other materials are involved;
- (g) 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 as adequate having regard to all the circumstances of the case:
- (h) fettling of biscuit ware which has been fired in powdered flint or quartz except where this is done in machine so enclosed as to effectively prevent the escape of dust;
- (i) ware cleaning after the application of glaze by dipping or other process;
- (j) crushing and dry grinding of materials for pottery bodies and saggars, unless carried on in machines so enclosed as to effectively prevent the escape of dust or is so damp that no dust can be given off;
- (k) 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;
- (l) grinding of tiles on a power driven wheel unless an efficient water spray is used on the wheel;
- (m) lifting and conveying of materials by elevators and conveyors unless they are effectively enclosed and so arranged as to prevent escape of dust into the air in or near to any place in which persons are employed;
- (n) preparation or weighing out of flow material, lawning of dry colours, colour dusting and colour blowing;
- (o) mould making unless the bins or similar receptacles used for holding plaster of paris are provided with suitable covers; and
- (p) manipulation of calcined material unless the material has been made and remains so wet that no dust is given off.
- **4. Separation of process** .—Each of the following Process shall be carried on in such a manner and under such conditions as to secure effectual separation from one another and from other wet Process —
- (a) crushing and dry grinding or sieving of materials, fettling, pressing of tiles, drying of clay and greenware, loading and unloading of saggars, and the use of a dry lead compound,
- (b) all Process involving the use of a dry lead compound.
- **5. Prohibition on use of glaze.**—No glaze which is not a leadless glaze or a low solubility glaze shall be used in a factory in which pottery is manufactured.
- **6. Prohibition relating to women and young persons.**—No woman or young person shall be employed or permitted to work in any of the operations specified in Paragraph 4, or at any place where such operations are carried on.
- **7. Provisions of screen to potter's wheel**.—The potter's wheel (jolly and jigger) shall be provided with screens or so constructed as to prevent clay scrapings being thrown off beyond the wheel.
- **8. Control of dust during cleaning.**—(1) All practical measures shall be taken by dampening or otherwise to prevent dust arising during cleaning of floors.
- (2) Damp sawdust or other suitable material shall be used to render the moist method effective in preventing dust rising into the air during the cleaning process which shall be carried out after work has ceased.
- **9. Floor of certain workrooms**.—The floors of potter's shops, slip houses, dipping houses and ware cleaning rooms shall be hard, smooth and impervious and shall be thoroughly cleaned daily by an adult male using a moist method.
- **10.** Protective equipment.—(1) The occupier shall provide and maintain suitable overalls and head coverings for all persons employed in process included under Paragraph 3.

- (2) The occupier shall provide and maintain suitable aprons of a waterproof or similar material which can be sponged daily, for the use of the dippers, dippers' assistants, throwers, jolly employees, casters, mould makers and filter press and pug mill employees.
- (3) Aprons provided in pursuance of sub-paragraph (2) shall be thoroughly cleaned daily by the wearers by sponging or other wet Process . All overalls and head coverings shall be washed, cleaned arid mended at least once a week, and this washing, cleaning or mending shall be provided for by the occupier.
- (4) No person shall be allowed to work in emptying sacks of dusty materials, weighing out and mixing of dusty materials, and charging of ball mills and plungers without wearing a suitable and efficient dust respirator.
- 11. Washing facilities.—(1) The occupier shall provide and maintain, in a clean state and in good repair for the use of all persons employed in any of the Process specified in Paragraph 8—
- (a) a wash place under cover with either—
- (i) a trough with smooth impervious surface fitted with a waste pipe without plug, and of sufficient length to allow at least 60 centimetres for every five such persons employed at any one time, and having a constant supply of clean water from taps or jets above the trough at intervals of not more than 60 centimetres; or
- (ii) at least one tap or standpipe for every five such persons employed at any one time, and having a constant supply of clean water, the tap or standpipe being spaced not less than 120 centimetres apart; and
- (b) a sufficient supply of clean towels made of suitable material changed daily, with sufficient supply of nail brushes and soap.
- **12.** Tune allowed for washing.—Before each meal and before the end of the day's work, at least ten minutes, in addition to the regular meal times, shall be allowed for washing to each person employed in any of the Process mentioned in Paragraph 3.
- **13.** Mess-room.—(1) There shall be provided and maintained for use of all persons remaining within the premises during the rest intervals, a suitable mess-room providing accommodation of 0.93 square metre per head and furnished with—
- (a) a sufficient number of tables and chairs or benches with backrest;
- (b) arrangements for washing utensils;
- (c) adequate means for warming food; and
- (d) adequate quantity of drinking water.
- (2) The room shall be adequately ventilated by the circulation of fresh air and placed under the charge of a responsible person and shall be kept clean.
- **14.** Food, drinks, etc. prohibited in workrooms.—No food, drink, pan, supari and tobacco shall be brought into or consumed by any worker in any workroom in which any of the Process mentioned in Paragraph 3 are carried on and no person shall remain in any such room during interval for meals or rest.
- **15.** Cloak-room, etc.—There shall be provided and maintained for the use of all persons employed in any of the Process mentioned in Paragraph 3,—
- (a) a cloak-room for clothing put off during working hours and such accommodation shall be separate from any mess-room; and
- (b) separate and suitable arrangements for the storage of protective equipment provided under Paragraph 10.
- **16.** Medical facilities and records of examinations and tests.—(1) The occupier of every factory in which manufacturing of pottery is carried on, shall—
- (a) employ a qualified medical practitioner for medical surveillance of the employees employed therein whose employment shall be subject to the approval of the Chief Inspector-cum-Facilitator of Factories; 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 examination and appropriate tests carried out by the said medical practitioner shall be maintained in a separate register approved by the Chief Inspector-cum-Facilitator of Factories, which shall be kept readily available for inspection by the Inspector-cum-Facilitaro.
- 17. Medical examination by Certifying Surgeon.—(1) Every worker employed in any process mentioned under Paragraph 3, shall be examined by a Qualified medical practitioner within 15 days of his first employment. Such examination shall include tests for lead in urine and blood, ALA in urine, haemoglobin content, stippling of cells and pulmonary function tests and chest X-ray for employees engaged in Process mentioned in clauses (a) and (n) of Paragraph 3 and pulmonary function test and chest X-rays for the others. 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) All persons employed in any of the Process mentioned in clauses (a) and (n) of Paragraph 3 shall be examined by a Qualified medical practitioner once in every 3 calendar months. Those employed in any other Process mentioned in the remaining clauses of Paragraph 3 shall be examined by a Qualified medical practitioner once in every twelve calendar months. Such examinations in respect of all the employees shall include all the tests as specified in sub-paragraph (1) except chest X-ray which will be once in 3 years.
- (3) The Qualified medical practitioner after examining a worker, shall issue Certificate of Fitness in Form 26. The record of examination and re-examination carried out shall be entered in the certificate and the certificate shall be kept in the custody of the manager of the factory. The record of each examination carried out under sub-paragraphs (1) and (2), including the nature and the results of the tests, shall also be entered by the Qualified medical practitioner in a Health Register in Form 27.
- (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 Qualified medical practitioner 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 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 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 said Process unless the Certifying Surgeon, after further examination again certifies him fit for employment in that Process.
- 18. Exemption.—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 certificate may at any time be revoked by the Chief Inspector-cum-Facilitator without assigning any reasons.

Schedule-XVI

Manipulation of Stone or any Other Material Containing Free Silica

- 1. Application.—This Schedule shall apply to all factories or parts of factories in which manipulation of stone or any other material containing free silica is carried on.
- 2. Definitions.—For the purpose of this Schedule—
- (a) "First employment" shall mean first employment in the Process specified in Paragraph 1 and shall also include reemployment in the said Process following any cessation of employment for a continuous period exceeding three calendar months:
- (b) "manipulation" means crushing, breaking, chipping, dressing, grinding, sieving, mixing, grading or handling of stone or any other material or any other operation involving such stone or material; and
- (c) "stone or any other material containing free silica" means a stone or any other solid material containing not less than 5 per cent by weight of free silica.
- 3. Precautions in manipulation.—No manipulation shall be carried out in a factory or part of a factory unless one or more of the following measures, namely—
- (a) dampening the stone or other material being process ed;
- (b) providing water spray;
- (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 second Schedule appended to Section 41-F of the Code:

Provided that such measures as above said are not necessary if the process of 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 wherein any person has to work or pass shall be of impervious material and maintained in such condition that they can be thoroughly cleaned by a moist method or any other method which would prevent dust being airborne in the process of cleaning.
- (2) The surface of every floor of every workroom or place where any work is carried on or where any person has to pass during the course of his work, shall be cleaned of dust once at least during each shift after being sprayed with water or 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 operations are carried on.
- 6. Medical facilities and records of examinations and tests.—(1) The occupier of every factory to which the Schedule applies, shall—
- (a) employ a qualified medical officer for medical surveillance of the employees employed therein whose employment shall be subject to the approval of the Chief Inspector-cum-Facilitator of Factories, 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 of Factories which shall be kept readily available for inspection by the Inspector.
- 7. Medical examination by Certifying Surgeon.—(1) Every worker employed in the Process specified in Paragraph 1, shall be examined by a Qualified medical practitioner 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 unless certified fit for such employment by the Certifying Surgeon.
- (2) Every worker employed in the said Process shall be re-examined by a Qualified medical practitioner at least once in every twelve months. Such examination shall, wherever the Qualified medical practitioner considers appropriate, include all the tests as specified in sub-paragraph (1) except chest X-ray which will be once in every 3 years.
- (3) The Qualified medical practitioner after examining a worker, shall issue a Certificate of Fitness in Form 26. The record of re-examination carried out shall be entered in the Certificate and the Certificate shall be kept in the custody of the manager of the Factory. The record of each examination carried out under sub-paragraphs (1) and (2) including the nature and the results of the tests, shall also be entered by the Qualified medical practitioner in Health Register in Form 27.
- (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 Qualified medical practitioner 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 those documents also include the period for which he considers that the said person is unfit for work in the said 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 said process unless the Qualified medical practitioner after further examination, again certifies him fit for employment in those Process es.
- 8. 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 are not necessary for protection of the employees in the factory, the Chief Inspector-cum-Facilitator may by a certificate in writing, which he may in his discretion revoke at any time, exempt such factory from all or any of such provisions subject to such conditions, if any, as he may specify therein.

Schedule-XVII

HANDLING AND PROCESS ING OF ASBESTOS, MANUFACTURE OF ANY ARTICLE OF ASBESTOS AND ANY OTHER PROCESS OF MANUFACTURE OR OTHERWISE IN WHICH ASBESTOS IS USED IN ANY FORM

- 1. Application.—This Schedule shall apply to all factories or part of factories in which any of the following Process are carried on—
- (a) breaking, crushing, disintegrating, opening, grinding, mixing or sieving of asbestos and any other Process involving handling and manipulation of asbestos incidental thereto;
- (b) all Process in the manufacture of asbestos textiles including preparatory and finishing Process
- (c) making of insulation slabs or sections, composed wholly or partly of asbestos and Process incidental thereto;
- (d) making or repairing of insulating mattresses composed wholly or partly of asbestos, and Process incidental thereto;
- (e) manufacture of asbestos cardboard and paper;
- (f) manufacture of asbestos or cement goods;
- (g) application of asbestos by spray method;
- (h) sewing, grinding, turning, abrading and polishing in the dry state of articles composed wholly or partly of asbestos;
- (i) cleaning of any room, vessel, chambers, fixture or appliance for the collection of asbestos dust; and
- (j) any other Process in which asbestos dust is given off into the work environment.
- 2. Definition.—For the purpose of this Schedule—
- (a) "approved" means approved for the time being in writing by the Chief Inspector-cum-Facilitator;
- (b) "asbestos" means any fibrous silicate mineral and any admixture containing Codeionlite, amosite, anthophyllite, chrysolite, crocidolite, tremolite or any mixture thereof, whether crude, crushed or opened;
- (c) "asbestos textiles" means yarn or cloth composed of asbestos mixed with any other material;
- (d) "breathing apparatus" means a helmet or face piece with necessary connection by means of which a person using it breathes air free from dust, or any other approved apparatus;
- (e) "efficient exhaust draught" means localized ventilation by mechanical means for the removal of dust so as to prevent dust from escaping into air of any place in which work is carried on. No draught shall be deemed to be efficient which fails to control dust produced at the point where such dust originates;
- (f) "first employment" shall mean first employment in the Process, specified in Paragraph 1 and shall also include reemployment in the said Process following any cessation of employment for a continuous period exceeding three calendar months;
- (g) "preparing" means crushing, disintegrating, and any other Process in or incidental to the opening of asbestos; and
- (h) "protective clothing" means overall 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 applies shall be such that they do not create asbestos dust above the permissible limit or are equipped with efficient exhaust draught.
- 4. Exhaust draught.—(1) An efficient exhaust draught shall be provided and maintained to control dust from the following Process 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 sewing, grinding, turning, drilling, abrading or polishing, in the dry state, of articles composed wholly or partly of asbestos.
- (b) cleaning and grinding of the cylinders or other parts of a carding machine;
- (c) chambers, hoppers or other structures into which loose asbestos is delivered or passes;
- (d) workbenches for asbestos waste sorting or for other manipulation of asbestos by hand;
- (e) workplaces at which the filling or emptying of sacks, skips or other portable containers, weighing or other process incidental thereto which is effected by hand, is carried on;
- (f) sack cleaning machines;
- (g) mixing and blending of asbestos by hand; and
- (h) any other process in which dust is given off into the work environment.
- (2) Exhaust ventilation equipment provided in accordance with sub-paragraph (1) shall, while any work of maintenance or repair to the machinery, apparatus or other plant or equipment in connection with which it is provided is being carried on, be kept in use so as to produce an exhaust draught which prevents the entry of asbestos dust into the air of any workplace.
- (3) Arrangements shall be made to prevent asbestos dust discharged from exhaust apparatus being drawn into the air of any workroom.

- (4) The asbestos bearing dust removed from any workroom by the exhaust system shall be collected in suitable receptacles or filter bags which shall be isolated from all work areas.
- 5. Testing and examination of ventilating systems.—(1) All ventilating systems used for the purpose of extrCodeing or suppressing dust as required by this Schedule shall be examined and inspected once every week by a responsible person. It shall be thoroughly examined and tested by a competent person once in every period of 12 months. Any defects found by such examinations or tests shall be rectified forthwith.
- (2) A register containing particulars of such examination and tests and the state of the plant and repairs 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 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.—All loose asbestos shall while not in use, be kept in suitable closed receptacles which prevent the escape of asbestos dust therefrom and such asbestos shall not be distributed within a factory except in such receptacles or in a totally enclosed system of conveyance.
- 8. Asbestos sacks.—(1) All sacks used as receptacles for the purpose of transport of asbestos within the factory shall be constructed of impermeable material and shall be kept in good repair.
- (2) A sack which has contained asbestos shall not be cleaned by hand beating but by a machine, complying with Paragraph 3.
- 9. Maintenance of floors and workplaces—(1) In every room in which any of the requirements of this Schedule apply
- (a) the floors, workbenches, machinery and plant shall be kept in a clean state and free from asbestos debris and suitable arrangements shall be made for the storage of asbestos not immediately required for use; and
- (b) the floors shall be kept free from any materials, plant or other articles not immediately required for the work carried on in the room and which would obstruct the proper cleaning of the floor.
- (2) The cleaning as mentioned in sub-paragraph (1) shall, so far as is practicable, be carried out by means of vacuum cleaning equipment as designed and constructed and so used that asbestos dust neither escapes nor is discharged into the air of any workplace.
- (3) When the cleaning is done by any method other than that mentioned in sub-paragraph (2), the persons doing cleaning work and any other person employed in that room shall be provided with respiratory protective equipment and protective clothing.
- (4) The vacuum cleaning equipment used in accordance with provisions of sub-paragraph (2), shall be properly maintained and after each cleaning operation, its surface shall be kept in a clean state and free from asbestos waste and dust.
- (5) Asbestos waste shall not be permitted to remain on the floors or other surfaces at the workplace at the end of the working shift and shall be transferred without delay to suitable receptacles. Any spillage of asbestos waste occurring during the course of the work at any time shall be removed and transferred to the receptacles maintained for the purpose without delay.
- 10. Breathing apparatus and protective clothing.—(1) An approved breathing apparatus and protective clothing shall be provided and maintained in good condition for use of every person employed—
- (a) in chambers containing loose asbestos;
- (b) in cleaning, dust settling, or filtering chambers, or apparatus;
- (c) in cleaning the cylinders, including the doffers cylinders, or other parts of a carding machine by means of hand-strickles;
- (d) in filling, beating, or levelling in the manufacture or repair of insulating mattresses; and
- (e) in any other operation or circumstance in which it is impracticable to adopt technical means to control asbestos dust in the work environment within the permissible limit.
- (2) Suitable accommodation in a 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 Schedule and for the storage of such apparatus and clothing when not in use.
- (3) All breathing apparatus and protective clothing when not in use shall be stored in the accommodation provided in accordance with sub-paragraph (2).
- (4) All protective clothing in use shall be re-dusted under an efficient exhaust draught or by vacuum cleaning and shall be washed at suitable intervals. The cleaning Schedule and procedure should be such as to ensure the efficiency of the said clothing 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) Records of the cleaning and maintenance and of the condition of the breathing apparatus shall be maintained in a register provided for that purpose which shall be readily available for inspection by an Inspector.
- (7) No person shall be employed to perform any work specified in sub-paragraph (1) for which breathing apparatus is necessary to be provided under that sub-paragraph unless he has been fully instructed in the proper use of that equipment.
- (8) No breathing apparatus provided in pursuance of sub-paragraph (1) which has been worn by a person, shall be worn by another person unless it has been thoroughly cleaned and disinfected since last being worn and the person has been fully instructed in the proper use of that equipment.
- 11. Separate accommodation for personal clothing.—A separate accommodation shall be provided in a conveniently accessible position for all persons employed in operations to which this Schedule applies for storing of personal clothing. This should be separated from the accommodation provided under subparagraph (2) of Paragraph 10 to prevent contamination of personal clothing.
- 12. Washing and bathing facilities.—(1) There shall be provided and maintained in a clean state and in good repair for the use of all employees employed in the Process covered by the Schedule, adequate washing and bathing places having a constant supply of water under cover at the rate of one such place for every 15 persons employed.
- (2) The washing places shall have standpipes placed at intervals of not less than one metre.
- (3) Not less than one-half of the total number of washing places shall be provided with bathrooms.

- (4) Sufficient supply of clean towels made of suitable materials shall be provided:
- Provided that such towels shall be supplied individually for each worker if so ordered by the Inspector.
- (5) Sufficient supply of soap and nail brushes shall be provided.
- 13. Mess-room.—(1) There shall be provided and maintained for the use of all employees 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 warning 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 the Process covered by this Schedule is carried on. A notice in the language understood by the majority of the employees shall be posted in the plant prohibiting smoking in such areas.
- 16. Cautionary Notices.—(1) Cautionary notices shall be displayed at the approaches and along the perimeter of every asbestos process ing 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 notices shall be in the languages understood by the majority of the employees.
- 17. Air Monitoring.—To ensure the effectiveness of the central measures, monitoring of asbestos in air shall be carried out once at least in every shift and the record of the results so obtained shall be entered in a register specially maintained for the purpose.
- 18. Medical facilities and records of medical examinations and tests.—(1) The occupier of every factory or part of the factory to which the Schedule applies, shall—
- (a) employ a qualified medical practitioner for medical surveillance of the employees covered by this Schedule whose employment shall be subject to the approval of the Chief Inspector-cum-Facilitator of Factories; 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 of Factories, which shall be kept readily available for inspection by the Inspector.
- 19. Medical examination by Certifying Surgeon.—(1) Every worker employed in the Process specified in Paragraph 1 shall be examined by a Qualified medical practitioner within 15 days of his first employment. Such examinations 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 in sub-paragraph (1) shall be re-examined by a Qualified medical practitioner at least once in every twelve calendar months. Such examinations shall, wherever the Qualified medical practitioner 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 Qualified medical practitioner after examining a worker, shall issue a Certificate of Fitness in Form 26. 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 test, shall also be entered, by the Qualified medical practitioner in a Health Register in Form 27.
- (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 Qualified medical practitioner 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 to work in the said Process .
- (6) No person who has been found unfit to work as said in sub-paragraph (5) shall be re-employed or permitted to work in the said Process unless the Certifying Surgeon, after further examination, again certifies him fit for employment in that Process .
- 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 Process for any other reason, all or any of the provisions of this Schedule is not necessary for protection of the employees in the factory, the Chief Inspector-cum-Facilitator may by a certificate in writing, which he may at his discretion revoke at any time, exempt such factory from all or any of such provisions subject to such condition, if any, as he may specify therein.

Schedule-XVIII

HANDLING OR MANIPULATION OF CORROSIVE SUBSTANCES

- 1. Definition.—For the purposes of this Schedule—
- (a) "corrosive operation" means an operation of manufacturing, storing, handling, process ing, packing or using any corrosive substance in a factory; and
- (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 workroom 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.—(1) The occupier shall provide for the use of all persons employed in any corrosive operation suitable protective wear for hands and feet, suitable aprons, face shields, chemical safety goggles and respirators. The equipment shall be maintained in good order and shall be kept in a clean and hygienic condition by suitably treating 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.
- (2) The protective equipment and preparations provided shall be used by the persons employed in any corrosive operation.
- 4. Water facilities.—Where any corrosive operation is carried on, there shall be provided as close to the place of such operation as possible a source of clean water at a height of 210 centimetres from a pipe of 1.25 centimetres diameter and fitted with a quick Coding valve so that in case of injury to the worker by any corrosive substance, the injured part can be thoroughly flooded with water. Whenever necessary, in order to ensure continuous water supply, a storage tank having a minimum length, breadth and height of 210 centimeters, 120 centimeters and 60 centimeters respectively or such dimensions as are approved by the Chief Inspector-cum-Facilitator-cum-Facilitatorshall 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 employees employed understand, shall be displayed prominently close to the place where a corrosive operation is carried out and where it can be easily and conveniently read by the employees. 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.—(1) Corrosive substances shall not be filled, moved or carried except in containers or through pipes and when they are to be transported in containers they shall be placed in crates of sound construction and of sufficient strength.
- (2) A container with a capacity of 11.5 litres or more of a corrosive substance shall be placed in a receptacle or crate and then carried by more than one person at a height below the waist line unless a suitable rubber wheeled truck is used for the purpose.
- (3) Containers for corrosive substances shall be plainly labelled.
- 7. Devices for handling corrosives.—(1) Tilting, lifting or pumping arrangements shall be used for emptying jars, carboys and other containers of corrosives.
- (2) Corrosive substances shall not be handled by bare hands but by means of a suitable scoop or device.
- 8. Openings of valves.—Valves fitted to containers holding a corrosive substance shall be opened with great care. If they do not work freely, they shall not be forced open. They shall be opened by a worker suitably trained for the purpose.
- 9. Cleaning tanks, sills etc.—(1) In cleaning out or removing residues from sills or other large chambers used for holding any corrosive substance, suitable implements made of wood or other material shall be used to prevent production of arseniuretted hydrogen (arsine).
- (2) Whenever it is necessary for the purpose of cleaning or other maintenance work for any worker to enter a chamber, tank, vat, pit or other confined space where a corrosive substance had been stored, all possible precautions required under Section 36 of the Code shall be taken to ensure the worker's safety.
- (3) Wherever possible, before repairs are undertaken to any part of equipment in which a corrosive substance was handled, such equipment or part thereof shall be freed of any adhering corrosive substance by adopting suitable methods.
- 10. Storage.—(1) Corrosive substances shall not be stored in the same room with other chemical materials such as turpentine, carbides, metallic powders and combustible materials, to accidental mixing with, which may cause a reaction which is either violent or gives rise to toxic fumes and gases.
- (2) Pumping or filling overhead tanks, receptacles, vats or other containers for storing corrosive substances shall be so arranged that there is no possibility of any corrosive substance overflowing and causing injury to any person.
- (3) Every container having a capacity of twenty litres or more and every pipeline, valve, and fitting used for storing or carrying corrosive substance shall be thoroughly
- examined every year for finding out any defects, and defects so found out shall be removed forthwith. A register shall be maintained of every such examination made and shall be produced before the Inspector whenever required.
- 11. Fire extinguishers and fire-fighting equipment.—An adequate number of suitable types of fire extinguishers or other fire-fighting equipment, depending on the nature of chemicals stored, shall be provided. Such extinguishers or other equipment shall be regularly tested and refilled. Clear instructions as to how the extinguishers or other equipment should be used, printed in the language which majority of the employees 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 owing to the exceptional circumstances, or the infrequency of the process or for any other reason to be recorded by him in writing, all or any of the provisions of this Schedule are not necessary for the protection of the persons employed therein, he

may by a certificate in writing which he may at any time revoke, exempt the factory from such of the provisions and subject to such conditions as he may specify therein.

Schedule-XIX

COMPRESSION OF OXYGEN AND HYDROGEN PRODUCED BY ELECTROLYSIS OF WATER

- 1. Location of electrolyser plant.—The room in which the electrolyser plant is installed shall be separate from the plant for storing and compressing the oxygen and hydrogen and also the electric generator room.
- 2. Testing of purity.—(1) The purity of oxygen and hydrogen shall be tested by competent person at least once in every shift at the following posts—
- (a) in the electrolysis room;
- (b) at the gas-holder inlet; and
- (c) at the suction and of the compressor.
- (2) The purity figures shall be entered in a register and signed by the persons carrying out such tests:

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

- 3. Restrictions as to the compression.—The oxygen and hydrogen gases shall not be compressed if their purity as determined under Paragraph 2 above falls below 98 per cent at any time.
- 4. Limit switch for gas holder.—The bell of any gas holder shall not be permitted to go within the 30 centimeters of its lowest position when empty and a limit switch shall be fitted in the gasholder in such a manner as to switch off the compressor motor when the limit is reached.
- 5. Provision of negative pressure switch.—In addition to the limit switch in the gasholder, a sensitive negative pressure switch shall be provided in or adjacent to the suction main for hydrogen close to the gasholder and between the gasholder and the hydrogen compressor to switch off the compressor meter in the event of the gasholder being emptied to the extent as to cause vacuum.
- 6. Purity of caustic soda.—The water and caustic soda used for making lye shall be chemically pure within pharmaceutical limits.
- 7. Precautions against reversal of polarity.—Electrical connections at the electrolysis cells and at the electric generator terminals shall be constructed as to preclude the possibility or wrong connections leading to the reversal of polarity and in addition an automatic device shall be provided to cut off power in the event of reversal of polarity owing to wrong connections either at the switchboard of at the electric generator terminals.
- 8. Colouring of gas pipes.—Oxygen and hydrogen gas pipes shall be painted with distinguishing colours and in the event of leakage at the joints of the hydrogen gas pipe, the pipe after reconnection shall be purged of all air before drawing in hydrogen gas.
- 9. Use of flame proof fittings.—All electrical wiring and apparatus in the electrolyser room shall be of flame proof construction or enclosed in flameproof fittings and no naked light or flame shall be allowed to be taken either in the electrolyser room or where compression and filling of the gases is carried on and such warning notices shall be exhibited in prominent places,
- 10. Prohibition of hot work.—No part of the electrolyser plant and the gasholders and compressor shall be subjected to welding, brazing, soldering or cutting until steps have been taken to remove any explosive substance from that part and render the part safe for such operations and after the completion of such operations no explosive substance shall be allowed to enter that part until the metal has cooled sufficiently to prevent risk of explosion.
- 11. Repair etc. to be done under supervision.—No work or operation, repair or maintenance shall be undertaken except under the direct supervision of a person who, by his training, experience and knowledge of the necessary precautions against risk of explosion is competent to supervise such work. No electric generator after erection or repairs shall be switched on to the electrolysers unless the same is certified by the competent persons under whose direct supervision erection or repairs are carried on to be in a safe condition and the terminals have been checked for the polarity as required by Paragraph 7,
- 12. Checking of plant.—Every part of the electrolyser plant and the gasholders and compressor shall have a regular Schedule of overhaul and checking and every defect noticed shall be rectified forthwith.

Schedule-XX

PROCESS OF EXTRACTING OILS AND FATS FROM VEGETABLE AND ANIMAL SOURCE IN SOLVENT EXTRACTION PLANTS

- 1. Definitions.—For the purposes of this Schedule—
- (a) "Competent person" for the purpose of this Schedule as define in Rule 33 under Section 2(1)(1).
- (b) "flame proof enclosure" as applied to electrical machinery or apparatus means an enclosure that will withstand, when covers or other access doors are properly secured, an internal explosion of the flammable gas or vapour which may enter or

which may originate inside the enclosure without suffering damage and without communicating internal inflammation (or explosion) to the external flammable gas or vapour;

- (c) "solvent" means an inflammable liquid such as pentane, hexane and heptane used for the recovery of vegetable oils;
- (d) "solvent extraction plant" means a plant in which the process of extracting oils and fats from vegetable and animal sources by the use of solvents is carried on.
- 2. Location and layout.—(1) No solvent extraction plant shall be permitted to be constructed or extended to within a distance of 30 meters from the nearest residential locality.
- (2) A 1-5 metre high continuous wire fencing shall be provided around the solvent extraction plant up to a minimum distance

- of 15 meters from the plant.
- (3) No person shall be allowed to carry any matches or an open flame of fire inside the area bounded by the fencing.
- (4) Boiler houses and other buildings were open flame Process es are carried on shall be located at least 30 metres away from the solvent extraction plant.
- (5) If godowns and preparatory Process are at a distance of less than 30 meters from the solvent extraction plant, these shall be at least 15 meters distant from the plant, and a continuous barrier wall of non-combustible material 1.5 meters high shall be erected at distance of not less than 15 meters from the solvent extrAction plant so that it extends to at a least 30 meters of vapour travel around its ends from the plant to the possible sources of ignition.
- 3. Electrical installations.—(1) All electrical motors and wiring and either electrical equipment installed or housed in a solvent extraction plant shall be of flame proof construction.
- (2) All metal parts of the plant and building including various tanks and containers where solvents are stored 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. Restrictions on smoking.—Smoking shall be strictly prohibited within 15 meters distance from a solvent extraction plant. For this purpose, "No Smoking" signs shall be permanently displayed in the areas.
- 5. Precautions against friction.—(1) All tools and equipment including ladders, chains and other lifting tackle required to be used in a solvent extraction plant shall be of non-sparking type.
- (2) No machinery or equipment in a solvent extraction plant shall be belt driven.
- (3) No person shall be allowed to enter and work in the solvent extraction plant if wearing clothes made of nylon or such other fibre that can generate static electrical charge or wearing footwear which is likely to cause sparks by friction.
- 6. Fire-fighting apparatus.—(1) Adequate number of portable fire extinguishers suitable for use against flammable liquid fires shall be provided in the solvent extraction plant.
- (2) 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 the solvent extraction plant and throughout the building housing such plant.
- 7. Precautions against power failure.—Provision shall be made for the automatic cutting off of steam in the event of power failure and also for emergency overhead water-supply for feeding water by gravity to condensers which shall come into play automatically with the power failure.
- 8. Magnetic separators.—Oil cake shall be fed to the extruder by a conveyor through a hopper and a magnetic separator shall be provided to remove any pieces of iron during its transfer.
- 9. Venting.—(1) Tanks containing solvents shall be protected with emergency venting to relieve excessive internal pressure in the event of fire.
- (2) All emergency relief vents shall terminate at least 6 metres above the ground and be so located that vapourswill not reenter the building in which the solvent extraction plant is located.
- 10. Wastewater.—process waste water shall be passed through a flash evaporator to remove any solvent before it is discharged into a sump which should be located within the fenced area but not closer than eight metres to the fence.
- 11. Ventilation.—The solvent extraction plant shall be well ventilated and if the plant is housed in a building, the building shall be provided with mechanical ventilation with provision for at least six air changes per hour.
- 12. Housekeeping.—(1) Solvent shall not be stored in an area covered by a solvent extraction plant except in small quantities which shall be stored in approved safety cans.
- (2) 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.
- (3) 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 ami repairs.—(1) The solvent extraction plant shall be examined by the competent person to determine any weakness or corrosion and wear once in every 12 months. Report of such examination shall be supplied to the Inspector with his observation as to whether or not the plant is in safe condition to work.
- (2) No repairs shall be carried out to the machinery or plant except under the direct supervision of the competent person.
- (3) 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 the plant and machinery in the solvent extraction plant shall be in the charge of such duly qualified and trained persons as are certified by the competent person to be fit for the purpose and no other person shall be allowed to operate the plant and machinery.
- 15. Employment of women and young persons.—No women or young person shall be employed in the solvent extraction plant.
- 16. Vapour detection.—A suitable type of flame proof and portable combustible gas indicator shall be provided and maintained in good working order and a Schedule routine sampling of atmosphere at various locations approved by the Chief Inspector-cum-Facilitator shall be drawn out and entered in a register maintained for the purpose.

Schedule-XXI

MANUFACTURE OR MANIPULATION OF MANGANESE AND ITS COMPOUNDS

- 1. Application.—This Schedule shall apply to every factory in which or in any part of which any manganese process is carried on.
- 2. Definitions.—For the purposes of this Schedule—
- (a) "efficient exhaust ventilation" means localized ventilation affected 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 drought shall be deemed to be efficient which fails to remove the dust or fume or mist at the point where it is generated and fails to prevent it from escaping into and spreading into the atmosphere of a workplace;
- (b) "first employment" means first employment in any manganese process following any cessation of employment for a continuous period exceeding three calendar months;
- (c) "manganese process" means process ing, manufacture or manipulation of manganese or any compound of manganese or any mixture containing manganese; and
- (d) "manipulation" means mixing, blending, filling, emptying, grinding, sieving, drying, packing, sweeping or otherwise handling of manganese, or a compound of manganese, or anymore or any mixture containing manganese.
- 3. 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 Process so that other plants and Process and other parts of the factory and persons employed on other Process may not be affected by the same.
- 4. 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.
- 5. 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 employees in emergency to prevent inhalation of dust, fumes or mists. Sufficient number of complete sets of such equipment shall always be kept near the workplace and the same shall be properly maintained and kept always in a condition to be used readily.
- (3) The occupier shall provide and maintain for the use of all persons employed, suitable accommodation for the storage and make adequate arrangement for cleaning and maintenance of personal protective equipment.
- 6. Prohibition relating to women and young persons.—No women or young persons shall be employed or permitted to work in any manganese process .
- 7. Food, drinks etc. prohibited in the workrooms.—No food, drink, pan and supari or tobacco shall be allowed to be brought into premises consumed by any worker in any workroom in which any manganese process is carried on.
- 8. 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.
- 9. Washing facilities.—There shall be provided and maintained in a clean state and in good condition, for the use of persons employed on manganese process —
- (a) a wash place under cover, with either—
- (i) a trough with a smooth impervious surface fitted with a waste pipe without plug, and of sufficient length to allow at least 60 centimeters for every ten such persons employed at any one time, and having a constant supply of water from tap or jet above the trough at intervals of not more than 60 centimeters; 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; and
- (b) sufficient supply of soap or other suitable cleaning materials and nail brushes and clean towels.
- 10. 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, pui off during working hours with adequate arrangements for drying the clothing.
- 11. Cautionary placard and instructions.—Cautionary notices in the form specified in appendix and printed in the language of the majority of the employees employed, shall be affixed in prominent places in the factory where they can be easily and conveniently read by the employees and arrangement shall be made by the occupier to instruct periodically all employees employed in a manganese process regarding the health hazards connected with their duties and the best preventive measures and methods to protect themselves. The notices shall always be maintained in a legible condition.
- 12. Medical facilities and records of examination and tests.—(1) The occupier of every factory to which the Schedule applies, shall—
- (a) employ a qualified medical practitioner for medical surveillance of the employees employed therein whose employment shall be subject to the approval of the Chief Inspector-cum-Facilitator of Factories; 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 of Factories, which shall be kept readily available for inspection by the Inspector-cum-facilitator.
- 13. Medical examination by Certifying Surgeon.—(1) Every worker employed in any manganese process shall be medically examined by a Qualified medical practitioner within 15 days of his first employment. Such examination shall include tests

detection of serum calcium, serum phosphate and manganese in blood and urine and also include steadiness tests and other neuromuscular coordination tests. No worker shall be allowed to work after 15 days of his first employment in the factory unless certified for such employment by the Certifying Surgeon.

- (2) Every worker employed in a manganese process shall be re-examined by a Qualified medical practitioner at least once in every three calendar months and such examination shall, wherever the Qualified medical practitioner considers appropriate include all the tests in sub-paragraph (1).
- (3) The Qualified medical practitioner after examining a worker shall issue a Certificate of Fitness in Form 26. 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 records of each examination carried out under sub-paragraphs (1) and (2) including the nature and the results of these tests, shall also be entered by the Qualified medical practitioner in a Health Register in Form 27.
- (4) The Certificate of Fitness and the Health Register shall be kept readily available for inspection by the Inspector-cumfacilitator
- (5) If at any time the Qualified medical practitioner is of the opinion that the 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 to work in the said process.
- (6) No person who has been found unfit to work as said in sub-paragraph (5) shall be re-employed or permitted to work in the said Process unless the Qualified medical practitioner after further examination, again certifies him fit for employment in that Process .
- 14. Exemption.—If in respect of any factory the Chief Inspector-cum-Facilitator is satisfied that owing to any exceptional circumstances, or infrequency of the process or for any other reason, application of all or any of the provisions of this Schedule is not necessary for the protection of the persons employed in such factory he may, by an order in writing which he may at his discretion revoke, exempt such factory from all or any of the provisions on such conditions and for such period as he may specify in the said order.

APPENDIX CAUTIONARY NOTICE

Manganese and Manganese Compounds

- 1. Dust, Fumes and mists of manganese and its compounds are toxic when inhaled or when ingested.
- 2. Do not consume food or drinks near the workplace.
- 3. Take a good wash before taking meals.
- 4. Keep the working area clean.
- 5. Use the protective clothing and equipment provided.
- 6. When required to work in situations where dusts, fumes or mists are likely to be inhaled, use respiratory protective equipment provided for the purpose.
- 7. If you get severe headaches, prolonged sleeplessness or abnormal sensations on the body, report to the manager who would make arrangements for your examination and treatment.

Schedule-XXII

MANUFACTURE OR MANIPULATION OF DANGEROUS PESTICIDES

- 1. Application.—This Schedule shall apply in respect of all factories or any part thereof in which the process of manufacture or manipulation of dangerous pesticide hereinafter referred or as the said manufacturing process is carried on.
- 2. Definitions.—For the purposes of this Schedule—
- (a) "dangerous pesticides" means any product proposed or used for controlling, destroying or repelling any part or for preventing growth or mitigating excerpts of such growth including any of its formulations which is considered toxic under and is covered by the Insecticides Code, 1968 and the rules made thereunder and any other product, as may be notified from time to time by the State Government;
- (b) "efficient exhaust draught" means localized mechanical ventilation for removal of smoke, gas vapour, dust, fume or mist so as to prevent them from escaping into the air of any workroom 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;
- (c) "first employment" shall mean first employment in any manufacturing process to which this Schedule applies and shall also include re-employment in the said manufacturing process following any cessation of employment for a continuous period exceeding three calendar months; and
- (d) "manipulation" including mixing, blending, formulating, filling, emptying, packing or otherwise handling.
- 3. Instruction to employees.—Every worker on his first employment shall be fully instructed on the properties including dangerous properties of the chemicals handled in the said manufacturing process and the hazards involved. The employees shall also be instructed in the measures to be taken to deal with any emergency, such instructions shall be repeated periodically.
- 4. Cautionary notice and placards.—Cautionary notices and placards in the form specified in appendix to this Schedule and printed in the language of the majority of the employees shall be displayed in all workplaces in which the said manufacturing process is carried on so that they can be easily and conveniently read by the employees. Arrangements shall be made by the occupier and the manager of the factory to periodically instruct the employees regarding the health hazards arising in the

said manufacturing process and methods of protection. Such notices shall include brief instructions regarding the periodical clinical tests required to be undertaken for protecting health of the employees.

- 5. Prohibition relating to employment of women or young persons.—No women or young person shall be employed or permitted to work in any room in which the said manufacturing process is carried on or in any room in which dangerous pesticide is stored.
- 6. Food, drinks and smoking prohibited.—(1) No food, drink, tobacco, pan or supari shall be brought into or consumed by any worker in any workroom in which the said manufacturing process is carried out.
- (2) Smoking shall be prohibited in any workroom in which the said manufacturing process is carried out.
- 7. Protective clothing and protective equipment.—(1) Protective clothing consisting of long pants and shirts or overalls with long sleeves and head coverings shall be provided for all employees employed in the said manufacturing process.
- (2) (a) Protective equipment consisting of rubber gloves, gum boots, rubber apron, chemical safety goggles and respirators shall be provided for all employees employed in the said manufacturing process.
- (b) Gloves, boots, aprons shall be made from synthetic rubber where a pesticide contains oil.
- (3) Protective clothing and equipment shall be worn by employees supplied with such clothing and equipment.
- (4) Protective clothing and equipment shall be washed daily inside and outside if the employees 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.
- 8. Floors and workbenches.—(1) Floors in every workroom 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) Workbenches where dangerous pesticides are manipulated shall be made of smooth, non-absorbing material preferably stainless steel and shall be cleaned at least once daily.
- 9. Spillage and waste.—(1) If a dangerous pesticide during its manipulation splashes or spills on the work-bench, floor or on the protective clothing worn by a worker, immediate Codeion 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 a readily accessible place for use while attending to a spillage.
- (4) Easy means of access shall be provided to all parts of the plants for cleaning, maintenance and repairs.
- 10. Empty containers used for dangerous pesticides.—Containers used for dangerous pesticides shall be thoroughly cleaned of their content and treated with an in-activating agent before being discarded or destroyed.
- 11. Manual handling.—(1) A dangerous pesticide shall not be required or allowed to be manipulated by hand except by means of a long handled scoop.
- (2) Direct contact of any part of the body with a dangerous pesticide during its manipulation shall be avoided.
- 12. Ventilation.—(1) In every workroom or area whereas dangerous pesticide is manipulated, adequate ventilation shall be provided at all times by the circulation of fresh air.
- (2) Unless the process is completely enclosed the following operations during manipulation of a dangerous pesticide shall not be undertaken without an efficient exhaust draught—
- (a) empty a container holding a dangerous pesticide;
- (b) blending a dangerous pesticide;
- (c) preparing a liquid or powder formulation containing a dangerous pesticide; and
- (d) changing or filling a dangerous pesticide into a container, tank, hamper or machines or small sized containers,
- (3) In the event of a failure of the exhaust draught provided on the above operation, the said operations shall be stopped forthwith.
- 13. Time allowed for washing.—(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 pesticide.
- (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.
- 14. Washing and bathing facilities.—(1) There shall be provided and maintained in a clean state and in good repair for the use of all employees employed in the factory where the said manufacturing process is carried on adequate washing and bathing places having a constant supply of water under cover at the rate of one such place for every 5 persons employed.
- (2) The washing places shall have standpipes placed at intervals of not less than one meter.
- (3) Not less than one half of the total number of washing places shall be provided with bathrooms.
- (4) Sufficient supply of clean towels made of suitable material shall be provided:
- Provided that such towels shall be supplied individually for each worker if so ordered by the Inspector.
- (5) Sufficient supply of soap and nail brushes shall be provided.
- 15. Cloak-room.—There shall be provided and maintained for the use of all employees employed in the factory where the said manufacturing process is carried on—
- (a) a cloak-room for clothing put off during working hours with adequate arrangements for drying clothing if wet; and
- (b) separate and suitable arrangements for the storage of protective clothing provided under Paragraph 7.
- 16. Mess-room.—(1) There shall be provided and maintained for the use of all employees employed in the factory in which the said manufacturing process is carried on and remaining on the premises during the rest intervals a suitable mess-room which shall be furnished with—
- (a) sufficient tables and benches with backrest; 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.
- 17. Manipulation not to be undertaken.—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-cum-Facilitator
- 18. Medical facilities and records of examinations and tests.—(1) The occupier of every factory to which the Schedule applies, shall—
- (a) employ a qualified medical practitioner for medical surveillance of the employees employed therein whose employment shall be subject to the approval of the Chief Inspector-cum-Facilitator-cum-Facilitator Factories; 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 Factories which shall be kept readily available for inspection by the Inspector.
- 19. Examined by the Certifying Surgeon.—(1) Every worker employed in the Process mentioned in Paragraph 1 shall be examined by the Qualified medical practitioner within 15 days of his first employment. Such examinations in respect of Halogenated pesticides, shall include tests for determination of the chemical in blood and in fat tissues, EEG abnormalities and memory tests, in respect of organophosphorus compounds, such examinations shall include tests for depression of cholinesterase in plasma and red blood cells. No worker shall be allowed to work after 15 days of his first employment in the factory unless certified fit for such employment by the Certifying Surgeon.
- (2) Every worker employed in the said Process shall be re-examined by a Qualified medical practitioner at least once in every six calendar months and such examination shall, wherever the Certifying Surgeon, (sic)80. The record of each examination carried out under sub-paragraphs (1). Further every worker employed in the said Process shall also be examined once in every three months by the factory medical officer.
- (3) The Qualified medical practitioner after examining a worker, shall issue a certificate of Fitness in Form 26. The record of examination and re-examination carried out shall be entered in the certificate and the certificate shall be kept in the custody of the manager of the factory. The record of each examination carried out under subparagraph (1) and (2), including the nature and the results of these tests, shall also be entered by the Qualified medical practitioner in a Health Register in Form 27.
- (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 Qualified medical practitioner 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 those documents should also include the period for which he considers that the said person is unfit to work in the said Process .
- (6) No person who has been found unfit to work as said in sub-paragraph (5) shall be re-employed or permitted to work in the said Process unless the Certifying

Surgeon after further examination again certifies him fit for employment in those Process es.

20. Exemption.—If in respect of any factory, the Chief Inspector-cum-Facilitator satisfied that owing to the exceptional circumstances or the infrequency of the said manufacturing process or for any other reason which he shall record in writing all or any of the provisions of this Schedule are not necessary for the protection of the employees employed in the factory, he may by a certificate in writing exempt such factory, from all or any of the provisions on such condition as he may specify therein, such certificate may at any time be revoked by the Chief Inspector-cum-Facilitator recording his reasons therefor.

APPENDIX A (Paragraph 11)

- (a) The hazard:
- (1) Benzene and substances containing benzene are harmful.
- (2) Prolonged or repeated breathing of benzene vapours may result in acute or chronic poisoning.
- (3) Benzene can also be absorbed through skin which may cause skin and other diseases.
- (b) The preventive measures to be taken:
- (i) Avoid breathing of benzene vapours.
- (ii) Avoid prolonged or repeated contact of benzene with the skin.
- (iii) Remove benzene soaked or wet clothing promptly.
- (iv) If any time you are exposed to high concentration of benzene vapours and exhibit the sign and symptoms such as dizziness, difficulty in breathing, excessive excitation and losing of
- consciousness, immediately inform your Factory Manager.
- (v) Keep all the containers of benzene closed.
- (vi) Handle, use and process benzene and substances containing benzene carefully in order to prevent their spillage on the floor.
- (vii) Maintain good house-keeping.
- (c) The protective equipment to be used:
- (i) Use respiratory protective equipment in place where benzene vapours are present in high concentration,
- (ii) In emergency, use self-generating oxygen masks or oxygen or air-cylinder masks.
- (iii) Wear hand gloves, aprons, goggles and gum boots to avoid contact of benzene with your skin and body parts.
- (d) The First-aid .measure 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: If the exposed person is conscious :
- (a) Move him to fresh air in the open.
- (b) Lay him down without a pillow and keep him quiet and warm.

If the exposed person in unconscious:

- (a) Lay him down preferably on the left side with the head low.
- (b) Remove any false teeth; chewing-gum tobacco or other foreign objects which may be in his mouth.
- (c) Provide him artificial respiration in case difficulty is being experienced in breathing.
- (d) In case of shallow breathing or cyanosis (blueness of skin, lips, ears, fingers, 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.

chedule-XXIII

MANUFACTURING PROCESS OR OPERATIONS IN CARBON DISULPHIDE PLANTS

- 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. This Schedule is in addition to and not generation, is condensed, refined and storied. This Schedule is in addition to and not in derogation of any of the provision of the Act and Rules made thereunder.
- 2. Construction, Installation and Operation-(1) The buildings in which electric furnaces area installed and carbon disulphide after generation is condensed and refined shall be segregated from other parts of the factory and shall be of open type to ensure optimum ventilation and the plant layout shall be such that only a minimum number of workers are exposed to the risk of any fire or explosion at any one time.
- (2) 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, furnace or the plant may be subjected to, and shall be so designed that carbon disulphide liquid and gas are in closed system during their normal working.
- (3) The electric furnace supports shall be firmly grouted about 60 centimeters in concrete or by other effective means.
- (4) Every electric furnace shall be installed and operated according to manufacturers' instructions and these instructions shall be clearly imparted to the personnel in charge of construction and operation.
- (5) The instructions regarding observance of correct furnace tempèrature, sulphur dose, admissible current, or power consumption, and periodical checking of charcoal level shall be strictly complied with.
- 3. Electrodes-(1) Where upper ring electrodes made of steel are used in the electric furnace, they shall be of seamless tube construction and shall have arrangement for being connected to the cooling water system through a siphon built in the electrodes or through a positive pressure water pump.
- (2) The arrangement for cooling water referred to in sub-paragraph (1) shall be connected with automatic alarm system which will actuate in the event of interruption of cooling water in the electrodes and give visible and audible alarm signals in the control room and simultaneously stop power supply for the furnace operation and stop the future supply of water. The alarm system and the actuating device shall be checked every day.
- 4. Maintenance of charcoal level- When any electric furnace is in operation, it shall be ensured that the electrodes are kept covered with a charcoal bed.
- 5. Rupture disc and safety seal- At least: two rupture discs be fitted on the offtake pipe between the electric furnace and sulphur separator to prevent entry of pieces of charcoal into the condensers and piping.
- 6. Rupture disc and safety seal-(1) 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.
- (2) The safety water shall be provided and tapped from a point between the charcoal separator and the sulphur separator.
- 7. Pyrometer and manometers.-
- (1). Each electric furnace shall be fitted with an adequate number of pyrometers to give an indication of the temperature as correctly as reasonably practicable at various points in the furnace. The dials for reading the temperatures shall be located in the control room.
 - (2) Manometers or any other suitable devices shall be provided for indicating pressure-
 - (a) in the offtake pipe before and after the sulphur separator; and
 - (b) in primary and secondary condensers.
- 8. Check valves.-All piping carrying carbon disulphide shall be fitted with check valves at suitable positions so as to prevent gas from flowing back into any electric furnace in the event of its shut down.
- 9. Inspection and maintenance of electric furnaces.
 - (1) Every electric furnace shall be inspected internally by a competent person-
 - (a) before being placed in service after installation;
 - (b) before being placed in service after reconstruction or repairs; and
 - (c) periodically every time the fur:nace is opened for cleaning or de-ashing or for replacing electrodes.
 - (2) When an electric furnace is shut down for cleaning or de-ashing-
 - (a) the brick lining shall be checked for continuity and any part found defective be removed;
 - (b) after removal of any part of the lining referred to in (a), the condition of the shell be closely inspected; and
- (c) any of the plate forming shells found corroded to the extent that safety of the furnáce is endangered shall be replaced.

- 10. Maintenance of records.-The following hourly records shall be maintained in a log book-
 - (a) manometer readings at the points specified in sub-paragraph (2) of Paragraph 7;
- (b) gas temperature indicated by pyrometers and all other vital points near the sulphur separator and primary and secondary condensers;
 - (c) water temperature and flow of water through the siphon in the electrodes; and
 - (d) primary and secondary voltage and current and energy consumed.
- 11. Electrical apparatus wiring and fittings.-All buildings in which carbon disulphide is refined or stored shall be provided with electrical apparatus, wiring and fittings which shall afford adequate protection from fire and explosion.
- 12. Prohibition relating to smoking.-No person shall smoke or carry matches, fire or naked light pr other means of producing a naked light or spark in buildings in which carbon disulphide is refined or stored, and a notice in the language understood by a .majority of the workers shall be pasted in the plant prohibiting smoking and carrying of matches, fire or naked light or other means of producing naked or spark into such rooms.
- 13. Means of escape.-Adequate means of escape shall be provided and maintained to enable persons to move to a safe place as quickly as possible in case of an emergency. At least two independent staircases of adequate width shall be provided in every building housing the furnaces of reasonable intervals at opposite ends. These shall always be kept clean of all obstructions and so designed as to afford easy passage.
- 14. Warnings 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.-
- (1) Adequate number of suitable fire extinguishers or other fire-fighting equipment shall be kept in constant readiness for dealing with risks involved and depending on the amount and nature of materials stored.
- (2) Clear instructions as to how the extinguishers or cier equipment should be used printed in the language which the majority of the workers employed understand, shall be affixed to each extinguisher or other equipment and the personnel trained in their use.
- 16. Bulk sulphur.-
- (1) Open or semi-enclosed spaces for storage of bulk sulphur shall be sited with due regard to the dangers which may arise from sparks given off by near locomotives etc. and precautions shall be taken to see that flame, smoking and matches and other sources of ignition do not come in contact with the clouds of dust arising during handling of bulk sulphur.
- (2) 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.
- (3) The bulk sulphur in the enclosures shall be handled in such a manner a minimise the formation of dust clouds and no flame smoking and matches or sources of ignition shall be employed during handling, and non-speaking toll used whenever sulphur is shovelled or otherwise removed by hand.
- (4) No repairs involving flames, heat or use of hand or power tools shall be made in the enclosures where bulk sulphur is stored.
- 17. Liquid sulphur.-Open fiames, electric sparks and other sources of ignition. including smoking and matches, shall be excluded from the vicinity of molten sulphur.
- 18. Training and supervision.-(1) 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 plants are in operation. (2) Workers in charge of operation and maintenance of electric furnaces and the plants shall be properly qualified and adequately trained.
- 19. Washing facilities.-
- (1) The occupier shall provide and maintain in a clean state and in good repair, for the use of all persons employed wash place under cover with at least one tap or stand-pipe, having a constant supply of clean water for every five such persons, the taps or stand-pipe being spaced not less than 120 centimeters apart with a sufficient supply of soap and clean towels, provided that towels shall be supplied individually to each worker if so ordered by the Inspector.
- (2) All the workers employed in the sulphur storage, handling and melting operations shall be provided with a nail brush.
- 20. Personal protective equipments.-
- (1) Suitable goggles and protective cloth consisting of overalls without pockets, gloves and footwear shall be provided for the use of operator :
 - (a) when operating valves or cocks controlling fluids etc;
 - (b) drawing-off of molten sulphur from sulphur pots; and
 - (c) handling charcoal or sulphur.
- (2) Suitable respiratory protective equipment shall be provided and stored in the appropriate place for use during abnormal conditions in an emergency.
 - (3) Arrangements shall be made for proper and efficient cleaning of all such protective equipment.
- 21. Cloak-rooms.-There shall be provided and maintained for the use of all workers employed in the Process es, a suitable cloak-room for clothing put-off during work hours and a suitable place separate from the cloak-room for the storage of overalls of 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, persons directly, connected with the plant operation and those accompanied by authorised persons shall be admitted into the plant.

Schedule-XXIV

OPERATIONS INVOLVING HIGH NOISE LEVELS

- 1. Application.-This Schedule shall apply to manufacturing Process es which have high noise levels. all operations in any
- 2. Definitions.-For the purpose of this Schedule-
- (a) "A-weighting" means making graded adjustments in the intensities of sound of various frequencies for the purpose of noise measurement, so that the sound pressure level measured by an instrument reflects the actual response of the human ear to the sound measured; "dBA" refers to 'sound level in decibels as measured on a sound level
 - (b) meter operating on the A-weighting network with slow meter response;
- (c) "decibel" means one-tenth of "Bel" which is the fundamental division of a logarithmic scale used to express the ratio of two specified or implied quantities, the number of "Bels" denoting such a ratio being the logarithm to the base of 10 of this ratio. The noise level (or the sound pressure level) corresponds to reference pressure of six x 10° newtone 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) "first employment" shall mean first employment in areas where the noise exceeds the maximum permissible exposure levels specified in sub-paragraph (1) of paragraph 3 and shall also include re-employment in the said areas following any cessation of employment for a continuous period exceeding three calendar months;
 - (e) "frequency" is the rate of pressure variations expressed in cycles per second or hertz;
 - (f) "high noise level" means any noise level measured on the A-weighted scale is 90 dB or above; and
 - (g) 'noise" means any unwanted sound.
- 3. Protection against noise.-
- (1) In every factory, suitable engineering control administrative measures shall be taken to ensure, so far as is reasonably practicable, that no worker is exposed to sound levels exceeding the maximum permissible noise exposure levels specified in Tables 1 and 2.

TABLE 1
PERMISSIBLE EXPOSURE IN CASES OF CONTINUOUS NOISE

Total time of exposure (continuous or a number of short-term exposure) per day, in hours	Sound pressures level in dBA	
8	90	
6	92	
4	95	
3	97	
2	100	
1-1/2	102	
1	105	
3/4	107	
1/2	110	
1/4	115	

Notes.-(1) No exposure in excess of 115 dBR 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 IMPLOSIVE OR IMPACT NOISE

Peak sound pressure level in dB	Permitted number of impulses or impacts per day	
140	100	
135	315	
130	1000	
125	3160	
120	10000	

Notes- (1) No exposure in excess of 140 dB peak sound pressure level is permitted.

- (2) For any peak sound pressure level falling in between any figure and the next higher or lower figure as indicated in Column 1, the permitted number of impulses or impacts per day is to be determined by extrapolation on a proportionate basis.
- (3) 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 impulsive or impact noise and the criteria given in Table 2 would apply.
- (4) 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 C1 + C2Cn, excess unity-

- where the C1, C2, etc. indicates the total time or actual exposure at a specified noise level and T1, T2, etc. denote the time of exposure permissible at that level. Noise limit value if the sum of the fractions excess unity- exposure of less than 90 dBA may be ignored in the above calculation.
- (5) Where it is not possible to reduce the noise exposure to the levels specified in sub-rule (1) by reasonably practicable engineering control or administrative measure, the noise exposure shall be reduced to the greatest extent feasible by such control measures and each worker so exposed shall be provided with suitable ear protectors so as to reduce the exposure to noise to the levels specified in sub-rule (1).
- (6) Where the ear protectors provided in accordance with sub-paragraph (2) and worn by a worker cannot still attenuate the noise reaching near his ear, as determined by subtracting the attenuation value in dBA of the ear protectors concerned from the measured sound pressure level, to a level permissible under Table 1 or Table 2 as the case may be, the noise exposure period shall be suitably reduced to correspond to the permissible noise exposure specified in sub-paragraph (1).
- (7) (a) In all cases where the prevailing sound levels exceeds 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.
- (b) 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 Qualified medical practitioner 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 Qualified medical practitioner may consider appropriate, and shall include determination of auditory thresholds for pure tones of 125, 250, 500, 1000, 2000, 4000 and 8000 cycles per second.

Schedule-XXV

MANUFACTURE OF RAYON BY VISCOSE PROCESSES

- 1. Definitions.-For the purposes 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 connection by means of which the person using it in poisonous, asphyxiating or irritant atmosphere breathes unpolluted air, or any other approved apparatus;
 - (c) "churn" means the vessel in which alkali cellulose pulp is treated with carbon disulphide;
 - (d) "dumping" means transfer of cellulose xanthate from a dry churn to dissolve;
- (e) "efficient exhaust draught" means localised ventilation by mechanical means for the removal of any gas or vapour, so as to prevent it from escaping into the air of any place in which work is carried on. No draught shall be deemed to be efficient if it fails to control effectively any gas or vapour generated at the point where such gas or fume originate;
- (f) "first employment" shall mean first employment in the fume Process . and shall also include reemployment in the said Process following any cessation of employment for a continuous period exceeding three calendar months;
- (g) "fume Process" means any Process in which carbon disulphide or hydrogen sulphide is produced, used or given off;
- (h) "life belt" means a belt made of leather or other suitable material which can be securely fastened round the body with a suitable length of rope attached to it, each of which is sufficiently strong to sustain the weight of a man; and
- (i) "protective equipment" means apron, goggles, face shields, footwear, gloves and overalls made of suitable materials.

2. Ventilation.-

- (1) In all workrooms where a fume Process is carried on, adequate ventilation by natural or mechanical means shall be provided so as to control, in association with other control measures, the concentration of carbon-disulphide and hydrogen sulphide in the air of every work environment, within the permissible limits.
- (2) Notwithstanding the requirements 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) dumping hoppers of dry churns;
 - (b) spinning machines;
 - (c) trio-rollers and cutters used in staple fibre spinning;
 - (d) hydro-extractors for yarn cakes;
 - (e) after treatment Processes; and
 - (f) spin baths.
- (3) Insofar as the spinning machine and trio-roller and cutters used in staple fibre spinning are concerned, they shall be, for the purpose of ensuring the effectiveness of the exhaust draught to be provided as required in sub-paragraph (1), enclosed as fully as practicable and provided with suitable shutters in sections to enable required operations to be carried out without giving rise to undue quantities of carbon-di-sulphide and hydrogen sulphide escaping to the work environment.
- (4) No dry chum shall be opened after completion of reaction without initial exhausting the residual vapours of carbon-di-sulphide by operation of a suitable and efficient arrangement for exhausting the vapours which shall be

continued to be operated so long as the churn is kept open.

(5) Whenever any ventilation apparatus normally required for the purpose of meeting the requirements is subparagraphs (2), (3) and (4) is ineffective, fails or is stopped tor any purpose whatsoever, all persons shall be required to

leave the work areas where the equipment or processesspecified in the above said sub-paragraphs are in use, as soon as possible and in any case not later than 15 minutes after such occurrence.

- (6)(i) All ventilation systems provided for the purposes as required in sub-para- hengraphs (2), (3) and (4) shall be examined and inspected once every week by a respon- sible 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.
- (ii) A register containing particulars of such examination 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 quickly as possible after decontamination.
- 4. Lining of Dry Churns.-The inside surface of all dry churns shall be coated with a non-sticky paint so that cellulose xanthate will not stick to the surface of the churn. Such coating shall be maintained in a 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 Second Schedule appended to Section 41-F of the Act, suitable steps shall be taken for controlling the concentration in air of such occurrence.
- 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 Processis carried on.
- 8. Protective equipment-
- (1) The occupier shall provide and maintain in good condition protective equipment as specified in the table for use of persons employed in the processes referred to therein.

TABLE

TIBEE		
Process	Protective Equipment	
1. Dumping 2. Spinning 3. Process involving or likely to involve contact with viscose solution 4. Handling of sulphuric acid 5. Any other Process involving contact with hazardous chemicals	Overalls, face-shields, gloves and foot-wear- all made of suitable material. Suitable parsons, gloves and footwear. Suitable gloves and footwear. Suitable Chemical goggles. Protective equipment as may be directed by the Chief Inspector-cum-Facilitator-cum-Facilitatorby an order in writing.	

- (2) A suitable room, rooms or leckers 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 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 condition 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 and of the condition of the breathing apparatus and other appliances referred to in sub-clause (1) shall be entered in a register provided for that purpose which shall be readily available for inspection by an Inspector.
- (3) Sufficient number of workers shall be trained and periodically, retained in the use of breathing apparatus and administering artificial respiration so that at least 2 such trained persons would be available during all the working hours in each room in which fume Process is carried on .
- (4) Breathing apparatus shall be kept properly labelled in clean, dry, light proof cabinets and if liable to the effect by fumes, shall be protected by placing them in suitable containers. working on.
- (5) No person shall be employed to perform any work specified in sub-para- graph (1) for which breathing apparatus is necessary to be provided under that sub-paragraph unless he has been fully instructed in the proper use of that equipment.
- (6) No breathing apparatus provided in pursuance of sub-paragraph (1) which has been worn by a person shall be worn by another person unless it has been thoroughly cleaned and disinfected since last being worn and the person has been fully instructed in the proper use of that equipment.

- 10. Electric fittings.-All electric fittings in any room in which carbondisulphia is produced, used or given off or is likely to be given off in the work environment, other than a spinning room shall be of flame-proof construction and all element, conductors shall either be enclosed in metal conduit or be lead-sheathed.
- Prohibition relating to smoking etc.-No person shall! smoke or carry match fire or naked light or other means of producing naked light or spark in a room in whichume Process is carried on. A notice in the language understood by the majority of th worker's shall be posted in prominent locations in the plant prohibiting smoking and carrying of matches, fire or naked light or other means of producing naked light or spark into such rooms: Provided that fire, naked light or other means of producing naked light or spark may be carried on in such room only when required for the purposes of the Process itself under the direction of a responsible person.
- 12. Washing and bathing facilities.-
- (1) There shall be provided and maintained in a clean state and in good repair for the use of all workers employed in the processescovered 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 standpipes placed at intervals of less than one meter.
- (3) Not less than one half of the total number provided with bathrooms. 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. Rest room.-
 - (1) A rest room shall be provided for the workers engaged in doffing operations of filament yarn spinning Process
 - (2) Such a rest room shall be provided with fresh air supply and adequate seating arrangement.
 - 14. Cautionary notice and instructions.-
 - (1) The following cautionary notice shall be prominently displayed in each fume Process room. autionary Notice
 - 1. Carbon-disulphide (C; S) and Hydrogen sulphide (H; S) which may be present in this room are hazardous to health.
 - 2. Follow safety instructions.
 - 3. Use protective equipment and breathing apparatus as and when required.
 - 4. Smoking is strictly prohibited in this area.

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

- (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-disul- phide and hydrogen sulphide. These 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-of Factories; and
 - (b) provide to the said medical officer all the necessary facilities for the purpose referred to in :lause (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 of Factories, which shall be kept readily available for inspection by the Inspector cum-Facilitator.
- 16. Medical examination by the Certifying Surgeon.-
- (1) Every worker employed in the fume Process shall be examined by a Qualified medical practitioner within 15 days of his. first employment. Such examinations shall include tests for estimation of exposure coefficient (iodine azide 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 Qualified medical practitioner at least once in every twelve calendar months. Such examination shall, wherever the Qualified medical practitioner considers appropriate, include all the tests as specified in sub-paragraph (1).
- (3) The Qualified medical practitioner after examining a worker, shall issue a Certificate of Fitness in Form 26. 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 cash examination carried out under sub-paragraphs (1) and (2), including the nature and the results of the tests, shall also be entered by the Qualified medical practitioner in a Health Register in Form 27.
 - (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 Qualified medical practitioner is of 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 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 satisfied that owing to the exceptional circumstance or infrequency of the processesor 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 by a certificate in writing, which he may at his discretion revoke at any time, exempt such factory form all or any of such provisions subject to such conditions, if any, as he may specify therein.

Schedule-XXVI

HIGHLY FLAMMABLE LIQUIDS AND FLAMMABLE COMPRESSED GASES

- 1. Application.-These rules will be applicable to all factories where highly flammable liquid or flammable compressed gases are manufactured, stored, handled or used.
- 2. Definitions.-For the purposes of this Schedule-
- (a) "flammable compressed gas" means flammable compressed gas as defined in Section 2 of the Static and Mobile Pressure Vessels (Unfired) ine and Rules, 1981 framed under the Explosives Act , 1984; and
- (b) "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 (Act No. 30 of 1934), gives off flammable vapours at temperature less than 32 degrees centigrade.
- 3. Storage.-
- (1) Every flammable liquid or flammable compressed gas used in every factory shall be stored in a suitable fixed storage tank, or in a suitable closed vessel located in a safe position under the ground, in the open or in a 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 reasonably practicable steps shall be taken to contain or immediately drain off to a suitable container any spill or leak that may occur.
- (3) Every container, vessel, tank, cylinder, or 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 pipelines, pumps and similar appliances from the storage tank or vessel to the point of use. Such enclosed systems shall be so designed, installed, operated and maintained as to avoid leakage or the risk of spilling.
- 5. Preventing formation of Flammable Mixture with Air.-Wherever there is a possibility for leakage or spill of highly flammable liquid or flammable compressed gas from an equipment, pipeline, 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, workplace or other location where highly flammable liquid or flammable compressed gas is stored, conveyed, handled or used or where there is danger of fire or explosion from accumulation of highly flammable liquid or flammable compressed gas in air, all practicable measures shall be taken to exclude the sources of ignition. Such precautions shall include the following-
- (a) all electrical apparatus shall either be excluded from the area of risk or they shall be of such construction and so installed and maintained as to prevent the danger of their being a source of ignition;
 - (b) effective measures shall be adopted for prevention of accumulation of static charges to a dangerous extent;
- (c) no person shall wear or be allowed to wear any footwear having iron or steel nails or any other exposed ferrous material which is likely to cause sparks by friction;
 - (d) smoking, lighting or carrying of matches, lighters or smoking material shall be prohibited;
 - (e) transmission belts with iron fasteners shall not be used; and
- (f) all other precautions, as are reasonably practicable shall be taken to prevent initiation of ignition from all other possible sources such as open flames, all frictional sparks, overheated surface of machinery or plant, chemical or physical-chemical reaction and radiant heat.
- 7. Prohibition of smoking.-No person shall smoke in any place where highly flammable liquid or flammable compressed gas is present in circumstances that smoking would give rise to a risk of fire. The occupier shall take all practicable measures to ensure compliance with this requirement including display of a bold notice indicating prohibition of smoking, at every place where this requirement applies.
- 8. Fire Fighting.-In every factory where highly flammable liquid or flammable compressed gas is manufactured, stored, handled or used, appropriate and adequate means of fighting a fire shall be provided. The adequacy and suitability. of such means which expression includes the fixed and portable fire extinguishing systems, extinguishing material, procedures and the Process of fire-fighting, shall be to the standards and levels prescribed by the Indian Standards applicable, and in any case not inferior to the stipulation.

9. Exemptions.-If in respect of any factory, the Chief Inspector-cum-Facilitator- satisfied that owing the exceptional circumstances of infrequency of the processesor 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

CARPET AND WOOLLENDRUGGET MAKING OR ANY WORK INCIDENTAL THERETO OR CONNECTED THEREWITH

- 1. Definition.-
- (a) "Efficient exhaust draught" means localized ventilation affected by mechanical means for the removal of gas, vapour, dust or fumes at the point where they originate so as to prevent them from escaping into the air of any place in which work is carried on. No drought shall be deemed efficiently, which fails to remove smoke generated at the point where such gas, vapour, fume or dust originate.
- (b) "First employment" means first employment in any Process mentioned under paragraph 2 and yarn dyeing Process , and shall also include re-employment in the said Process following any cessation of employment for a continuous period- exceeding three calendar months.
- 2. Exhaust draught.-The following processesshall 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) Carding and spinning of raw fibre
 - (b) Weaving.
- 3. Prohibition relating to women and young persons.-No woman or young person ·shall be employed or permitted to work in any of the operations specified in paragraph 2, or at any place where such operations are carried on or at yarn dyeing Process ,
- 4. Ventilation.-Every workroom shall be provided with inlets and outlets of adequate size so as to secure and maintain efficient ventilation to all parts of the room.
- 5. Protective equipments and clothing.-
- (i) The occupier of the factory shall provide and maintain dust respirator for all persons employed in the Process included under paragraph 2.
- (ii) The occupier shall provide and maintain protective clothings, gloves for all persons employed in the dyeing Process
- 6. Medical facilities and records of examinations and tests.--(1) The occupier of every factory in which the carpet and woollendrugget manufacturing Process is carried on shall-
- (a) employ a qualified medical practitioner for medical surveillance of the workers employed therein, whose employment shall be subjected to the approval of the Chief Inspector-cum-Facilitator of Factories; and
 - (b) provide to the said medical practitioner all the necessary facilities for the purpose referred to in clause (a).
- (2) The records of medical examinations and appropriate tests carried out by the said medical practitioner shall be maintained in a separate register approved by the Chief Inspector-cum-Facilitator of Factories, which shall be kept readily available for inspection by the Inspector- cum-Facilitator.
- 7. Medical examination by Certifying Surgeon.-
- (i) Every worker employed in any of the processesspecified in paragraph 2 and in the yarn dyeing Process shall be examined by a Qualified medical practitioner within 15 days of his first employment. Such examination shall include tests for detection of methaemoglobin in blood, or paranitrophenol in urine, test for central nervous system function, pulmonary function test 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.
- (ii). Every worker employed in the said Process shall be re-examined by a Qualified medical practitioner at least once in every 12 calendar months and such re-examination shall, wherever the Qualified medical practitioner cons:ders appropriate, include tests for detection of methaemoglobin in blood, or para nitro phenol in urine, test for central nervous system function, pulmonary function test and chest X-ray once in every 3 years.
- (iii) The Qualified medical practitioner after examining a worker, shall issue a Certificate of Fitness in Form 26. The record of examination and re-examination carried out shall be kept in the custody of the Manager of the factory. The records of each examination carried under sub-paragraphs (i) and (ii), including the nature and results of the tests, shall also be entered by the Qualified medical practitioner in a Health Register in Form 27.
 - (iv) The Certificate of Fitness and the Health Register shall be readily available for inspection by the Inspector.

Schedule-XXVIII

- (a) "Efficient exhaust draught" means localized ventilation affected by mechanical means for the removal of gas, vapour, dust or fumes at the point where they originated so as to prevent them from escaping into the air of any place in which work is carried on. No exhaust draught shall be deemed efficient, which fails to remove smoke generated at the point where such gas, vapour, fume or dust originate.
- (b) "First employment" means first employment in any Process mentioned under paragraph 2 and shall also include re-employment in the said Processfollowing any cessation of employment for a continuous period exceeding three calendar months.
- (c) "Dressing or fettling operation" 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 the machining or assembling of castings after they have been dressed or fettled, or (b) any operation which is a knock-out operation within the meaning of this Schedule.
- (d) "knock-out operation" means all methods of removing castings from moulds and the following operations, when done in connection therewith, namely, stripping, coring-out and the removal of runners and risers.

Exhaust draught.-

- (1) The following processesshall 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) casting Process
 - (b) buffing and polishing of brass articles;
 - (c) electroplating of brass article using electrolyte;
 - (d) degreasing and cleaning.
- (2) Such drought shall be provided by mechanical means and shall operate on. dust, vapour or spray given off in the Process as nearby as may be at the point of origin. The exhaust draught shall be so constructed, arranged and maintained as to prevent the dust, vapour or spray entering into any workroom or place in which work is carried on.
- 3. Prohibition relating to women and young person 5.-No woman or young person shall be employed or permitted to work in any of the operations specified in paragraph 2(c) and 2(d) or at any place where such operations are carried on .
- 4. Arrangement and storage.-For the purposes of promoting safety and cleanliness in workrooms the following requirements shall be observed:-
- (a) Moulding boxes, loam plates, ladles patterns, pattern plates, frames, boards, box weights and other heavy articles shall be so arranged and placed as to enable work to be carried on without unnecessary risk;
- (b) suitable and conveniently accessible racks, bins or other receptacles shall be provided and used for the storage of other gear and tolls;
- (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. Cleanliness of Indoor Workplaces.-

- (1) All accessible parts of the walls of every indoor workplace in which the casting processes are carried on and of everything affixed to those walls shall be effectively cleaned by a suitable method to a height of not less than 4.2 metres from the floor at least once in every period of fourteen months. A record of the carrying out of every such effective cleaning in pursuance of this paragraph including the date, shall be maintained.
- (2) Effective cleaning by a suitable method shall be carried out at least once every working day, of all accessible parts of the floor of every indoor workplace in which the processes are carried on, other than parts which are of sand; and the parts which are of sand shall be kept in good order.
- 6. Manual operations involving molten metal.-
- (1) There shall be provided and properly maintained for all persons employed on manual operations involving molten metal with which they are liable to be splashed, a working space for that operation-
 - (a) which is adequate for the safe performance of the work; and
 - (b) which, so far as reasonably practicable, is kept free from obstruction,
- (2) Any operation involving the carrying by hand of a container holding molten metal shall be performed on a floor all parts of which, where any person walks while engaged in the operation, shall be on the same level:

Provided that, where necessary to enable the operation to be performed without undue risk, nothing in this paragraph shall prevent the occasional or exceptional use of a working space on a different level from the floor, being a space provided with a safe means of access from the floor for any person while engaged in the operation.

7. Dust and Fumes.-

- (1) Open coal, coke or wood fires shall not be used for heating or drying ladles inside a workroom unless adequate measures are taken to prevent, so far as practicable, fumes or other impurities from entering into or remaining in the atmosphere of the workroom.
- (2) No open coal, coke.or wood fires shall be used for drying moulds except in circumstances in which the use of such fires is 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 workroom during any period when a person is employed therein.
 - (4) All knock-out operations shall be carried out-
- (a) in a separate part of the foundry suitably partitioned off, being a room or part in which so far as reasonably practicable, effective and suitable local exhaust ventilation and a high standard of general ventilation are provided; or
- (b) in an area of 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 in an area of the foundry set apart for the purpose; and shall, so far as
 - (b) reasonably practicable, be carried out with effective and suitable local exhaust ventilation or other equally effective means of suppressing dust, operating as near as poss:ble to the point of origin of the-dust.
- 8. Disposal of dross and skimming.-Dross and skimmings removed from the molten metal or taken from a furnace shall be placed forthwith in a suitable receptacle
- 9. Floor or workroom.-

be-

- (1) The floor of every room in which the processesspecified in paragraphs 2(i)(c) and 2(i)(d) are carried on shall
 - (a) of cement or similar material so as to be smooth and impervious to water;
 - (b) maintained in sound condition; and
 - (c) the floor shall be cleaned daily.
- (2) Floors of indoor workplaces in which the processes are carried on, other than parts which are of sand, shall have an even surface of hard material.
- (3) 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.
- (4) All parts of the surface of the floor of any such indoor workplace are of sand shall, so far as practicable, be maintained in an even and firm condition.
- 10. Ventilation.-Every workroom. shall be provided with inlets and outlets of adequate size, so as to secure and maintain efficient ventilation to all parts of the room.
- 11. Protective clothing and protective equipment.-
- (1) The occupier of the factory shall provide and maintain the following protective clothing for use of workers who may come in contact with liquid, employed in Process specified in paragraph 2(i)(c)-
 - (a) waterproof apron and bib; and
 - (b) loose rubber gloves and rubber boots or any other waterproof boots.
- (2) The occupier of the factory shall provide and maintain adequate arrangements and place for keeping and drying the protective clothing for the use of workers employed in the factory.
- (3) The occupier of the factory shall provide and maintain suitable respirator for all workers employed in processesspecified in paragraphs 2(i)(a) and 2(i)(b).
- 12. Medical facilities and records of examination and tests.-
 - (1) The occupier of every factory in which processes specified in paragraph 2 are carried on shall
- (a) employ a qualified medical practitioner for medical surveillance of the workers employed therein, whose employment shall be subjected to the approval of the Chief Inspector-cum-Facilitator-cum-Facilitator of Factories;
 - (b) provide to said medical practitioner all the necessary facilities for the purpose referred to in clause (a); and
- (c) provide and maintain a sufficient supply of suitable ointment and impermeable waterproof plaster in a separate box readily, accessible to the workers and used solely for the purpose of keeping the ointment and the plaster.
- (2) The records of medical examinations and appropriate tests carried out by the said medical practitioner shall be maintained in a separate register approved by the Chief Inspector-cum-Facilitator-cum-of Factories, which shall be kept readily available for inspection by the Inspector- cum-Facilitator.
- (3) The medical practitioner shall examine all workers specified in paragraph 2(i)(c) before they are employed in the electroplating Process. Such examination shall include inspection of hands, forearms and nose.
- (4) The records of examination referred to in sub-paragraph (3) shall be maintained in a separate register, approved by the Chief Inspector-cum-Facilitator-cum-Facilitator Factories, which shall be kept readily available for inspection by the Inspector cum-Facilitator.
- 13. Medical Examination by Certifying Surgeon.-
- (1) Every worker employed in any of the processesspecified in paragraph 2, shall be examined by a Čertifying Surgeon within 15 days of his first employment, such examination shall include test for chromium, nickel or cadmium in uzine, pulmonary function test 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 Process shall be re-examined by a Qualified medical practitioner at least once in every 12 calendar months and such re-examination shall, wherever the Qualified medical practitioner considers appropriate, include test for chromium, nickel or cadmium in urine, pulmonary function test and chest X-ray once in every 3 years.
- (3) The Qualified medical practitioner after examining a worker, shall issue a Certificate of Fitness in Form 26. The record of examination and re-examinations carried out shall be kept in the custody of the Manager of the factory. The records of each examination carried out under sub-paragraphs (1) and (2), including the nature and results of the tests, shall also be entered by the Qualified medical practitioner in a Health Register in Form 27.
 - (4) The Certificate of Fitness and the Health Register shall be readily available for inspection by the Inspector.
- 14. Mess-room.-There shall be provided and maintained for the use of all workers employed in the processesspecified in paragraph 2 and remaining on the premises during the meal intervals, suitable mess-room, which shall be furnished with sufficient tables and benches under supervision of a responsible person.
- 15. Washing facilities.-
- (1) There shall be provided and maintained in a clean state and in good repair for the use of all persons employed in the processes specified in paragraph 2:-
 - (a) a wash place under cover with either :-

- (i) a trough with a smooth impervious surface fitted with a waste pipe without plug, and of sufficient length to allow at least 60 cms for every five such persons employed at any time, and having a constant supply of water from taps or jets above 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 plug and having a constant supply of water laid on; and
- (b) a sufficient supply of clean towels made of suitable materials renewed daily with supply of soap or other suitable cleansing material and of nail brushes.
- 16. Food, drink, etc. prohibited in the workroom.-No food, drink, pan and supari or tobacco shall be consumed or brought by any worker into any room in which the processesspecified in paragraph 2 are carried on.

Schedule-XXIX

LOCK AND HARDWARE MAKING OR ANY OTHER WORK INCIDENTAL THERETO OR CONNECTED THEREWITH

- 1. Definitions.-(a) "Efficient exhaust draught" means localized ventilation affected by mechanical means for the removal of gas, vapour, dust or fumes at the point where they originate so as to prevent them from escaping into the air of any place in which work is carried on. No exhaust draught shall be deemed efficient, which fails to remove smoke generated at the point where such gas, vapour, fume or dust originate;
- (b) "First employment" means first employment in any Process mentioned under paragraph 2 and shall also include re-employment in the said Process following any cessation of employment for a continuous period exceeding three calendar months;
- (c) "dressing or fettling operation" include 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 å casting when performed incidentally in connection with the machining or assembling of castings after they have been dressed or fettled, or (b) any operation which is a knock-out operation within the meaning of this Schedule;
- (d) "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.
- 2. Exhaust draught.-(1) The following processesshall 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) casting the metal parts;
 - (b) metal finishing operations involving buffing and polishing:
 - (c) all 'such processesin which electroplating is carried on by using electrolyte;
 - (d) spray painting.
- (2) Such draught shall be provided by mechanical means and shall operate on dust, vapour or spray given off in the Process as nearby as may be at the point of origin. The exhaust draught shall be so constructed, arranged and maintained as to prevent the dust, vapour or spray entering into any workroom or place in which work is carried on.
- 3. Prohibition relating to women and young persons.-No woman or young person shall be employed or permitted in any of the operations specified in paragraphs 2(c) and 2(d) or at any place where such operations are carried on.
- 4. Arrangement and storage.-For the purposes of promoting safety and cleanliness in workrooms the following requirements shall be observed:
- (a) moulding boxes, loam plates, ladles patterns, pattern plates, frames, boards, box weights and other heavy articles shall be so arranged and placed as to enable work to be carried on without unnecessary risk;
- (b) suitable and conveniently accessible racks, bins or other receptacles shall be provided and used for the storage of other gear and tools;
- (c) where there is bulk storage of sand, fuel, metal scrap or other materials or 'residues, suitable bins, bunkers or other receptacles shall be provided for the purpose of such storage.
- 5. Cleanliness of indoor workplaces.-
- (1) All accessible parts of the walls of every indoor workplace in which the casting processes are carried on and of everything affixed to those walls shall be effectively cleaned by a suitable method to a height of not less than 4.2 metres from the floor at least once in every period of fourteen months. A record of the carrying out of every such effective cleaning in pursuance of this paragraph including the date shall be maintained.
- (2) Effectiveteleaning by a suitable method shall be carried out at least once every working day of all accessible parts of the floor of every indoor workplace in which the processes are carried on, other than parts which are of sand, and the parts which are of sand shall be kept in good order.
- (3) Floors of indoor workplaces in which the processes are carried on, other than parts which are of sand, shall have an even surface of hard material.
- (4) 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.
- (5) All parts of the surface of the floor of any such indoor workplace are of sand shall, so far as practicable, be maintained in an even and firm condition. O
- 6. 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 the paragraph shall prevent the occasional or exceptional use of a working space on a different level from the floor, being a space provided with a safe means of access from the floor for any person while engaged in the operation.

7. Dust and Fumes.-

- (1) Open coal, coke or wood fires shall not be used for heating or drying ladles inside a workroom unless adequate measures are taken to prevent, so far as practicable, fumes or other impurities from entering into or remaining in the atmosphere of the workroom.
- (2) No open coal, coke or wood fires shall be used for drying moulds except in circumstances in which the use of such fires is 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 workroom during any period when a person is employed therein.
 - (4) All knock-out operations shall be carried out-
- (a) in a separate part of the foundry suitably partitioned off, being a room or part in which so far as reasonably practicable, effective and suitable local exhaust ventilation 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.
- 8. Disposal of dross and skimming.-Dross and skimmings removed from the molten metal or taken from a furnace shall be placed forthwith in a suitable receptacle.
- Floor of workroom.-
 - (1) The floor of every room in which the processesspecified in paragraph 2(1)(c) are carried on shal! be-
 - (a) of cement or similar material so as to be smooth and impervious to water;
 - (b) maintained in sound condition.
 - (2) The floor shall be cleaned daily in processesspecified in paragraph 2.
- (3) Floors of indoor workplaces in which the casting processes are carried on, other than parts which are of sand, shall have an even surface of hard material.
- (4) 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.
- (5) All parts of the surface of the floor of any such indoor workplace are of sand shall, so far as prácticable, be maintained in an even and firm condition.
- 10. Ventilation.-Every workroom shall be provided with inlets and outlets of adequate size, so as to secure and maintain efficient ventilation to all parts of the room.
- 11. Protective clothing and protective equipment.-
- (1) The occupier of the factory shall provide and maintain the following protective clothing for use of workers who may come in contact with liquid, employed in Process specified in paragraph 2(1)(c):
 - (a) waterproof apron and bib; and
 - (b) loose rubber gloves and rubber boots or any other waterproof boots.
- (2) The occupier of the factory shall provide and maintain adequate arrangements and place for keeping and driving the protective clothing for the use of workers employed in the factory.
- (3) The occupier of the factory shall provide and maintain suitable respirator for all workers employed in processesspecified in paragraphs 2(1)(a) and 2(1)(b).
- 12. Medical facilities and records of examination.-
 - (1) The occupier of every factory in which processesspecified in paragraph 2 are carried on shall-
- (a) employ a qualified medical practitioner for medical surveillance of the workers employed therein, whose employment shall be subjected to the approval of the Chief Inspector-cum-Facilitator of Factories;
 - (b) provide to the said medical practitioner all the necessary facilities for the purpose referred to in clause (a); and
- (c) provide and maintain a sufficient supply of suitable ointment and impermeable waterproof plaster in a separate box readily accessible to the workers and used solely for the purpose of keeping the ointment and the plaster.
- (2) The records of medical examinations and appropriate tests carried out by the said medical practitioner shall be maintained in a separate register approved by the Chief Inspector-cum-Facilitato of Factories which shall be kept readily available for inspection by the Inspector cum-Facilitator.
- (3) The medical practitioner shall examine all workers specified in paragraph 2(1)(c) before they are employed in the electroplating Process. Such examination shall include inspection of hands, forearms and nose.
- 13. Medical examination by Certifying Surgeon.
- (1) Every worker employed in any of the processesspecified in paragraph 2, shall be examined by a Qualified medical practitioner within 15 days of his first employment. Such examinations shall include tests for chromium, cadmium or nickel in urine, pulmonary function test 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 Process shall be re-examined by a Qualified medical practitioner at least once in every 12 calendar months and such re-examination shall, wherever the Qualified medical practitioner considers appropriate, include test for chromium, cadmium or nickel in urine, pulmonary function test and chest X-ray once in every 3 years.
- (3) The Certifying Surgeon, after examining a worker, shall issue a Certificate of Fitness in Form 26. The record of examination and re-examinations carried out shall be kept in the custody of the Manager of the factory. The records of each examination carried out under sub-paragraphs (i) and (ii), including the nature and results of the tests, shall also be entered by the Qualified medical practitioner in a Health Register in Form 27.
 - (4) The Certificate of Fitness and the Health Register shall be readily available for inspection by the Inspector.
- 14. Mess-room.-There shall be provided and maintained for the use of all workers employed in the processesspecified in paragraph 2 and remaining on the premises during the meal intervals, a suitable mess-room, which shall be furnished with sufficient tables and benches under supervision of a responsible person.
- 15. 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 processesspecified in paragraph 2:
 - (a) a wash place under cover with either-
- (i) a trough with a smooth impervious surface fitted with a waste pipe without plug, and of sufficient length to allow at least 60 cms for every five such persons employed at any time, and having a constant supply of water from taps or jets above 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 plug and having a constant supply of water laid on; and
- (b) a sufficient supply of clean towels made of suitable materials renewed daily with supply of soap or other suitable cleansing materials and of nail brushes.
- 16. Food, drink etc. prohibited in the workroom.-No food, drink, pan and supari or tobacco shall be consumed or brought by ary worker into any room in which the processesspecified in paragraph 2 are carried on.]

Schedule-xxx

Hot Metallurgical Processes and Processes Incidental thereto

- **1- Definitions**:- For the purpose of this schedule-
- (a) "Hot Metallurgical Process" means melting, refining, smelting, moulding, forging operations, hot rolling operations, foundry operations, casting; and furthermore
- it is applicable to production of iron, steel or nonferrous melting and casting by moulds of different materials including the Process of shall moulding, die casting, pressure die casting, centrifugal casting, continuous Casting and making of ingots, billets, slabs etc and the stripping thereof.
- (b) "first employment" shall mean first employment in any kind of welding Processes and Processes incidental thereto to which this Schedule applies and shall also include re-employment in the said manufacturing Process following any cessation of employment for a continuous period exceeding three calendar months;

2-General safety measures:

- (a) There shall be uncongested machine and Process layout, good housekeeping and ventilation, good draft to furnace and efficient exhaust of gases, water curtains and reflective or insulating screens for protection against radiant heat and hot air, local exhaust systems at the furnaces, cold air showers at hot work places, noise absorbent panels and deep and massive foundations to suppress vibrations.
- (b) Rest rooms protected against radiant heat should be provided and equipped with air and water showers etc.
- (c) Protective heat-resistant armlets, gaiters, aprons, safety footwear, eye and face shield, ear muffs or plugs to workers and safety training shall be provided to all the employees.
- (d) adequate safety measures and precautions shall be taken for handling receiving and storage of raw materials and finished products.
- (e) electrical equipment must be earthed and operated safely

(3)Preventive maintenance of machines:

- (a) treadle guard shall be designed to provide complete coverage and at the same time enough clearance for operator comfort and control of the treadle action shall be ensured..
- (b) forging furnace should be shielded as much as possible to protect employees from radiant heat. This can be done by means of asbestos covered screens, metal shield backed by refractory material and stainless steel or aluminum shells having radiant heat reflective qualities.
- (c) Equipments including hoists, slings, chains, props and catches, tongs should always be kept in good working order by periodic inspection and preventive maintenance schedules.
- (4) **Personal protective Equipment:** 1.Personal protective equipment for Hot Metallurgical Processes and processes Incidental thereto shop employees include safety shoes, leather leg guards, safety helmets, hand and arm protection, leather aprons, etc. Goggles with coloured or clear lenses, face shield or wire mesh face screen should be worn to help prevent face and eye injuries. Aluminised asbestos cloth overalls should be provided to furnace men to protect them from radiant heat. Ear muffs or ear plugs should be provided to forging crew to protect them from noise.
- 2. Training for use of PPE to all the employees shall be ensured.
- 3. A register for the allotment of PPEs to the employees shall be maintained. Maintenace of PPEs shall also be ensured periodically.
- 4. Occupier shall ensure that all the employees wear the appropriate PPEs during the work.
- 5. Medical facilities and records of examination and test-(a) The occupier of every factory to which the schedule applies and wherein more than 50 workers are employed in Hot Metallurgical processes and processes directly connected to it, shall-
- (i) Employe a qualified medical practitioner for medical surveillance of the worker employed therein. whose employment shall be subject to approval of the Chief Inspector-cum-Facilitator of Factories; and
- (ii) provide to the said medical practitioner all the necessary facilities for the purpose referred to in subclause (i).
- (b) The record of medical examinations and appropriate test carried out by the said medical practitioner shall be maintained in health register, form 4.
- 6. Medical examination by qualified medical practitioner or Medical Officer.-(1) Every worker employed in any of the processes to which this schedule applies shall be examined by a qualified medical practitioner within 15 days of his first employment. Such examination shall include pulmonary function test, chest X-ray or pulmonary function test and eye test. No worker shall be allowed to work after 15 days of his first employment in the factory unless certified fit for such employment by qualified medical practitioner
- (2) Every worker employed in the said processes shall be re-examined by a qualified medical practitioner at least once in every 6 calendar months and such re-examination shall, wherever the qualified medical practitioner considers appropriate, include fundoscopy and acuity test, chest X-ray or pulmonary function test; audimatery test (if required), checking for skin diseases, CBC test and any other what the qualified medical practitioner things necessary. If any worker complains of any eye or skin related discomfort or problem, the occupier shall immediately ensure the requisite test and its treatment.
- (3) The qualified medical practitioner after examining a worker, shall issue a Certifying of fitness in form 4. The record of examination and re-examinations carried out shall be kept in the custody of the Manager of the factory. The record of each examination carried out under sub-paragraphs(1) and (2), including the nature and the results of the test, shall also be entered by the Qualified medical practitioner in the Health Register in form 4.
- (4) The Certifying of Fitness form 5 and the Health Register form 4 shall be readily available for inspection by the Inspector-cum-facilitator.

- (5) If at any time qualified medical practitioner is of the opinion that a worker is no longer fit for employment in the said processeson 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 Certifying and the Health Register. The entry of his finding inthose documents should also include the period for which he considers that the said person is unfit for work in the said Processes.
- (6) The medical examination shall be arranged by the occupier or manager of the factory and the worker shall not bear any expenses for it.

Schedule-xxxi

WELDING PROCESSES

- 1. *Definitions.*—For the purposes of this schedule—
 - (a) "Welding Process" means Fusion(liquid state) welding ,Solid/Liquid state joining, Solid phase welding at elevated temperature or Oxy/fuel gas welding/cutting/heating;
- (b) "efficient exhaust draught" means localized ventilation by mechanical means for the removal of gases, vapours, dust or fumes so as to prevent them from escaping into air of any workroom. No draught shall be deemed to be efficient if fails to remove smoke generated at the point where such gases, vapours, dust or fumes originate;
- (c) "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 fumes, or any other approved apparatus;
- (d) "qualified Welder" means any employed person who possesses requisite qualification and is properly trained for that particular welding Process as prescribed by state government, central government or any recognized institution;
- (e) "first employment" shall mean first employment in any kind of welding processesand processes incidental thereto to which this Schedule applies and shall also include re- employment in the said manufacturing Process following any cessation of employment for a continuous period exceeding three calendar months;
- 2. **Exceptions-**(a) Nothing in this schedule shall apply to any factory in which welding processes are carried on occasionally for machinery maintenance purpose only and the welding processes are not the part of routine activities.
- (b) Nothing in this schedule shall apply to any welding Process which is unconventional and generates no dust, fumes ,gas or vapour.
- (c) Where the Chief Inspector-cum-Facilitator satisfied that all or any of the provisions of this schedule are not necessary for any of the welding Processes, he may, by certificate in writing, exempt any factory or class of factories from any such provisions, subject to such conditions as he may specify therein.
- 3. **Qualification of welder**: No person shall be assigned any core welding Process unless he is a qualified welder for that kind of welding work. Allied work connected with core welding work can be done by other trained worker with all precautions and protective gears;

Provided that in case of any ambiguity between core welding work and allied work , the decision of Chief Inspector-cum-Facilitator shall be final.

4. **Periodical examination, testing and maintenance of equipments :-** (a) All parts of every welding machine ,gas/fuel cylinders and sources of heat shall be properly maintained and thoroughly examined periodically and the various controls as cylinder valves, pressure gauges, regulators, flash back arrester and

nozzles and their working shall be examined at frequent intervals to ensure its safe operation by a responsible person designated by the occupier or manager, who by his experience and knowledge of necessary precautions against risks of explosion is fit to undertake such works; and

- (b) A register shall be maintained in which the details of the various tests carried out from time to time under clause (a) shall be entered and every entry made shall be signed by the person making the tests.
- 5. **Breathing apparatus and protective clothing**-(1) The occupier shall provide suitable protective clothing, footwear, goggles, welding helmet, gloves, welding suit, respirators and face shields as per Indian standard according to the nature of the work for the use of all persons employed in welding processes and processes incidental thereto and such clothing, footwear, *etc.* shall be worn by the persons concerned. Breathing apparatus shall be provided to the persons employed in confined space and shall also be provided, if required, at other places according to the nature of welding work.
- (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 Schedule and for the storage of such apparatus and clothing when not in use.
- (3) All breathing apparatus and protective clothing when not in use shall be stored in the accommodation provided in accordance with sub-paragraph (2).All protective clothing in use shall be washed at suitable intervals. The cleaning Schedule and procedure should be such as to ensure the efficiency of the said clothing in protecting the wearer.
- (4) All breathing apparatus shall be cleaned and disinfected at suitable intervals and thoroughly inspected once every month by a responsible person.
- (5) Records of the cleaning and maintenance and of the condition of the breathing apparatus shall be maintained in a register provided for that purpose which shall be readily available for inspection by an Inspector.
- (6) No person shall be employed to perform any work for which breathing apparatus is necessary unless he has been fully instructed in the proper use of that equipment.
- (7) 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.
- 6. **Precaution against fire and explosion-** (1) Equipments or cylinders carrying Acetylene, LPG or other fuel gases shall be properly maintained. Proper connections and closing of valves for no gas leakage shall be ensured by a responsible person designated by the occupier or manager.
- (2) Nearby combustible materials during welding shall be removed or protected, if it can not be moved.
- (3) workers shall not be allowed to perform any welding work/Process without standard operating procedure approved by manager or a responsible person.
- (4) An adequate number of suitable type of fire extinguishers or other fire-fighting equipment, depending on the nature of welding work, 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.
- 7. *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.

- 8. **Medical facilities and records of examination and test-**(1) The occupier of every factory to which the schedule applies and wherein more than 50 workers are employed in welding processes and processes directly connected to it, shall-
- (a) employ a qualified medical practitioner for medical surveillance of the worker employed therein whose employment shall be subject to approval of the Chief Inspector-cum-Facilitator- of Factories; 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 test carried out by the said medical practitioner shall be maintained in a separate resigter approved by the Chief Inspector-cum-Facilitator-cum-Facilitator Factories, which shall be kept readily available for inspection by the Inspector cum-Facilitator.
- 9. **Medical examination by Certifying Surgeon**.-(1) Every worker employed in any of the processesto which this schedule applies shall be examined by a Qualified medical practitioner within 15 days of his first employment. Such examination shall include pulmonary function test, chest X-ray and eye test. No worker shall be allowed to work after 15 days of his first employment in the factory unless certified fit for such employment by the Certifying Surgeon.
- (2) Every worker employed in the said processesshall be re-examined by a Qualified medical practitioner at least once in every 12 calendar months and such re-examination shall, wherever the Qualified medical practitioner considers appropriate, include all the tests as specified in sub-paragraph(1) except chest X-ray which will be once in every three years. If any worker complains of any eye related discomfort or problem, the occupier shall immediately ensure the eye test and its treatment.
- (3) The Qualified medical practitioner after examining a worker, shall issue a Certifying of fitness in form 26. The record of examination and re-examinations carried out shall be kept in the custody of the Manager of the factory. The record of each examination carried out under sub-paragraphs(1) and (2), including the nature and the results of the test, shall also be entered by the Qualified medical practitioner in the Health Register in form 27.
- (4) The Certifying of Fitness and the Health Register shall be readily available for inspection by the Inspector.
- (5) If at any time Qualified medical practitioner is of the opinion that a worker is no longer fit for employment in the said processeson 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 Certifying and the Health Register. The entry of his finding in those documents should also include the period for which he considers that the said person is unfit for work in the said Process.
- (6) The medical examination shall be arranged by the occupier or manager of the factory and the worker shall not bear any expenses for it.

FORM-1

(See Rule-3)

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

A. EstablishmentDetails.

- 1. Retrieve details of Establishment from Portal:
- 2. Name of Establishment:
- 3. Location and Address of the Establishment:

- 4. Others details of Establishment:
 - a. Total Number of employees engaged directly in theestablishment:.....
 - b. Total Number of the contract employeesengaged:
 - c. Contract employees engaged or to be engaged in process:.....
 - d. Total Number of Inter-State Migrant workers employed:.....
- 5. Type of Establishment(Factory/Beedi Establishment/Plantation Establishment/Construction Establishment)

6 (a) For factories:

Details of the manufacturing process& Tiype of Factory	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

6 (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

- 7. Ownership Type/Sector:
- 8. Activity as per National IndustrialClassification:
- 9. Details of Selected NICCode:
- 10. Date of opening/Start of business:

B. Details of Employer:-

C.

- 1. Name & Address of Employer / Occupier / Owner:
- 2. Designation:
- 3. Father's/ Husband's Name of the Employer:
- 4. Email Address, Telephone& Mobile No:

D. Manager/ Agent Details

E.

- 1. Full name & Address of Manager/ Agent or person responsible for supervision and control of the Establishment
- 2. Address of Manager/Agent:
- 3. Email Address, Telephone& Mobile No:
- 4. Date on which the person assumed charge as Manager

F. ContractorDetails

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

G. Date- Place;-

Signature/ Esign/digital sign of employer

FORM-2

(See Rule 5)

Notice of Commencement / cessation of Establishment:

- 1. RegistrationNo:
- Name and Address of Establishment:-
- 3. Name & Designation of employer (who has ultimate control over the affairs of the establishment:-
- 4. Full address to which communication relating to the establishment to be sent:-
- Nature of work of the establishment:-
- 6. In case of the notice is for commencement of work the approximate duration ofwork:-
- 7. in case of cessation, the date ofcessation:

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

Form 2A

In case of cessation of work:

I/we hereby certify that the payment of all dues to the employees employed in the establishment have been made and the premises are kept free from storage of hazardous chemicals and substances and it does not come under the perview of OSHW code,2021.

Kindly deregister for the purpose of this code.

Signature of the Employer

To,

The Inspector-cum-Facilitator

Health Register [Form No.3]

(As Prescribed under the hazardous process, dangerous operations , Section 6(1)(c) and rules therein)

1	Serial number	
2	Department/Work	
3	Name of worker	
4	Sex	
5	Age (last birthday)	
6	Date of employment or present work	
7	Date of leaving or transfer to other work with reasons for discharge for	
8	transfer Nature of job or occupation	
9	Raw materials products or by-products likely to be exposed to	
	Date of medical examination and the results thereof	
10	Date	
11		
12	Signs and symptoms observed during examination	
13	Nature of tests and result thereof	
i	General physical examination	
ii	Vision –visual acuity and fundoscopy examination	
iii	Hearing- audiometry test, if required	
iv	Breathing- pulmonary function test or X-Ray, if required	
V	CBC test; and any other test if required	
vi	If observed any skin disease?	
vii	Result fit or unfit or any other comment	
14	If declared unfit for work state period of suspension with reasons in detail	
15	Whether certificate of unfitness issued to the worker	
16	Re-certified fit to resume duty on	
17	Signature, seal and registration no.of qualified medical practitioner	

Certificate of Fitness

[Form No. 4]

(As Prescribed under the hazardous process, dangerous operations , Section 6(1)(c) and rules therein) $\,$

.		
Saria	l Number	
OCITA	HAMILING	

I certify that I have personally e	examined	. (name) son of	, (father's name)
residing at (address)	who is desirous of being em	ployed as	(designation) in
(process, department and factor	ry) and that his age, as nearly	y as can be ascertaine	ed from my examination,
is			
years, and that he is	, in my opinion, fit/unfit for em	ployment in the above	mentioned
factory as mentioned above.			
2. He may be produced for further	er examination after a period o	of	
3. The serial number of the previ	ous certificate is		
0: // % = /	0: /		. , ,
Signature/ Left Thumb-	Signature, seal and re	egistration no.of qualif	
impression of the person			practitioner
examined.	L	Date	

I certify that I	I extend this certificate until (if	Signs and	Signature, seal
examined the	certificate is not extended, the	symptoms	and registration
person	period for which the worker is	observed during	no.of qualified
mentioned	considered unfit for work is to be	examination	medical
above on	mentioned)		practitioner

Form 5 (See Rule 7)

For Appointment Letter

I. Name of the Establishment;
2. Name of the Employe and Father/Mother's Name
3. Date of birth
4. Permanent Address of the employee
5. Post for which appointment is made
6. Nature of Work
(hazardous/Nonhazardous/Clerical/Supervisory/Managerial)
7. Details of wages and perks
8. Nature of Appointment(permanent/temporary/Contract)
9. Period of Appointment
10. Employee distinct no. or code
11. Category of skill
12. Aadhar no

Signature
Name and Designation of
Appointing Officer

Notice of Accidents or Dangerous Occurrence, resulting in Death or Bodily Injury

FORM 6

(see Section 10,11 Rule 08.)

To,
Dated
Sir,
I hereby give notice under Section 10/11 of the occupational safety, Health and working conditions code, 2020 that fatal/non-fatal accident occurred in this factory/establishment to the person mentioned below :—
1.
(a) Name of Employer (occupier) of the establishment
(b) Name of the Manager of factory/establishment
2. (a) Employer's employee state insurance Code No
(a) Name, address and email address of factory/establishment
(b) The section or part of factory where accident or dangerous occurrence took place
3. (a)Nature of Industry (General/Hazardous/MAH)
(b) Main work of the establishment
4. Branch or department and exact place where the accident or dangerous occurrence took place
5. (a)Name of injured person
(b) Father's name
(c) Designation
6. (a) Sex
(d) Monthly wages of the person injured
(e) If the person is Contract labour, name and address of contractor
7. (a) Local E.S.I. Office to which the injured person is attached
(b)Injured person's employee state insurance number(if covered)

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
(c) whether the person was working on overtime
O. Cause and nature of accident or dangerous occurrence
(a) If caused by machinery
(i) Give name of the machine and the part causing the accident or dangerous occurrence
(b) State exactly what the injured person was doing at that time
(c) In your opinion, was the injured person at the time of accident ordangerous occurrence
(i) acting in contravention of provisions of any law applicable to him, or
(iii) acting without instructions from his employer
(d) In case reply to (c) , (i) (ii) or (iii) is in the affirmative state whether the act was done for the purpose of securing the safety in connection with the employer's trade or business.
12. In case the accident or dangerous occurrence happened while travelling in the employer's transport state whether
(i) the injured person was travelling as a passenger to or from his place of work
(ii) the injured person was travelling with the express or implied permission of his employer,
(iii) 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
(iv) the vehicle being not/being operated in the ordinary course of public transport service.
13. In case the accident or dangerous occurrence happened while meeting emergency state
(i) its nature
(ii) 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.

14. Describe briefly how the accident or dangerous occurrence occurred.
15. Name and addresses of witnesses :
(1) (2)
16. (a) Nature and extent of injury (e.g. fatal, loss of finger, fracture of leg, sealed or scratch and followed by sepsis.)
(b) Location of injury (right leg, left hand or left eye etc.)
17. (a) If the accident or dangerous occurrence is not fatal, state whether the injured person was disabled for more than, 48 hours.
(b) Date and hour of return to work.
18. (a) Physician, dispensary or hospital from whom or in which the injured person received or is receiving treatment.
(b) Name of dispensary/panel doctor selected by the injured person
19. (i) Has the injured person died
(ii) 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
Name and Designation of the Occupier or Manager-Employer
Employer's Address and Code No
(This space is to be completed by the Inspector of Factories) Sex
(Men, Women, Boy or Girl).
District
Date of receipt.
Number of accident or dangerous occurrence. Causation number, other particulars (e.g. fatal leg injury, arm injury, etc.)
Date of Investigation
Result of Investigation

Notice of dangerous occurrence not resulting in death or bodily injury

FORM NO. 6-A

(see Section 11, Rule 08)

1. Name and address of Factory/establishment	
2. Name of the Occupier/employer	
3. name of the Manager	
4. Nature of Industry	
5. Branch or Department and exact place where the dang place	
6. Date and hour occurrence	
7. Nature of Dangerous Occurrence (state exactly what h	nappened)
I certify that, to the best of my knowledge and belief, about	ove particulars are correct in every respect.
Signature of the Occupier / Manager.	
Date of despatch of report.	
(This space to be completed by Inspector of Factories)	
District	Date of receipt
D.O. No	Date of investigation
Causation	Date of investigation
No	
Result of investigation.]

FORM NO. 07

(Section 12, Rule 9)

Notice of certain diseases 1.

Name of factory
2. Address of factory
3. Address of office or private residence of occupier
4. Nature of industry5. Name, father's name and factory ticket number of patient
6. Address of patient
7. Sex and age of patient
8. Precise occupation of patient
9. Nature of poisoning or disease from which patient is suffering and the approximate period of illness
10. Has the case been reported to the Certifying Surgeon
11. Have particulars of the case been entered in the Health Register
Signature of Factory Manager
Date
to be filled in by the ⁷³ Inspector of factories
No. of case
Remarks

FORM NO. 08

[Section 31 Rule 23]

occupational safety , health and working conditions code, 2021
Date of enforcement
Name of factory under which it is registered/proposed to be registeredplacedistrict

Notice prescribed under Sections 31 rule......

Group			ire of ach gi			ber of group		ers em	ploye	-	Relay on workers		Shift or period of work		
					Perm	anent		Temp	orary		WOIKEIS		OI WOI.	K	
1			2			3			4			5	6		
Tuesday					Sat	urday									
Men	Wo	men	Men	Wo men	Men	Wo men	Men	Wo men	Men	Wo men	Men	Wo men	Men	Wo men	
7	8		9	10	11	12	13	14	15	16	17	18	19	20	

FORM No. 11-(contd.)

(Hours (time) of beginning and ending work for each relay, group and intervals of rest fixed under rule......

Worker	Group		Name of work of each group			Rela	ay or set		Shift or period of	Work comn	nences	Rest interval or intervals
WOIKEI			or each group			of w	orke	rs	work	Mondays to Fridays	Saturdays	Sundays
1	2			3			4		5	6	7	8
Men Women Boy Girls												
Work en	ds											
From	То	Fro	om	То	Fron	n _	То	Mono	lays to Fridays	8	Saturdays	Sundays
9	10		11	12	1	3	14		15		16	17

Charts showing the relation of relays working on continuous processes similar to those prescribed in

First week	Second week	Third week
Mon. Tue. Wed. Thu. Fri. Sat. Sun. Shift Relay	Mon. Tue. Wed. Thu. Fri. Sat. Sun.	Mon. Tue. Wed. Thu. Fri. Sat. Sun.

Factory Manager's Signature.....

Instructions to be followed while filling in the notice of periods of work

- 1. Divide all the workers into groups according to their nature of work. Show the number of workers working in each group.
- 2. Use numericals (1, 2, 3 and 4, etc.) for groups.
- 3. Show the nature of work against each group.
- 4. Make relays of groups accordingly specify them as I, II, III, etc.
- 5. Show the daily working hours *exclusive of periods of the fixed rest interval* of each relay or set of workers in the upper half of the notice.
- 6. Use letters, A, B, C, etc. for shifts and periods of work.
- **7.** Do not arrange the shift in such a way that more than one relay of workers is engaged in work of the same kind at the same time as overlapping shifts are prohibited.
- 8. Arrange the periods of work for workers in such a way that no adult worker is required to work for more than 8 hours in any day and that no worker shall work more than 5 hours before he has had an interval of rest for at least half an hour
- 9. Arrange the working hours in such a way that weekly hours of the workers do not exceed 48 hours a week. Arrange the periods of work of adult workers in such a way that inclusive of rest interval they shall not spread over more than 10-1/2 hours.
- 10. Show the weekly holiday for each relay or set of workers in the foot-note of each notice.
- 11. Submit the notice of periods for work in duplicate to the Inspector cum facilitator of the Region concerned before the day it is enforced. If there is any change in the system of work a revised notice of periods for work shall be submitted [Section 31]

Special instructions for filling in the chart which is to be used only in cases of relays working on continuous process or of sets of workers working in successive periods.

I. Show the periods of work *Inclusive of rest intervals* of adult workers on continuous processes in the upper half of the notice.

LEAVE REGISTER

FORM No. 09

(see Section 32,33 Rule24)

employee	Name Father's name Date and amount of payment made in lieu of leave due
----------	---

LEAVE WITH WAGES REGISTER NAME

OF FACTORY.....

1	Calendar year service					
2	Wage paid fromto					
3	Wages earned during the wage period					
4	No. of days of work performed					
5	No. of days of lay-off					
6	No. of days of maternity leave	No. of days worked during the calendar year				
7	No. of days of leave enjoyed	_ Janonam your				
8	Total of Columns 4 to 7					
9	Balance of leave from preceding year					
10	Leave earned during the year mentioned in Column 1	Leave to credit				
11	Total of Columns 9 and 10					
12	Whether leave in accordance with scheme under Section 32 was refused					
13	Leave enjoyed fromto					
14	Balance of leave to credit					
15	Normal rate of wages					
16	Remarks					

LEAVE BOOK FOR EMPLOYEE FORM No. 10

(see Section 32,33Rule 25)

NAME OF FACTORY.....

1	Calendar year service			
2	Wage paid from			
_	to			
3	Wages earned during the wage period			
4	No. of days of work performed			
5	No. of days of lay-off	N 61 1 1 1 1 1		
6	No. of days of maternity leave	No. of days worked during the calendar year		
7	No. of days of leave enjoyed			
8	Total of Columns 4 to 7			
9	Balance of leave from preceding year			
10	Leave earned during the year mentioned in Column 1	Leave to credit		
11	Total of Columns 9 and 10			
12	Whether leave in accordance with scheme under			
12	Section 32 was refused			
13	Leave enjoyed from			
13	to			
14	Balance of leave to credit			
15	Normal rate of wages			
16				
17				
18	Remarks			
		1		

Overtime Register

FORM NO.11

(see Section 27 ,33,Rule 25)

Overtime muster-roll for persons on work month ending

Workers number in register	Name	Department	Dates on which overtime has been worked	Extent of overtime each occar Time from	on	Total overtime worked in hours	Normal hours worked during the period
1	2	3	4	5	6	7	8

Normal rate of pay	Overtime rate of pay	Overtime earnings	Reasons for overtime			
9	10	11	12			

Form No. 12

[Section 33 Rule 25] Name of Factory or Department

	Time of commencement of	Re	est	perio	t	Time of	
	work	From	То	From	То	completion	
Monday to Friday							
Saturday							
Sunday							
System of rotation of relays							

Serial No.	Employee code	Name of employee	Father's name	Nature of work	Department	Corresp onding to that in Group or relay
1	1(i)	2	3	4	5	6

Month..... Year....

14th	15th	16th	17th	18th							25th	26th	27th	28th	29th	30th	31st	Total No. of days worked
21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39

ate of overtime	On account of provident fund	On		Actual wages paid	Total number of weekly holidays lost by the worker	Date(s) on which compensatory holiday(s) Will be given	Remarks of indication showing that the payments have been made together with the date
43	44	45	46	47	48	49	s 50

Register of Accidents and Dangerous Occurrences

[Form No.13]

(Section 33, Rule 25)

Seria I	Date of report in Form No. 18 to inspector (notice to	Time of report and	Name and address of the injured	Sex	Age	Insuranc e No.
No.	insurance authorities	notice	person			
1	2	3	4	5	6	7

Shift, department		Injury or dangerous occurrence								
and occupation of employee	Date	Time	Place	Cause of injury or dangerous occurences	Nature of injury or dangerous occurrences	What exactly was the injured person doing at the time of injury				
8	9	10	11	12	13	14				

Name, occupa	ation,	Signature	and	Name,		Date	of	Name	of	the	Remarks
address	and	designation	of	address	and	return	of	State	Insura	ance	if any
signature or th	umb-	the person	who	occupation	of	injured		Local	Office	to	
impression of	the	makes the e	ntry	two witness	ses	person	1	which	the inj	ured	
person giving not	tice					to work	<	person	1	is	
								attache	ed		
15		16		17		18		19		20	

Annual Return

FORM NO. 14

(Section 33, Rule26)

Year ending 31st December, 20...

1.	Licence number issued by the Chief Inspector-cum-Facilitator-cum-Facilitatorcum facilitator
2.	Name of the factory/ Establishment
3.	Name the occupier/Employer
4.	Name the managersince
5.	District
6.	Postal address, email-address and mobile no
7.	Nature of industry (General/Hazardous/MAH)
8.	Main product of the factory
9. (i	i) Average number of employees employed daily
(ii)	Average number of workers [Section 2(1)(zzl)] employed daily

*(Column 4)—The average daily number should be calculated by dividing the aggregate of attendance on working days by the number of working days in the year. ⁸⁰ [In reckoning attendances (1) attendance of a employee (a) for less than half of his scheduled working hours on a working day shall be omitted, and (i) attendance for half of his scheduled working hours or more on a working day shall be treated as full attendance (2) attendance of both temporary as well as parmanent workers shall be counted.] Attendances on separate shifts (e.g. night and days shifts) should be counted separately. Days on which the factory was closed, for whatever cause, and days on which the manufacturing processes were not carried should not be treated as working days.

	Employees directly by, occupier	Employees directly by the contractor	Total average	Total number of apprentice	Total number of other apprentice				
Men									
Women									
Adolescent									
Total									
10. Name, addre	ss and email-	address of the c	ontractor (s)						
11. (i) Normal ho	urs worked pe	er week for							
Male Worker	•••••								
Woman Worker									
Other Apprentices.									
(ii) Total normal M	Ian hour work	ted under Section	n 25						
(Explanation; Man	hour include	s work done by	employees)						
12. Number of d	ays worked in	the year							
13. What rest fo hour or others)		ere given to emp	loyees(half an	hour or one h	our or two				
14. Whether firstSuch nur	•	was substituted a	as weekly holic	lays ?					
	5. Was the factory or part of factory is engaged in continuous process under chedule "C."								
16. Over time(Sec	16. Over time(Section 27 and Rule 24)								
(i) Total Man hour	(i) Total Man hour worked during the period under Section 27								

Total

17. Average number of woman employees engaged in a shift or part thereof (Between 7 PM to 6 AM)
(i) Between 7 PM to 10 PM
(ii) 10 PM to 6 AM
18 . Compensatory Holidays
(i) Number of workers exempted from Section 26 of the code
(ii) Number of workers, who received holidays in the—
(a) Same month
(b) Following month
(c) Third month
29 Leave with Wages(section 32)
i) Total number of persons employed during the year
(ii) Number of persons who are entitled to leave with wages during the year preceding the year for which this return is submitted
(iii) Number of persons who are entitled to leave with wages during the year for which this return is submitted
(iv) Number of persons who were granted leave during the preceding year
(v) Number of persons who were granted leave during the year for which the return is submitted
(vi) (a) The total number of workers discharged or dismissed from service during the year

(b) Number	of disch	arged worke	rs pai	d wages in lie	eu of leave	<u>`</u>		
(c) Total am	ount of	wages paid i	n lieu	of leave				
(d) Total nu	mber of	workers who	left	the services o	f their ow	n accord	•••••]
(vii) Numb year in which	-	•		otice not to av	ail thems	elves of leav	eduring t	the
20. <i>(i)</i> Tot	al numb	er of days of	invo	luntary unemp	oloyment	during the ye	ear	
(ii) Number (of unem	ployed work	ers					
21. Does th	ne factor	y come unde	er—					
(i) Section 2((1)(za)							
(ii) Section 8	32	•••••						
(iii) Section	80							
22. Averag Hazardous P	•		nploy	ree employed	in danger	ous operation	ns or	
23. (i) No. of	safety of	officers empl	oyed	under Section	n 22			
(ii) Name of	chief sa	fety officer a	ınd er	nail address				
(iii) Name of	the sec	retary of safe	ety co	mmittee				
24. If welfare	e officer	is appointed	unde	er section 24(2	2)(iv)			
25. CANTEEN	NS .							
(For establishn	nent ordin	narily employir	ng 100	or more worker	rs)			
*26. Is a canted	en provid	ed in complian	ce of S	Section 24(1)(v)	and its Rul	le		
Does the cante	en provid	e—		Approxima te		Percentage of	How is	General
Cooked food and	Cooke d	Refreshment	Tea only	number of workers	charges levied below	borne by	the canteen	remarks
anu								

refreshmen t,	food	and tea		patronising	cost price,	the employer	manage d	
etc.	only	only		canteen (daily)	if so, state	(details		
					items	regarding		
					provide d	items, if any,		
					below	and amount		
					cost price	subsidized		
						should be		
						given)		
1	2	2	1	5	6	7	o	0
1		3	4	3	O	/	0	9

*(Column 26). If the columns are insufficient for giving details, a separate sheet may be attached and detailed information submitted. Enter "Nil" against the column which is not applicable to your factory.

27. CRECHE

(For establishment ordinarily employing more than 50 workers)

27. Is a creche room provided/arranged in compliance of provisions of the code and rule? Provide Details [Section 24(3)].....

SHELTERS, REST ROOMS OR LUNCH ROOMS

(For establishment ordinarily employing more than 50 workers)

*28. Is a shelter, rest-room or lunch room provided in compliance of Section 24(2)(iii) and its Rule in addition to a canteen?

Average daily attendance of workers of shelter, rest room or lunch room	Details of facilities provided for drinking water	Details of accommodation, furniture and other equipments provided	General remarks
1	2	3	4

^{*(}Column 27)-If the columns are insufficient for giving full details, a separate sheet may be attached and detailed information submitted. (ii) Enter "Nil against the column which is not applicable to your factory.

28.	ACCI	IDENTS								
"Fai	tal an	d non-fatal	accident	s''						
1			2	3	4					
accio occu	Total number of accidents of dangerous occurr ences during the year		Number of persons injured	Non-fatal accidents in which the workers returned to work during the year						
					Occurring a year	during the		Occurring previous y	•	
fata 1		Dangerou s occurrenc e without injury			Number of accident s Number of person s injured Number of mandays lost on accoun t of absence Number of accid ents		Num ber of person s injure d	Numbe r of mandays lost on acco unt of absence		
		f fatal acciden	_			-				
	[I/We certify that information given by me/us is true and correct to the best of my/our knowledge.]									
[The employer of every establishment shall furnish to Inspector cum facilitator of region on or before 15 January of each year an annual return in the form set forth for it.										
Signature of Occupier Dated				Signature (of Manage	er				

Nomination Form FORM No. 16

[Rule 30.]

I,
paid to who is my
Witnesses:
1
Signature of employee.
(Name)
2
Date
Present Address
Permanent Home Address

FORM-17

(See rule 40) APPLICATION FOR LICENSE

Application for License/Renewal of License/Amendment of License (including Common/single license) I. Particulars of Establishment for which licencerequired: 1. Name of Establishment & Type of Factory

- 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:

II. Details of Employer:

- 1. Full NameofEmployer.....relationship withestablishment.
- 2. Full Address of Employer:
- 3. Email Id of employer:
- 4. Mobile No. of employer:

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

Locations of worksites	Name of works	Date of commencement	Date of completion	Name of Establishments in which contract labour is/proposed to be employed	Name Address, email id of the Site Incharge
1	2	3	4	5	6

5. Maximum number of contract labour/ Inter-state migrant worker proposed to be employed on the Establishment on any date:

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

Type of Establishments	Name & Address of establishment	(i)Nature of work carried out in the establishment (ii) Activity as per National Ind'l classification	Date of commencement	Permanent establishment or probable date of completion	Maximum number of employees employed/ proposed to be employed	Maximum number of employees employed/ proposed to be employed
1	2	3	4	5	6	7

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

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

	Signature of Contractor
APPLICATION FOR AMENDA	MENT OF LICENCE:
1.LicenceNo	Date:
2. LIN & PAN	
3. Name and address of the establi	shment:
4.Details for which amendment is	sought:
	presently employed: (If there is increase in the maximum number of workers to be urity deposit as per law needs to be deposited:
(b). Details of fees paid through e	payment date on which made:
©. Other details requiring amendment change required)	ent in the licence issued (Necessary documents may be uploaded in support of

Date of Application

Signature of the Contractor

Form 18

(See rule 40)

Form of Certificate by Principal employer

Certified that I have engaged the applicant (Name of the Contractor) as a contractor in my establishment. I undertake to be bound by the all provisions of occupational safety heath and working conditions code 2020 and Uttarakhand rules mad thereunder in so far as the provisions or applicable to me in respect of employment of contract labour by the applicant in my establishment.

Date .-

Place

Signature of Principal
employer Name and Address of
Establishment

FORM-19

(See Rule-42)

Form of license

Year when

Amended

Maximum

number of Contract labour

Lic	LicenceNo Reg.No			Date of Reg					
Lic	cenceisherel	bygrantedto		(Name of the Contractor)					
for	r the premise	esknownas		(name of the principal	employer)				
situ	situatedat								
	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.								
The20 IssuingAuthority									
Sl.No. Dat	te of issue	Valid For Maximum number of Contract labour /inter-state workers on any one day	Fee	Security deposit	Date of Payment				
	Signature of issuing authority AMENDMENTS:								

/workers on any one day		Authority

Date of payment of

amendment fee

Signature of issuing authority

Signature of

the Issuing

Date of

Payment

FORM-20

(See Rule-45)

EXPERIENCE CERTIFICATE OF CONTRACT EMPLOYEE

	To whom so ever concerned
1.	Name ofcontractor/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 PrincipalEmployer*:
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 / AadhaarNo.:
12.	Mobile No. :
13.	Serial Number in the Employee Register:
14.	Registration number, date and name of the Board if the building and other construction worker is
regis	stered asa beneficiary:
15.	Period ofEmployment:
16.	Designation:
	Seal and Signature of Contractor
*Plea	ase strike off whichever is not applicable.

Form 21

(See rule 46)

Application for declaration of core activity

To,	
	Principal Secretary/Secretary,
	Labour and employment
	Government of Uttarakhand.
1-(name and address of establishment) is engaged in manufacturing of
2-	The flow chart of manufacturing process is attached herewith.
3- a	activity is core activity/non-core activity of the establishment
4-	The detail of the activity in question
5-]	Detail grounds of the application
6-	Number of workers employed in the activity in question
7- '	Total number of workers employed in the establishment
	Prayer
	Signature
	(Name and Address)
	Verification
It is	s verified that the content of the application is true and correct to the best of my knowledge and belief.
	Signature
	(Name and Address)

Form 22

(See rule 50)

Form of Agreement

•	monthyearyearyear	betweenMessers havingofficeatShri/Smt/Kum	•
ĕ	Č .	(hereinafterreferredtoasthe-audio-visual l include their heirs, successors, administrato	

Now, therefore this agreement is made as follows:

- 1. That both the parties agree that the duration of this agreement shall be from the date hereof till the completion of the audio-visual and this period shall not exceed consecutivemenths.
- 2. That the audio-visual worker agrees to attend studio, location or work place, as the case may be, subject to the requirement of his previous engagement and on his confirmation, to his respective job punctually as and when he shall be required by a written intimation by the Producer or the person duly authorised by him inwriting.
- 4. That in the event of the audio-visual production being not complete within the stipulated period and the Producer still needing the services of the audio-visual worker to complete the audio-visual production, the producer agrees to pay and the audio-visual worker agrees to receive additional remuneration on pro-rata basis, payable in the same manner as stated in Clause 3 above, till the completion of the production.
- 5. That in case the assignment of the audio-visual worker is completed earlier than the period stipulated in Clauses 1 and 4 above, the producer shall settle the account of the audio-visual worker and pay the remaining balance of the agreement amount in full before the commencement of re-recording work/censor of the production, whichever is earlier.
- 6. That the audio-visual worker shall, if so required,
- (a) attend the studios, location or work-place, as the case may be, earlier than the a scheduled time of the shift, for preparatory work, and in that case, he/she shall be paid by the Producer extra wages at the rateofRs perhouror part

thereof for such early attendance.

- (b) continue to work beyond the working day, with one hour break and in that case, he/she shall be paid by the Producer extra wages at the rateofRs...... for the work during the extendedhoursandrefreshments, and transport facilities.
- 8. That the Producer shall provide transport and food or pay traveling allowances to and fro to report to duty and food allowance while on duty as are customary or fixed by bilateral arrangements between the Producer's and audiovisual worker's representativeorganizations.
- 9. That the Producer shall also pay for all travelling and accommodation expenses, fares, cost of food and such other allowances as are customary when the audio-visual worker is required to work on locationoutdoors.
- 10. That the Producer shall get the audio-visual worker insured for any injury or damage to his/her person including death caused by accident arising out of or in the course of his/her employment and/or during the period of his/her assignment under thisagreement.
- 11. That where the Producer is prevented from proceeding with the production of the audio-visual by reason of fire, riot, natural calamity, order of the public authority or any other reason beyond his control:-
- (a) he shall be entitled to suspend the operation of this agreement during the period of suspension of production in case the production is suspended. The producer shall serve notice in writing of such suspension on the audiovisual worker and shall pay all his/her dues up to the date of service of such notice. Upon resumption of work on the film, this agreement shall revive and shall remain valid for the period stipulated in Clause I excluding the period of suspension therefrom; or

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

- 21. That the Producer shall have the right to terminate this agreement on ground of misconduct on the part of the audio- visual worker in relation to performance of his/her duties or his/her unwillingness to perform the service required under the agreement, upon payment to the audio-visual worker of the amount due at the time of termination, calculated taking into consideration the audio-visual worker's total work in the audio-visual and the work he/she has completed till the date of termination of this agreement. Termination under this clause shall not be made unless the charges of the Producer against the audio-visual worker are provide before a forum comprising equal number of representatives of the Producers' Organisation and the audio-visual worker's Organisation to which the Producer and the audio-visual worker respectively may belong. The decision of the forum shall be binding on both the parties. The producer can engage another audio-visual worker for the job towards this agreement only after the forum has given a decision in favor of such termination and the audio-visual worker has been paid all hisdues.
- 22. That in case of premature termination of this agreement, it shall be the option of the Producer whether or not to retain the work of the audio-visual worker in the audio-visual and at the same time, it shall be option of the audio-visual workers whether or not to allow his/her name to go on the credit titles of thefilm.
- 23. That the Producer shall have the right to decide the manner of representing the audio-visual worker's personality on the screen, his/her clothes, make-up and hair-style and the audio-visual worker shall fully and willingly comply with the direction of the Producer in this regard, provided that the requirements of the Producer in this respect have been notified to the audio-visual worker and accepted byhim/her.
- 24. That the audio-visual worker agrees that he/she shall render his/her services to the best of his/her ability in such manner as the Producer or, at his instance, the Director of the audio-visual may direct and shall comply with all reasonable instructions that he may give for the production of thefilm.
- 25. That the audio-visual worker shall comply with all the regulations of the studio, location or work place as the case maybe.
- 26. That the Producer shall not without the consent in writing of the audio-visual worker, assign or transfer the benefit of this agreement to any other person.
- 27. That the provisions of the Employees' Provident Funds and Miscellaneous Provisions Act, 1952 shall be applicable to this agreement.
- 28. That the Producer shall not utilise the work of the audio-visual worker in any film, other than the audio-visual under this agreement, without prior permission of the audio-visual worker.

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

1. Witness Producer

Name Address

2. Witness

audio-visualworker NameAddress

Form 23

(See rule 52)

Application for grant of license

1. Full name of the industrial premises
2. (i) Full postal address and situation of the industrial premises.
(ii) Full address to which communication relating to the industrial premises should be sent
(iii) Full address of the applicant.*
3. Maximum number of employees proposed to be employed on any one day during the financial year.
4. Full name and residential address of the person who shall be the employer for the purposes of the Code .
5. If the employer is a partnership company, full name and residential address of other partners or directors. (see Note at the end)
6. Financial resources of the employer e.g., particulars and value of movable and immovable properties, bank reference, income-tax assessment.
7. Whether the employer is a trade mark holder registered under the Trade and Merchandise Marks Act, 1958.
8. Whether the proposed site of the industrial premises amounts to the alteration of the site of any existing industrial premises and, if so, the reasons for such alteration.
9. Source of obtaining tobacco.
10. Whether the beedis or cigars or both manufactured by the applicant* will be sold and marketed by himself or through a proprietor or a registered user of a trade mark registered under the Trade and Merchandise Marks Act, 1958, or any other person.
11. Whether the plans of the premises are enclosed. (Yes/No)
12. Amount of fee Rs.
I Hereby declare that the particulars furnished by me in the form are to the best of my knowledge and belief accurate
Date

Signature of applicant*

Note .- Where an industrial premises are run or proposed to be run by a contractor for or on behalf of another person or persons or company, the said other person or persons or company is under the Act the employer and particulars to be entered for "employer" in the Form should be in regard to such person, persons or company.

*The applicant for licence may, however, be either the contractor or the employer.

Form 24 (See rule 54) Record of outside work

Name and date of Government Order permitting work outside the industrial premises ------

Date	Place or places where	Nature of work	Name of employe	Remark
	outside work		е	
	was permitted			
1	2	3	4	5

Form 25 (See rule 55) Particulars of rooms in the factory

Name of room in factory	i						ar in so	quar	Floor are a occupied by machinery in the room	Breathin g space (content s	Total volume of air in the room
			Maxii	mum	Minimum	Avera e	g			c feet).	
1	2	3	4		5	6	7		8	9	10
Numbe and size of doors	s —		mber	Total	capacity of n		ons	er of room is to be		Date construction	Remarks
	and si of windo openii	of ws sky	I size light ening	area in squa r e feet		be	oloye		of for torage only		
11	12	13		14	15	16		1	7	18	19

Signature	of the	Occupier
GidilalaiG	OI IIIC	OCCUDICI

Signature of the Manager.....

Questionnaire Annexed to Form No.

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.

Plans-

(a) Has a site-plan showing the immediate surroundings including adjacent buildings and other structures, roads, drains, etc., been submitted in triplicate.

- (b) If there is a system of underground sewage within 100 ft. of the factory, has its position been shown in the site plan?
- (c) Have the direction *i.e.*, north, south, east and west been shown on the site-plans as well as on the detailed plans?
- (d) Have the municipal nos. or the field nos. of the premises and the surrounding areas been shown on the site-plan?
- (e) Have the factory premises been clearly demarcated in the site-plan in distinctive colour?
- (f) Have the detailed plans of the factory indicating all relevant details " relating to doors, windows, ventilators, fire escapes, etc., been submitted in triplicate?
- (g) Are all new buildings, parts of buildings (if extensions) or alterations in existing buildings shown by boundaries duly marked in a distinctive colour?
- (h) Are all rooms, sheds, enclosures, etc., serially numbered inside a circle on the plans, corresponding to the serial entry in Form No. 1?
- (i) Are the outlines of all rooms, sheds, enclosures, *etc.*, shown in the site-plan and allotted the same number as in Item 1(h) above?
- (j) Is the sectional elevation of such a room or shed, etc., shown separately?
- (k) Is the minimum and 'maximum height of every room, shed, etc., shown clearly in the sectional elevation?
- (I) Is the material of which the roof is constructed indicated the sectional elevation?
- (m) Are the heights of all the workrooms in accordance with the provisions of Rule 4 as under:
- (i) Is the minimum height 20 ft. with C. I. sheet roofing?
- (ii) Is the minimum height 14 ft. with A. C. sheet roofing or R.B./R. C. C. roofing?
- (iii) Has an inner ceiling of a heat resisting material with an air gap of at least 4" been provided at a minimum height of 14 ft. and the name of the heat resisting material given?
- (iv) Has an exemption been sought for a height of up to 12 ft. R.B/R. G. C. roofing?
- (v) Has an exemption been sought for on the assurance of not employing more than 50 employees in the factory on any day?
- (n) Is the minimum distance of the nearest building from latrines and urinals shown on the plans?
- (o) Is the minimum distance of the nearest well, hand-pump or other drinking water centres shown in the drawing?
- (p) Are water centres shown on the plans?
- (q) Are the sizes of all the doors and ventilators shown on the plans along with their exCode position?
- (r) Are all the drains, pipes and sewers for carrying sullage sewage water effluent and waste products running within the factory premises constructed and shown in the plans?
- (s) Are the positions of various machines fitted or proposed to be fitted shown in the drawings together with their names?
- 2. Form No. 1
- (a) Is Form No. 1 submitted in triplicate, filled in for all workrooms, godowns, etc. which are proposed to be constructed or extended?
- (b) Have the internal dimensions only been entered in all the columns of Form No. 1?
- (c) Is the breathing space of workroom, shed, etc., calculated as shown below:

Floor area of room x its mean height (height above 14 ft. has to be left out of calculation).

- (d) Is the maximum capacity entered in Column No. 15 of Form No. 1 the maximum number of persons shown as the lower value of the two calculations shown below:
- (i) Floor area of a room less area occupied by machinery in the room divided by 36 [Rule 4(ii)].
- (ii) Breathing space [as in (c) above] divided by 500.
- (e) Have the maximum number of persons as worked out above (lower value) been also shown on the plans for each workroom corresponding to Column No. 15 of Form No. 17?
- (f) Is the window, ventilator and skylight area provided at the minimum rate of 1 sq. ft. to every 15 sq. ft. of floor area of the room ? (Rule 19) ?
- (g) Can the windows and skylights under Columns Nos. 12 and 13 of Form No. 1 all be opened for

ventilation?

- It is recommended that windows and skylights may be provided one opposite to another so as to provide cross ventilation.
- (h) Has a flow chart of the manufacturing PROCESS supplemented by its brief description in various stages been submitted in triplicate?
- Rule 3(1) (a)Doors and ventilators.—(a) Is every work room provided with at-least two doors or exits?
- (b) Is the minimum size of every door or exit 6'-6"x3'
- (c) Have any doors of ventilators in common with two adjacent rooms been counted in both?
- (d) Are all the doors opening outwards?
- (e) Do the windows and skylights entered under Cols. 12 and 13 of Form No. 1 Actually serve the purpose of ventilation?
- 3. **Fire Escapes.—(**In case of buildings of more than one story
- (a) Are two fire escapes provided on either side of the building?
- (b) Are the fire escapes accessible from every room in the upper floor in the buildings?
- (c) Is the material used in construction of the fire escapes non-combustible?
- (d) Are the windows, doors giving access to an external stair-case arranged to open immediately from inside.
- (e) Is any fire escape or stair-way constructed at an angle greater than "450 ft. with the horizontal?
- (f) Is any fire escape or stair way less than 45'Un width?
- (g) Is any part of the factory building further (along the line of travel) than 150 ft. from the fire escape stair?
- (h) Have the particulars given against Items 4(e), (f) and (g) above been also clearly shown in the various drawings being submitted?
- (i) Is the setback area of the factory and its premises uncovered and free from obstruction?
- 4. Latrines and urinals.—(a) Are the latrines and urinals provided separately for men and women?
- (b) Are these sufficient to meet the requirements of Section 24?
- (c) Is the surrounding ground up to a distance of 4 ft. all round of impermeable material?
- (d) Is the surrounding ground raised to at least 6" above the ground level?
- (e) Is any latrines, ventilator or opening in the proximity of any opening of the main building?
- (f) Do any latrines or urinals communicate with any work room without any intervening space open to the sky?
- (g) Are the latrines of the flush type?
- (h) Are all the drains, pipes and sewers for carrying sullage, sewage water effluent and waste products running within the factory premises constructed of impermeable material?
- (i) Are the drains of flush type latrines connected to the drainage system of the local Boards?
- (j) Is an efficient system of septic tanks provided if no drainage system exists?
- (k) Are the latrines provided with roofing?
- 5. **Drinking water.—(a)** Is the drinking water provided from a source provided by the local Board.
- (b) Is any well constructed in the premises of the factory for drinking water or humidification purposes?
- (c) Is the cylinder of the well pucca and impervious to water throughout and up to a depth not less than the lowest level of sub-soil water?
- (d) Are the positions of water centres including wells, hand pumps situated at least 20 ft. away from the washing place, latrines and urinals?
- 6. **Rest shelter, canteen and creches**.—If the plans relate to any of these, the following questions should also be answered—
- (i) Rest shelter:
- (a) Does the building fully meet the requirements of Section 24(1). ?
- (b) Is the roof ef heat-resisting material?
- (c) Is the height of every room in the rest shelter at least 12 ft. from the floor level to the lowest part of the roof?
- (ii) Canteen:

- (a) Does the building fully meet the requirements of—Section 24(1).
- (b) Are the canteen buildings situated not less than 50 yards from any latrines, urinals, boiler house, coals, stack coals dumps etc.?
- (c) What is the minimum height of the buildings of the canteen measured from the floor level to the lowest part of the roof?

(iii)Creche:

- (a) Does the building of creche meet fully the requirements of—Section 24(3).
- (b) Is the height of buildings not less than 12 ft. from floor level to the lowest part of roof? We certify that the replies given to the questionnaire above are correct.

Signature of Manager.

Signature of Occupier.

- N. B.—(i) After showing the above details, the plans and site-plan this questionnaire and Form No. 1 should all be submitted in triplicate to the Inspector of Factories of the Region concerned for the approval of the Chief Inspector-cum-Facilitator of Factories, Uttarakhand.
- (ii) A certificate of stability signed by a person having the qualifications laid down in Rule 53(3) shall be submitted on Form No. 26 before the manufacturing PROCESS with the aid of power is begun in the building.

Form 25A (See rule 55)

Form of Approval of plans and permission for site (factories).

1-	Name of the factory
2-	Location of the factory (if possible geo-mapping)
3-	Name of the employer
4-	Address, telephone number and E-mail Id of the employer
5-	Name and Address, telephone number and E-mail Id of the Occupier
6-	Name and Address, telephone number and E-mail Id of the Manger
7-	Activity or proposed activity as per national industrial classification
8-	Detail of selected NIC code
9-	Number of the workers employed or to be employed
10-	Details of power used or to be used

Signature (Name and Address)

Attachment ;-

- 1- Process flow digram
- 2- Drawing plan
- 3- all particulars and documents as per provisions of section 79 and rule 54 to be attached. 4- Challan fee

Form 26 (See rule 55(3)

Certificate of Stability of a Factory or Part of a Factory

(To be submitted after completion and before working)

(To be submitted after completion and before working)
I hereby declare that I have personally examined the plans and specifications of the building
described below, the actual materials and methods used in its construction and the finished building
and I am satisfied that its construction is such that its stability will be satisfactory when used as
factory or part of a factory for the purposes herein declared. 1. Name of the
factory
2. Name of builder (s) or Contractor (s)
3. General type of construction
(a) Full name of signatory (in block letters)
(b) Qualifications
(c) Present occupation
(d) Permanent postal address
4. Purpose for which the building is to be used
5. Name of room or building for which this certificate is granted giving reference to plan no.
6. Nature of work to be carried on in the above room/buildingture and
amount of moving power
Date
Circulature of Contifuing Engineer (Name and Decimation)
Signature of Certifying Engineer (Name and Designation)
Signature of occupier (Name and Designation)

NOTE.—The person giving the certificate must be: (a) a Corporate Member of the Institution of Civil Engineers, or (b) a Corporate Member of the Institution of Structural Engineers or (c) a Fellow Associate or Licentiate of the Royal Institute of British Architects, or (d) be a graduate in Civil Engineering and be also a Corporate Member of the Institute of Engineers (India), 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 an Executive Engineer, shall be authorized to sign a certificate of stability if he is in the full time employment of the owner or the builder of the building.

Form 27 (See rule 58)

LICENCE UNDEROCCUPATIONAL SAFETY, HEALTH AND WORKING CONDITIONS CODE-2020

(Licence to Work a Factory)

Type of Factory
valid only for the premises described below for ns on any one day during the year and using motive sions of the Factory Act, 1948, and the rules made
the Licenced Premises
dated/ are situated in M/S
Signature of Chief Inspector-cum-Facilitator-cum-Facilitatorcum facilitator
t

- 1- This is a computer generated licence.
- 2- This licence may be verified from the website of the Labour Department, Govt. of Uttarakhand-www.uklabour.gov.in

This licence is issued solely on the basis of the information submitted by the applicant. The Labour Department does not undertake responsibility for the correctness of the information contained herein.

3- This license shall remain in force subject to validity of NOC from Concerned Department.

FORM NO. 28

(*Rule 57*)

Notice of occupation for Registration and grant or Renewal of License

Written notice prescribed under Sections 79 and rule 57

LICENO	CE NUMBER	Type of Factory
01- Full na	me of the factory and its licence number,	if already registered.
* *	ostal address and situation of the factory ading the police station, tehsil and district	
` '	ddress to which communication relating to actory should be sent	
(C) C	Contact Number of Factory	
(d) Email	Address of Factory	
03-	Nature of manufacturing process/ processes	
	carried on in the factory during thenext velve months (in case of factories already in xistence)	
(b	to be carried o in the factory during the ext twelve months (in case of all factories)	

- 04-Names and values of the principal products manufactured during the last twelve months 05-(a) Maximum number of workers proposed to be employed on any one day during the year
- (b) Maximum number of workers employed in any day during the last twelve months
- (c) Number of workers to be employed in the Factory
- 06-(a) Nature and total amount of power (H.P.) installed or proposed to be installed
- (b) Maximum amount of power (H.P.) proposed to be used

NOTE.—If power is not proposed to be used originally but is introduced later, the fact should be immediately communicated to the Chief Inspector-cum-Facilitator-cum-Facilitatorof Factories.

07- In the case of a factory constructed or extended after the date of the commencement of the rule

- (i) Reference number and date of approval of the plans for site, whether for old or new building and for construction or extension of factory, by the State Government/ Chief Inspector-cum-Facilitator
- (ii) Reference number and date of approval of the arrangements, if any, made for the disposal of trade waste and effluents and the name of the authority granting such approval

08-Full name, father's name and residential address of

- (i) The person who shall be Manager of the factory for the purposes of the Act
- (ii) The occupier of the factory —
- (a) the Proprietor of the factory if it is a private firm or proprietary concern
 - (b) the Directors of the factory if it is a limited company of firm
- (c) where Managing Agents have been appointed, the name of Managing Agents and their Directors
- (d) share-holders in case of a private company where no Managing Agents have been appointed.
- (e) The Chief Administrative Head of the factory if it is owned by Government or a public authority
- 09- If the factory is covered by the provisions of Section 93 of the Factories Act (Act LXIII of 1948), full name, father's name, and address of the owner of the premises or buildings in which the factory is situated
- 10- Half Yearly & Annual return submitted (Yes / No)
- 11- Date on which the Manager assumed charge

12- Date on which the occupier occupied will occupy the premises	the premises or
13-Amount of fee Rs.) with Bank / E-Challan	Number/
Online Payment with date	
I hereby declare that our factory is compound provisions of The Code 2020 to the best of m	lying / will comply with all health and safety y knowledge.
Full signature of occupier	
	Full signature of manager
	Full signature of owner, if any
Date	
Notes.	

- (1) This form should be completed in ink in block letters or typed.
 - (2) If any of the persons named against the item is minor the fact should be clearly stated.
 - (3) In the case of a factory where a Managing Agent or Agents have been appointed as occupiers under the Indian Companies Act, 1913 (VII of 1913), information required in the item should be supplied in respect of that person or persons.

FORM NO. 28-A

Notice of change of Manager

[Rule 66]

1.	. Name of factory with current licence number							
2.	Postal address of the factory	/						
3.	Name of outgoing manager.							
if a	ny	with his postal residential address and telephone number,ger took over charge						
Da	ıte	Signature of new						
Pla	ace	Manager						
		Signature of Occupier						
		Orrania :						

Form 29

No,	OTICI	E UND	ER SU	B-SEC	CTION	(1) OF	SECT	TON 11	4 FO	R COM	IPOSI	ΓΙΟΝ	OF OF	FENCE
l)	Your	establis	hment l		en inspe	cted by	Inspec	ctor-cun	n-Facil	litator o	n	of		of
2)	20 In the		spection	ı you h	ave bee	en foun	d viola	ting Sec	tion					0
	the Co													
)	given for co	notice mposit	to the ef	ffect th ubmitt	at if you	u are w applica	illing t tion in	o apply Form V	for co	mposition ong wit	on of of h depos	fence, sit of R	you mag	
		_	ich are			romean	ly On th	ie depai	timent	ii portui	or Lab	our co	/IIIIII551 \	Jiici. III
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														1
	(ii)	Flow	chart o	f elect	ronic na	vment	_	Or			•			_
	(11)													
												gnature		
										of the (ame and	d desig	nation	

Form 30

APPLICATION UNDER SUB-SECTION (1) OF SECTION 114 FOR COMPOSITION OF OFFENCE

composition of Offence and I have deposited Rs/- as the amount of Composition by deposit through Treasury Challan or electronically through the portal of Labour Commissioner on/	0,
Kindly refer to your notice no	
Kindly refer to your notice no	
	Kindly refer to your notice no
	(Signature Name of the Applican
(1) Name of the establishment:(2) Address of Establishment :	