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**Government of West Bengal**

**Labour Department**

# **The West Bengal Factories Rules, 1958**

**(As modified up to the 1st January, 1966)**

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GOVERNMENT OF WEST BENGAL

LABOUR DEPARTMENT

NOTIFICATION

No. 1693L.W./LW/1R-37/57.—22nd May 1958.—In exercise of the powers conferred by section 112 and, in particular, by sections 6(1), 7, 8(1), 9, 10(4), 11(1), 12(2), 15(1), 17(4), 18(4), 19(3), 20(2), 21(2), 22(1), 23(2), 29(2), 31(2), 34(2), 35, 36(6), 37(5), 38(1), 38(7), 42(2), 45(1), 45(4), 46, 47, 48(3), 53(2), 59(4), 59(5), 60, 61(8), 62(2), 72(3), 73(2), 76, 80, 83, 87, 88, 89(1), 107(1), 108(1), 109 and 110 of the Factories Act, 1948 (LXIII of 1948), and in supersession of all previous rules on the subject, the Governor is pleased to make after previous publication as required by section 115 of the said Act, the following rules, namely:—

**THE WEST BENGAL FACTORIES RULES, 1958**

CHAPTER I

PRELIMINARY

1. **Short title, extent and commencement.**—(1) These rules may be cited as the West Bengal Factories Rules, 1958.

(2) These rules shall extend to the whole of West Bengal.

(3) Save as otherwise expressly provided elsewhere in these rules, these rules shall come into force at once.

2. **Definitions.**—In these rules unless there is anything repugnant in the subject or context:—

(a) "The Act" means the Factories Act, 1948, and "section" means a section of the Act.

(b) "Artificial Humidification" means the introduction of moisture into the air of a room by any artificial means whatsoever, except the unavoidable escape of steam or water vapour into the atmosphere directly due to a manufacturing process:

Provided that the introduction of air directly from outside through moistened mats or screens placed in openings at times when the temperature of the room is 80 degrees or more, shall not be deemed to be artificial humidification.

(c) "Belt" includes any driving strap or rope.

- (d) "Chief Inspector" means an officer appointed under sub-section (2) of section 8 of the Act and includes "Deputy Chief Inspector".
- (e) "Degrees" (of temperature) means degrees on the Fahrenheit scale.
- (f) "District Magistrate" includes such other official as may be appointed by the State Government in that behalf.
- (g) "Form" means a form appended to these rules.
- (h) "Fume" includes gas or vapour.
- (i) "Hygrometer" means an accurate wet and dry bulb hygrometer conforming to the prescribed conditions as regards constructions and maintenance.
- (j) "Inspector" means an officer appointed under sub-section (1) of section 8 of the Act and includes the "Chief Inspector", "Deputy Chief Inspector" and "Medical Inspector of Factories".
- (k) "Maintained" means maintained in an efficient State in efficient working order and in good repair.
- (l) "Septic tank latrine" means a latrine of the Septic tank type, together with its filter beds, and includes activated sludge latrines and aero-bacterial latrines.

Rules 3 to 12  
prescribed under  
sub-section (1)  
of section 6.

**3. Approval of site and plan.**—(1) No building shall be constructed, extended or taken into use as a factory or a part of a factory on any site unless previous permission in writing has been obtained from the State Government or the Chief Inspector for the site and for the construction, extension or use of the building on such site.

Application for such permission shall be made as nearly as possible in Form No. 1 which shall be accompanied by the following documents:—

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

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*Vide* Notification No. 1008L.W., dated the 20th August 1964.

(c) Such other particulars as the Chief Inspector may require.

(2) If the Chief Inspector is satisfied that the plans are in consonance with the requirements of the Act he shall, subject to such conditions as he may specify, approve them by signing, and returning to the applicant one copy of each plan; or he may call for such other particulars as he may require to enable such approval to be given.

(3) No deviation of any kind from approved plans shall be made without the written permission of the Chief Inspector.

**4. Application for registration and grant of licence.—(1)** The occupier of every factory shall submit to the Chief Inspector an application as nearly as possible in Form No. 2, in duplicate for its registration and grant of licence:

Provided that—

(a) in the case of any factory already in existence but in respect of which application for registration and grant of licence has not been submitted, the aforesaid application shall be submitted within fifteen days from the date of enforcement of these rules, or,

(b) in the case of any factory which comes into existence and is in use on the date of coming into force of these rules or on any date thereafter, the aforesaid application shall be submitted at least fifteen days before the occupier begins to occupy or use any premises as a factory.

(2) Notwithstanding anything in sub-rule (1) it shall not be necessary for the occupier of any such factory to submit the application before the expiry of fifteen days from the date of enforcement of these rules.

**5. Grant of licence.—(1)** A licence for a factory shall be granted by the Chief Inspector as nearly as possible in Form No. 3 and on payment of the fees specified in the Schedules A, B, and C hereto: Provided that the fee payable by a factory declared under section 85 of the Act for grant of licence shall be ten rupees.

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

(3) The licence or a copy of it shall be framed and displayed in the factory at a conspicuous place near the main entrance.

**SCHEDULE A**

*Scale of fees payable for Licence and Annual Renewal of Licence by factories defined under Section 2(m)(i) of the Factories Act, 1948, other than Electricity Generating Stations.*

Total amount of Rated H. P. installed.		Maximum number of workers to be employed on any day during the year.													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14
10 or under.	Over.	10 to 20.	21 to 50.	51 to 100.	101 to 250.	251 to 500.	501 to 750.	751 to 1,000.	1,001 to 1,500.	1,501 to 2,000.	2,001 to 3,000.	3,001 to 5,000.	5,001 to 7,500.	7,501 to 10,000.	10,001 and over.
		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
A.	..	25	50	75	150	300	450	600	750	1,000	1,250	1,500	2,000	2,500	3,000
B.	10	35	60	85	200	350	500	650	800	1,250	1,500	1,750	2,250	2,750	3,250
C.	50	45	70	95	210	360	525	675	825	1,300	1,550	1,800	2,300	2,800	3,300
D.	100	55	80	105	220	370	550	700	850	1,350	1,600	1,850	2,400	2,900	3,400
E.	250	75	100	125	240	390	570	750	900	1,400	1,650	1,900	2,500	3,000	3,500
F.	500	95	120	145	260	410	590	800	950	1,450	1,700	1,950	2,600	3,100	3,600
G.	1,000	115	140	165	280	430	610	850	1,000	1,500	1,750	2,000	2,700	3,200	3,700
H.	2,000	135	160	185	300	450	630	900	1,100	1,600	1,850	2,200	2,900	3,500	4,000
I.	5,000	165	190	215	330	480	660	1,000	1,200	1,800	2,050	2,400	3,100	3,800	4,300
J.	10,000 and over	195	220	245	360	510	690	1,100	1,300	2,000	2,250	2,600	3,300	4,100	4,600

## SCHEDULE B

Scale of fees payable for Licence and Annual Renewal of Licence by Electricity Generating Stations, generation electric power for sale to the public.

1	2	3	4
	Total installed capacity of the generating plant (in K.W.).	Number of workers to be employed.	Fee payable. Rs.
A.	50 K.W. or less .. ..	10 or above ..	25
B.	Over 50 K.W.—not over 100 K.W. .. ..	Ditto ..	50
C.	Over 100 K.W.—not over 150 K.W. .. ..	Ditto ..	75
D.	Over 150 K.W.—not over 300 K.W. .. ..	Ditto ..	100
E.	Over 300 K.W.—not over 750 K.W. .. ..	Ditto ..	150
F.	Over 750 K.W.—not over 1,000 K.W. .. ..	Ditto ..	225
G.	Over 1,000 K.W.—not over 5,000 K.W. .. ..	Ditto ..	450
H.	Over 5,000 K.W.—not over 10,000 K.W. .. ..	Ditto ..	750
I.	Over 10,000 K.W.—not over 50,000 K.W. .. ..	Ditto ..	1,250
J.	All over 50,000 K.W.— (a) up to 60,000 K.W. .. ..	Ditto ..	1,500
	(b) up to 80,000 .. ..	Ditto ..	1,750
	(c) up to 100,000 .. ..	Ditto ..	2,000
	(d) up to 150,000 .. ..	Ditto ..	2,500
	(e) up to 200,000 .. ..	Ditto ..	3,000
	(f) up to 300,000 .. ..	Ditto ..	3,500
K.	All over 300,000 K.W. (without limit) .. ..	Ditto ..	4,000

## SCHEDULE C

Scale of fees payable for Licence and Annual Renewal of Licence by factories wherein no power is used, i.e., "factories" as defined in Section 2(m)(ii) of the Factories Act, 1948.

Maximum number of workers to be employed on any day during the year.			Fees payable. Rs.
A	20 to 30 .. ..	.. ..	10
B	31 to 50 .. ..	.. ..	25
C	51 to 100 .. ..	.. ..	50
D	101 to 200 .. ..	.. ..	75
E	201 to 300 .. ..	.. ..	100
F	301 to 500 .. ..	.. ..	175
G	501 to 750 .. ..	.. ..	200
H	751 to 1,000 .. ..	.. ..	250
I	All over 1,000 without any upward limit .. ..	.. ..	300

Provided that if the fee for renewal of licence is not deposited within the time specified in sub-rule (2) of rule 7, then notwithstanding any other action which may be taken, the amount of the fee payable for renewal of the licence shall be 25 per cent. in excess of the amount which would otherwise be payable if the payment is made within three calendar months of the time specified and shall be 50 per cent. in excess of the amount which would otherwise be payable for further default beyond three calendar months; the Chief Inspector may, however, waive payment of excess fee if he is satisfied that there was sufficient reason for delay in payment :

Provided further that if part of the renewal fee is paid within the due date then the excess fee shall only be payable on the balance due.

vide Notification No. 1008L. W., dated 20th August 1964.

**6. Amendment of licence.**—(1) A licence granted under rule 5 may be amended by the Chief Inspector.

(2) A licensee whose licence requires to be amended by virtue of increase in the number of workers employed or additional power installed shall submit it to the Chief Inspector with an application as nearly as possible in Form No. 2 stating the nature of amendment. Fee for such amendment shall be five rupees plus the amount by which the fee payable for the amended licence exceeds the fee originally paid for the licence.

**7. Renewal of licences.**—(1) A licence may be renewed by the Chief Inspector.

(2) Every application for renewal shall be submitted as nearly as possible in Form No. 2, in duplicate, on or before the 31st December, every year.

(3) The fee that shall be charged for the renewal of a licence shall be subject to the scale of fees laid down in the Schedule A, Schedule B, Schedule C, or ten rupees as may then be applicable to the Factory in respect of which application for renewal of licence is submitted to the Chief Inspector.

**8. 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 who shall, if he approves of the transfer, enter upon the licence, under his signature, an endorsement to the effect that the licence has been transferred to the person named.

(3) A fee of five rupees shall be charged on each such endorsement. The person to whom the licence is to be transferred shall submit a notice of occupation as nearly as possible in Form No. 2, and shall pay the endorsement fee.

9. An occupier shall not use any premises as a factory unless a licence has been issued in respect of such premises and is in force for the time being:

Provided that if application for grant of licence or renewal of licence has been submitted, and correct fee has been deposited, the premises shall be deemed to be duly licensed until such date as the Chief Inspector grants or renews the licence or refuses in writing to grant or renew the licence.

**10. 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 Act for exercising the powers granted to the licensee by the licence during such time as may reasonably be required to allow him to make an application for the amendment of the licence under rule 6 in his own name for the unexpired portion of the original licence.

11. **Loss of licence.**—Where a licence granted under these rules is lost or accidentally destroyed, a duplicate may be granted on payment of a fee of rupees five.

12. **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 under the head of account XXXVI—Miscellaneous Department (Provincial)—Fees realised under Factories Act, 1948.

(2) If an application for the grant, renewal, amendment or transfer of a licence is rejected, the fee paid shall be refunded to the applicant, on a pay order issued by the Chief Inspector of Factories.

13. **Notice of occupation and particulars of factory.**—The notice of occupation and particulars of the factory shall be as nearly as possible in Form No. 2. Rule prescribed under section 7.

\*13A. **Notice of change of Manager.**—The occupier of a factory shall send a duly signed notice containing the following particulars as and when there is change of Manager in the factory:

- (a) Name of the factory with licence number;
- (b) Postal address of the factory;
- (c) Name of the outgoing Manager;
- (d) Name of the new Manager with postal address of his residence and telephone number, if any; and
- (e) Date of appointment of new Manager.

## CHAPTER II

### INSPECTING STAFF

14. **Appointment of Inspectors.**—No person shall be appointed as Inspector for the purposes of the Act, unless he possesses the qualifications prescribed for such Inspectors in the Provincial services Recruitment Rules at the time of his appointment. Rule prescribed under section 8(1).

15. **Powers of Inspectors.**—An Inspector shall, for the purposes of the execution of the Act, have power to do all or any of the following things, that is to say:— Rule prescribed under section 9.

- (a) to photograph any worker, to inspect, examine, measure, copy, photograph, sketch or test, as the case may be, any building or room, any plant, machinery, appliance or apparatus, any register or document, or anything provided for the purpose of securing the health, safety or welfare of the workers employed in a factory;
- (b) in the case of an Inspector who is a duly qualified medical practitioner, to carry out such medical examinations as may be necessary for the purposes of his duties under the Act:

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\*Vive Notification No. 1008L.W., dated the 20th August 1964.



Provided that the powers of the District Magistrates and such other public officers as are appointed to be additional Inspectors shall be generally limited to the inspection of factories in respect of the following matters, namely:—

Cleanliness (section 11), Overcrowding (section 16), Lighting (section 17), Drinking water (section 18), Latrines and Urinals (section 19), Spittoons (section 20), Precautions in the case of fire (section 38), Welfare (Chapter V), Working hours of adults (Chapter VI except the power of exemption under the proviso to section 62), Employment of young persons (Chapter VII), Leave with wages (Chapter VIII) and Display of notices (section 108).

Rule prescribed under sub-section (4) of section 10 and section 76.

**16. Duties of Certifying Surgeon.**—(1) For purposes of the examination and certification of young persons who wish to obtain certificates of fitness, the Certifying Surgeon shall arrange a suitable time and place for the attendance of such persons, and shall give previous notice in writing of such arrangements to the managers of factories situated within the local limits assigned to him.

(2) The Certifying Surgeon shall issue his certificates as nearly as possible in Form No. 4. The foil and counter-foil shall be filled in and the left thumb mark of the person in whose name the certificate is granted shall be taken on them. On being satisfied as to the correctness of the entries made therein and of the fitness of the person examined, he shall sign the foil and initial the counter-foil and shall deliver the foil to the person in whose name the certificate is granted. The foil so delivered shall be the certificate of fitness granted under section 69. All counterfoils shall be kept by the Certifying Surgeon for a period of at least 2 years after the issue of the certificate.

(3) The Certifying Surgeon shall, upon request by the Chief Inspector, carry out such examination and furnish him with such report as he may indicate for any factory or class or description of factories where—

- (a) cases of illness have occurred which it is reasonable to believe are due to the nature of the manufacturing process carried on, or other conditions of work prevailing therein, or
- (b) by reason of any change in the manufacturing process carried on, or in the substances used therein, or by reason of the adoption of any new manufacturing process or of any new substance for use in a manufacturing process, there is a likelihood of injury to the health of workers employed in that manufacturing process, or
- (c) young persons are, or are about to be, employed in any work which is likely to cause injury to their health.

(4) For the purposes of the examination of persons employed in processes covered by the rules relating to dangerous operations, the Certifying Surgeon shall visit the factories within the local limits assigned to him at such intervals as are prescribed by the rules relating to such dangerous operations.

(5) At such visits the Certifying Surgeon shall examine the persons employed in such processes and shall record the results of his examination in a register known as the Health Register which shall be kept in Form No. 17 by the factory manager and produced to the Certifying Surgeon at each visit.

(6) If the Certifying Surgeon finds as a result of his examination that any person employed in such process is no longer fit for medical reasons to work in that process, he shall suspend such person from working in that process for such time as he may think fit and no person after suspension shall be employed in that process without the written sanction of the Certifying Surgeon in the Health Register.

(7) The manager of a factory shall afford to the Certifying Surgeon facilities to inspect any process in which any person is employed or is likely to be employed.

(8) The Manager of a factory shall provide for the purpose of any medical examination which the Certifying Surgeon wishes to conduct at the factory (for his exclusive use on the occasion of an examination) a room which shall be properly cleaned and adequately ventilated and lighted and furnished with a screen, a table (with writing materials) and chairs.

\* (9) If the examination of persons employed in processes covered by the rules relating to dangerous operations cannot be carried out at the factory owing to the special nature of any examination that may be necessary, the manager of the factory shall arrange to send such persons to such places as may be required by the Certifying Surgeon.

### CHAPTER III

#### HEALTH

17. In every factory all inside walls and partitions, all ceilings or tops of rooms and all walls, sides and tops of passages and staircases, if painted, varnished or having a smooth impervious surface, shall be washed with water once in every period of fourteen months, if necessary, by soap and brush. Rule prescribed under section 11 (1) (d) (ii).

18. **Record of white washing, etc.**—The record of dates on which white washing, colour-washing, varnishing, etc., are carried out shall be entered in a register maintained as early as possible in Form No. 6. Register prescribed under sub-section (1) of section 11.

19. In the case of a factory situated in a place where no public sewerage system exists, prior approval of the arrangements made for the disposal of trade-wastes and effluents shall be obtained from the Chief Inspector of Factories who shall act in this behalf in consultation with the Directorate of Health Services, West Bengal. Rule prescribed under sub-section (2) of section 12.

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\*Vide Notification No. 1008L.W., dated 20th August 1964.

Rules 20 to 30  
prescribed under  
sub-section (1) of  
section 15.

20. **When artificial humidification not allowed.**—There shall be no artificial humidification in any room of a cotton spinning or weaving factory:—

- (a) by the use of steam during any period when the dry bulb temperature of that room exceeds 85 degrees ;
- (b) at any time when the wet bulb reading of the hygrometer is higher than that specified in the following Schedule in relation to the dry bulb reading of the hygrometer at that time; or as regards a dry bulb reading intermediate between any two dry bulb readings indicated consecutively in the Schedule when the dry bulb reading does not exceed the wet bulb reading to the extent indicated in relation to the lower of these two dry bulb readings:—

SCHEDULE

Dry bulb.	Wet bulb.	Dry bulb.	Wet bulb.	Dry bulb.	Wet bulb.
60.0	58.0	77.0	75.0	94.0	86.0
61.0	59.0	78.0	76.0	95.0	87.0
62.0	60.0	79.0	77.0	96.0	87.5
63.0	61.0	80.0	78.0	97.0	88.0
64.0	62.0	81.0	79.0	98.0	88.5
65.0	63.0	82.0	80.0	99.0	89.0
66.0	64.0	83.0	80.5	100.0	89.5
67.0	65.0	84.0	81.0	101.0	90.0
68.0	66.0	85.0	82.0	102.0	90.0
69.0	67.0	86.0	82.5	103.0	90.5
70.0	68.0	87.0	83.0	104.0	90.5
71.0	69.0	88.0	83.5	105.0	91.0
72.0	70.0	89.0	84.0	106.0	91.0
73.0	71.0	90.0	84.5	107.0	91.5
74.0	72.0	91.0	85.0	108.0	91.5
75.0	73.0	92.0	85.5	109.0	92.0
76.0	74.0	93.0	86.0	110.0	92.0

Provided, however, that clause (b) shall not apply when the difference between the wet bulb temperature as indicated by the hygrometer in the department concerned and the wet bulb temperature taken with a hygrometer outside in the shade is less than 3.5 degrees.

**21. Provision of hygrometer.**—In all departments of cotton spinning and weaving mills wherein artificial humidification is adopted, hygrometers shall be provided and maintained in such positions as are approved by the Inspector. The number of hygrometers shall be regulated according to the following scale:—

- (a) *Weaving department.*—One hygrometer for departments will less than 500 looms, and one additional hygrometer for every 500 or part of 500 looms in excess of 500.
- (b) *Other departments.*—One hygrometer for each room of less than 300,000 cubic feet capacity and one extra hygrometer for each 200,000 cubic feet or part thereof, in excess of this.
- (c) One additional hygrometer shall be provided and maintained outside each cotton spinning and weaving factory wherein artificial humidification is adopted, and in position approved by the Inspector, for taking hygrometer shade readings.

**22. Exemption from maintenance of hygrometers.**—When the Inspector is satisfied that the limits of humidity allowed by the Schedule to rule 20 are never exceeded, he may, for any department other than the weaving department, grant exemption from the maintenance of the hygrometer. The Inspector shall record such exemption in writing.

**23. Copy of Schedule to rule 20 to be affixed near every hygrometer.**—A legible copy of the Schedule annexed to rule 20 shall be affixed near each hygrometer.

**24. Temperature to be recorded at each hygrometer.**—At each hygrometer maintained in accordance with rule 21, correct wet and dry bulb temperatures shall be recorded thrice daily during each working day by competent persons nominated by the Manager and approved by the Inspector. The temperature shall be taken between 7 a.m. and 9 a.m., between 11 a.m. and 2 p.m. (but not in the rest interval) and between 4 p.m. and 5-30 p.m. In exceptional circumstances, such additional readings and between such hours, as the Inspector may specify, shall be taken. The temperatures shall be entered in a Humidity Register as nearly as possible in Form No. 5, maintained in the factory. At the end of each month, the persons who have taken the readings shall sign the Register and certify the correctness of the entries. The Register shall always be available for inspection by the Inspector.

**25. Specifications of hygrometer.**—(1) Each hygrometer shall comprise two mercurial thermometeres of wet bulb and dry bulb of similar construction, and equal in dimensions, scale and divisions of scale. They shall be mounted on a frame with a suitable reservoir containing water.

(2) The wet bulb shall be closely covered with a single layer of muslin, kept wet by means of a wick attached to it and dipping into the water in the reservoir. The muslin covering and the wick shall be suitable for the purpose, clean and free from size or grease.

(3) No part of the wet bulb shall be within 3 inches of the dry bulb or less than 1 inch from the surface of the water in the reservoir and the water reservoir shall be below it, on the side of it away from the dry bulb.

(4) The bulb shall be spherical and of suitable dimensions and shall be freely exposed on all sides to the air of the room.

(5) The bores of the stems shall be such that the position of the top of the mercury column shall be readily distinguishable at a distance of 2 feet.

(6) Each thermometer shall be graduated so that accurate readings may be taken between 50 and 120 degrees.

(7) Every degree from 50 degrees up to 120 degrees shall be clearly marked by horizontal lines on the stem, each fifth and tenth degrees shall be marked by longer marks than the intermediate degrees and the temperature marked opposite each tenth degree, i.e., 50, 60, 70, 80, 90, 100, 110 and 120.

(8) The markings as above shall be accurate, that is to say, at no temperature between 50 and 120 degrees shall the indicated readings be in error by more than two-tenths of a degree.

(9) A distinctive number shall be indelibly marked upon the thermometer.

(10) The accuracy of each thermometer shall be certified by the National Physical Laboratory, London, or, the National Instruments Factory, Calcutta, or some competent authority appointed by the Chief Inspector and such certificate shall be attached to the Humidity Register.

**26. Thermometers to be maintained in efficient order.**—Each thermometer shall be maintained at all times during the period of employment in efficient working order, so as to give accurate indications and in particular—

- (a) the wick and the muslin covering of the wet bulb shall be renewed once a week;
- (b) the reservoir shall be filled with water which shall be completely renewed once a day. The Chief Inspector may direct the use of distilled water or pure rain water in any particular mill or mills in certain localities;
- (c) no water shall be applied directly to the wick or covering during the period of employment.

**27. An inaccurate thermometer not to be used without fresh certificate.**—If an Inspector gives notice in writing that a thermometer is not accurate it shall not, after one month from the date of such notice, be deemed to be accurate unless and until it has been re-examined as prescribed and a fresh certificate obtained which certificate shall be kept attached to the Humidity Register.

**28. Hygrometer not to be affixed to wall, etc., unless protected by wood.**—(1) No hygrometer shall be affixed to a wall, pillar, or other surface unless protected therefrom by wood or other non-conducting material at least half an inch in thickness.

(2) No hygrometer shall be fixed at a height of more than 5 feet 6 inches from the floor to the top of thermometer stem or in the direct draughts from a fan, window or ventilating opening.

**29. No reading to be taken within 15 minutes of renewal of water.**—No reading shall be taken for record on any hygrometer within 15 minutes of the renewal of water in the reservoir.

**30. How to introduce steam for humidification.**—In any room in which steam pipes are used for the introduction of steam for the purpose of artificial humidification of the air the following provisions shall apply:—

- (a) The diameter of such pipes shall not exceed two inches and in the case of pipes installed after 1st day of January 1950 the diameter shall not exceed one inch.
- (b) Such pipes shall be as short as is reasonably practicable.
- (c) All hangers supporting such pipes shall be separated from the bare pipes by an efficient insulator not less than half an inch in thickness.
- (d) No uncovered jet from such pipe shall project more than  $4\frac{1}{2}$  inches beyond the outer surface of any cover.
- (e) The steam pressure shall be as low as practicable and shall not exceed 70 lbs. per square inch.
- (f) The pipe employed for the introduction of steam into the air in a department shall be effectively covered with such non-conducting material, as may be approved by the Inspector in order to minimise the amount of heat radiated by them into the department.

**31. Lighting of interior parts.**—(1) The general illumination over those interior parts of a factory where persons are regularly employed shall be not less than 3-foot candles measured in the horizontal plane at a level of 3 feet above the floor:

Rules 31 to 33 prescribed under sub-section (4) of section 17.

Provided that in any such parts in which the mounting height of the light source for general illumination necessarily exceeds 25 feet measured from the floor or where the structure of the room or the position or construction of the fixed machinery or plant prevents the uniform attainment of this standard, the general illumination at the said level shall be not less than 1 foot candle and where work is actually being done the illumination shall be not less than 3-foot candles.

(2) The illumination over all other interior parts of the factory over which persons employed pass, shall, when and where a person is passing, be not less than 0.5 foot candles at floor level.

(3) The standard specified in this rule shall be without prejudice to the provision of any additional illumination required to render the lighting sufficient and suitable for the nature of the work.

**32. Prevention of glare.**—(1) Where any source of artificial light in the factory is less than 16 feet above floor level, no part of the light source or of the lighting fitting having a brightness greater than 10 candles per square inch shall be visible to persons whilst normally employed within 100 feet of the source, except where the angle of elevation from the eye to the source or part of the fitting as the case may be exceeds 20 degrees.

(2) Any local light, that is to say, an artificial light designed to illuminate particularly the area or part of the area of work of a single operative or small group of operatives working near each other, shall be provided with a suitable shade of opaque material to prevent glare or with other effective means by which the light source is completely screened from the eyes of every persons employed at a normal working place, or shall be so placed that no such person is exposed to glare therefrom.

**33. Power of Chief Inspector to exempt.**—Where the Chief Inspector is satisfied in respect of any particular factory or part thereof or in respect of any description of workroom or process that any requirement of rules 31 and 32 is inappropriate or is not reasonably practicable, he may by order in writing exempt the factory or part thereof, or description of workroom or process from such requirement to such extent and subject to such conditions as he may specify.

Rules 34 and 35 prescribed under sub-section (4) of section 18.

**34. Provision for drinking water.**—(1) In every factory there shall be provided and maintained at suitable points conveniently accessible to all workers a supply of water fit for drinking. The quantity supplied daily shall consist of at least as many gallons as there are workers.

(2) The supply of drinking water required under sub-rule (1), if not laid on, shall be contained in suitable vessels and shall be renewed at least daily. All practicable steps shall be taken to preserve the water and vessels from contamination.

(3) Any open well or reservoir from which drinking water is derived shall be so situated and protected as not to be liable to pollution by organic matter or other impurities.

(4) The area around any place where drinking water is supplied to the workers shall be maintained in a clean and drained condition.

(5) The Inspector may, by order in writing, require the manager of a factory to obtain a report from the Directorate of Health Services, West Bengal, as to whether the drinking water supplied to the workers is fit for drinking or otherwise.

**35. Cooling of Water.**—In every factory wherein more than two hundred and fifty workers are ordinarily employed—

- (a) the drinking water supplied to the workers shall, from the 1st of April to the 30th of September in every year, be cooled by ice or other effective method:

Provided that if ice is placed in the drinking water, the ice shall be clean and wholesome;

- (b) the cooled drinking water shall be supplied in every canteen, lunch-room and rest-room and also at conveniently accessible points throughout the factory which for the purpose of these Rules shall be called "Water Centres";
- (c) the water centres shall be sheltered from the weather and adequately drained;
- (d) the number of water centres to be provided shall be one "centre" for every 100 persons employed at any one time in the factory:

Provided that in the case of a factory where the number of persons employed exceeds 500 it shall be sufficient if there is one such "centre" as aforesaid for every 100 persons up to the first 500 and one for every 200 persons above that:

Provided further that in the case of factories where provision for water-coolers has been made the Chief Inspector may by order in writing relax the provisions of this sub-rule.

**36. Latrine accommodation.**—(1) Latrine accommodation shall be provided in every factory on the following scale:—

- (a) where females are employed, there shall be at least one latrine for every 25 females;
- (b) where males are employed, there shall be at least one latrine for every 25 males; provided that, where the number of males employed exceeds 100, it shall be sufficient if there is one latrine for every 25 males up to first 100, and one for every 50 above that.

Rules 36 to 43  
prescribed under  
sub-section (3) of  
section 19.

In calculating the number of latrines required under this rule any odd number of workers less than 25 or 50, as the case may be shall be reckoned as 25 or 50.

(2) The number of workers in a factory for whom septic tank latrine accommodation shall be deemed to be adequate shall be (a) the maximum number of daily users as approved by Directorate of Health Services, West Bengal, under clause (1) of rule 38, or (b) the number of workers provided for on the scale specified in sub-rule (1), whichever is less; and where the number so calculated is less than the total number of workers employed, the accommodation provided by way of septic tank latrines shall not be deemed to be sufficient within the meaning of section 19.



**37. Design, situation, etc., of latrines.**—The following provisions shall apply to all latrines:—

- (1) The design and the site or situation shall be subject to the approval of the Directorate of Health Services, West Bengal, and the construction shall be subject to the approval of the Chief Inspector.

Application for such approval shall be accompanied by plans in duplicate, showing—

- (a) the site or situation and immediate surroundings including adjacent buildings and drinking water sources, and,
- (b) the plan, elevation and necessary cross-sections drawn to scale indicating all relevant details.
- (2) They shall be situated, unless otherwise approved in writing by the Inspector, within the factory precincts and so located that (a) every worker may have ready access thereto and (b) no effluvia therefrom can arise within a workroom.
- (3) They shall not communicate with any workroom except through the open air or through an intervening ventilated space and shall be adequately lighted during working hours.
- (4) They shall be under cover and so partitioned off as to secure privacy, and shall have proper hinged doors and fastenings:

Provided that the Chief Inspector may by order in writing exempt factories existing on the date of commencement of these rules from providing hinged doors and fastenings for those latrines which have been constructed before such commencement.

- (5) Where workers of both sexes are employed, separate latrines shall be provided for each sex and outside each latrines, at the entrance, there shall be displayed in a conspicuous position, an approved sign or a notice in Hindi in Devnagri script and Bengali clearly indicating the sex for which the latrine is provided. All latrines intended for females shall be so placed or so screened that the interior shall not be visible even when the door is open, from any place where persons of other sex have to work or pass, and, if the latrines for one sex adjoin those for the other sex the approaches shall be separate and there shall be no common entrance.
- (6) Where piped water-supply is available a sufficient number of water taps, conveniently accessible, shall be provided in or near such latrine accommodation.

**38. Septic Tank Latrines.**—The following provisions shall apply to septic tank latrines:—

- (1) The maximum number of daily users for whom the tank is designed shall be approved by the Directorate of Health Services, West Bengal, and a notice board showing such number shall be fixed in a prominent position on each latrine.
- Septic tanks constructed after the commencement of this rule shall be so designed as to allow a space of 2 c.ft. to 3 c.ft. per user. The ordinary filter beds shall have 6 c.ft. of filtering media per every user, and for rotary filters the capacity may be reduced to 3 c.ft. per user.
- (2) An efficient automatic recording turnstile or turnstiles shall be provided for recording the total number of users admitted on any day, and a register showing the number of daily users shall be maintained.
  - (3) The effluent therefrom shall conform to such standards as the State Government may prescribe by notification in the Official Gazette. The septic tanks and filter beds shall be desludged at least once a year.
  - (4) For the satisfactory disposal of the sludge or other solid matters, a pit of cubical capacity equal to the total flow of not less than an hour shall be provided to receive the solid matter. When the pit becomes full, the valves shall be closed and the solid matter and sludge shall be allowed time to settle. The effluent shall then be drawn off and sterilised, and the solid matter and sludge shall be trenched or burnt:

Provided that where the Inspector is satisfied that in respect of any septic tank, the requirements of clause (2) are not necessary, he may, by order in writing, grant exemption from that clause on such conditions, if any, as he may impose.

**39. Reference to municipal and local authorities.**—In the case of factories situated in places within the limit of a local authority if it appears to the Inspector that there has been a breach of the provisions of any municipal or local Act relating to sanitary arrangements, removal of objectionable rubbish, the cleaning and fencing of water tanks, or the like matters, the Inspector shall without prejudice to any action which he is empowered to take under the Act or the rules thereunder draw the attention of the local authority to the breach of such provisions.

**40. Urinal accommodation.**—Urinal accommodation shall be provided for the use of male workers and shall not be less than 2 feet in length for every 50 males, provided that where the number of males employed exceeds 500, it shall be sufficient if there is one urinal for every 50 males up to the first 500 employed, and one for every 100 thereafter.

In calculating the urinal accommodation required under this rule any odd number of workers less than 50 or 100, as the case may be, shall be reckoned as 50 or 100.

**41. Urinals to conform to public health requirements.**—Urinals other than those connected with an efficient water borne sewage system and urinals in a factory wherein more than two hundred and fifty workers are ordinarily employed shall comply with the requirements of the Directorate of Health Services.

**42. White-washing, colour-washing of latrines and urinals.**—The walls, ceilings and partitions of every latrine and urinal shall be white-washed or colour-washed and the white-washing or colour-washing shall be repeated at least once in every period of four months. The dates on which the white-washing or colour-washing is carried out shall be entered in the prescribed Register (Form No. 6):

Provided that parts of latrines and urinals which are laid in glazed tiles or otherwise finished to provide a smooth polished impervious surface shall be washed with suitable detergents and disinfectants at least once in every period of four months.

**43. Construction and maintenance of drains.**—All drains carrying waste or sullage water shall be constructed in masonry or other impervious material 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 Inspector.

Rules 44 to 46  
prescribed under  
sub-section (2) of  
section 20.

**44. Number and location of spittoons.**—The number and location of spittoons to be provided shall be to the satisfaction of the Inspector.

**45. Type of spittoons.**—The spittoons shall be of either of the following types:—

- (a) a galvanised iron container with a conical funnel-shaped cover. A layer of suitable disinfectant liquid shall always be maintained in the container;
- (b) a container filled with dry, clean sand, and covered with a layer of bleaching powder;
- (c) any other type approved by the Chief Inspector.

**46. Cleaning of spittoons.**—The spittoons mentioned in rule 45 shall be emptied, cleaned and disinfected at least once every day; and the spittoons mentioned in clause (b) of rule 45 shall be cleaned by scraping out the top layer of sand as often as necessary or at least once every day.

## CHAPTER IV

### SAFETY

Safety precau-  
tions prescribed  
under sub-section  
(2) of section 21.

**47. Safety precautions.**—Without prejudice to the provisions of sub-section (1) of section 21 in regard to the fencing of machines, the further precautions specified in the Schedules annexed hereto shall apply to the machines noted in each Schedule.

## SCHEDULE I

*(Jute Textiles)*

1. **Fencing of machinery.**—Fencings, guards or safety devices in respect of each individual machine as prescribed shall be provided and maintained in good order.

2. **Softening machines.**—(a) A safety stopping device comprising a breast plate in front of the feed table to operate the belt striking gear by releasing an unbalanced weight.

No device departing from the unbalanced weight principle will be deemed to conform to this rule unless it has been approved in writing by the Inspector. In the case of machines provided with an individual electric drive the device shall be arranged to act on a switch inserted in the no-volt release circuit.

(b) The feed table shall not be less than 6' in length, measured from the centre of the first cloth roller to the centre of the first pair of cast iron rollers. The table shall be provided with side guards reaching a height of not less than 4'-6" from the floor, and extending, at that height, not less than 3'-6" from the centre of the first pair of rollers; the height of the rest of the side guards shall not be less than 4' from the floor.

(c) The starting and stopping gear shall be arranged to comply with the following :—

(i) Provision for stopping the machine at both the feed and delivery ends.

(ii) Provision for starting the machine at the feed end only, the design shall be such that an operator at the feed end cannot start the machine without the co-operation of an operator at the delivery end.

(iii) When a machine is stopped for clearing a jam or attention otherwise, the starting gear shall be secured in the "off" position at least by a lock operated by a removable key in possession of the person attending the machine.

(iv) The lever operating the unbalanced weight shall be securely fenced.

(d) Sheet steel casings completely enclosing the side shafts, *i.e.*, the shafts and gears shall not be exposed on the underside. The casings shall be locked or secured by a device which will ensure (i) that they cannot be opened while the machine is in motion and (ii) that it will not be possible to start the machine unless they are closed.

3. **Carding machines.**—(a) The underframe shall be guarded in such a manner that it will not be possible for operatives to obtain access underneath the machine until the cylinder has ceased to revolve. The lowest cross member of the frame shall come down to a point not more than 10" from the floor and all openings above this, large enough to permit of access underneath, shall be filled in with sheet steel or fitted with bars or rods spaced not more than

6" apart. Any part of this protection may be in the form of a door, but all such doors shall be controlled by a device which will ensure that they cannot be opened until the cylinder has come to rest and that the machine cannot be restarted until the doors are closed :

Provided that in the case of machines installed before 1st January 1950 rigidly secured panels filling the under-frame will be deemed to comply with it.

(b) A guard with panels and sliding doors of sheet steel or closely spaced bars or rods enclosing the side gears ; there shall be no opening at the underside of this protection for access to the gears. The sliding doors shall be controlled by a device which will ensure that they cannot be opened until the cylinder has come to rest, and that the machine cannot be started up until the doors are closed.

(c) A sheet steel guard extending up to the centre line of the cylinder, enclosing the stripper belts and pulleys shall be provided on all machines installed after 1st January 1950.

(d) An adequately strong and rigid set of bars or rods over the doffer roller, securely bolted in position. This guard must follow the radius of the roller ; the space between the rods not to exceed 2" ; the distance from the doffer pin points to the underside of the rods to be 4" ; the space between the Drawing pressing roller and the first rod not to exceed 2" ; and the width of the guard from the first to the last rod to be not less than 12".

(e) A hand or guard rail extending the full width of the Drawing pressing roller, fitted in a convenient position in front of and higher than the roller.

(f) Effective side guards to prevent operatives' fingers being caught between the delivery roller and the pressing ball.

(g) When a machine is stopped for clearing a jam or attention otherwise, the starting gear shall be secured in the "off" position at least by a lock operated by a removable key in possession of the person attending the machine.

**4. Drawing machines.**—(a) A sheet steel guard completely closing the space between the bend rail and the bottom of the retaining roller, the opening and closing of which shall be controlled by the starting gear, and the design such that the guard cannot be opened while the machine is running. The guard plate shall swivel more or less about the centre of its height, and the top edge, shall swing inwards towards the gill bars as the guard opens, and outwards as the guard closes :

Provided that in the case of machines installed before 1st January 1950, a fixed guard will be sufficient if the clearance between the top of the guard and the underside of the retaining roller does not exceed 3/8" :

Provided, further that in the case of machines with individual electric drive it will be sufficient if the guard is of the swivelling type and inter-linked with the driving mechanism so that sliver cannot be fed into the gills, or the guard opened, before the machine is stopped, and that the machine cannot be started up unless the guard is closed.

(b) Sheet steel or cast iron guards completely enclosing the end gears, the design to be such that access to the gears is possible only by removing the guard in its entirety. If doors or movable panels are provided they shall be controlled by a locking device, operated by the starting gear, which will ensure that the machine cannot be started unless the guard is completely closed and that no movable part can be opened whilst the machine is in motion :

Provided that in the case of machines installed before 1st January 1950 a guard securely held in position by automatic catches to prevent opening by vibration but without the interlocking arrangement will be deemed to comply with it.

(c) An efficient guard which will prevent operatives' fingers or hands being caught between the delivery roller and the pressing ball.

(d) Starting and stopping gear so designed that the machine can be stopped by operatives on the feed and delivery sides ; can be started only by an operative on the feed side but with the co-operation of the operative on the delivery side and cannot be started by an operative on the delivery side: The device necessitating co-operation shall be engaged before the machine stops.

(e) Share pins driving the individual carriages shall be fitted to the pinion on the main back shaft and not to the pinion on the carriage back shaft.

5. **Roving machines.**—(a) Starting and stopping gear designed to embody the following :—

- (i) Provision for stopping the machine on both the feed and delivery sides.
- (ii) Provision for starting the machine on the delivery side only.
- (iii) A device on the delivery side which will automatically lock the belt striking gear in the "off" position. This device shall be such that the machine will not stop before the lock is engaged nor start before it is disengaged by a worker on the delivery side.

(b) Sheet steel or cast iron guards completely enclosing the end gears, the design to be such that access to the gears is possible only by removing the guard in its entirety. If doors or movable panels are provided, they shall be controlled by a locking device, operated by the starting gear, which will ensure that the machine cannot be started unless the guard is completely closed and that no movable part can be opened whilst the machine is in motion :

Provided that in the case of machines installed before 1st January 1950, a guard securely held in position by automatic catches to prevent opening by vibration, but without the interlocking arrangement will be deemed to comply with it.

(c) Shear pins driving individual carriages shall be fitted to the pinion on the main back shaft and not to the pinion on the carriage back shaft.

**6. Spinning frames.**—(a) Access between the driving cylinders whilst in motion shall be prevented by providing a door at the pass end, so interconnected with the starting gear that neither side of the frame can be set in motion whilst the door is open and conversely, the door cannot be opened whilst either or both sides of the frame is or are running :

Provided that in the case of machines installed before 1st January 1950 hinged and well secured doors will be deemed to comply with it.

(b) Sheet steel or cast iron guards completely enclosing the end gears, the design to be such that access to the gears is possible only by removing the guard in its entirety. If doors or movable panels are provided they shall be controlled by a locking device, operated by the starting gear, which will ensure that the machine cannot be started unless the guard is completely closed and that no movable part can be opened whilst the machine is in motion :

Provided that in the case of machines installed before 1st January 1950 a guard securely held in position by automatic catches to prevent opening by vibration, but without the interlocking arrangement will be deemed to comply with it.

**7. Cop winding machines.**—(a) Effective guards covering the driving end gears. Hinged doors or panels will not be deemed to comply with this rule unless securely held in the closed position by automatic catches to prevent opening by vibration.

(b) Guards covering the spindle driving gears of such design that it will not be possible to remove them from position whilst the machine is in motion :

Provided that in the case of machines installed before 1st January 1950 guards rigidly secured by bolts or screws will be deemed to comply with it.

**8. Roll winding machines.**—Effective guards for traverse or other gears and cams. Hinged doors or panels will not be deemed to comply with this rule unless securely held in the closed position by automatic catches to prevent opening by vibration.

**9. Beaming and dressing machines.**—(a) The flywheel shall be of the disc type.

(b) Cross and side shafts driving the starch rollers shall be enclosed in protecting tubes.

(c) A guard securely anchored in position and protecting the nip between the top and bottom starch rollers. It shall have an aperture large enough to pass the yarn through but not the operative's hand. A hinged guard will not be deemed to be compliance with this rule.

(d) A guard protecting the nip between the yarn beam pressing roller and the outer top weight roller, i.e., the top weight roller on the side at which the beam is inserted and removed.

(e) The space between any yarn guide roller and its adjacent steam cylinder must be not less than 3".

10. **Looms.**—(a) Sheet steel for cast iron guards protecting the crank and wyper shaft spur gears shall be provided.

(b) The minimum clearance between the sley and the breast beam shall be not less than 2".

(c) Yarn beams shall be placed on looms by mechanical or other means. Lifting into position by hand alone will not be deemed to comply with this rule.

11. **Cropping machines.**—Sheet steel guards protecting the spirals shall be provided.

12. **Calendering machines.**—(a) A strong and rigid guard, securely fixed in position, in front of the nip between the bottom cast iron roller and the paper roller on top of same. This guard shall be constructed in such a manner that it will be impossible for the fingers of an operative to reach the nip through the aperture in the guard.

(b) Safety rollers protecting the nip of the upper rollers. These rollers must be made of steel or wrought iron tube, as light as possible, and not more than  $2\frac{1}{2}$ " external diameter. The safety roller shall ride on the under roller and be free to lift. It shall be set in such a manner that the peripheral clearance between it and the upper roller, and between it and the under roller when the safety roller is fully raised, will not permit of an operative's fingers reaching the nip.

(c) Sheet steel panels shall be fitted on the machine gable to prevent access through same to the large drive wheel.

(d) Lever weights shall be lowered into strong and rigid guards.

13. **Cloth cutting machines.**—A guard preventing access to the knife from the front, top or sides shall be provided. On the underside the knife shall be protected up to the maximum limit without interfering with the machine operation.

14. **Lapping machines.**—(a) Provision for starting the machine at the feed end only; the design shall be such that an operator at the feed end cannot start the machine without the co-operation of an operator at the delivery end and that he cannot interfere with the device necessitating co-operation.



(b) A "sight panel" fitted to the feed table in such position that operators on either side of the machine can see through to the other side.

(c) The hand wheel on the driving shaft shall be of the disc type and it shall be located at sufficient distance from the machine gable to permit of fencing being constructed between it and the lever mechanism operating the folder.

(d) The treadle mechanism shall be such as to allow extraction of the maximum cloth lapped and no worker shall be required to go up on the machine table to force it down.

15. **Sewing machines.**—An apron plate shall be fitted in front of the feed chain and the plate shall be without holes or openings except for slots for the jockey pulleys.

16. **Press pits.**—When the press table is level with the floor the clearance between it and the floor shall not be less than 4".

## SCHEDULE II

(*Cotton Textiles*)

1. **Cotton Openers, Scutchers, Combined Openers and Scutchers, Scutcher and Lap Machines, Hard Waste Breakers, etc.**—(1) All Cotton Openers, Scutchers, Combined Openers and Scutchers, Scutcher and Lap Machines, Hard Waste Breakers and similar machines, if not driven by separate motors, shall be driven off shaft provided with fast and loose pulleys.

(2) In all Openers, Combined Openers and Scutchers, Scutchers, Scutcher-lap machines, Hard Waste Breakers and similar machines, the beater covers and doors which give access to any dangerous part of the machine shall be fitted with effective interlocking arrangements which shall prevent

(a) the covers and doors being opened while the machine is in motion; and

(b) the machine being restarted until the covers and doors are closed:

Provided that in respect of doors or openings, other than dirt doors or desk doors such openings shall be so fenced as to prevent access to any dangerous parts of the machine if effective interlocking arrangement is not provided.

(3) In all Openers, Combined Openers and Scutchers, Scutchers, Scutcher-lap machines, Hard Waste Breakers and similar machines, the opening giving access to the dust chamber shall be provided with permanently fixed fencing, which shall, while admitting light, yet prevent contact between any portion of a worker's body and the beater grid bars.

**2. Combined Openers and Scutchers, Scutchers, Scutcher-lap, Silver-lap, Lap Machines, Derby Doublers and Ribbon Machines.—**

(1) The lap forming rollers shall be fitted with a guard or cover which shall prevent access to the intake of the lap roller and fluted roller as long as the weighted rack is down, or

(2) The guard or cover shall be so locked that it cannot be raised until the machine is stopped and the machine cannot be started until the guard or cover is closed.

**3. Carding Machines.—**All cylinder doors shall be secured by an automatic locking device which shall prevent the door being opened until the cylinder has ceased to revolve and shall render it impossible to restart the machine until the door has been closed.

**4. Speed Frames.—**Headstocks shall be fitted with automatic locking arrangements which shall prevent the doors giving access to jack box wheels being opened while the machinery is in motion and shall render it impossible to restart the machine until the doors have been closed.

**5. Self-acting Mules.—**Self facting Mules, if not driven by separate motors, shall be driven off countershafts provided with fast and loose pulleys.

**6. Calendering Machines, etc.—**Calenders, mangles and similar machines shall be provided with an efficient "nip" guard along the whole length on the intake side of each pair of bowls and similar parts, which shall be so fitted and maintained, whilst the rollers or bowls are in motion, as to prevent access to the point of contact of the rollers or bowls.

### SCHEDULE III

*(Wood-working Machinery)*

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

Wood-working machine means a machine used for sawing, planing, morticing or moulding wood or cork.

**2. Stopping and Starting device.—**An efficient stopping and starting device shall be provided on every wood-working machine. The control of this device shall be in such a position as to be readily and conveniently operated by the person in charge of the machine.

**3. Space around machines.—**The space surrounding every wood-working machine in motion shall be kept free from obstruction.

**4. Floors.—**The floor surrounding every wood-working machine shall be maintained in good and level condition, and shall not be allowed to become slippery, and as far as practicable shall be kept free from chips or other loose material.

5. **Circular saws.**—Every circular saw shall be fenced as follows :—

- (a) Behind and in direct line with the saw there shall be a riving knife, which shall have a smooth surface, shall be strong, rigid and easily adjustable, and shall also conform to the following conditions :—
  - (i) The edge of the knife nearer the saw shall form an arc of a circle having a radius of the largest saw used and it shall extend upward from the bench to a height not less than that reached by the largest wood or timber sawn.
  - (ii) The knife shall be maintained as close as practicable to the saw, having regard to the nature of the work being done at the time, and at the level of the bench the distance between the front edge of the knife and the teeth of the saw shall not exceed half an inch.
- (b) The top of the saw shall be covered by a strong and easily adjustable guard, with a flange at the side of the saw farthest from the fence. The guard shall be kept so adjusted that the said flange shall extend below the roots of the teeth of the saw. The guard shall extend from the top of riving knife to a point as low as practicable at the cutting edge of the saw.
- (c) The part of the saw below the bench shall be protected by two plates of metal or other suitable material one on each side of the saw ; such plates shall not be more than six inches apart, and shall extend from the axis of the saw outwards to a distance of not less than two inches beyond the teeth of the saw . Metal plates, if not beaded, shall be of a thickness of at least  $1/10$  inch, or if beaded be of a thickness of at least  $1/20$  inch.

6. **Push sticks.**—A push stick or other suitable appliance shall be provided for use at every circular saw and at every vertical spindle moulding machine to enable the work to be done without unnecessary risk.

7. **Band saws.**—Every band saw shall be guarded as follows :—

- (a) Both sides of the bottom pulley shall be completely encased by sheet metal or other suitable material.
- (b) The front of the top pulley shall be covered with sheet metal or other suitable material.
- (c) All portions of the blade shall be enclosed or otherwise securely guarded except the portion of the blade between the bench and the top guide.

8. **Planing machines.**—(1) A planing machine (other than a planing machine which is mechanically fed) shall not be used for overhand planing unless it is fitted with a cylindrical cutter block

(2) Every planing machine used for overhand planing shall be provided with a "bridge" guard capable of covering the full length and breadth of the cutting slot in the bench, and so constructed as to be easily adjusted both in a vertical and horizontal direction.

(3) The feed roller of every planing machine used for thickening except the combined machine for overhand planing and thickening, shall be provided with an efficient guard.

**9. Vertical spindle moulding machines.**—(1) The cutter of every vertical spindle moulding machine shall be guarded by the most efficient guard having regard to the nature of the work being performed.

(2) The wood being moulded at a vertical spindle moulding machine shall, if practicable, be held in a jig or holder of such construction as to reduce as far as possible the risk of accident to the worker.

**10. Chain morticing machines.**—The chain of every chain morticing machine shall be provided with a guard which shall enclose the cutters as far as practicable.

**11. Adjustment and maintenance of guards.**—The guards and other appliances required under this Schedule shall be—

- (a) maintained in an efficient state,
- (b) constantly kept in position while the machinery is in motion, and
- (c) so adjusted as to enable the work to be done without unnecessary risk.

**12. Exemptions.**—Paragraphs 5, 7, 8 and 9 shall not apply to any wood-working machine in respect of which it can be proved that other safeguards are provided, maintained and used which render the machine as safe as it would be if guarded in the manner prescribed in this Schedule.

#### SCHEDULE IV

##### *(Rubber Mills)*

**1. Installation of machines.**—Mills for breaking down, cracking, grating, mixing, refining and warming rubber or rubber compounds shall be so installed that the top of the front roll is not less than forty-six inches above the floor or working level: Provided that in existing installations where the top of the front roll is below this height a strong rigid distance bar guard shall be fitted across the front of the machine in such position that the operator cannot reach the nip of the rolls.

**2. Safety devices.**—(1) Rubber mills shall be equipped with horizontal safety-trip rods or tight wire cables across both front and rear, which will, when pushed or pulled, operate instantly to disconnect the power and apply the brakes, or to reverse the rolls.

(2) Safety-trip rods or tight wire cables on rubber mills shall extend across the entire length of the face of the rolls and shall be located not more than fifty-nine inches above the floor or working level.

(3) Safety-trip rods and tight wire cables on all rubber mills shall be examined and tested daily in the presence of the Manager or other responsible person and if any defect is disclosed by such examination and test the mill shall not be used until such defect has been remedied.

## SCHEDULE V

### (Power Presses)

1. **Definition.**—For the purposes of this Schedule power press means a machine used in metal or other industries for blanking, raising, drawing and similar processes.

2. **Starting and stopping mechanism.**—The starting and stopping mechanism shall be provided with a safety stop so as to prevent overrunning of the press or descent of the ram during tool setting, etc.

3. **Protection of tool and die.**—(a) Each press shall be provided with a fixed guard with a slip plate on the underside enclosing the front and sides of the tool.

(b) Each die shall be provided with a fixed guard surrounding its front and sides, and extending to the back in the form of a tunnel through which the pressed article falls to the rear of the press.

(c) The design, construction and mutual position of the guards referred to in (a) and (b) shall be such as to preclude the possibility of the worker's hand or fingers reaching the danger zone.

(d) The machine shall be fed through a small aperture at the bottom of the die guard, but a wider aperture may be permitted for second or subsequent operations if feeding is done through a chute.

4. **Exemption.**—If in the case of a machine or operation it is not possible to comply with the provisions of paragraph 3 alternative means of protection as approved by the Inspector shall be provided.

Rules 48 to 52  
prescribed under  
section 112.

48. **Buildings and structures.**—No building, wall, chimney, bridge, tunnel, road, gallery, stairway, ramp, floor, platform, staging, or other structure, whether of a permanent or temporary character, shall be constructed, situated or maintained in any factory in such a manner as to cause risk of bodily injury.

49. **Railways.**—No railway or other electrical or mechanical means of transport within the precincts of a factory shall be constructed, situated, operated or maintained in such a manner as to cause risk of bodily injury :

Provided that the Inspector shall not accept any such railway or means of transport if it is so designed, maintained or operated as to contravene the provisions of any other Act.

**50. Machinery and plant.**—No machinery, plant or equipment shall be constructed, situated, operated or maintained in any factory in such a manner as to cause risk of bodily injury.

**\*50A. Precautions against electrical hazards.**—(1) In every factory all electric supply lines and apparatus shall be sufficient in size and power for the work they may be required to do, and shall be constructed, situated, protected, worked and maintained in such a manner as to cause no risk of bodily injury :

Provided that where automatic mechanism is installed which renders dead any electrical equipment on the occurrence of danger, such mechanism shall be taken into account by the Inspector when considering the adequacy or otherwise of the protection furnished :

Provided further that in no case shall the Inspector accept as adequate any conditions or combination of conditions which are subject to objection under any other Act.

(2) Every portable hand lamp must be equipped with an insulating handle and the bulb must be enclosed in a wire cage which must be insulated from the metal parts of the lamp holder.

(3) Wherever practicable, connection between the flexible cable of a portable apparatus and the supply line shall be made by a properly designed three pin plug and socket, so arranged that wrong insertion will not be possible.

(4) The type and the lay out of electrical apparatus to be used, and the method of electrical wiring, in any part of a factory in which any substance likely to induce ignitable or explosive mixture is used or stored, shall be subject to the approval of the Chief Inspector.

Explanation :—“Apparatus” includes all apparatus, machines and fittings in which conductors are used, or of which they form parts.

**51. Methods of work.**—No process or work shall be carried on in any factory in such a manner as to cause risk of bodily injury.

**52. Stacking and storing of materials, etc.**—No materials or equipment shall be stacked or stored in such a manner as to cause risk of bodily injury.

**53. Work on or near machinery in motion.**—(1) One or more adult male workers shall be appointed for the purposes of sub-section (1) of section 22. A list of such workers shall be maintained in a register as nearly as possible in Form No. 7.

Rules prescribed under sub-section (1) of section 22 and section 112.

\*Vide Notification No. 1008L.W., dated the 20th August 1964.

(2) No worker shall be appointed unless he has been sufficiently trained for such examination or operation and is acquainted with the dangers from moving machinery arising in connection with such work.

(3) A worker required to wear tight fitting clothing under sub-section (1) of section 22 shall be provided by the occupier with such clothing which shall consist of at least a pair of closely fitting shorts and a closely fitting half-sleeve shirt or vest. Such clothing shall be returned to the occupier on termination of service or when new clothing is provided.

Rules prescribed under sub-section (2) of section 23.

**54. Employment of young persons on dangerous machines.—** The following machines shall be deemed to be of such dangerous character that young persons shall not work at them unless the provisions of sub-section (1) of section 23 are complied with :—

Power presses other than hydraulic presses ;

Milling machines used in the metal trades ;

Guillotine machines ;

Circular saws ;

Platen printing machines.

Rule prescribed under sections 29 (2) and 112.

**55. Lifting machines, chains, ropes and lifting tackles.—**

(1) No lifting machine and no chain, rope or lifting tackle, except a fibre rope or fibre rope sling, shall be taken in use in any factory for the first time in that factory unless it has been tested and all parts have been thoroughly examined by a competent person and a certificate of such a test and examination specifying the safe working load or loads and signed by the person making the test and the examination, has been obtained and is kept available for inspection.

(2) (a) Every jib-crane so constructed that the safe working load may be varied by the raising or lowering of the jib, shall have attached thereto either an automatic indicator of safe working loads or an automatic jib angle indicator and a table indicating the safe working loads at corresponding inclinations of the jib or corresponding radii of the load.

(b) A table showing the safe working loads of every kind and size of chain, rope or lifting tackle in use, and, in the case of a multiple sling, the safe working loads at different angles of the legs, shall be posted in the store room or place where or in which the chains, ropes or lifting tackles are kept, and in prominent positions on the premises and no rope, chain or lifting tackle not shown in the table\* shall be used. The foregoing provisions of this paragraph shall not apply in respect of such lifting tackle if the safe working load thereof, or in the case of a multiple sling, the safe working load at different angles of the legs, is plainly marked upon it.

\*Vide Notification No. 1098L.W., dated the 20th August 1964.

(3) A register as nearly as possible in Form No. 8 shall be maintained containing the following particulars :—

- (i) Name of occupier of factory.
- (ii) Address of the factory.
- (iii) Distinguishing number or mark and description sufficient to identify the lifting machine, chain, rope or lifting tackle.
- (iv) Date when the lifting machine, chain, rope or lifting tackle was first taken into use in the factory.
- (v) Date and number of the certificate relating to any test and examination made under sub-rule (1) together with the name and address of the person who issued the certificate.
- (vi) Date of each periodical thorough examination made under clause (a)(iii) of sub-section (1) of section 29 of the Act and by whom it was carried out.
- (vii) Date of annealing or other heat treatment of the chain and other lifting tackle and by whom it was carried out.
- (viii) Particulars of any defects affecting the safe working load found at any such thorough examination or after annealing and of the steps taken to remedy such defects.

The register shall be kept readily available for inspection.

(4) All chains and lifting tackle, except a rope sling, shall unless they have been subjected to such other heat treatment as may be approved by the Chief Inspector, be effectively annealed under the supervision of a competent person at the following intervals :—

- (i) All chains, slings, rings, hooks, shackles and swivels used in connection with molten metal or molten slag or when they are made of half inch bar or smaller, once at least in every six months.
- (ii) All other chains, rings, hooks, shackles and swivels in general use once at least in every twelve months :

Provided that chains and lifting tackle not in frequent use shall, subject to the Chief Inspector's approval, be annealed only when necessary. Particulars of such annealing shall be entered in the register prescribed under sub-rule (3).

(5) Nothing in sub-rule (4) shall apply to the following classes of chains and lifting tackle :—

- (i) Chains made of malleable cast iron.
- (ii) Plate link chains.



- (iii) Chains, rings, hooks, shackles and swivels made of steel or of any non-ferrous metal.
- (iv) Pitched chains, working on sprocket or pocketed wheels
- (v) Rings, hooks, shackles and swivels permanently attached to pitched chains, pulley blocks or weighing machines.
- (vi) Hooks and swivels having screw threaded parts or ball-bearing or other case hardened parts.
- (vii) Socket shackles secured to wire ropes by whitemetal capping.
- (viii) Bordeaux connections.
- (ix) Any chain or lifting tackle which has been subjected to the heat treatment known as "normalising" instead of annealing.

Such chains and lifting tackle shall be thoroughly examined by a competent person once at least in every twelve months and particulars entered in the register kept in accordance with sub-rule (3).

(6) All lifting machines, chains, ropes and lifting tackle, except a fibre rope or fibre rope sling, which have been lengthened, altered or repaired by welding or otherwise shall, before being again taken into use, be adequately tested and re-examined by a competent person and a certificate of such test and examination be obtained.

(7) All rails on which a travelling crane moves and every track on which the carriage of a transporter or runway moves, shall be of proper size and adequate strength and have an even running surface and every such rail or track shall be properly laid, adequately supported and properly maintained.

(8) No person under 18 years of age and no person who is not sufficiently trained and reliable shall be employed as driver of a lifting machine whether driven by mechanical power or otherwise, or to give signals to a driver.

\*(9) Overhead travelling cranes shall be provided with safe access by stairways or fixed ladders from the ground or floor to the crane cabs and from the crane cabs to the bridge footwalks.

(10) Where the regular footwalks or platforms provided on the bridges of overhead travelling cranes do not afford safe support for changing or repairing wheels of end-trucks, special platforms shall be provided for the purpose at both ends of each bay :

Provided that this provision shall apply to new factories and also to existing factories in respect of such overhead travelling cranes as are taken into use after this sub-rule comes into force.

\*Vide Notification No. 1008L.W., dated the 20th August 1964.

Provided further that the Chief Inspector may exempt any factor in respect of any particular overhead travelling crane from the operation of any provision of this sub-rule subject to such condition as he may direct in-writing.

**\*56. Pressure Plant.**—(1) Every plant or machinery other than the working cylinder of prime movers used in a factory, and operated at a pressure greater than atmospheric pressure, shall be—

- (a) of good construction, sound material, adequate strength and free from any patent defect;
- (b) properly maintained in a safe condition;
- (c) fitted with—
  - (i) a suitable safety valve or other effective device to ensure that the maximum permissible working pressure of the vessel shall not be exceeded;
  - (ii) a suitable pressure gauge easily visible and designed to show, at all times, the correct internal pressure in pounds per square inch, and marked with a prominent red mark at the safe working pressure of the vessel;
  - (iii) a suitable stop valve or valves by which the vessel may be isolated from other vessels or source of supply of pressure;
  - (iv) a suitable drain cock or valve at the lowest part of the vessel for the discharge of collected liquid:

Provided that it shall be sufficient for the purposes of clause (c) if the safety valve, pressure gauge and stop valve are mounted on a pipe line immediately adjacent to the vessels and where there is a range of two or more similar vessels in a plant served by the same pressure lead, only one set of such mountings need be fitted, provided they cannot be isolated;

- (d) thoroughly examined by a competent person—
  - (i) externally, once in every period of six months, to ensure general condition of the vessel and the working of its fittings;
  - (ii) internally, once in every period of twelve months, to ensure condition of the walls, seams and ties, both inside and outside vessel, soundness of the parts of the vessel, and the effects of corrosion. If by reason of construction of the vessel, a thorough internal examination is not possible, this examination may be replaced by a hydraulic test which shall be carried out once in every two years provided that the vessels in continuous processes which cannot be frequently opened, the period of internal examination may be extended to four years;

\*Vide Notification No. 1003L.W., dated the 20th August 1964.

(iii) hydraulically at intervals of not more than four years provided that in respect of pressure vessels with thin walls such as sizing cylinders made of copper or any other non-ferrous metal periodic hydraulic test may be dispensed with on the condition that the requirements laid down in sub-rule (2) are fulfilled.

(2) (a) In respect of pressure vessels of thin walls such as sizing cylinders made of copper or any other non-ferrous metal the safe working pressure shall be reduced at the rate of 5 per cent. of the original working pressure for every year of its use after the first five years and no such cylinder shall be continued to be used for more than twenty years after it was first taken into use.

(b) If no information as to the date of construction, thickness of walls and safe working pressure is available, the age of the sizing cylinder shall be determined by the competent person in consultation with the Chief Inspector from any other particulars available with the Manager.

(c) Every new and second hand cylinder of thin walls to which repairs which may affect its safety, have been carried out, shall be tested before use to at least one and half times its working pressure.

(3) Every vessel other than part of a prime mover operated at a pressure greater than atmospheric pressure, and not so constructed as to withstand with safety the maximum permissible working pressure at the source of supply, or the maximum pressure which can be obtained in the pipe connecting the vessel with any other source of supply shall be fitted with a suitable reducing valve or other suitable automatic device to prevent the safe working pressure of the vessel being exceeded :

(4) In cases where owing to the nature of the process or the action of the contents of the vessels, a pressure gauge or safety valve or both cannot work reliably, a tested and reliable working thermometer with a sufficient large scale, on which shall be clearly marked the maximum permissible temperature in the vessel or pyrometers or rupture discs in addition to the pressure gauge and safety valve may be fitted as may be directed by the Chief Inspector.

(5) If during thorough examination, doubt arises as to the ability of a vessel to work safely until the next examination provided for in these rules then the competent person shall enter in his report in Form No. 9 a statement mentioning the reasons for authorising the vessel for further work subject to a lowering of pressure or to more frequent inspection or subject to both of these requirements.

(6) No vessel which has undergone alterations or repairs shall be taken into use unless it is thoroughly examined by a competent person.

(7) A report of the result of every examination made shall be completed in Form No. 9 and signed by the person making the examination and shall be kept available for perusal by an Inspector.

(8) No vessel which has previously been used elsewhere shall be taken into use in any factory for the first time in the factory until it has been examined and reported in accordance with these rules and no new vessel shall be taken into use unless a certificate specifying the maximum permissible working pressure thereof, and the nature of the tests to which the vessel and its fittings (if any) have been subjected has been obtained from the maker of the vessel, or from a competent person. The certificate shall be kept available for perusal by an Inspector, and the vessel shall be so marked as to enable it to be identified, to which the certificate relates.

(9) Where the report of any examination under this rule specifies conditions for securing the safe working of a vessel, the vessel shall not be used except in accordance with these conditions.

(10) The competent person making the report of any examination under this rule shall, within seven days of the completion of the examination, send to the Inspector a copy of the report in every case where the maximum permissible working pressure is reduced, or the examination shows that the part cannot continue to be used with safety unless certain repairs are carried out immediately or within a specified time.

(11) The requirements of this rule shall be in addition to and not in derogation of the requirement of any other Act, rules or regulations.

(12) Nothing in this rule shall apply to—

(a) any plant which comes within the scope of the Indian Boilers Act, 1923; and

(b) portable cylinders or vessels used for transport of gases.

Explanation :—'Vessel' means any closed vessel of any capacity but does not include feed pumps, steam traps, turbine casings, compressor cylinders, valves, air vessels on pumps, pipes coils of normal design, accessories of instruments and appliances such as cylinder and piston assemblies used for operating relays and interlocking type of guards, gas holders with working pressure only slightly over atmospheric pressure and of capacity less than 5,000 cubic ft., vessels with liquids subject to static head only and hydraulic operating cylinders other than any communicating with an air loaded accumulator.

(13) The Chief Inspector of Factories may exempt on such conditions as may be deemed expedient any or all the pressure vessels from compliance with any or all the provisions of this rule if he is satisfied that the construction or use of these vessels is such that inspection provisions are not necessary or are not practicable.

Rule prescribed  
under sub-section  
(2) of section 34  
and section 112.

57. **Excessive weights.**—(1) No woman or young person shall be employed in any factory to lift, carry or move by hand or on head, unaided by another person, any material, article, tool or appliance exceeding the maximum limit in weight set out in the following Schedule :—

#### SCHEDULE

Persons.	Maximum weight of material, article, tool or appliance.
(a) Adult female .. .. .	65 lbs.
(b) Adolescent male .. .. .	65 "
(c) Adolescent female .. .. .	45 "
(d) Male child .. .. .	35 "2
(e) Female child .. .. .	30 "

(2) No woman or young person shall be engaged, in conjunction with others, in lifting, carrying or moving by hand or on head, any material, article, tool or appliance, if the weight thereof exceeds the lowest weight fixed by the Schedule to sub-rule (1) for any of the persons engaged, multiplied by the number of the persons engaged :

\*Provided that in case of transport of round articles by rolling on the floor or transport of articles by means of hand operated wheeled vehicles, the maximum weights specified in the Schedule may be increased by fifty per cent. in each case for the purposes of sub-rules (1) and (2).

(3) No woman whilst she is pregnant, shall be employed in any factory to lift, carry, or move by hand or on head any material, article, tool or appliance.

Rule prescribed  
under section 35.

58. **Protection of eyes.**—Effective screens or suitable goggles shall be provided for the protection of persons employed in or in the immediate vicinity of the following processes :—

- (a) Dry grinding of metals or metal articles applied by hand to a revolving wheel, or disc driven by mechanical power. Turning (external or internal) of non-ferrous metals or of cast iron, or articles of such metals or such iron, where the work is done dry, other than precision turning where the use of goggles or a screen would seriously interfere with the work, or turning by means of hand tools.
- (b) Welding or cutting of metals by means of electric, oxy-acetylene or similar processes.
- (c) Fettingling, cutting out cold rivets or bolts, chipping or scaling, and breaking or dressing of stone, concrete slag, etc., by hand tools or other portable tools.

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

Rules prescribed under sub-section (6) of section 36.

- (a) in the case of a rectangular or oval shape, be not less than 16 inches long and 12 inches wide;
- (b) in the case of a circular shape, be not less than 16 inches in diameter.

60. **Exemptions.**—The requirements of sub-section (4) of section 37 shall not apply to the following processes carried on in any factory :—

Exemptions under sub-section (5) of section 37.

- (a) The operation of repairing a water-sealed gas-holder by the electric welding process, subject to the following conditions :—
  - (i) The gasholder shall contain only the following gases, separately or mixed at a pressure greater than atmospheric pressure, namely, town gas, coke-oven gas, producer gas, blast furnace gas, or gases other than air, used in their manufacture :

Provided that this exemption shall not apply to any gasholder containing acetylene or mixture of gases to which acetylene has been added intentionally.

- (ii) Welding shall only be done by the electric welding process and shall be carried out by experienced operatives under the constant supervision of a competent person.
- (b) The operations of cutting or welding steel or wrought iron gas mains and services by the application of heat, subject to the following conditions :—
  - (i) the main or service shall be situated in the open air, and it shall contain only the following gases, separately or mixed at a pressure greater than atmospheric pressure, namely, town gas, coke-oven gas, producer gas, blast furnace gas, or gases other than air, used in their manufacture ;
  - (ii) the main or service shall not contain acetylene or any gas or mixture of gases to which acetylene has been added intentionally ;
  - (iii) the operation shall be carried out by an experienced person or persons and at least 2 persons (including those carrying out the operations) experienced in work on gas mains and over 18 years of age shall be present during the operation ;
  - (iv) the site of the operation shall be free from any inflammable or explosive gas or vapour ;

- (v) where acetylene gas is used as a source of heat in connection with an operation, it shall be compressed and contained in a porous substance in a cylinder; and
  - (vi) prior to the application of any flame to the gas main or service, this shall be pierced or drilled and the escaping gas ignited.
- (c) The operation of repairing an oil tank on any ship by the electric welding process shall be subject to the following conditions :—
- (i) The oil contained in the tank shall have a flash point of not less than 150°F. (close test) and a certificate to this effect shall be obtained from a competent analyst.
  - (ii) The analyst's certificate shall be kept available for inspection by an Inspector, or by any person employed or working on the ship.
  - (iii) The welding operation shall be carried out only on the exterior surface of the tank at a place (a) which is free from oil or oil leakage in inflammable quantities and (b) which is not less than one foot below the nearest part of the surface of the oil within the tank; and
  - (iv) Welding shall be done only by electric welding and shall be carried out by experienced operatives under the constant supervision of a competent person.

Rule prescribed  
under sub-section  
\*(7) of section 38.

61. **Means of escape in case of fire.**—(1) Every factory shall be provided with adequate means of escape in case of fire for the persons employed therein, and without prejudice to the generality of the foregoing provision :—

- (a) Each room of a factory building shall in relation to its size and the number of persons employed in it be provided with an adequate number of exits for use in case of fire though not necessarily confined to such use, so positioned that each person will have a reasonably free and unobstructed passage from his workplace to an exit.
- (b) No exit intended for use in case of fire shall be less than 3 feet in width nor less than 6 feet 6 inches in height.
- (c) In the case of a factory building or part of a factory building of more than one storey and in which not less than twenty persons work at any one time, there shall be provided at least one substantial stairway permanently constructed either inside or outside the building and which affords direct and unimpeded access to ground level.

\*Vide Notification No. 1008L.W., dated the 20th August 1964.

(d) In the case of a factory building or part of a factory building in which twenty or more persons work at any one time above the level of the ground floor, or wherein explosive or highly inflammable materials are used or stored, or which is situated below ground level, the means of escape shall include at least two separate and substantial stairways permanently constructed either inside or outside the building and which afford direct and unimpeded access to ground level.

(e) Every stairway in a factory which affords a means of escape in case of fire shall be provided with a substantial handrail which if the stairway has an open side shall be on that side, and if the stairway has two open sides, such handrail shall be provided on both sides.

(2) In the case of a building constructed or converted for use as a factory after 1st January 1950, the following additional requirements shall apply :—

(a) At least one of the stairways provided shall be of fire-resisting materials.

(b) Every hoist-way or lift-way inside a factory building shall be completely enclosed with fire-resisting materials and all means of access to the hoist or lift shall be fitted with doors of fire resisting materials :

Provided that any such hoist-way or lift-way shall be enclosed only at the top by some material easily broken by fire or be provided with a vent at the top.

(c) No fire escape stair shall be constructed at an angle greater than 45° from the horizontal.

(d) No part of a factory building shall be farther (along the line of travel) than 150 feet from any fire escape stair.

(e) No stairway shall be less than 45 inches in width.

**\*62. Fire fighting apparatus and water supply.**—(1) In every factory there shall be provided and maintained two fire buckets of not less than 2 gallon capacity for every 1,000 sq. ft. of floor area subject to a minimum of four buckets on each floor, and every such bucket shall—

Rule prescribed under sub-section (7) of section 38.

(i) conform to appropriate Indian Standards Specification ;

(ii) be kept in a position approved by the Inspector and shall be used for no other purpose than fire extinguishing ; and

(iii) at all times be kept full of water, except where the principal fire risk arises from inflammable liquid or other substances where water cannot be used, it shall be kept full of clean, fine dry sand, stone dust or other inert material :

\*Vide Notification No. 1008 L.W., dated the 20th August 1964.



Provided that where the Chief Inspector is of opinion that owing to other adequate fire fighting apparatus provided in the factory building or room, all or any of the provision of this sub-rule may be relaxed he may issue a certificate in writing (which he may at his discretion revoke) specifying the extent to which the above requirements are relaxed in respect of that building or room.

(2) (a) In factories having more than 1,000 sq. ft. floor area and where fire may occur due to combustible materials other than inflammable liquids, electrical equipment and ignitable metals, soda acid or equivalent type of portable extinguishers at the rate of one for every 5,000 sq. ft. of area spaced at not more than 100 ft. apart subject to a minimum of one extinguisher shall be provided in addition to fire buckets required under sub-rule (1).

(b) In factories where fires may occur due to inflammable liquids or grease or paint, the extinguishers to be provided at the scale laid down in clause (a) shall consist of foam, carbon tetrachloride, dry power, carbondioxide, chlorobromomethane or other equivalent type.

(c) In factories where fires may occur due to electrical equipment, the extinguisher to be provided at the scale laid down in clause (a) shall consist of carbondioxide, dry powder, carbon tetrachloride or equivalent types.

(d) In factories where fire may occur due to magnesium, alluminium or zinc dust or shavings of other ignitable metals, the use of liquids, carbondioxide and foam type extinguishers shall be prohibited and an ample supply of clean, fine, dry sand, stone dust or other inert material shall be kept ready for segregating such fires.

(e) Every type of portable fire extinguisher shall be kept mounted in a position approved by the Inspector :

Provided that where the Chief Inspector is of opinion that owing to other adequate fire fighting apparatus or permanent automatic fire fighting installations approved by any recognised fire association or fire insurance company provided in the factory building or room, all or any of the provisions of this sub-rule may be relaxed, he may issue a certificate in writing (which he may at his discretion, revoke) specifying the extent to which the above requirement are relaxed in respect of the building or room.

(3) (a) Every portable fire extinguisher to be provided under sub-rule (2) shall—

- (i) conform to the appropriate Indian Standards Specification ;
- (ii) be kept charged ready for use, properly mounted in a position approved by the Inspector and accompanied by the maker's printed instructions for its use ; and
- (iii) be examined, tested or discharged periodically in accordance with the maker's recommendation.

(b) The manager of every factory shall keep and maintain sufficient number of spare charges for each type of extinguisher provided in the factory with a minimum of 12 spare charges always in stock and readily available.

(4) Every worker of the factory should as far as possible, be trained in the use of portable fire extinguishers, subject to a minimum of at least one-fourth of the number of workers engaged separately in each section of the factory.

(5) Each factory shall have a trained officer who shall be responsible for the proper maintenance and upkeep of all fire-fighting equipments.

(6) The manager shall prepare a detailed 'Fire Safety Plan' for proper enforcement of fire safety rules and for action to be taken, in proper sequence, in the case of a fire in the factory.

63. **Prohibition of smoking and naked lights.**—There shall be exhibited, in English and in the language of the majority of the workers, a notice prohibiting smoking and the use of naked lights, in any place where they would be dangerous, or where the Inspector may require, and all other reasonable precautions against fire shall be taken. Rule prescribed under section 112.

## CHAPTER V

### WELFARE

64. **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 the facilities shall be conveniently accessible and shall be kept in a clean and orderly condition. Rule prescribed under sub-section (2) of section 42.

(2) Without prejudice to the generality of the foregoing provisions the washing facilities shall include—

(a) a trough with taps or jets at intervals of not less than two feet, or

(b) wash-basins with taps attached thereto, or

(c) taps on stand-pipes, or

(d) showers controlled by taps, or

(e) circular troughs of the fountain type, provided that the Inspector may, having regard to the needs and habits of the workers, fix the proportion in which the aforementioned types of facilities shall be installed.

(3) (a) Every trough and basin shall have a smooth, impervious surface and shall be fitted with a waste-pipe and plug.

(b) The floor or ground under and in the immediate vicinity of every trough, tap, jet, wash-basin, stand-pipe and shower shall be so laid or finished as to provide a smooth impervious surface and shall be adequately drained.

(4) For persons whose work involves contact with any injurious or noxious substance there shall be at least one tap for every fifteen persons; and for persons whose work does not involve such contact the number of taps shall be as follows:—

No. of workers.		No. of taps.	
Up to 20	.. ..	..	1
21 to 35	.. ..	..	2
36 to 50	.. ..	..	3
51 to 150	.. ..	..	4
151 to 200	.. ..	..	5
Exceeding 200 but not exceeding 500	.. ..	..	5 plus one tap for every 50 or fraction of 50.
Exceeding 500	.. ..	..	11 plus one tap for every 100 or fraction of 100.

(5) If female workers 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 workers "For Women Only", and shall also be indicated pictorially.

(6) The water-supply to the washing facilities shall be capable of yielding at least two gallons a day for each person employed in the factory.

**Rule prescribed under sub-section (1) of section 45.**

**65. First-aid appliances.**—The first-aid boxes or cup-boards shall be distinctively marked with a red cross on a white ground and shall contain the following equipment:—

A. For factories in which the number of persons employed does not exceed ten, or (in the case of factories in which mechanical power is not used) does not exceed fifty persons—Each first-aid box or cupboard shall contain the following equipment:—

- (i) 6 small sterilized dressings.
- (ii) 3 medium size sterilized dressings.
- (iii) 3 large size sterilized dressings.
- (iv) 3 large size sterilized burn dressings.
- (v) 1 (1 oz.) bottle containing a two per cent. alcoholic solution of iodine.
- (vi) 1 (1 oz.) bottle containing sal-volatile having the dose and mode of administration indicated on the label.
- (vii) A snake-bite lancet.
- (viii) 1 (1 oz.) bottle of potassium permanganate crystals.
- (ix) One pair scissors.
- (x) 1 copy of the first-aid leaflet issued by the Chief Adviser, Factories, Government of India.
- \*(xi) Aspirin 5 gr. tablets, ointment for burns, and suitable surgical antiseptic solution.

*Vide* Notification No. 1008L.W., dated the 20th August 1964.

B. For factories in which mechanical power is used and in which the number of persons employed exceeds ten but does not exceed fifty—Each first-aid box or cupboard shall contain the following equipment :—

- (i) 12 small sterilized dressings.
- (ii) 6 medium size sterilized dressings.
- (iii) 6 large size sterilized dressings.
- (iv) 6 large size sterilized burn dressings.
- (v) 6 ( $\frac{1}{2}$  oz.) packets sterilized cotton wool.
- (vi) 1 (2 oz.) bottle containing a two per cent. alcoholic solution of iodine.
- (vii) 1 (2 oz.) bottle containing sal-volatile having the dose and mode of administration indicated on the label.
- (viii) 1 roll of adhesive plaster.
- (ix) A snake-bite lancet.
- (x) 1 (1 oz.) bottle of potassium permanganate crystals.
- (xi) 1 pair scissors.
- (xii) 1 copy of first aid leaflet issued by the Chief Adviser, Factories, Government of India.
- \*(xiii) Aspirin 5 gr. tablets, ointment for burns, and suitable surgical antiseptic solution.

C. For factories employing more than fifty persons—Each first-aid box or cupboard shall contain the following equipment :—

- (i) 24 small sterilized dressings.
- (ii) 12 medium size sterilized dressings.
- (iii) 12 large size sterilized dressings.
- (iv) 12 large size sterilized burn dressings.
- (v) 12 ( $\frac{1}{2}$  oz.) packets sterilized cotton wool.
- (vi) 1 snake-bite lancet.
- (vii) 1 pair scissors.
- (viii) 2 (1 oz.) bottles of potassium permanganate crystals.
- (ix) 1 (4 oz.) bottle containing a two per cent. alcoholic solution of iodine.
- (x) 1 (4 oz.) bottle of sal-volatile having the dose and mode of administration indicated on the label.
- (xi) 1 copy of first-aid leaflet issued by the Chief Adviser Factories, Government of India.
- (xii) 12 roller bandages 4 inches wide.
- (xiii) 12 roller bandages 2 inches wide.

\*Vide Notification No. 1008L.W., dated the 20th August 1964.

- (xiv) 2 rolls of adhesive plaster.
- (xv) 6 triangular bandages.
- (xvi) 2 packets of safety pins.
- (xvii) A supply of suitable splints.
- (xviii) 1 tourniquet.
- \*(xix) Aspirin 5 gr. tablets, ointment for burns, and suitable surgical antiseptic solution;

Provided that items (xii) to (xviii) inclusive need not be included in the standard first-aid box or cupboard (a) where there is a properly equipped ambulance room, or (b) if at least one box containing such items and placed and maintained in accordance with the requirements of section 45 is separately provided.

D. In lieu of the dressings required under items (i) and (ii), there may be substituted adhesive wound dressings approved by the Chief Inspector of Factories.

Rule prescribed under sub-section (4) of section 45 and section 112.

66. **Ambulance room.**—(1) The ambulance room or dispensary shall be in charge of a qualified medical practitioner assisted by at least one qualified nurse and such subordinate staff as the Chief Inspector may direct. The medical practitioner shall always be available on call during working hours, or when any work is being carried on in the factory :

Provided that the Chief Inspector may in the case of Ordnance Factories relax the provisions of this sub-rule to such extent and on such conditions as he may deem expedient.

\*(2) The ambulance room or dispensary shall be separate from the rest of the factory and shall not be situated in close proximity to any part of the factory in which noisy processes are carried on. Plan and site plan, in duplicate, of the building to be constructed or adopted, as the ambulance room or dispensary, shall be submitted for the approval of the Chief Inspector.

The ambulance room shall have smooth, hard impervious floor and walls impervious up to a height of 5 ft. and shall be adequately ventilated and lighted by both natural and artificial means. It shall be used only for the purpose of first-aid treatment and rest.

Ambulance room constructed or taken into use after 1st January 1965 shall have a floor area of at least 300 sq. ft. and the height of every room in the building shall be not less than 12 ft. from the floor level to the lowest part of the roof, and there shall be attached at least one latrine and one urinal of sanitary type.

Suitable beds shall be provided for rest. An adequate supply of wholesome drinking water shall be laid on and the room shall contain at least :—

- (i) A glazed sink with hot and cold water always available.
- (ii) A table with a smooth top at least 6' x 3' 6".

\*Vide Notification No. 1008L.W., dated the 20th August 1964.

- (iii) Means for sterilizing instruments.
- (iv) A couch.
- (v) Two stretchers.
- (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  $36'' \times 4'' \times \frac{1}{4}''$ .
- (x) Twelve plain wooden splints  $14'' \times 3'' \times \frac{1}{4}''$ .
- (xi) Six plain wooden splints  $10'' \times 2'' \times \frac{1}{2}''$ .
- (xii) Six woollen blankets.
- (xiii) One pair artery forceps.
- (xiv) One bottle of brandy.
- (xv) Two medium size sponges.
- (xvi) Six hand towels.
- (xvii) Four "Kidney" trays.
- (xviii) Four cakes carbolic soap.
- (xix) Two glass tumblers and two wine glasses.
- (xx) Two clinical thermometers.
- (xxi) Graduated measuring glass with teaspoon.
- (xxii) One eye bath.
- (xxiii) One bottle (2 lbs.) carbolic lotion 1 in 20.
- (xxiv) Three chairs.
- (xxv) One screen.
- (xxvi) One electric hand torch.
- (xxvii) Four first-aid boxes or cupboards stocked to the standards prescribed under item 3 of rule 65.
- (xxviii) An adequate supply of anti-tetanus serum.

(3) The occupier of every factory to which these rules apply shall, for the purpose of removing serious cases of accident or sickness, provide in the premises and maintain in good condition a suitable conveyance unless he has made arrangements for obtaining such a conveyance from a hospital.

(4) A record of all cases of accident and illness treated in the room shall be kept and produced to the Inspector or Certifying Surgeon when required.

Rules 67 to 72  
prescribed under  
section 46.

**67. Canteens.**—(1) The occupier of every factory wherein more than two hundred and fifty workers are ordinarily employed shall provide in or near the factory an adequate canteen according to the standards prescribed in these rules.

(2) The occupier of a factory shall submit for the approval of the Chief Inspector plans and site plan, in duplicate, of the building to be constructed or adapted for use as a canteen.

(3) The canteen building shall be situated not less than fifty feet from any latrine, urinal, boiler house, coal stacks, ash dumps and any other source of dust, smoke or obnoxious fumes :

Provided that the Chief Inspector may in any particular factory relax the provisions of this sub-rule to such extent as may be reasonable in the circumstances and may require measures to be adopted to secure the essential purpose of this sub-rule.

(4) The canteen building shall be constructed in accordance with the plans approved by the Chief Inspector and shall accommodate at least a dining hall, kitchen, store room, pantry and washing places separately for workers and for utensils :

Provided that the Chief Inspector may, in the case of factories existing on the date of commencement of these rules relax the provisions of this sub-rule to such extent as he considers reasonable.

(5) The height of every room in the building shall be not less than 12 feet from the floor level to the lowest part of the roof. The floor and inside walls up to a height of 4 feet from the floor shall be made of smooth and impervious material :

Provided that in the case of factories existing on the date of commencement of these rules the Chief Inspector may by order in writing relax the provisions of this sub-rule, regarding height.

(6) The doors and windows of a canteen building shall be of fly-proof construction and shall allow adequate ventilation.

(7) The canteen shall be sufficiently lighted at all times when any persons have access to it.

(8) (a) In every canteen—

(i) all inside walls of rooms and all ceilings and passages and stair-cases shall be lime-washed or colour-washed at least once in each year or painted once in three years dating from the period when last lime-washed, or painted, as the case may be ;

(ii) all wood work shall be varnished or painted once in three years dating from the period when last varnished or painted ;

(iii) all internal structural iron or steel work shall be varnished or painted once in three years dating from the period when last varnished or painted : Provided that inside walls of the kitchen shall be lime-washed once in every four months.

(b) Records of dates on which lime-washing, colour-washing, varnishing or painting is carried out, shall be maintained in the prescribed Register (Form No. 6).

(9) The canteen building shall be maintained in a clean and hygienic condition and its precincts shall be maintained in a clean and sanitary condition. Waste water shall be carried away in suitable covered drains and shall not be allowed to accumulate so as to cause a nuisance. Suitable arrangement shall be made for the collection and disposal of garbage.

**68. Dining hall.**—(1) The dining hall shall accommodate at a time at least 30 per cent. of the workers working at a time :

Provided that, in any particular factory or in any particular class of factories, the Chief Inspector may, by an order in writing in this behalf, alter the percentage of workers to be accommodated.

(2) The floor area of the dining hall, excluding the area occupied by the service counter and any furniture except tables and chairs, shall be not less than 10 square feet per diner to be accommodated as prescribed in sub-rule (1).

(3) A portion of the dining hall and service counter shall be partitioned off and reserved for women workers in proportion to their number. Washing places for women shall be separate and screened to secure privacy.

(4) Sufficient tables, with impervious tops, chairs or benches shall be available for the number of diners to be accommodated as prescribed in sub-rule (1).

**69. Equipment.**—(1) There shall be provided and maintained sufficient utensils, crockery, cutlery, furniture and any other equipment necessary for the efficient running of the canteen. Suitable clean clothes for the employees serving in the canteen shall also be provided and maintained.

(2) The furniture, utensils and other equipment shall be maintained in a clean and hygienic condition. A service counter, if provided, shall have a top of smooth and impervious material. Suitable facilities including an adequate supply of hot water shall be provided for the cleaning of utensils and equipment.

**70. Prices to be charged.**—(1) Food, drink and other items served in the canteen shall be sold on a non-profit basis and the prices charged shall be subject to the approval of the Canteen Managing Committee.

(2) The charges per portion of foodstuff, beverages and any other item served in the canteen shall be conspicuously displayed in the canteen.

**71. Accounts.**—(1) All books of accounts, registers and any other documents used in connection with the running of the canteen shall be produced on demand to an Inspector.



(2) The accounts pertaining to the canteen shall be audited, once in every twelve months, by registered accountants and auditors. The balance-sheet prepared by the said auditors shall be submitted to the Canteen Managing Committee not later than two months after the closing of the audited accounts :

Provided that the accounts pertaining to the canteen in a Government factory having its own Accounts Department, may be audited by such Department.

**72. Managing Committee.**—(1) The manager shall consult the Canteen Managing Committee from time to time as to—

- (a) the quality and quantity of foodstuffs to be served in the canteen ;
- (b) the arrangement of the menus ;
- (c) times of meals in the canteen ; and
- (d) any other matter as may be found necessary for the purpose of efficient administration of the canteen.

(2) The Canteen Managing Committee shall consist of an equal number of persons nominated by the manager and elected by the workers. The number of elected workers shall be in the proportion of 1 for every 1,000 workers employed in the factory, provided that in no case shall there be more than 5 or less than 2 workers on the Committee.

(3) The Manager shall determine and supervise the procedure for elections to the Canteen Managing Committee.

(4) A Canteen Managing Committee shall be dissolved by the Manager two years after the last election, no account being taken of a bye-election.

Rules prescribed  
under section 47.

**73. Shelters, rest rooms and lunch rooms.**—The shelters, or rest rooms and lunch rooms shall conform to the following standards and the manager of a factory shall submit for the approval of the Chief Inspector plan and site plan, in duplicate, of the building to be constructed or adapted :—

(a) The building shall be soundly constructed and all the walls and roof shall be of suitable heat resisting materials and shall be water-proof. The floor and walls to a height of 3 feet shall be so laid or finished as to provide a smooth, hard and impervious surface.

\*(b) (i) The building shall accommodate at a time at least 10 per cent. of the workers working at a time :

Provided that, in any particular factory or in any particular class of factories, the Chief Inspector may, by an order in writing in this behalf, alter or relax the percentage of workers to be accommodated ;

\*Vide Notification No. 1008L.W., dated the 20th August 1964.

- \**(ii)* The height of every room in the building shall be not less than 12 ft. from floor level to the lowest part of the room, and there shall be at least 10 sq. ft. of floor area for every worker to be accommodated as prescribed in clause (b) *(i)* ;
- (c)* Effective and suitable provision shall be made in every room for securing and maintaining adequate ventilation by the circulation of fresh air and there shall also be provided and maintained sufficient and suitable natural or artificial lighting.
- (d)* Every room shall be adequately furnished with chairs or benches with back-rests.
- (e)* Sweepers shall be employed whose primary duty it is to keep the rooms, building and precincts thereof in a clean and tidy condition.

74. **Creches.**—(1) The creche shall be conveniently accessible to the mothers of the children accommodated therein and so far as is reasonably practicable it shall not be situated in close proximity to any part of the factory where obnoxious fumes, dust or odours are given off or in which excessively noisy processes are carried on. Plan and site plan, in duplicate, of the building to be constructed or adapted, shall be submitted for the approval of the Chief Inspector.

Rules 74 to 77  
prescribed under  
sub-section (3)  
of section 48.

(2) The building in which the creche is situated shall be soundly constructed and all the walls and roof shall be of suitable heat resisting materials and shall be water-proof. The floor and internal walls up to a height of 4 feet from the floor of the creche shall be so laid or finished as to provide a smooth impervious surface.

(3) The height of the rooms in the building shall be not less than 12 feet from the floor to the lowest part of the roof and there shall be not less than 20 sq. ft. of floor area for each child to be accommodated.

(4) Effective and suitable provision shall be made in every part of the creche for securing and maintaining adequate ventilation by the circulation of fresh air.

(5) The creche shall be adequately furnished and equipped and in particular there shall be one suitable cot or cradle with the necessary bedding for each child (provided that for children over two years of age it will be sufficient if suitable bedding is made available), at least one chair or equivalent seating accommodation for the use of each mother while she is feeding or attending to her child, and a sufficient supply of suitable toys for the older children.

(6) A suitably fenced and shady open air play-ground shall be provided for the older children: Provided that the Chief Inspector may by order in writing exempt any factory from compliance with this sub-rule if he is satisfied that there is not sufficient space available for the provision of such a play-ground.

\**Vide* Notification No. 1008 L.W., dated the 20th August 1964.

**75. Wash room.**—There shall be in or adjoining the creche a suitable wash room for the washing of the children and their clothing. The wash room shall conform to the following standards:

- (a) The floor and internal walls of the room to a height of 3 feet shall be so laid or finished as to provide a smooth impervious surface. The room shall be adequately lighted and ventilated and the floor shall be effectively drained and maintained in a clean and tidy condition.
- (b) There shall be at least one basin or similar vessel for every four children accommodated in the creche at any one time together with a supply of water provided, if practicable, through taps at the rate of at least five gallons per child per day.
- (c) An adequate supply of clean clothes, soap and clean towels shall be made available for each child while it is in the creche.

**76. Supply of milk and refreshment.**—At least one ~~gown~~ of clean pure milk shall be available for each child on every day it is accommodated in the creche and the mother of such a child shall be allowed in the course of her daily work 2 intervals of at least 15 minutes each to feed the child. For children above two years of age there shall be provided in addition an adequate supply of wholesome refreshment.

**77. Clothes for creche staff.**—The creche staff shall be provided with suitable clean clothes for use while on duty in the creche.

## CHAPTER VI

### WORKING HOURS OF ADULTS

Rule prescribed  
under sub-section  
(2) of section 53.

**78. Compensatory holidays.**—(1) Except in the case of workers engaged in any work which for technical reasons must be carried on continuously throughout the day, the compensatory holidays to be allowed under sub-section (1) of section 53 of the Act shall be so spaced that not more than two holidays are given in one week.

(2) The Manager of the factory shall display, on or before the end of the month in which holidays are lost, a notice in respect of workers allowed compensatory holidays during the month in which they are due or the two subsequent months and of the dates thereof, at the place at which the notice of periods of work prescribed under section 61 is displayed. Any subsequent change in the notice in respect of any compensatory holiday shall be made not less than three days in advance of the date of that holiday.

(3) No worker shall be discharged or dismissed before he has been given compensatory holiday or holidays to which he may be entitled and no such holiday or holidays shall be reckoned as part of any period of notice required to be given before discharge or dismissal.

(4)(a) The Manager shall maintain a Register as nearly as possible in Form No. 10 :

Provided that if the Chief Inspector of Factories is of the opinion that any muster roll or register maintained as part of the routine of the factory or return made by the Manager, gives in respect of any or all of the workers in the factory the particulars required for the enforcement of section 53, he may, by order in writing, direct that such muster roll or register or return shall, to the corresponding extent, be maintained in place of and be treated as the register or return required under this rule for that factory.

(b) The register maintained under clause (a) shall be preserved for a period of three years after the last entry in it and shall be produced before the Inspector on demand.

**79. Cash equivalent.**—The cash equivalent of the advantage accruing through the concessional sale to a worker of foodgrains and other articles shall be computed at the end of every wage period fixed under the provisions of the Payment of Wages Act, 1936.

Rule prescribed under sub-section (4) of section 59.

**80. Manner of computing cash equivalent; \*overtime slips and muster roll.**—(1) For the purpose of computing cash equivalent of the advantage accruing through the concessional sale to a worker of foodgrains and other articles, the difference between the value of foodgrains and other articles at which these were purchased by the factory and the value of foodgrains and other articles supplied at concessional rates shall be calculated and allowed for the number of overtime hours worked.

Rules prescribed under sub-section (5) of section 59 and section 112.

This sub-rule shall not apply to any Railway factory whose alternative method of computation has been approved by the State Government.

(2) The Manager of every factory in which workers are exempted under sections 5, 64, 65 or 86 from the provisions of section 51 or section 54 shall keep a muster-roll as nearly as possible in Form No. 11 showing the normal piecework rate of pay, or rate of pay per hour of all exempted employees. In this muster-roll shall be correctly entered the overtime hours of work and payments therefor of all exempted workers. The muster-roll (Form No. 11) shall always be available for inspection. All entries shall be made in ink and the muster-roll shall be preserved for three calendar years, after the last entry in it.

\* (3) Period of overtime work shall be entered in overtime slips, in duplicate, a copy of which duly signed by the Manager or by a person duly authorised by him, shall be given to the workers, immediately after completion of the overtime work.

\*Vide Notification No. 1008 L.W., dated the 20th August 1964.

Rule prescribed  
under section 60.

**81. Employment in two factories on the same day.**—An adult worker employed in one factory may work on the same day in one or more other factories, provided that—

- (a) he does not thereby change his employer ;
- (b) unless working under the provisions of the rule providing for the exemption of workers engaged on urgent repairs made under clause (a) of sub-section (2) of section 64, he does not work for longer periods or for more hours than he might legally have worked in the factory in which he is employed ;
- (c) any time spent in travelling between one factory and another shall be deemed to be time during which he has worked ; and
- (d) in computing any pay due to the worker for overtime the total of all hours worked by him in any factory' including any time necessarily spent in travelling between one factory and another, shall be deemed to be the total hours worked by him on that day.

Notice prescribed  
under sub-section  
(8) of section 61.

**82. Notice of periods of work for adults.**—The notice of periods of work for adult workers shall be as nearly as possible in Form No. 12, Form No. 12A or Form No. 12B as the case may be.

Register pres-  
cribed under sub-  
section (2) of  
section 62.

**83. Register of adult workers.**—The Register of adult workers shall be as nearly as possible in Form No. 13 and shall be maintained in accordance with the following provisions :—

- (1) For each group of workers classified under section 61, a separate part of the register shall be maintained.
- (2) Where a worker is transferred from one group to another or from one relay to another, the following particulars of his transfer shall be entered against his name :—
  - (a) Under the group from which he has been transferred—
    - (i) the date and actual time of finishing work in the group or relay, and
    - (ii) the group or relay to which he has been transferred, and
  - (b) under the group to which he has been transferred—
    - (i) the date and actual time of commencing work in the group or relay, and
    - (ii) the group or relay from which he has been transferred.
- (3) Where a worker is discharged from or leaves his employment, the date of his leaving or discharge, as the case may be, shall be entered against his name in the "remarks" column.
- (4) All entries in the registers shall be made in ink, shall be legible and shall be maintained up-to-date.
- (5) All registers shall be maintained in English and all dates entered in a register shall be in accordance with the English calendar.
- (6) All registers for the preceding three calendar years shall be preserved and be available in the factory for examination by the Inspector.

## CHAPTER VII

## EMPLOYMENT OF YOUNG PERSONS AND EXCLUSION OF UNDER AGE CHILDREN.

84. **Notice of periods of work for children.**—The notice of periods of work for child workers shall be as nearly as possible in Form No. 12, Form No. 12A or Form No. 12B as the case may be. Notice prescribed under sub-section (3) of section 72.

85. **Register of child workers.**—The Register of child workers shall be as nearly as possible in Form No. 14 and shall be maintained in accordance with the following provisions :— Register prescribed under sub-section (2) of section 73.

- (1) For each group of children classified under section 61, a separate part of the register shall be maintained.
- (2) Where a child is transferred from one group to another, or from one relay to another the following particulars of his transfer shall be entered against his name :—
  - (a) Under the group from which he has been transferred—
    - (i) the date and actual time of finishing work in the group or relay, and
    - (ii) the group or relay to which he has been transferred, and
  - (b) under the group to which he has been transferred—
    - (i) the date and actual time of commencing work in the group or relay, and
    - (ii) the group or relay from which he has been transferred.
- (3) Where a child is discharged from or leaves his employment, the date of his leaving or discharge, as the case may be, shall be entered against his name in the "remarks" column.
- (4) All entries in the registers shall be made in ink, shall be legible, and shall be maintained up-to-date.
- (5) All registers shall be maintained in English and all dates entered in a register shall be in accordance with the English calendar.
- (6) All registers for the preceding three calendar years shall be preserved and be available in the factory for examination by the Inspector.

86. **Exclusion of underage children.**—No child under the age of 14 years shall be permitted within the workrooms and godowns of any factory at any time during which work is carried on. Rule prescribed under section 112.

## CHAPTER VIII

87. **Cash equivalent.**—The cash equivalent of the advantage accruing through the concessional sale of foodgrains and other articles payable to a worker proceeding on leave shall be the difference between the value of foodgrains and other articles at which these were purchased by the factory and the value at the concessional rates of foodgrains and other articles to which he is entitled. Rule prescribed under section 80.

Rules 88\* to 93  
prescribed under  
sections 83 and  
112.

**88. Leave with Wages Register.**—(1) The Manager shall keep an up-to-date Register as nearly as possible in Form No. 15 hereinafter called the Leave with Wages Register :

Provided that if the Chief Inspector is of the opinion that any muster-roll or register maintained as part of the routine of the factory, or return made by the Manager, gives, in respect of any or all of the workers in the factory, the particulars required for the enforcement of Chapter VIII of the Act, he may, by order in writing, direct that such muster-roll or register or return shall, to the corresponding extent, be maintained in place of and be treated as the register or return required under this Rule in respect of that factory.

(2) The Leave with Wages Register shall be preserved for a period of three years after the last entry in it and shall be produced before the Inspector on demand.

**89. Leave Book.**—(1) The Manager shall provide each worker with a book as nearly as possible in Form No. 16 (hereinafter called the Leave Book). The Leave Book shall be the property of the worker and the Manager or his agent shall not demand it except to make relevant entries therein whenever necessary and shall not keep it for more than a week at a time. All entries in the Leave Book shall be made in ink, shall be legible, and shall be maintained up-to-date.

(2) If a worker loses his Leave Book, the Manager shall provide him with another copy on the payment of six paise, and shall complete it from his record.

**90. Medical certificate.**—If any worker is absent from work due to his illness and wants to avail himself of the leave with wages due to him to cover the whole or part of the period of his illness, under the provisions of sub-section (7) of section 79 he shall, if required by the Manager, produce a medical certificate signed by a registered medical practitioner or by a registered or recognised *vaid* or *hakim* stating the cause of the absence and the period for which the worker is in the opinion of such medical practitioner, *vaid* or *hakim* unable to attend his work.

**91. Notice to Inspector of lay off or closure.**—The occupier or manager of every factory shall give to the Inspector a notice of every case of lay off as soon as possible, and of every intended closure of the factory or any section or department thereof, immediately after the closure is decided upon, stating the reason for the lay off or closure, the number of workers working in the factory, section or department, as the case may be, on the date of the notice, the number of workers on lay off or likely to be unemployed on account of the closure and the possible period of the closure. The occupier or manager shall also send a notice to the Inspector as soon as the factory, section or department starts working again, stating the number of workers employed. Entries to this effect shall be made in the Leave with Wages Register and the Leave Book in respect of each worker concerned.

**92. Notice of leave with wages.**—(1) In a factory where leave scheme has been drawn up in accordance with sub-sections (8) and (9) of section 79 of the Act the Manager shall, by a notice displayed at the place at which the notice of the periods of work required by section 61 is displayed, fix the dates on which leave with wages shall be allowed to each worker or group of workers including any worker who has accumulated his leave. This date shall not, in an individual case, be earlier than two weeks from the date of notice unless the worker agrees to take the leave earlier. The necessary entries shall be made in the leave with Wages Register and the Leave Book of the worker concerned.

(2) As far as circumstances permit, members of the same family, comprising husband, wife and children shall be allowed leave on the same date.

(3) The Manager may alter the dates fixed for leave only after giving notice of two weeks to the worker.

(4) A worker may exchange the period of his leave with another worker, subject to the approval of the Manager.

**93. Payment of wages if the worker dies.**—If a worker dies before availing himself of leave with wages due to him, his leave pay shall be paid to his legal heir within one week of the receipt of intimation of the death of the worker.

## CHAPTER IX

### SPECIAL PROVISIONS.

**94. Dangerous operations.**—(1) The following operations when carried on in any factory are declared to be dangerous operations under section 87 :—

Rule prescribed  
under section  
87.

- (a) Manufacture of aerated water and processes incidental thereto.
- (b) Electrolytic plating or oxidation of metal articles by use of an electrolyte containing chromic acid or other chromium compounds.
- (c) Manufacture or repair of electric accumulators.
- (d) Glass manufacture.
- (e) Grinding or glazing of metals.
- (f) Manufacture, treatment or handling of lead, lead alloy or certain compounds of lead.
- \*(g) Generation of gas from dangerous petroleum.
- (h) 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.
- (i) Liming and tanning of raw hides and skins and processes incidental thereto.
- (j) Feeding of jute, hemp or other fibres into softening machines.

\*Vide Notification No. 1008 L.W., dated the 20th August 1964.



- (k) Lifting, stacking, storing and shipping of bales in and from finished goods godowns of Jute Mills.
- (l) Manufacture, use or storage of cellulose solutions.
- (m) Manufacture of chromic acid or manufacture or recovery of the bichromate of sodium, potassium or ammonium.
- (n) Printing presses and Type Foundries certain lead processes carried on therein.
- \*(o) Manufacture of compressed hydrogen or compressed oxygen.
- (p) Manufacture of pottery.
- (q) Manufacture of rayon by the viscose process.
- (r) Manufacturing processes and processes incidental thereto carried out in chemical works mentioned in Appendix I of Schedule XVIII.

(2) The provisions specified in the Schedules annexed to this rule shall apply to factories wherein dangerous operations specified in such schedules are carried out.

#### SCHEDULE I

*(Manufacture of Aerated Waters and processes incidental thereto.)*

**1. Fencing of machines.**—All machines for filling bottles or syphons shall be so constructed, placed or fenced, as to prevent, as far as may be practicable, 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-guard to protect the face, neck and throat, and
- (b) suitable gauntlets for both arms to protect the arm and at least half of the palm and the space between the thumb and forefinger.

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\*Vide Notification No. 1008 L. W., dated the 20th August 1964.

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

## SCHEDULE II

*(Electrolytic plating or oxidation of metal articles by use of an electrolyte containing chromic acid or other chromium compounds.)*

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

- (a) "Electrolytic chromium process" means the electrolytic plating or oxidation of metal articles by the use of an electrolyte containing chromic acid or other chromium compounds.
- (b) "Bath" means any 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 of 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 workers and used solely for the purpose of keeping the ointment and plaster.

7. **Medical examination.**—(a) \*Every person employed shall be examined by the Certifying Surgeon once in every 14 days or at such other intervals as may be specified by the Chief Inspector, and such examination shall normally be made at the factory.

(b) A Health Register as nearly as possible in 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 Certifying Surgeon may make from time to time.

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

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

9. **Weekly examination.**—A responsible person appointed in writing by occupier of the factory shall twice in every week inspect the hands and forearms of all persons employed and shall keep a record of such inspections in the Health Register.

### SCHEDULE III

*(Manufacture or repair of electric accumulators.)*

1. **Savings.**—This Schedule shall not apply to the manufacture or repair of electric accumulators or parts thereof not containing lead or any compound of lead; or to 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 trimming or any other abrading or cutting of pasted plates, involving the use, movement or manipulation of, or contact with, any oxide of lead.
- (b) "Manipulation of raw oxide of lead" means any lead process involving, any manipulation or movement of raw oxides of lead other than its conveyance in a receptacle or by means of an implement from one operation to another.
- (c) "Suspension" means suspension from employment in any lead process by written certificates in the Health Register (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 women and young persons.**—No woman or young person shall be employed or permitted to work in any lead process or in any room in which the manipulation of raw oxide of lead or pasting is carried on.

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

- (a) Manipulation of raw oxide of lead ;
- (b) Pasting ;

\**Vide* Notification No. 1008 L. W., dated the 20th August 196

- (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 14 feet shall be taken into account.

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

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

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

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

(2) In all such rooms other than grid casting shops the floor shall be cleansed daily after being thoroughly sprayed with water at a time when no other work is being carried on in the room.

(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 or pasting is carried on, the floor shall also be—

- (a) kept constantly moist while work is being done ;
- (b) provided with suitable and adequate arrangements for drainage ;
- (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 processes shall not be carried on without the use of an efficient exhaust draught :—

- (a) Melting of lead or materials containing lead ;
- (b) Manipulation of raw oxide of lead, unless done in an enclosed apparatus so as to prevent the escape of dust into the work-room ;
- (c) Pasting ;
- (d) Trimming, brushing, filing or any other abrading or cutting of pasted plates giving rise to dust ;
- (e) Lead burning, other than—
  - (i) “tacking” in the formation room ;
  - (ii) chemical burning for the making of lead lining for cell cases necessarily carried on in such a manner that the application of efficient exhaust is impracticable.

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

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

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

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

14. **Racks and shelves in drying room.**—The racks or shelves provided in any drying room shall not be more than 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 cleaned only after being thoroughly damped unless an efficient suction cleaning apparatus is used for this purpose.

15. **Medical examination.**—(a) Every person employed in a lead process shall be examined by the Certifying Surgeons within the seven days preceding or following the date of his first employment in such process and thereafter shall be examined by the Certifying Surgeon once in every calendar month, or at such other intervals as may be specified in writing by the Chief Inspector, 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 as nearly as possible in Form No. 17 containing the names of all persons employed in a lead process shall be kept.

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

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

(a) manipulation of raw oxide of lead ;

(b) pasting ;

(c) the formation room ;

and such clothing shall be worn by the persons concerned. The protective clothing shall consist of a waterproof apron and waterproof footwear; and, also, as regards persons employed in the manipulation of raw oxide of lead or in pasting, head coverings. The head coverings shall be washed daily.

**17. Mess-room.**—There shall be provided and maintained for the use of all persons employed in a lead process and remaining on the premises during the meal intervals, a suitable mess-room, which shall be furnished with (a) sufficient tables and benches, and (b) adequate means for warming food: Provided that this paragraph shall not apply where a canteen has been provided under the provision of rules 67 to 73.

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

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

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

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

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

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

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

- (ii) a sufficient supply of clean towels made of suitable materials renewed daily, which supply, in the case of pasters and persons employed in the manipulation of raw oxide of lead, shall include a separate marked towel for each such worker; and
  - (iii) a sufficient supply of soap or other suitable cleansing material and of nail brushes.
- (b) There shall in addition be provided means of washing in close proximity to the rooms in which manipulation of raw oxide of lead or pasting is carried on if required by notice in writing from the Chief Inspector.

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

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

**21. Facilities for bathing.**—Sufficient bath accommodation to the satisfaction of the Chief Inspector 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-rooms.**—No food, drink, *pan* and *supari* or tobacco shall be consumed or brought by any worker into any work-room in which any lead process is carried on.

#### SCHEDULE IV

(Glass Manufacture)

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

**2. Definitions.**—For the purposes of this Schedule—

- (a) "Efficient exhaust draught" means localised ventilation effected by mechanical means for the removal of gas, vapour, dust or fumes so as to prevent them (as far as practicable under the atmospheric conditions usually prevailing) from escaping into the air of any place in which work is carried on. No draught shall be deemed efficient which fails to remove smoke generated at the point where such gas, vapour, fume, or dusts originates.
- (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 processes shall not be carried on except under an efficient exhaust draught or under such other conditions as may be approved by the Chief Inspector :—

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

**4. 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 3 or at any place where such operations are carried on.

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

The floors shall be—

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

The work-benches shall—

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

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

**7. 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 room or workplace wherein any process specified in paragraph 3 is carried on.



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

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

(a) a wash place with either—

(i) a trough with a smooth impervious surface fitted with a waste pipe without plug, and of sufficient length to allow of at least two feet for every five such 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 and of nail brushes;

and

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

10. **Medical Examination.**—(a) Every person employed in any process specified in paragraph 3 shall be examined by the Certifying Surgeon within seven days preceding or following the date of his first employment in such process and thereafter shall be examined by the Certifying Surgeon once in every calendar month or at such other intervals as may be specified in writing by the Chief Inspector on a day of which due notice shall be given to all concerned.

(b) A Health Register as nearly as possible in Form No. 17 containing the names of all persons employed in any process specified in paragraph 3 shall be kept.

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

#### SCHEDULE V

*(Grinding or glazing of metals and processes incidental thereto)*

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

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

(b) “Abrasive wheel” means a wheel manufactured of bonded emery or other 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 mechanic power, or metal, by means of any wheel, buff, pom or similar appliance to which any abrading or polishing substance is attached or applied.
- (e) "Racing" means the turning up, cutting or dressing of a revolving grindstone before it is brought into use for the first time.
- (f) "Hacking" means the chipping of the surface of a grindstone by a hack or similar tool.
- (g) "Rodding" means the dressing of the surface of a revolving grindstone by the application of a rod, bar or strip of metal to such surface.

2. **Exceptions.**—(1) Nothing in this Schedule shall apply to any factory in which only repairs are carried on except any part thereof in which one or more persons are wholly or mainly employed in the grinding or glazing of metals.

(2) Nothing in this Schedule except paragraph 4 shall apply to any grinding or glazing of metals carried on intermittently and at which no person is employed for more than 12 hours in any week.

(3) The Chief Inspector may, by certificate in writing, subject to such conditions as he may specify therein, relax or suspend any of the provisions of this Schedule in respect of any factory if owing to the special methods of work or otherwise such relaxation or suspension is practicable without danger to the health or safety of the persons employed.

3. **Equipment for removal of dust.**—No racing, dry grinding or glazing shall be performed without—

- (a) a hood or other appliance so constructed, arranged, placed and maintained as substantially to intercept the dust thrown off; and
- (b) a duct of adequate size, air tight and so arranged as to be capable of carrying away the dust, which duct shall be kept free from obstruction and shall be provided with proper means of access for inspection and cleaning, and where practicable, with a connection at the end remote from the fan to enable the Inspector to attach thereto any instrument necessary for ascertaining the pressure of air in the said duct; and
- (c) a fan or other efficient means of producing a draught sufficient to extract the dust:

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

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

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

5. **Glazing.**—Glazing or other processes, except processes incidental to wet grinding upon a grindstone, shall not be carried on in any room in which wet grinding upon a grindstone is done.

**6. Hacking and rodding.**—Hacking or rodding shall not be done unless during the process either (a) an adequate supply of water is laid on at the upper surface of the grindstone or (b) adequate appliances for the interception of dust are provided in accordance with the requirements of paragraph 3.

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

(b) A register containing particulars of such examination and test shall be kept in a form approved by the Chief Inspector.

## SCHEDULE VI

*(Manufacture, treatment or handling of lead, lead alloys or certain compounds of lead.)*

**1. Exemptions.**—Where the Chief Inspector is satisfied that all or any of the provisions of this Schedule are not necessary for the protection of the persons employed, he may by certificate in writing exempt any factory from all or any of such provisions, subject to such conditions as he may specify therein.

**2. Definitions.**—For the purposes of this Schedule—

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

The method of treatment shall be as follows:—

A weighed quantity of the material which has been dried at 100°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 localised ventilation effected by heat or mechanical means, for the removal of gas, vapour, dust or fumes so as to prevent them (as far as practicable under the atmospheric conditions usually prevailing) from escaping into the air of any place in which work is carried on. No draught shall be deemed efficient which fails to remove smoke generated at the point where such gas, vapour, fumes or dust originate.

**3. Application.**—This Schedule shall apply to all 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 or handling of solder or alloys containing not less than five per cent. of lead.
- (d) The manufacture of any oxide, carbonate, sulphate, chromate, acetate, nitrate or silicate of lead.
- (e) Handling or mixing of lead tetra-ethyl.
- (f) Any other operation involving the use of a lead compound.
- (g) The cleaning of work-rooms where any of the operations aforesaid are carried on.

4. **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 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 41 are complied with.

6. **Exhaust draught.**—Where dust, fume, gas or vapour is produced in the process, provision shall be made for removing them by means of an efficient exhaust draught so contrived as to operate on the dust, fume, gas or vapour as closely as possible to the point of origin.

7. **Certificate of fitness.**—A person medically examined under paragraph 8 and found fit for employment shall be granted by a Certifying Surgeon a certificate of fitness as nearly as possible in Form No. 25 and such certificate shall be in the custody of the Manager of the factory. The certificate shall be kept readily available for inspection by any Inspector and the person granted such a certificate shall carry with him, while at work, a token giving reference to such certificate.

8. **Medical Examination.**—(1) The person so employed shall be medically examined by a Certifying Surgeon within 14 days of his first employment in such process and thereafter shall be examined by the Certifying Surgeon at intervals of not more than three months, and a record of such examinations shall be entered by the Certifying Surgeon in the special certificate of fitness granted under paragraph 7.

(2) If at any time the Certifying Surgeon is of opinion that any person is no longer fit for employment on the grounds that continuance therein would involve special danger to health, he shall cancel the special certificate of fitness of that person.

(3) No person whose special certificate of fitness has been cancelled shall be employed unless the Certifying Surgeon, after re-examination, again certifies him to be fit for employment.

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 the process is 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 coverings, 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 cleansing material and clean towels.

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

**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: Provided that this paragraph shall not apply wherein a canteen has been provided under rule 67.

**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. Definition.**—“Dangerous petroleum” has the same meaning as in the Petroleum Act, 1934 (30 of 1934).

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

**3. 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.

**4. Generating room or building.**—All plants for generation of gas from dangerous petroleum erected after the coming into force of the provisions specified in this schedule, shall be erected in a well ventilated building (hereinafter referred to as the generating building) completely separate from other buildings. In the case of such plant erected before the coming into force of the provisions specified in this schedule

\*(Vide Notification No. 1008L, W. dated 20th August 1964)

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.

5. **Fire Extinguishers.**—An efficient means of extinguishing flammable liquid fires shall be maintained in an easily accessible position near the plant for generation of gas from dangerous petroleum.

6. **Plant to be approved by Chief Inspector.**—The design and construction of the plant used for generating gas from dangerous petroleum shall be approved by the Chief Inspector.

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

8. **Prohibition relating to smoking.**—No person shall smoke or carry matches, fire or naked light or other means of producing a naked light or spark in the generating room or building or in the vicinity thereof, and a warning notice in the language understood by the majority of the workers shall be affixed at the entrance of every generating room or building 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.

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

10. **Electric fittings.**—All electric fittings shall be of flame-proof construction, shall be maintained in flame-proof state, and all electric conductors shall be enclosed in metal conduits.

11. **Construction of doors.**—All doors in the generating room or building shall be constructed to open outwards or to slide, and no door shall be locked or obstructed or fastened in such a manner that it cannot be easily and immediately opened from the inside while gas is being generated and any person is working in the generating room or building.

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

#### SCHEDULE 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.)*

1. **Definition.**—For the purposes of this Schedule "Blasting" means the blasting of any article by a jet of sand, metal shot, grit or other abrasive.

2. **Blasting to be done in enclosed chamber.**—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 woman or young person shall be employed or permitted to work at any operation of blasting.

**4. Protective equipment.**—(1) Unless he is wearing a suitable protective helmet, overall and gauntlets—

(a) no person shall be employed or permitted to work at blasting in the open air or work within thirty feet of 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 has been thoroughly disinfected.

(5) Every person engaged in 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 processes incidental thereto)*

**1. Cautionary notices.**—(1) Cautionary notices as to anthrax in the form specified by the Chief Inspector shall be affixed in prominent positions in the factory where they may be easily and conveniently read by the persons employed.

(2) A copy of a warning notice as to anthrax in the form specified by the Chief Inspector shall be given to each person employed when he is engaged, and subsequently if still employed, on the first day of each calendar year.

(3) Cautionary notices as to the effects of chrome on the skin shall be affixed in prominent positions in every factory in which chrome solutions are used and such notices shall be so placed as to be easily and conveniently read by the persons employed.

(4) Notices shall be affixed in prominent places in the factory stating the position of the "First Aid" box or cupboard and the name of the person in charge of such box or cupboard.

(5) If any person employed in the factory is illiterate, effective steps shall be taken to explain carefully to such illiterate person the contents of the notice specified in sub-paragraphs (1), (2) and (4) and if chrome solutions are used in the factory, the contents of the notice specified in sub-paragraph (3).

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

- (a) waterproof footwear, leg coverings, aprons and rubber gloves for persons employed in processes involving contact with chrome solutions including the preparation of such solutions ;
- (b) protective footwear, aprons and gloves for persons employed in the handling of hides or skins other than in processes specified in clause (a) :

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

3. **Washing facilities, mess-room and cloak-room.**—There shall be provided and maintained in a 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 of at least two feet for every ten persons employed at any one time, and having a constant supply of water from taps or jets above the trough at intervals of not more than two feet ; or
- (b) at least one wash basin for every ten such persons employed at any one time fitted with a waste pipe and plug and having a constant supply of water ; together with, in either case, a sufficient supply of nail brushes, soap or other suitable cleansing material, and clean towels ;
- (c) a suitable mess-room, adequate for the number remaining on the premises during the meal intervals, which shall be furnished with (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 :

Provided that this clause shall not apply wherein a canteen has been provided under rule 67.

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

4. **Food, drinks, etc., prohibited in work-rooms.**—No drink, *pan* and *supari* or tobacco shall be brought into or consumed by any worker in any work-room or shed in which hides or skins are stored, treated or manipulated.

5. **First-aid arrangements.**—The occupier shall—

- (a) arrange for an inspection of the hands of all persons coming into 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

*(Feeding of jute, hemp or other fibre into softening machines)*

**Prohibition relating to women and young persons.**—No woman or young person shall be employed or permitted to work in feeding jute, hemp or other fibre into softening machines.

## SCHEDULE XI

*(Lifting, stacking, storing and shipping of bales in and from finished goods godowns of jute mills.)*

**Handling of bales in finished goods godowns of jute mills.**—Lifting, stacking and storing of bales in and shipping from finished goods godowns of jute mills shall not be done except by mechanical means.

Winch operated lifting tackle without side movement and with the winch driver obstructed from view of the bale to be lifted or lowered, will not be deemed to comply with this rule.

## SCHEDULE XII

*(Manufacture, use or storage of cellulose solutions.)*

**1. Application.**—This Schedule shall apply to all factories or parts thereof in which cellulose solutions are manufactured, used or stored.

**2. Saving Clause.**—Nothing in this Schedule shall apply to the painting of any building, or to any process in the manufacture of artificial silk, or of explosives or to any factory in which cellulose solutions or inflammable liquids are not manipulated or used for more than 15 minutes on any day.

Paragraphs 4, 5, 6 and 8 of this Schedule shall not apply to any cellulose space in which the following conditions are observed:—

- (a) The total quantities of cellulose solutions and other inflammable liquids together, consumed in the cellulose space do not exceed four pints on any day, and not more than two pints are kept in the cellulose space at any time.
- (b) The cellulose solutions and other inflammable liquids do not contain—
  - (i) Benzene (“benzol”).
  - (ii) Toluene.
  - (iii) Xylene.
  - (iv) Any halogenated hydrocarbon.
- (c) The occupier of the factory keeps available for inspection a certificate from the makers of the cellulose solutions and other inflammable liquids used in cellulose space certifying that the solutions and liquids do not contain benzene (“benzol”), toluene, xylene or any halogenated hydrocarbon.

**3. Definitions.**—(a) In this Schedule “Cellulose solutions” mean any solution in inflammable liquid of cellulose acetate, cellulose nitrate, celluloid, or of any other substance containing cellulose acetate, cellulose nitrate or any other cellulose compound, with or without the admixture of other substances.

(b) "Cellulose space" means a cabinet, booth or similar structure, or a room or part of a room, within which cellulose solutions are manipulated or used.

(c) "Fire Resisting Materials" mean properly constructed brickwork not less than five inches in thickness, concrete not less than three inches in thickness, iron or steel or any other material the thickness of which is approved in writing by the Chief Inspector of Factories.

4. **Separation of cellulose space.**—Every cellulose space shall be separated by enclosure from every other part of the building except in so far as openings are necessary for the purpose of the work or for operation of the ventilating apparatus required by paragraph 6.

5. **Provisions for fire-proofing.**—(a) All walls, partitions, doors, windows, floors, tops and ceilings, enclosing or forming part of the enclosure of any cellulose space shall be constructed of fire-resisting material, except as regards (1) any cellulose space which was in use as such before the commencement of these rules, and (2) any tops or ceilings of rooms in single storey buildings or of top floor rooms or any outside walls, doors or windows other than any of the aforesaid parts of a building in respect of which the Chief Inspector of Factories specially directs that this exception shall not apply.

(b) All ducts, trunks or casings used in connection with the means of ventilation required by paragraph 4 above shall be constructed of fire-resisting material.

6. **Ventilation.**—(a) Every cellulose space shall be adequately ventilated by mechanical means so as to remove any vapours of cellulose solutions or inflammable liquids and to prevent them (as far as may be practicable under the atmospheric conditions usually prevailing) from entering into any place where work is carried on. Such ventilation shall be kept in full operation for at least five minutes after cessation of work.

(b) Where cellulose solutions are applied by spraying apparatus, arrangements shall (as far as practicable) be made so as to render it unnecessary for the person operating the spray to be in a position between the ventilating outlet and the article being sprayed.

7. **Prohibition relating to smoking, etc.**—There shall be no smoking, fire, flame, open light or other agency likely to cause ignition within 20 feet of any cellulose space unless separation therefrom is effected by means of intervening fire-resisting material.

8. **Fire escapes.**—Adequate means of escape in case of fire, including a sufficient number of safe exits not fewer than two in number shall be provided and maintained for every room or part of a room in which cellulose solutions are manipulated and such exits shall be constructed so as to open outwards or to slide.

9. **Precautions against fire.**—(a) Cotton waste, cleaning rags or similar material liable to spontaneous combustion shall, after use, be deposited without delay in metal containers with covers or be removed without delay to a safe place.

(b) Solid residues resulting from the manufacture, manipulation or use of cellulose solutions shall be removed from all cellulose spaces and from the ventilating apparatus used therewith and shall be deposited in a safe place. No such removal shall be effected by scraping with iron or steel implements.

10. **Fire Extinguishers.**—An adequate supply of efficient fire extinguishing appliances in suitable position shall be provided for every cellulose space.

11. **Storage.**—(a) All stock of cellulose solutions or inflammable liquids shall be kept in (i) fixed storage tanks in safe positions, or (ii) metal drums, cans or similar vessels situated in store rooms which shall either be constructed of fire-resisting material or be in safe positions not less than 30 feet from any occupied building.

(b) The quantity of cellulose solution or inflammable liquid in any cellulose space shall not exceed the estimated requirements for one day's use.

12. **Prohibition relating to women and young persons.**—No woman or young person shall be employed in the manipulation or use of cellulose solutions or inflammable liquids containing more than fifteen per cent. by weight of benzene and any such solutions or liquids shall not be procured or stored otherwise than in receptacles legibly marked as containing benzene.

### SCHEDULE XIII

*(Manufacture of chromic acid or manufacture or recovery of the bichromate of sodium, potassium or ammonium)*

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

- (a) "Chrome Process" means the manufacture of chromic acid, chromate or bichromate of sodium or potassium or ammonium, any preparation of these substances, or any process involving the use of such preparation or of these substances, and shall also include the manipulation, movement or treatment of such substances or any preparation of such substances.
- (b) "Efficient Exhaust Draught" means localised ventilation effected by mechanical or other means for the removal of gas, vapour, dust or fumes so as to prevent them from escaping into the air of any place in which work is carried on. No draught shall be deemed efficient which fails to remove gas, vapour, fumes or dust from the point where they originate.
- (c) "Suspension" means suspension from employment in any of the chrome processes specified 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.

2. **Prohibition relating to women and young persons.**—No woman or young person shall be employed or permitted to work on any chrome process.

3. **Efficient exhaust draught.**—The following chrome processes shall not be carried on without the use of an efficient exhaust draught, unless they are carried on by means of an enclosed mechanical or other appliance so constructed as to prevent the escape of dust, fumes, vapour or gas into the atmosphere, where any person is working—

- (a) grinding ;
- (b) sieving ;
- (c) batch mixing ;
- (d) leaching and acidification, and
- (e) concentration (Evaporating Tanks).

**4. Washing facilities.**—(1) Where acidification, filtration, sulphate settling or washing, concentration, crystallisation, centrifugation or packing is carried out, there shall be provided close to the place of work :—

- (a) wash places with running water for frequent washing of hands and feet, and
- (b) a container holding at least 20 ounces of 10 per cent. solution of sodium bisulphite or any other suitable reducing agent for treating chromic acid split on clothes or any part of body.

(2) There shall also be provided and maintained in a clean state and good repair washing accommodation under cover, with a sufficient supply of soap, nail brush and towels on the scale indicated below :—

At least one tap or stand pipe for every 10 employees and the tap or pipe shall be spaced not less than 4 feet apart.

**NOTE** :—In computing the total number of taps required for the purposes of of this rule, the taps or stand pipes as required under paragraph 4(1)(a) shall be included.

**5. Time to be allowed for washing.**—Before each meal and before the end of the day's work, at least ten minutes, in addition to the regular meal times, shall be allowed for washing, to each person employed in a chrome process.

**6. Flooring.**—The floor of every work-room, shall be—

- (a) of cement or similar other material so as to be smooth and impervious to water and provided with suitable gradient and drainage ;
- (b) maintained in sound condition and cleaned daily.

**7. Medical facilities.**—(1) The occupier of the factory shall appoint a qualified medical practitioner who shall examine and treat all workers for chrome ulcerations on the premises at least thrice a week. Records of such examination and treatment shall be maintained in a form approved by the Chief Inspector of Factories and shall be available to the Inspector for inspection.

(2) The occupier shall in addition appoint a person trained in First Aid who shall inspect daily the hands and feet of all persons employed.

Any case of ulceration shall be brought to the notice of the medical practitioner appointed under sub-paragraph (1) who shall keep a record of such inspection in a register in a form approved by the Chief Inspector of Factories.

(3) The occupier shall also provide and maintain a sufficient supply of protective cream for application to hands, feet and nostrils and impermeable waterproof plaster dressing in a separate box, readily accessible to the workers and used solely for the purpose of keeping the cream and plaster dressing.

**8. Protective clothing and equipment.**—(1) The occupier shall provide and maintain for the use of all persons employed—

- (a) in grinding, sieving or mixing raw materials and cooling or raking roasted mass, sufficient and suitable respirators (issued separately for each individual) the filtering materials of which shall be renewed daily ;
- (b) in roasting process, suitable protective footwear, respirators and glove or mitten ;

- (e) in acidification, settling, concentration, crystallisation, centrifugation or packing, aprons and protective coverings for hands and feet; and
- (d) in furnace cleaning and dismantling, suitable protective clothing and equipment.

(2) Arrangements shall be made by the occupier for the proper maintenance and supervisin of all protective clothing and equipment at the close of each day's work and for the repairs or renewal thereof when necessary.

(3) Arrangements shall be made for cleanliness of tools and equipment of the maintenance staff of the factory.

**9. Use of protective equipment.**—Every person employed in a chrome process shall make use of the protective cream on his hands, feet and nose and also of the protective clothing and equipment provided under praragraph 8.

**10. Storage of protective equipment.**—A suitable room or a portion of the factory suitably partitioned off shall be provided exclusively for the storage of all the protective equipment supplied to the employees and no such equipment shall be stored in any place other than the room or place so provided.

**11. Mess-room.**—(1) There shall be provided and maintained for the use of all persons remaining within the premises during the meal intervals a suitable mess-room providing accomedation of at least 10 sq. ft. per head and furnished with—

- (i) a sufficient number of tables and chairs or benches;
- (ii) arrangements for washing utensils;
- (iii) adequate means for warming food.

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

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

13. Separate lockers shall be provided, where food, etc., shall be stored by workers before it is actually consumed in the mess-room.

**14. Medical examination.**—(1) Every person employed in a chrome process shall be examined by a Certifying Surgeon, once in every calendar month, or at such other intervals as may be specified in writing by the Chief Inspector on a day of which due notice shall be given to all concerned and such examination shall take place on the factory premises.

(2) Every person employed shall present himself at the appointed time for examination by the Certifying Surgeon as provided in sub-paragraph (1).

(3) A Health Register as nearly as possible in Form No. 17 containing the names of all persons employed in a chrome process shall be kept.

(4) No person after suspension shall be employed in chrome process without a written sanction from the Certifying Surgeon entered in the Health Register.

15. **Fencing of vessels.**—Every fixed vessel, whether pot, pan, vat, or other structure, containing any dangerous material, and not so covered as to eliminate all reasonable risk of accidental immersion of any portion of the body of a person employed shall be fenced as follows :—

- (a) Each such vessel shall, unless its edge is at least 3 feet above the adjoining ground or platform, be securely fenced to a height of at least 3 feet above such adjoining ground or platform ;
- (b) No plank or gangway shall be placed across or inside any such vessel unless such plank or gangway is—
  - (i) at least 18 inches wide ; and
  - (ii) securely fenced on both sides, either by upper and lower rails, to a height of 3 feet or by other equally efficient means.
- (c) If any two such vessels are near each other and the space between them clear of any surrounding brick-work or other work, is either,
  - (i) less than 18" in width, or
  - (ii) 18 or more inches in width, but is not securely fenced on both sides to a height of at least 3 feet, secure barriers shall be placed so as to prevent any passage between them.

16. For the purpose of limiting exposure levels in various departments the various processes shall be isolated as given below :—

- (1) Storage of raw materials.
- (2) (a) Sieving, (b) grinding and mixing.
- (3) (a) Roasting, (b) Cooling of roasted ore.
- (4) Leaching, concentration, crystallisation and drying.
- (5) Packing.

17. Proper type of receptacles shall be provided for corrosive liquids to prevent their spillage.

18. Adequate arrangements shall be made for the storage or disposal of waste material so as to avoid atmospheric or ground pollution.

19. **Cautionary notice.**—A cautionary notice in the form specified by the Chief Inspector of Factories and printed in the language of the majority of the workers employed shall be affixed in a prominent place in the factory where it can be easily and conveniently read by the workers.

Arrangements shall also be made for issue of verbal instructions to the uneducated workers.

20. **Exemption.**—If in respect of any factory the Chief Inspector is satisfied that owing to the exceptional circumstances or the infrequency of the process, or for any other reason, all or any of the provisions of this Schedule are not necessary for the protection of the persons employed in such factory, he may by certificate in writing exempt such factory from all or any of the provisions indicated in such certificate on such conditions as he may specify therein. Such certificate may at any time at his discretion be revoked by the Chief Inspector.

## SCHEDULE XIV

(*Printing Presses and Type Foundries—Certain lead processes carried on therein.*)

1. **Exemption.**—Where the Chief Inspector is satisfied that all or any of the provisions of this Schedule are not necessary for the protection of persons employed he may by certificate in writing exempt any factory from all or any of such provisions subject to such conditions as he may specify therein. Such certificate may at any time be revoked by the Chief Inspector.

2. **Definitions.**—In these regulations—

“lead material” means material containing not less than five per cent. of lead.

“Lead process” means—

- (a) the melting of lead or any lead material for casting and mechanical composing ;
- (b) the re-charging of machines with used lead material ;
- (c) any other work including removal of dross from melting pots, cleaning of plungers ; and
- (d) manipulation, movement or other treatment of lead material.

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

3. **Exhaust draught.**—None of the following processes shall be carried on except with an efficient exhaust draught :—

- (a) melting lead material or slugs ;
- (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 so contrived as to operate on the dust, fume, gas or vapour given off as closely as possible to the 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 processes.**—Each of the following processes shall be carried on in such a manner and under such conditions as to secure effectual separation from one another and from any other process :—

- (a) melting of lead or any lead material ;
- (b) casting of lead ingots ;
- (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 workroom near the machine except when the dross is being deposited therein.

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

- (a) of cement or similar material so as to be smooth and impervious to water;
- (b) maintained in sound condition; and
- (c) shall be cleansed throughout daily after being thoroughly damped with water at a time when no other work is being carried on at the place.

**8. Mess-room.**—There shall be provided and maintained for the use of all persons employed in lead process and remaining on the premises during the meal intervals a suitable mess-room which shall be furnished with sufficient tables and benches: Provided that this provision shall not apply where a canteen has been provided under section 46 of the Act.

**9. Washing facilities.**—There shall be provided and maintained in a cleanly state and in good repair for the use of all persons employed in 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 a Certifying Surgeon within 14 days of his first employment in such processes and thereafter shall be examined by Certifying Surgeon at intervals of not more than 3 months, and a record of such examinations shall be entered by the Certifying Surgeon in the special certificate of fitness as nearly as possible in Form No. 25.

(b) A Health Register containing names of all persons employed in any lead process shall be kept as nearly as possible in Form No. 17.

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

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



**\*SCHEDULE XV**

*(Manufacture of compressed hydrogen or compressed oxygen).*

1. The provision of this Schedule shall apply to all factories where either hydrogen or oxygen or both the gases are manufactured with a view to compressing the gases for any purpose whatsoever.

2. Where the gases are manufactured by the electrolytic method the caustic soda or the caustic potash used for making lye shall be of electrolytic quality, and the water used shall be distilled.

3(a). Where the gases are manufactured by the electrolytic method the purity of the gases shall be tested at an interval of every 4 hours by a competent person, and the results of analysis shall be entered in a register showing (a) date of test, (b) time of test, (c) purity of the gas tested and (d) signature of the person carrying out the test.

(b) The register shall be available to the Inspector at all times.

4. Either of the gases referred to in paragraph 1 shall not be compressed if its purity falls below 98 per cent.

5. High pressure gas vessels shall be preferably located in open-sided sheds. If located otherwise, provision shall be made for adequate ventilation to the satisfaction of the Inspector.

6. All electric fittings shall be of flame-proof construction, shall be maintained in flame-proof state, and all electric conductors shall be enclosed in metal conduits.

7. Gas holders, gas pipe lines and, wherever possible, high pressure gas vessel shall be effectively earthed.

8. Prominent notices in the language understood by the majority of the workers and legible both in day and night, prohibiting smoking or the use of naked lights, and the carrying of matches, or any apparatus for producing a naked light or spark shall be affixed at the entrance of every room or place where there is risk of fire or explosion.

9. Electrical connections of the electrolytic cells shall be so arranged as to overrule the possibility of wrong connections of terminals leading to reversal of polarity.

10. Oxygen and hydrogen pipes shall be painted with distinguishing colours so as to eliminate the possibility of inter-connections.

11. If for any reason hydrogen gas pipe joints are broken, all such pipe lines shall be purged of air after re-connecting and before drawing hydrogen gas.

12. Each plant shall be provided with at least two gas holders for each kind of gas fitted with adequate number of interlinked stop valves so that no gas holder shall be connected to the compressor and to the electrolyser at the same time.

13. The bell of the gas holder shall not be permitted to go within 30 cm. (12 inches) of its lowest position when empty. A visual and an audible signal shall be fitted to the gas holder to indicate when this limit is reached.

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

\*Vide notification No. 1008 L. W., 20th August 1964.

## SCHEDULE XVI

*(Manufacture of Pottery).*

**1. Definition.**—(a) “Efficient exhaust draught” means localised ventilation affected by mechanical or other means for the removal of dust or fume so as to prevent it from escaping into the air of any place in which work is carried on. No draught shall be deemed efficient which fails to remove effectively dust or fume generated at the point where dust or fume originated ;

(b) “Fettling” includes scalloping, towing, sand papering, sand sticking, brushing or any other process of cleaning of pottery ware in which dust is given off ;

(c) “Ground or powdered flint or quartz” does not include natural sands ;

(d) “Leadless glaze” means a glaze which does not contain more than one per cent. of its dry weight of a lead compound calculated as lead monoxide ;

(e) “Low solubility glaze” means a glaze which does not yield to dilute hydrochloric acid more than five per cent. of its dry weight of a soluble lead compound calculated as lead monoxide when determined in the manner described below :

A weighed quantity of the material which has been dried at 100° 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 ;

(f) “Pottery” includes earthenware, stoneware, porcelain, chinatiles and any other articles made from clay or from a mixture containing clay and other materials such as quartz, flint, feldspar ; and

(g) “Potters’ shops” includes all places where pottery is formed by pressing or by any other process and all places where shaping, fettling or other treatment of pottery articles prior to placing for the biscuit fire is carried on.

**2. Efficient exhaust draught.**—The following processes shall not be carried on without the use of an efficient exhaust draught, namely :—

(i) all processes involving the manipulation or use of a dry and unfritted lead compound ;

(ii) 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 ;

(iii) sifting of clay dust or any other material for making tiles or other articles by pressure, except where—

(a) this is done in a machine so enclosed as to effectually prevent the escape of dust ; or

(b) the material to be sifted is so damp that no dust can be given off ;

- (iv) pressing of the tiles from clay dust, or pressing from clay dust of articles other than tiles unless the materials is so damp that no dust is given off, and in any such case the exhaust draught shall be applied to each press ;
- (v) fettling of tiles made from clay dust by pressure, except where the fettling is done wholly on, or with, damp material ; this clause shall also apply to the fettling of other articles made from clay dust, unless the material is so damp that no dust is given off ;
- (vi) process of loading and unloading of saggars where handling and manipulation of ground and powdered flint, quartz, alumina or other materials are involved ;
- (vii) brushing of earthenware biscuit, unless the process is carried on in a room provided with efficient general mechaical ventilation or other ventilation which is certified by the Inspector of Factories as adequate, having regard to all the circumstances of the case ;
- (viii) fettling of biscuit ware which has been fired in powered flint or quartz except where this is done in machines so enclosed as to effectually prevent the escape of dust ;
- (ix) ware cleaning after the application of glaze by dipping or other process ;
- (x) crushing or dry grinding of materials for pottery bodies, and saggars, unless carried on in a machine so enclosed as to effectively prevent the escape of dust or is so damp that no dust can be given off ;
- (xi) sieving or manipulation of powdered flint, quartz, clay grog or mixture of those materials unless it is so damp that no dust can be given off ;
- (xii) grinding of tiles on a power driven wheel unless an efficient water spray is used on the wheel ;
- (xiii) lifting and conveying of materials by elevators and conveyors unless they are effectively enclosed and so arranged as to prevent escape of dust into the air in or near to any place where persons are employed ;
- (xiv) preparation or weighing out of flow material, lawning of dry colours, colour dusting and colour blowing ;
- (xv) mould making unless the bins or similar receptacles used for holding plaster of Paris are provided with suitable covers, and
- (xvi) manipulation of calcined material unless the material has been made and remains so wet that no dust is given off.

3. Each of the following processes shall be carried on in such a manner and under such conditions so as to secure effectual separation from one another, and from other wet processes, namely :—

- (i) crushing and dry grinding or sieving of materials, fettling, pressing of tiles, drying of clay and green-ware, loading and unloading of saggars,
- (ii) all processes involving the use of a dry lead compound.

4. No glaze which is not a leadless glaze or a low solubility glaze shall be used in a factory in which pottery is manufactured.

5. 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.

6. The potter's wheel (Jolly and Jigger) shall be provided with screens or so constructed as to prevent clay scrapings being thrown off beyond the wheel.

7. (a) All practical measures shall be taken by damping or otherwise to prevent dust arising during cleaning of floors, and

(b) damp saw-dust or other suitable material shall be used to render the moist method effective in preventing dust rising into the air during the cleaning process which shall be carried out after work has ceased.

8. The floors of potters' shops, slip houses, dipping houses and ware cleaning rooms shall be hard, smooth and impervious and shall be thoroughly cleaned daily by a moist method by an adult male.

9. **Medical examination.**—(1) All persons employed in any process referred to in paragraph 2 shall be examined by the Certifying Surgeon within 7 days preceding or following the date of their first employment in such process; thereafter all persons employed in any process included under clauses (i) and (xiv) of the said paragraph shall be examined by the Certifying Surgeon once in every three calendar months, and those employed in any process included in clauses (ii) to (xiii) and (xv) and (xvi) of the said paragraph once in every 12 months by the Certifying Surgeon. Records of such examinations shall be entered by the Certifying Surgeon in the Health Register and certificate of fitness granted to him under paragraph 10.

(2) If at any time the Certifying Surgeon is of opinion that any person employed in any process included in paragraph 2 is no longer fit for employment on the ground that continuance would involve damage to his health, he shall cancel the certificate of fitness granted to that person.

(3) No person whose certificate of fitness has been cancelled shall be re-employed unless the Certifying Surgeon after examination, again certifies him to be fit for employment.

10. **Certificate of fitness.**—A person medically examined under paragraph 9 and found fit for employment shall be granted by the Certifying Surgeon a certificate of fitness in Form No. 25 and such certificate shall be in the custody of the Manager of the factory. The certificate shall be kept readily available for inspection by an Inspector and the person granted such a certificate shall carry with him while at work, a token giving reference to such certificate.

11. **Protective equipment.**—(1) The occupier shall provide and maintain suitable over-alls and head coverings for all persons employed in processes included under paragraph 2.

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

(3) Aprons provided in pursuance of paragraph 11(2) shall be thoroughly cleaned daily by the wearers by sponging or other wet process. All over-alls and head coverings shall be washed, cleaned and mended at least once a week, and this washing, cleaning or mending shall be provided for by the occupier.

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

**12. Washing facilities.**—The occupier shall provide and maintain, in a clean condition and in good repair, for the use of all persons employed in any of the processes specified in paragraph 2, a wash place under cover, with—

- (a) (i) a trough with smooth impervious surface fitted with a waste pipe, without plug, and sufficient length to allow at least two feet for every five such persons employed at any one time, and having a constant supply of clean water from taps or jets above the trough at intervals of not more than two feet ; or
- (ii) at least one tap or stand pipe for every five such person employed at any time, and having a constant supply of clean water, the tap or stand pipe being spaced not less than 4 feet apart ;
- (b) a sufficient supply of clean towels made of suitable material changed daily, with sufficient supply of nail brushes and soap.

**13. Time allowed for washing.**—Before each meal and before the end of the day's work at least ten minutes, in addition to the regular meal times shall be allowed for washing to each person employed in any of the processes mentioned in paragraph 2.

**14. Mess-room.**—(1) There shall be provided and maintained for use of all persons remaining within the premises during the rest intervals, a suitable mess-room providing accommodation of 10 square feet per head and furnished with—

- (i) a sufficient number of tables and chairs or benches with back rest ;
- (ii) arrangements for washing utensils ;
- (iii) adequate means for warming food ; and
- (iv) adequate quantity of drinking water ;

Provided that this paragraph shall not apply to a factory where a canteen has been provided under rule 67.

(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.

**15. 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 processes mentioned in paragraph 2 are carried on and no person shall remain in any such room during intervals for meals or rest.

**16. Cloak-room, etc.**—There shall be provided and maintained for the use of all persons employed in any of the processes mentioned in paragraph 2,—

- (a) a cloak-room for clothing put off during working hours and such accommodation shall be separate from any mess room ;
- (b) separate and suitable arrangements for the shortage of protective equipment referred to in paragraph 11.

**17.** The provisions of this Schedule shall not apply to a factory in which any of the following articles, but no other pottery are made :—

- (a) unglazed or salt glazed bricks and tiles ; and
- (b) architectural terra-cotta made from plastic clay and either unglazed or glazed with a leadless glaze only.

18. **Exemption.**—If in respect of any factory the Chief Inspector 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 without assigning any reasons.

## SCHEDULE XVII

*(Manufacture of rayon by the viscose process).*

1. **Definition.**—“Efficient exhaust draught” means localised ventilation effected by mechanical means for the removal of gas, vapour or fumes so as to prevent them from contaminating the air of any place in which work is carried on.

2. The ventilation of the following work room shall be controlled by efficient exhaust draught and fresh air supply effected by mechanical means, namely :

- (i) Churn room,
- (ii) Mixer room,
- (iii) Filtration room,
- (iv) Spinning machine room,
- (v) After treatment room.

3. Concentration of carbon disulphide and hydrogen sulphide in the air of the work rooms shall be kept below 20 parts per million.

4. (1) Estimations of carbon disulphide and hydrogen sulphide concentration in the breathing zone of the workers shall be carried out by a competent person once in every seven days.

(2) The places at which air samples are to be taken shall be subject to the approval of the Inspector.

(3) A register to be available to the Inspector at all times, shall be maintained containing the following particulars, namely :

- (i) date of estimation ;
- (ii) place where air sample was taken ;
- (iii) concentration of carbon disulphide and hydrogen sulphide detected by the estimation ; and
- (iv) signature of person who carried out the estimation.

5. A qualified medical practitioner shall examine all workers exposed to carbon disulphide and hydrogen sulphide, at least once in every six months, and the results of such examination shall be recorded in register. If any case of poisoning is detected the medical practitioner shall record his findings in the register against the name of the worker affected. The register shall be available to the Inspector at all times.

Explanation.—“Qualified medical practitioner” has the same meaning as in the Explanation to section 10 of the Factories Act, 1948.

## SCHEDULE XVIII

*Manufacturing processes and processes incidental thereto carried on in Chemical Works).*

1. **Application.**—This schedule shall apply to all manufactures and processes (incidental thereto carried on in chemical works. The provisions of this schedule shall be in addition to and not in derogation of any provisions of the Factories Act, 1948, or any other rules made thereunder or of any other Act or rules made under the same.

2. **Definitions.**—(a) “Bleaching powder” means the bleaching powder commonly called chloride of lime.

(b) “Breathing Apparatus” means a helmet or facepiece with necessary connections by means of which a person using it in a poisonous, asphyxiating or irritant atmosphere breathes ordinary air, or any other suitable apparatus approved in writing by the Chief Inspector.

(c) “Caustic” means hydroxide of potassium or sodium.

(d) “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.

(e) “Chemical works” means any factory or such parts of any factory as are named in Appendix I to this Schedule.

(f) “Chlorate” means chlorate or perchlorate.

(g) “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.

(h) “Efficient exhaust draught” means localised ventilation effected by mechanical or other means for the removal of gas, vapour, fume or dust to prevent it from escaping into air of any place in which work is carried on.

(i) “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.

(j) “Nitro or Amido 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.

(k) “Surgeon” means a Certifying Surgeon appointed under section 10 of the Factories Act, 1948.

**Exceptions.**—If the Chief Inspector is satisfied in respect of any factory or any process that, owing to the special conditions or special methods of work, or by reason of the infrequency of the process or for other reason all or any of the requirements 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 mentioned in Appendix I.*

**General.**

1. **House-keeping.**—(a) Every part of the ways, work, machinery and plant shall be maintained in a clean and tidy condition.

(b) Any spillage of materials 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 workers for any purpose apart from the processes for which they are supplied.

(b) Workers shall be instructed on the possible dangers arising from such misuse. These instructions shall further be displayed in bold letters in prominent places in the different sections.

3. **Storage of food and tasting.**—(a) No food, drink, tobacco, pan or similar article shall be stored or consumed on or near any part of the plant.

(b) Workers shall be instructed on the possible danger arising from the tasting 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 actual operations and the chemical reactions. The properties of the raw materials used, the final products to be made, and by-products arising during manufacture, shall be carefully studied and provisions shall be made for dealing with any hazards including effects on workers, which may arise during manufacture.

The design of the buildings and plant shall be based on the information so obtained.

5. **Entry inside the factory.**—(a) Unauthorised persons shall not be permitted to enter any section of the factory or plant where there are special dangers.

(b) Visitors shall be provided where necessary with suitable safety equipment and shall be accompanied by a responsible official while going near dangerous plant.

6. **Instruments.**—All instruments such as pressure gauges, thermometers, flow meters, and weighing machines shall be tested at regular intervals by a competent person and records of these tests shall be kept in a register.

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 a month, and tested periodically by a competent person, and records of these tests shall be kept in a register. A plan of all service installations shall be readily available for perusal.



**8. Manhole.**—No manhole shall be opened for entry until effective fencing has been erected round it.

**9. Emergency Instruction.**—Simple and special instructions shall be framed to ensure that effective measures will be carried out in cases of emergency, to deal with escapes 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 workers shall be trained and instructed in the action 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 damp or corrosive atmosphere, be adequately protected. Periodical tests shall be carried out on all circuits.

**12. Place of works.**—(a) Works 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 workers shall be kept to the 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 will be stored and transported in such a manner as to ensure that, in the event of a spillage they will neither produce a reacting mixture, nor cause the development of toxic or fire risks in contact with other products in its vicinity or with walls, floors, or dust thereon.

**14. Site and Buildings : Fire and Explosion Risks.**—(a) Building and plant shall be sited with due regard to the dangers which may arise from the processes involved, and in particular shall be spaced at distances which are deemed safe for the fire and explosion risks connected with the processes in adjacent buildings. Due consideration shall be given to the effect of any processes carried out in adjacent factories.

(b) 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 blow-out panels or roofs. Where the risk of fire or explosion is considerable, the building shall be divided by blast or protective screen walls.

(c) 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-resistant. 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 lighting installations.**—(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 conduits.

(b) All hot exhaust pipes shall be installed outside a building and other hot pipes shall be suitably protected.

(c) **Portable electric hand pumps** shall not be used unless the same are of an intrinsically safe type, and portable electric tools connected by flexible wires shall not be used unless the same are of the flame-proof type.

(d) Where an inflammable atmosphere may occur the soles of foot-wear worn by workers shall have no metal on them, and the wheels of trucks or conveyors shall be of conducting non-sparkig materials. Adequate precautions shall be taken to prevent the ignition of explosive or inflammable substances by sparks emitted from locomotives of other vehicles operated in the factory or on public lines.

(e) No electric arc lamp, 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 or spark 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 light glass covers.

(f) Prominent notices in the language understood by the majority of the workers and legible during day and 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 the entrance of every room or place where there is a risk of fire or explosion from inflammable gas, vapour or dust. In the case of illiterate workers 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) A sufficient supply of spades, scrapers and pails made 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.

(Note.—The risk is not always obvious and may arise, for example, through the production of hydrogen in acid tanks.)

**16. Static Electricity.**—(a) All machinery and plant, particularly, pipe line 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 prevent 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 protection apparatus shall be fitted when 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 pre-determined temperature below the danger temperature.

**18. Escape of materials.**—(a) Provision shall be made in all plant, 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 explosion, 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) Provisions shall be made to confine by means of bund walls, sumps, etc., possible leakage 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 and storage of combustible materials.**—

(1) All empty containers which have held inflammable liquids, and metal containers which 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.

(2) (a) Combustible and inflammable materials shall not be stored in close proximity to chemicals which are liable to cause ignition.

(b) 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. Installing of pipe lines for inflammable liquids.**—All pipe lines 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 deposits in any part. All flanged joints, bends and other connections shall be regularly inspected. Cocks and valves shall be so constructed that explosive residues cannot collect therein. The open and closed positions of all cocks and valves shall be clearly indicated on the outside.

**22. Examination, testing and repair of plant.**—Examination, testing and repair of plant parts which have been in contact with explosive and inflammable materials or which is under pressure, shall only be carried out under proper supervision.

**23. 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**

**24. Escape of gases, etc.**—(a) 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 provision of efficient exhaust draught. Effective arrangements shall be made to ensure in the event of failure of the control measure provided in compliance of the foregoing, the process shall stop immediately.

(b) In the event of such escape, provision shall be made to trap the materials and render them safe.

25. **Danger due to effluents.**—(a) Adequate precautions shall be taken to prevent the mixing of effluents which may cause dangerous or poisonous gases to be evolved.

(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.

26. **Staging.**—(a) Staging shall not be erected over any open vessel unless the vessel is so constructed and ventilated so as to prevent the emission 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 outer side 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.

27. **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. Workers shall also be instructed in the measures to be taken to deal with an escape of gas, fume, etc., in the event of an emergency.

28. **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
- (iii) life-belts.

(b) Such breathing apparatus and other appliances 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 and (ii) be thoroughly inspected once every month by a competent person, appointed in writing by the occupier, and a record of their condition shall be entered in a book provided for that purpose, which shall be produced when required by an Inspector.

(c) Workers shall be trained, and given a periodic refresher course, in the use of breathing apparatus and respirators.

(d) 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.

29. **Treatment of persons.**—In every room or place or wherever required in writing by the Chief Inspector there shall be affixed the official cautionary notice regarding gassing and burns. Such notices shall be legible during day and night, and shall be printed in the language understood by the majority of the workers.

30. **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 systems containing such fluids if pressure is likely to exist behind the chokes ;
- (ii) when there is danger of injury by absorption through the skin during the performance of normal duties or in the event of emergency ;

(iii) whenever there is risk of injury in handling corrosive substances, hot or cold articles and sharp or rough objects, and

(iv) when there is risk of poisonous materials being carried away on their clothes.

(b) There shall be provided for the use of all persons employed in the processes specified in Appendix II to 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.

(c) Protective equipment shall be provided and stored in the appropriate place for use during abnormal conditions or in an emergency.

(d) Arrangement shall be made for the proper and efficient cleaning of all such protective equipment.

**31. Cloak Rooms.**—There shall be provided and maintained for the use of all persons employed in the processes specified in Appendix II to this schedule a suitable cloak-room, for clothing put off during working hours and a suitable place separate from the cloakroom, for the storage of overalls or working clothes. The accommodation so provided shall be placed in the charge of a responsible person and shall be kept clean.

**33. Special bathing accommodation.**—There shall be provided for the use of all persons employed in the processes specified in Appendix III to this schedule separate sanitary conveniences and sufficient and suitable bathing facilities, which shall be to the satisfaction of the Chief Inspector.

**33. Entry into vessels.**—(a) Before any person enters, for any purpose 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 a breathing apparatus and a life-belt in the manner specified.

**34. 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 pipe lines, respirators, goggles and protective clothing shall be worn to the extent required by the competent person.

**35. Storage of acid carboys.**—Carboys containing nitric acid or "mixed" acid shall be stored in opensided sheds detached from other buildings, and placed on a flooring of sandstone, brick or other suitable inorganic material. A passageway 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 split acid and all precautions shall be taken to prevent workers being exposed to fumes.

#### **Corrosive or deleterious substances risks**

**36. Buildings.**—The site of all buildings and plant 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 thorough washing and cleaning. The construction of staging and other parts of building shall be carried out with materials impervious and resistant to corrosion so far as practicable.

**37. 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 localise 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 pipe-lines where there is danger involved to maintenance and other workers from such leakage.

(c) Passages and work-stations 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.

**38. 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.

**39. Drainage.**—Adequate drainage shall be provided and shall lead to special treatment tanks where deleterious material shall be neutralised or otherwise rendered safe before it is discharged into ordinary drains or sewers.

**40. Covering of vessels.**—(a) Every fixed vessel or structure containing risk of accidental immersion into 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 barriers shall be so placed as to prevent passage between them:

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

- (i) saturators used in the manufacture of sulphate of ammonia, and
- (ii) that part of the sides of brine evaporating pans which require raking, drawing or filling.

**41. 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.

**42. 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.

**43. 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 liquid.
  - (ii) adequate special arrangements to deal with any person who has been splashed with poisonous material that can be absorbed through the skin; and
  - (iii) a sufficient number of eye-wash 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, 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.

**44. Maintenance.**—(a) Before any examination or repairs are carried out on plant or pipe lines, a competent person shall issue a clearance certificate permitting such examination or repairs.

(b) Adequate precautions shall be taken to liberate any pockets of gas or liquid which may have been at the point where dismantling takes place.

**45. Washing facilities.**—(a) 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 the facilities shall be conveniently accessible and shall be kept in a clean and orderly condition.

(b) If female workers 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 place shall bear conspicuous notice in the language understood by the majority of the workers "FOR WOMEN ONLY" and shall also be indicated pictorially.

**46. 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 accommodation which shall be furnished with sufficient tables and chairs, or benches with back rests, and where sufficient drinking water is available. This paragraph shall not, however, apply where a canteen has been provided under rule 67.

**47. Medical centre.**—(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 a medical centre.

The medical centre shall be a separate room used only for the purpose of treatment and rest. It shall have floor space of not less than 100 square feet, and smooth, hard and impervious floor and walls up to a height of five feet, and shall be provided with ample means of natural and artificial lighting. It shall contain all the items shown in Appendix IV.

Where persons of both sexes are employed, arrangements shall be made at the medical centre for their separate treatment.

The medical centre 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. The person in charge of the medical centre shall keep a record of all cases of accidents or sickness treated in the centre.

(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 places in telephonic communication with the factory for obtaining such a carriage immediately when required.

**48. Medical personnel.**—There shall be a whole-time Medical Officer in every factory employing 250 persons or more.

**49. Medical examination.**—In a chrome process and in a nitre or amido process—

- (a) a Health Register containing the names of all persons employed in the process shall be kept in a form approved by the Chief Inspector;
- (b) no person shall be newly employed for more than 14 days without a certificate of fitness granted after examination by the Certifying Surgeon by a signed entry in the Health Register;
- (c) every person employed in the process shall be examined by the Certifying Surgeon once in each calendar month (or at such other intervals as may be prescribed in writing by the Chief Inspector) on a date or dates of which due notice shall be given to all concerned;
- (d) every person so employed shall present himself at the appointed time for examination by the Certifying Surgeon as provided in sub-paragraphs (b) and (c);
- (e) the Certifying Surgeon shall have power of suspension as regards all persons employed and no person after suspension shall be employed without written sanction from the Surgeon entered in the Health Register.



50. **Duties of workers.**—(a) Every person employed shall—

- (i) report to his foreman any defect in any fencing, breathing apparatus, appliance or other requisite provided in pursuance of the provisions of this schedule, as soon as he becomes aware of such defect;
- (ii) use the articles, appliances or accommodation required by the provisions of this schedule for the purpose for which they are provided;
- (iii) wear the breathing apparatus and life-belt where required.

## (b) No person shall—

- (i) remove any fencing provided in pursuance of paragraph 40 unless, duly authorised; or
- (ii) stand on the edge or on the side of any vessel to which paragraph 40 applies;
- (iii) pass or attempt to pass any barrier erected in pursuance of paragraph 40;
- (iv) place across or inside any vessel to which paragraph 40 applies any plank or gangway which does not comply with that paragraph or make use of any such plank or gangway while in such position;
- (v) 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;
- (vi) use a metal spade, scraper or pail when cleaning out or removing the residues from any chamber, still, tank or other vessel which has contained sulphuric acid or hydrochloric acid or other substance which may cause evolution of arseniuretted hydrogen;
- (vii) remove from a First Aid Box or cupboard or from the medical centre any First Aid Appliance or dressing except for the treatment of injuries in the works.

**PART II**

## Applying to works or parts thereof in which—

- I. caustic pots are used; or
- II. chlorate or 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) a nitro or amido process is carried on; or
- (c) a chrome process is carried on; or
- IV. crude shale oil is refined or processes incidental thereto are carried on or
- V. nitric acid is used in the manufacture of nitro compounds; or
- VI. the evaporation of brine in open pans and the stoving of salt are carried on; or
- VII. the manufacture or recovery of hydro-fluoric acid or any of its salts is carried on; or
- VIII. work at a furnace where the treatment of zinc ores is carried on; or
- IX. insecticides mentioned in Appendix I are manufactured, mixed, blended, or packed.

51. **Entry into gas tar or coal tar still.**—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 by disconnecting—

either

- (a) the leading from the swan neck to the condenser worm, or
- (b) the waste gas pipe fixed to the worm and/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.

52. **Entry into bleaching powder chambers.**—(a) 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.

(b) A register containing details of all such tests shall be kept in a form approved by the Chief Inspector.

53. **Special precautions for nitro and Amido processes.**—In a nitro or amido 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 and the handles of all implements used in the operations shall be cleansed 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 amido derivatives of phenol or of benzene or its homologues shall, if steam is passed into or around it, or if the temperature of the content be at or above the temperature of boiling water, be covered in such a way that steam or 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.

54. **Precautions during caustic grinding, etc.**—

- (a) Every machine used for grinding or crushing caustic shall be enclosed, and
- (b) Where any of the following processes are carried on, namely—
  - (i) grinding or crushing of caustic;
  - (ii) packing of ground caustic;
  - (iii) grinding, sieving, evaporating or packing in a chrome process;
  - (iv) crushing, grinding or mixing of material or cartridge filling in a nitro or amido process;

- (v) insecticides mentioned in Appendix I are manufactured, mixed, blended or packed ;

an efficient exhaust draught shall be provided.

**55. Chlorate manufacture.**—(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 cleansed daily.

(b) Wooden vessels shall not be used for the crystallisation of chlorate, or to contain crystallised or ground chlorate ; provided that this clause shall not prohibit the packing of chlorate for sale into wooden casks or other wooden vessels.

**56. Restrictions on the employment of young persons and women.**—(a) Persons under 18 years of age and women shall not be employed in any process in which hydro-fluoric acid fumes or ammoniacal vapours are given off or in any of the following operations, namely :

- (i) evaporation of brine in open pans ;
- (ii) stoving of salt ;
- (iii) work at a furnace where the treatment of zinc ores is carried on ; and
- (iv) the cleaning of workrooms where the process mentioned in item (iii) is carried on.

(b) No person under 18 years of age shall be employed in a chrome process in a nitro or amido process or in a process in which the following materials are used or where the vapour of such materials is given off, namely—

Carbon bisulphide, chlorides of sulphur, benzene, carbon tetrachloride, trichlorethylene, any carbon chlorine compound, or any mixture containing any of such materials.

**57. Duties of employees.**—Every person employed—

- (a) in a process to which paragraph 30 applies shall wear the protective clothing, footwear, respirators, goggles or gloves provided under paragraph 33 and shall deposit overalls or suits or working clothing so provided, as well as clothing put off during working hours, in the places provided under paragraph 31 ;
- (b) in processes to which paragraph 32 applies shall carefully wash the hands and face before partaking of any food or leaving the premises ;
- (c) in any processes to which Part II of this schedule applies shall use the protective appliances supplied in respect of any process in which he is engaged

#### APPENDIX I

Chemical works for the purpose of Schedule XVIII means any factory or that part of a factory in which—

- (1) the manufacture or recovery of any of the following is carried on, namely :
  - (a) carbonates, chromates, chlorates, oxides or hydroxides of potassium, sodium iron, aluminium, cobalt, nickel, arsenic, antimony, zinc or magnesium,

- (b) ammonia and the hydroxide and salts of ammonium,
  - (c) sulphurous, sulphuric, nitric, hydrochloric, hydrofluoric, hydriodic, hydrosulphuric, boric, phosphoric, oxalic, arsenious, arsenic, lactic, acetic, tartaric or citric acids and their metallic or organic salts, and
  - (d) cyanogen compounds, or
- (2) a wet process is carried on—
- (a) for the extraction of metal from ore or from any by-product or residual material, or
  - (b) in which electrical energy is used in any process of chemical manufacture, or
- (3) alkali waste or the drainage therefrom is subject to any chemical process for the recovery of sulphur, or for the utilisation of any constituent of such waste or drainage, or
- (4) carbon bisulphide is made or hydrogen sulphide is evolved by the decomposition of metallic sulphides or hydrogen sulphide is used in the production of such sulphides, or
- (5) bleaching powder is manufactured or chlorine gas is made or is used in any process of chemical manufacture, or
- (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, or
- (b) synthetic colouring matters or their intermediates are made, or
- (7) refining of crude shale oil or any process incidental thereto is carried on, or
- (8) nitric acid is used in the manufacture of nitro-compounds, or
- (9) explosives are made with the use of nitro compounds, or
- (10) insecticides which are phosphorous, nicotine, mercury, naphthalene, cyanogen, arsenic, fluorine, copper, benzene and ethane compounds or derivatives and methyl bromide are manufactured, mixed, blended and packed.

## APPENDIX II

1. A nitro or amido 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 packing in a chrome process (protective coverings).
4. Packing in a chrome process (suitable respirators).
5. Any room or place in which chlorate is crystallised, ground or packed (clothing of woollen material 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 (suitable 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, faceshields, gloves and footwear of fireproof material).

9. (a) Manufacture, mixing, blending and packing of insecticides which are phosphorus, 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 phosphorus and nicotine derivatives; synthetic rubber aprons, gloves and boots when working with oil solutions; and washable working clothes laundered daily).

(b) Manufacture, mixing, blending and packing of insecticides which are derivatives of benzene or ethane (rubber aprons and suitable respirators; separate work clothes, laundered frequently).

#### APPENDIX III

1. A nitro or amido 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 Appendix I.

#### APPENDIX IV

- (i) A glazed sink 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,  $36" \times 4" \times \frac{1}{4}"$ .
- (x) Twelve plain wooden splints,  $14" \times 3" \times \frac{1}{4}"$ .
- (xi) Six plain wooden splints,  $10" \times 2" \times \frac{1}{2}"$ .
- (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 eye bath.
- (xxiii) One bottle (2 lbs.) carbolic lotion 1 in 20.
- (xxiv) Two chairs.
- (xxv) One screen.
- (xxvi) One electric hand torch.
- (xxvii) An adequate supply of anti-tetanus, serum.

(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) 1 copy of the first aid leaflet issued by the Chief Adviser, Factories, Government of India ;

**95. Notification of accidents—Fatal and serious.**—When there occurs in any factory an accident to any person which results in (a) death, or (b) such injury that there is no reasonable prospect that he will be able to resume his employment in the factory within 20 days, such accidents shall be called in all prescribed communications "Fatal" or "Serious" as the case may be, and the Manager of the factory shall give notice of the occurrence forthwith by telephone, telegram or special messenger to—

Rules 95, 96 and 97 prescribed under section 88.

- (1) the Inspector notified for this purpose,
- (2) the District Magistrate or, if the District Magistrate by order so directs, the Subdivisional Officer,
- (3) the Commissioner for Workmen's Compensation appointed under section 20 of the Workmen's Compensation Act, 1923, and

- (4) in the case of fatal accidents only, the officer-in-charge of the police-station within the local limits of which the factory is located:

Reports by special messenger shall be as nearly as possible in Form No. 18 and those sent by telephone or telegram shall be confirmed within 48 hours by a written report in that form.

\*Provided, however, that the Defence Installations may send reports of accidents in their own form IAF0 1913, subject to the condition that any change in the form shall at once be communicated to the Chief Inspector in writing.

96. **Minor.**—When there occurs in any factory an accident to any person less serious than those described in rule 95 but which prevents or is likely to prevent him from resuming the employment in the factory within 48 hours after the accident occurred, such accident shall be recorded by the manager of the factory and reported by him in Form No. 18 as soon as practicable, but in any case within 72 hours of its occurrence, to the authorities mentioned in clauses (1), (2) and (3) of rule 95. Such accidents shall be called in prescribed communications "minor accidents".

97. **Supplementary reports.**—(1) When an accident which has been reported to the Inspector as either "Serious" or "Minor" afterwards proves to be "Fatal", the manager of the factory shall make the necessary correction in a supplementary report which shall be sent forthwith to the authorities mentioned in clauses (1), (2), (3) and (4) of rule 95.

(2) When an accident which has been reported to the Inspector as "Minor" afterwards proves to be "Serious" or when one reported as "Serious" afterwards proves to be "Minor", the manager of the factory shall make the necessary correction in a supplementary report which shall be sent forthwith to the authorities mentioned in clauses (1), (2) and (3) of rule 95.

Rule prescribed under section 112.

98. **Site of fatal accident.**—Where loss of life has immediately resulted from an accident, the place where the accident occurred shall be left as it was immediately after the accident until the expiration of at least three days after the time when the notice required under rule 95 was given, or until the visit to the place by an Inspector, whichever first happens, unless compliance with this rule would tend to increase or continue the danger.

Rule prescribed under section 88.

99. **Explosions, fire and accidents to plant.**—When there occurs in any factory any explosion, fire, collapse of buildings, or serious accident to the machinery or plant, whether or not attended by personal injury or disablement, such occurrence shall be reported by the manager of the factory within five hours of its occurrence to the authorities mentioned in clauses (1) and (2) of rule 95. Such reports shall be as nearly as possible in Form No. 19.

Rule prescribed under sub-section (1) of section 89.

100. **Notice of poisoning or disease.**—A notice as nearly as possible in Form No. 20 should be sent forthwith both to the Chief Inspector and to the Certifying Surgeon, by the manager of

\*Vide Notification No. 1003L.W., dated the 20th August 1934.

a factory in which there occurs a case of lead, phosphorus, mercury, manganese, arsenic, carbon bisulphide or benzene poisoning; or poisoning by nitrous fumes, or by halogens or halogen derivatives of the hydrocarbons of the aliphatic series; or of chrome ulceration, anthrax, silicosis, toxic anaemia, toxic jaundice, primary epitheliomatous cancer of the skin, or pathological manifestations due to radium or other radio-active substances or X-rays.

## CHAPTER X

### (Supplemental)

101. **Procedure in appeals.**—(1) An appeal presented under section 107 shall lie to the State Government or to such authority as the State Government may appoint in this behalf and shall be in the form of a memorandum setting forth concisely the grounds of objection to the order and bearing court-fee stamps in accordance with Article 11 of Schedule II to the Court-fees Act, 1870, and shall be accompanied by a copy of the order appealed against.

Rule prescribed  
under sub-section  
(1) of section 107.

(2) On receipt of the memorandum of appeal, the appellate authority shall, if the appellant has requested that the appeal should be heard with aid of assessors, call upon the appellant to deposit an amount to be fixed by him for payment to the assessors, if necessary, after conclusion of the appeal.

(3) On receipt of the memorandum of appeal, the appellate authority shall, if it thinks fit or if the appellant has requested that the appeal should be heard with the aid of assessors, call upon the registered association of employers declared under sub-rule (4) to be representative of the industry concerned, to appoint an assessor within a period of 14 days. If an assessor is nominated by such association, the appellate authority shall appoint a second assessor itself. It shall then fix a date for the hearing of the appeal and shall give due notice of such date to the appellant and to the Inspector whose order is appealed against, and shall call upon the two assessors to appear upon such date to assist in the hearing of the appeal.

(4) If in the memorandum of appeal the appellant has requested that the appeal should be heard with the aid of assessors he shall state in the memorandum the name or names of registered associations of employers of which he is a member.

(5) The association entitled to appoint the assessor within the meaning of section 107(2) of the Factories Act, 1948, shall be determined as hereinafter stated:—

- (a) If the appellant is a member of one such association it shall be that association.
- (b) If he is a member of more than one such association it shall be the association which the appellant desires should appoint the assessor.
- (c) If the appellant does not state in the memorandum that he is a member of any association mentioned under sub-rule (4) or if he does not state which of such associations, if he is a member of more than one, he desires should appoint the assessor, then the appellate authority shall call upon the association which it considers to be the best fitted to represent the industry and to appoint the assessor.



(6) An assessor appointed in accordance with the provisions of sub-rules (3) and (5) shall receive, for the hearing of the appeal a fee to be fixed by the appellate authority, subject to a maximum of fifty rupees per diem. He shall also receive the actual travelling expenses. The fees and travelling expenses shall be paid to the assessors by Government; but where assessors have been appointed at the request of the appellant and the appeal has been decided wholly or partly against him the appellate authority shall direct that the fees and travelling expenses of the assessors shall be paid in whole or in part by the appellant out of the money deposited under sub-rule (2), and the balance of the deposit, if any, refunded to the appellant.

Rule prescribed  
under sub-section  
(1) of section 108.

102. **Display of notices.**—The abstract of the Act and of the rules required to be displayed in every factory shall be as nearly as possible in Form No. 21.

Rule prescribed  
under section 110.

103. **Returns.**—The manager of every factory shall furnish to the Inspector or other officer appointed by the State Government in this behalf the following returns, namely:—

- (1) *Annual return.*—Not later than the 31st January of the year subsequent to that to which it relates, an annual return, in duplicate, as nearly as possible in Form No. 22.
- (2) *Annual return of holidays.*—Before the end of each year, a return giving notice of all the days on which it is intended to close the factory during the next ensuing year. This return shall be submitted whether the factory is or is not working during the year preceding the year to which the return relates:

Provided that the State Government or the Chief Inspector may dispense with this return in the case of any specified factory or of any class of factories or of factories in any particular area:

Provided further that the annual return of holidays shall be dispensed with in case of all factories—

- (a) which regularly observe the first day of the week as a holiday, or
- (b) which regularly observe a fixed day in the week as a holiday, or
- (c) which observe holidays according to a list approved by the Inspector:

Provided, further, that where the Manager of any factory makes any departure from such a holiday or list of holidays as aforesaid, prior intimation shall be given to the Inspector.

- (3) *Half-yearly return.*—The Manager of every factory shall furnish to the Inspector on or before the 15th July and 15th January of each year, a half-yearly return in duplicate as nearly as possible in Form No. 23.

- (4) *Canteen—Annual Return.*—The Manager of every factory wherein more than 250 workers are ordinarily employed, shall furnish to the Inspector not later than 31st January of the year subsequent to that to which it relates, a return as nearly as possible in Form No. 26.
- (5) *Creche—Annual Return.*—The Manager of every factory wherein more than 50 women workers are ordinarily employed, shall furnish to the Inspector not later than 31st January of the year subsequent to that to which it relates, a return as nearly as possible in Form No. 27.
- (6) *Shelters, rest rooms and lunch rooms—Annual Return.*—The Manager of every factory wherein more than 150 workers are ordinarily employed shall furnish to the Inspector not later than 31st January of the year subsequent to that to which it relates, a return as nearly as possible in Form No. 28.

104. **Service of notices.**—The despatch by post under registered cover of any notice or order shall be deemed sufficient service on the occupier, owner or Manager of a factory of such notice or order. Rule prescribed under section 109.

105. **Information required by the Inspector.**—The occupier, owner or Manager of a factory shall furnish any information that an Inspector may require for the purpose of satisfying himself whether any provision of the Act has been complied with or whether any order of an Inspector has been duly carried out. Any demand by an Inspector for any such information, if made during the course of an inspection, shall be complied with forthwith if the information is available in the factory, or, if made in writing, shall be complied with within seven days of receipt thereof. Rules 105 to 107 prescribed under section 112.

106. **Register of accidents and dangerous occurrences.**—The Manager of every factory shall maintain a Register of all accidents and dangerous occurrences which occur in the factory as nearly as possible in Form No. 24 showing the—

- (a) Name of injured person (if any).
- (b) Date of accident or dangerous occurrence.
- (c) Date of report in Form No. 18 or 19 as the case may be, to Inspector.
- (d) Nature of accident or dangerous occurrence.
- (e) Date of return of injured person to work.
- (f) Number of days of absence from work of injured person.

107. **Filing and preservation of Inspector's reports, letters, etc.**—All certificates, orders, letters, reports or other documents issued by an Inspector or other officer duly appointed in this behalf by the Government or by a local authority with respect to the fitness or safety of the factory or any portion of its buildings, works, plant, machinery apparatus or ways, or with respect to the fitness of workers employed in the factory shall be properly filed and preserved for a period of three years and shall be available in the factory for examination by the Inspector.

108. **Savings.**—Any licence granted, notification issued, order made or anything done under any of the provisions of the West Bengal Factories Rules, 1949, shall, unless inconsistent with these rules, be deemed to have been granted, issued, made or done under the corresponding provisions of these rules.

## FORM No. 1.

(See rule 3.)

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

1. Applicant's name .. ..
- Applicant's address .. ..
2. Full name and postal address of the  
factory
3. Situation of the factory—
- District .. ..
- Town or Village .. ..
- Police-station .. ..
- Nearest Railway Station or  
Steamer Ghat.
4. Particulars of plant to be installed ..

*Signature of Applicant* .....*Date* .....

NOTE.—This application shall be accompanied by the following documents:—

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

**FORM No. 2.**

(See rules 4, 7 and 13.)

**APPLICATION FOR REGISTRATION AND GRANT OR RENEWAL  
OF LICENCE AND NOTICE OF OCCUPATION SPECIFIED  
IN SECTIONS 6 AND 7 OF THE FACTORIES ACT, 1948.**

(To be submitted in duplicate.)

1. (a) Full name of the factory.....  
.....  
.....

(b) Previous name of the factory, if different from the present name.....  
.....  
.....

2. **Situation of factory—**

Address .....  
Post Office.....  
Telegraph Office.....  
District .....  
Subdivision.....  
Subdivision Headquarters.....  
Police-station.....

3. **Address to which communications relating to the factory may be sent.....**  
.....  
.....

4. **Name and address of the owner of the premises occupied as a factory.....**  
.....  
.....

5. **Nature of the manufacturing process/processes :—**

(a) Carried on in the factory during the preceding twelve months (if the  
factory was then in existence).....  
.....  
.....

(b) To be carried on in the factory during the next twelve months.....  
.....  
.....

6. Name and address of the Managing Agents, if any—

Name .....  
 Address .....

7. Name and residential address of the Manager for the purpose of the Factories Act—

Name .....  
 Address .....

8. Names and residential addresses of occupier (see note 1) :—

- (a) Directors of the Managing Agents.....  
 or
- (b) Directors in case of a public Company.....  
 or
- (c) Shareholders in case of a private Company.....  
 or
- (d) Partners/Proprietor .....

9. Name and address of the person nominated as the occupier under section 100 of the Act. (A director in case of a public company, or a share-holder in case of a private company, or a partner in case of a firm can be nominated)—

Name .....  
 Address .....

10. (a) Nature and total amount of power installed or proposed to be installed (total Rated H. P. in case of all factories except Electricity Generating Stations)—

.....

(b) Total amount of power proposed to be used.....

.....

11. Maximum number of workers (including contract labour) likely to be employed in the factory on any day during the next twelve months—

(i) Men .....

(ii) Women.....

(iii) Adolescents (over 15 but under 18 years of age) :—

(a) Male .....

(b) Female .....

(iv) Children over 14 but under 15 years of age) :—

(a) Male .....

(b) Female .....

**Total** ..

---



---

12. **Maximum number of workers (including contract labour) employed on any day during the previous twelve months.....**  
 .....
13. **In case of a factory constructed or extended or taken into use after the date of commencement of the Rules—**
- (a) Reference number and date of approval of plans by the State Government/Chief Inspector.  
 .....
- (b) Reference number and date of approval of the arrangements, if any made for disposal of trade waste and effluents.  
 .....
14. **Amount of fee/Renewal fee Rs.....**  
 (Rupees.....paid in.....  
 treasury/bank) on.....(vide Challan No.....  
 enclosed) for the year/years ending 31st December, 19.....
15. **In case of registered factories number and date of issue of original licence—**
- (a) Licence No.....
- (b) Date of issue.....

*Signature of Occupier.....*

*Date .....*

**Notes.—**(1) "Occupier" of a factory means the person who has ultimate control over the affairs of the factory, and where the said affairs are entrusted to a managing agent, such agent shall be deemed to be occupier of the factory.

"Managing Agent" has the meaning assigned to it in the Companies Act, 1956.

(2) This form should be completed in ink, block letters or typed and returned to the Chief Inspector of Factories, accompanied by the licence and treasury challan.

(3) Information not included above may be submitted in separate sheets, if necessary.

**FORM No. 3**

(See rules 5, 6, 7 and 8.)

**LICENCE TO WORK A FACTORY**

Licence No.....Reg. No.....Date of reg.....

Category.....Fee Rs.....

Licence is hereby granted to.....  
 valid only for the factory known as.....  
 .....situated at.....  
 .....subject to the provisions of the Factories  
 Act, 1948, and the rules made thereunder.

The licence shall remain in force till 31st December 19 .

The.....19....

*Chief Inspector of Factories, West Bengal.***RENEWALS**

Valid for the year.	Category.	Fee for renewal.	Date of payment.	Late fee for renewal.	Signature of Chief Inspector of Factories, West Bengal.

**TRANSFERS**

To whom transferred	Date of transfer.	Date of payment of transfer fee.	Signature of Chief Inspector of Factories, West Bengal.

**AMENDMENTS**

Date when category changed.	Changed category.	Date of payment of amendment fee.	Additional fee.	Signature of Chief Inspector of Factories, West Bengal.

FORM No. 4

(See rule 16)

CERTIFICATE OF FITNESS

1. Serial No.....	Token No.....	Serial No.....	Token No.....
Date .....		Date .....	
2. Name.....		I certify that I have personally examined (name) .....	
3. Father's name.....		son/daughter of.....	
4. Sex.....		residing at.....	
5. Residence .....		..... who is desirous of being employed in a factory, and that his/her age, as nearly as can be ascertained from my examina- tion, is.....years, and that he/she is fit for employment in a factory as an adult/child.	
6. Certified age and date of birth, if avail- able .....			
7. Physical fitness.....			
8. Descriptive marks .....		His/Her descriptive marks are.....	
.....		.....	
.....		.....	
.....		.....	

Thumb  
impression.

Thumb  
impression.

Initials of  
Certifying Surgeons.

Certifying Surgeon.

NOTE.—Exact details of cause of physical disability should be clearly stated.



FORM No. 5.

(See rule 24.)

HUMIDITY REGISTER

Department .....

Hygrometer { Distinctive mark or number.....  
 { Position in department.....

Date—Year, month, day.	Readings of Hygrometer.						Remarks.	
	Between 7 and 9 a.m.		Between 11 a.m and 2 p.m. (but not in the rest period).		Between 4 and 5-30 p.m.			If no humidity, insert "None".
	Dry bulb.	Wet bulb.	Dry bulb.	Wet bulb.	Dry bulb.	Wet bulb.		
1st .. ..								
2nd .. ..								
3rd .. ..								
4th .. ..								
5th .. ..								
6th .. ..								
7th .. ..								
8th .. ..								
9th .. ..								
10th .. ..								
11th .. ..								
12th .. ..								
13th .. ..								
14th .. ..								
15th .. ..								
16th .. ..								
17th .. ..								
18th .. ..								
19th .. ..								
20th .. ..								
21st .. ..								
22nd .. ..								
23rd .. ..								
24th .. ..								
25th .. ..								
26th .. ..								
27th .. ..								
28th .. ..								
29th .. ..								
30th .. ..								
31st .. ..								

(Signed) .....

Certified that the above entries are correct.

(Signed) .....

FORM No. 6.

(See rules 18 and 42.)

REGISTER OF LIME WASHING, PAINTING, ETC.

Part of Factory, <i>e.g.</i> , name of room.	Parts lime-washed, painted, varnished or oiled, <i>e.g.</i> , walls, ceilings, wood work, etc.	Treatment, whether lime-washed, painted, varnished or oiled.	Date on which lime-washing, painting, varnishing, oiling or cleaning was carried out (according to the English calendar).			Remarks.
			Date.	Month.	Year.	
1	2	3	4	5	6	7



FORM No. 8.

(See rule 55.)

Name of occupier.....

Address of factory.....

**PART I.—TEST AND THOROUGH EXAMINATION OF LIFTING MACHINES, CHAINS, ROPES OR LIFTING TACKLE (EXCEPT FIBRE ROPES OR ROPE SLINGS) BEFORE BEING TAKEN INTO USE IN ANY FACTORY FOR THE FIRST TIME IN THAT FACTORY.**

Distinguishing number or mark and description sufficient to identify the machine, chain, rope or lifting tackle.	Certificate of Test and thorough Examination.		
	Date of certificate.	Number of certificate.	Name and address of person who issued the certificate.
(1)	(2)	(3)	(4)

**PART II.—ANNUAL THOROUGH EXAMINATION OF ALL LIFTING MACHINES, CHAINS, ROPES OR LIFTING TACKLE.**

Distinguishing number or mark and description sufficient to identify the lifting machine, chain, rope or lifting tackle.	Number of certificate of test and examination.	Date when the lifting machine, chain, rope or tackle was first taken into use in the factory.	Date and by whom carried out.			Particulars of any defects affecting the safe working load and of the steps taken to remedy such defects. (To be initialled.)
			Date and name.	Date and name.	Date and name.	

**PART III.—ANNEALING OR OTHER APPROVED FORM OF HEAT TREATMENT OF CHAINS OR LIFTING TACKLES EXCEPT ROPE SLINGS.**

Distinguishing number or mark and description to identify the chain or lifting tackle.	Number of certificate of test and examination.	Dates of Annealing or other Heat Treatment and by whom carried out.			Particulars of any defects affecting the safe working load and of the steps taken to remedy such defects.
		Date and name.	Date and name.	Date and name.	

FORM No. 9.

*(See rule 56.)***REPORT OF EXAMINATION OF PRESSURE VESSEL**

1. Name of occupier .....
2. Name and address of factory .....
3. Name, description and distinctive number of pressure vessel. ....
4. Nature of process in which it is used .....
5. Date of construction (the history should be briefly given, and the examiner should state whether he has seen the previous report). ....
6. Date of last hydraulic test (if any) and pressure applied. ....
7. Is the vessel in the open, or otherwise exposed to weather or to damp? .....
8. What parts (if any) were inaccessible? .....
9. What examination and tests were made? .....
10. Condition of vessel (state any defects materially affecting the safe working pressure or the safe working of the vessel).
 

{	External .....
{	Internal .....
11. Are the required fittings and appliances provided in accordance with the Rules for pressure vessels? .....
12. Are all fittings and appliances properly maintained and in good condition? .....
13. Repairs (if any) required, and period within which they should be executed and any other condition which the person making the examination thinks it necessary to specify for securing safe working. ....

- 14. Safe working pressure, calculated from .....  
 dimensions and from the thickness  
 and other data ascertained by the  
 present examination, due allowance  
 being made for conditions of working  
 if unusual or exceptionally severe.
  
- 15. Where repairs affecting the safe work-  
 ing pressure are required, state the  
 working pressure :—
  - (a) Before the expiration of the .....  
 period specified in (13).
  
  - (b) After the expiration of such .....  
 period if the required repairs  
 have not been completed.
  
  - (c) After the completion of the .....  
 required repairs.
  
- 16. Other observations .....

I certify that on.....the pressure vessel described  
 above was thoroughly cleaned and (so far as its construction permits) made accessible  
 for thorough examination and for such tests as were necessary for thorough examina-  
 tion and that on the said date I thoroughly examined this pressure vessel, including  
 its fittings, and that the above is a true report of my examination.

*Signature* .....

*Qualification* .....

*Address* .....

.....  
*Date* .....

If employed by a Company or Association, .....  
 give name and address.  
 .....  
 .....

**FORM No. 13.**  
(See rule 78.)

**REGISTER OF COMPENSATORY HOLIDAYS**

Serial No.	Number in the register of workers.	Name.	Group and Relay No.	No. of exemption Rule or No. and date of exempting order.	Year.	Weekly rest days lost due to exemption rule or exempting order in—	Dates of compensatory holidays given in—	Remarks.							
1	2	3	4	5	6	7 January to March.	8 April to June.	9 July to September.	10 October to December.	11 January to March.	12 April to June.	13 July to September.	14 October to December.	15 Lost rest days carried to the next year.	16

FORM No. 11.  
(See rule 80.)

OVERTIME MASTER ROLL FOR EXEMPTED WORKERS

- \*Quarter ending 31st March 19 . . . . .
- \*Quarter ending 30th June 19 . . . . .
- \*Quarter ending 30th September 19 . . . . .
- \*Quarter ending 31st December 19 . . . . .

No. in Register.	Name.	Department.	Overtime worked by workers during week ending . . . . .	Total overtime hours of time or piece workers for each week as taken from the register maintained under the Exemption Rules.	Time workers' normal rate of pay per hour (inclusive of allowances).	Total amount payable as overtime to workers.	Normal time rate per hour for piece workers based on production.	Total amount payable as overtime to piece workers.	Date on which overtime payment has been made.	Total overtime for the quarter.

\*Strike out quarter not required.



**NOTICE OF PERIODS OF WORK FOR ADULT OR CHILD WORKERS.**

Form No. 12.  
(See rules 82 and 84.)

Name of factory ..... Place.....

	Starting time.	Intervals for rest.		Stopping time.
		From—	To—	
Sunday ..				
Monday ..				
Tuesday ..				
Wednesday ..				
Thursday ..				
Friday ..				
Saturday ..				

Signature of Manager.....

Date .....

**NOTICE OF PERIODS OF WORK FOR ADULT OR CHILD WORKERS**

Form No. 12A.  
(See rule 82 and 84.)

Name of factory ..... Place.....

	Group No.....				Group No.....			
	Nature of work.....				Nature of work.....			
	Start- ing time.	Intervals for rest.		Stop- ping time.	Start- ing time.	Intervals for rest.		Stop- ping time.
From—		To—	From—			To—		
Sunday ..								
Monday ..								
Tuesday ..								
Wednesday ..								
Thursday ..								
Friday ..								
Saturday ..								

Signature of Manager.....

Date .....

NOTICE OF PERIODS OF WORK FOR ADULT OR CHILD WORKERS

Form No. 12B.  
(See rule 82 and 84.)

Name of factory..... Place.....

		Group No.....							
		Nature of work.....							
		Relay No.....			Relay No.....				
		Start- ing time.	Intervals for rest.		Stop- ing time.	Start- ing time.	Intervals for rest.		Stop- ing time.
			From—	To—			From—	To—	
Sunday	..								
Monday	..								
Tuesday	..								
Wednesday	..								
Thursday	..								
Friday	..								
Saturday	..								

Signature of Manager.....

Date.....

Form No. 13.  
See rule 83.

the month of.....19.....  
For the period.....19....to.....19....

REGISTER OF ADULT WORKERS.

Serial No.	Name.	Nature of work.	Group No.	Relay No.	Particulars of transfer from one group or relay to another.	No. and date of certificate if an adolescent.		Number of hours worked each day.							Remarks.		
						No. of certificate and date.	Token No. giving reference to the certificate.	1	2	3	4	5	6	7			



FO RM No. 15.  
(See rule 88.)

In case of discharged or dismissed  
worker :

**REGISTER OF LEAVE WITH WAGES**

Name..... Serial No. in the Register of Adult/Child Workers..... Date of discharge or dismissal.....  
 Department..... Date of entry into service..... leave due.....  
 Date and amount of payment made in lieu of

Calen- dar year.	No. of days leave earned in the imme- diately preceding calendar year.	No. of days leave brought forward (from previous year or years).	Lay off.	Dates of absence.			Actual No. of days worked during the calendar year shown in column 1.	Date from which the worker is allowed leave (shown in columns 2 and 3) and No. of days allowed.	Rate of wages for the period of leave.	Amount of wages for the period of leave.	Date of payment.	Remarks.
				Maternity Leave (Female worker).	Leave earned in the imme- diately pre- ceding calen- dar year and enjoyed during the year.	Others.						
1	2	3	4	5	6	7	8	9	10	11	12	13

Note.—(1) Separate page shall be allotted to each worker.

(2) No. of days leave earned = 20 for adult and 15 for child.  
 Column (8) 15 Column (8)

## LEAVE BOOK

In case of discharged or dismissed worker

\*FORM No. 16.

(See rule 89).

Name of factory ..... Date of discharge or dismissal.....  
 Name ..... Address of factory ..... Date and amount of payment made in lieu of leave due  
 Department..... Serial No. in the Register of Adult/Child workers .....  
 Date of entry into service .....

Calendar year.	No. of days leave earned in the immediately preceding calendar year.	No. of days leave brought forward from previous year or years).	Date of absence.				Actual No. of days worked during the calendar year shown in column 1.	Date from which the worker is allowed leave (shown in columns 2 and 3) and No. of days allowed.	Rate of wages for the period of leave.	Amount of wages for the period of leave.	Date of payment.	Remarks.	Signature of the Manager or his agent.
			Lay off.	Maternity Leave (Female worker).	Leave earned in the immediately preceding calendar year and enjoyed during the year.	Others.							
1	2	3	4	5	6	7	8	9	10	11	12	13	14

.Note—(1) The leave book shall be made out separately for each worker on thick bound sheets which may be folded.

(2) No. of days leave earned =  $\frac{\text{Column (8) for adult}}{20}$  and  $\frac{\text{Column (8) for Child}}{15}$

\*Vide Notification No. 1008L.W., dated 20th August 1964.

Form No. 17,  
(See rule 16 and Schedules II, III, IV, XII, and XIV to rule 94.)

HEALTH REGISTER

(In respect of persons employed in occupations declared to be dangerous operation under section 87.)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Serial No.	Works No.	Name of worker.	Sex.	Age (last birthday).	Date of employment on present work.	Date of leaving or transfer to other works.	Reason for leaving, transfer or discharge.	Nature of job or occupation.	Raw material or by-product handled.	Result of Medical Examination.	Dates of Medical Examination by Certifying Surgeon.	If suspended from work state period of suspension with detailed reasons.	Re-certified fit to resume duty on (with signature of Certifying Surgeon).	If certificate of unfitness or suspension issued to worker.	Signature, with date of Certifying Surgeon.

Note—(a) Column 8.—Detailed summary of reasons for transfer or discharge should be stated.  
(b) Column 11.—Should be expressed as fit/unfit/suspended.

FORM No. 18.  
(See rules 95 and 106.)

NOTICE OF ACCIDENT

To ..... Dated.....19....  
Sir,

I hereby give notice under section 88 of the Factories Act, 1948, that an accident occurred in this factory and the following person was involved in the accident :—

Name.....Occupation.....Sex.....Age.....

1. Date and hour of accident.....
2. The hour at which the injured person started work on day of occurrence.....
3. (a) State how the accident occurred.....  
(b) If caused by machinery—  
(i) give the name of the machine and part causing the accident.....  
(ii) state whether it was being moved by mechanical power at the time.....
4. Was the accident due to injured person's negligence or to that of any other person ?.....
5. Names of persons who saw the accident and can give important evidence.....
6. Nature and extent of injury giving medical diagnosis, if possible.....
7. Number of days the injured person is likely to be off work.....
8. Name and address of Medical Officer in attendance on injured person.....

Name of factory..... Nature of industry.....  
Branch or Department where accident occurred.....  
Address..... Signed.....

Note.—Any additional information which the Manager may wish to give, in order to let the Inspector have a clear idea of the circumstances surrounding the accident, should be attached to this form.

(To be filled in by the Factory Inspection Department.)

Classification..... Inspector's initial.....  
Responsibility..... Date.....



FORM No. 19.

(See rules 99 and 106.)

NOTICE OF DANGEROUS OCCURRENCE

Dated.....19....

To

Sir,

I hereby give notice under section 88 of the Factories Act, 1948, that a dangerous occurrence occurred in the factory as detailed below :—

- 1. Date and hour of dangerous occurrence .....
- .....
- 2. Full account of the dangerous occurrence .....
- .....
- 3. Names of persons who saw the dangerous occurrence and can give important evidence .....

Name of factory.....Nature of industry.....

Branch or department where the dangerous occurrence occurred.....

Address..... Signed.....

Note.—Any additional information which the Manager may wish to give in order to let the Inspector have a clear idea of the circumstances surrounding the dangerous occurrence, should be attached to this form.

FORM No. 20.

(See rule 100.)

To be filled in by the  
Chief Inspector.

No. of Case.....

Remarks.....

*NOTICE OF POISONING OR DISEASE.*

1. Name and address of factory.....  
.....
2. Address of office or private residence of occupier.....  
.....
3. Nature of Industry.....
4. Name and Works Number of Patient.....  
.....
5. Address of Patient.....  
.....
6. Sex and Age of Patient.....
7. Precise occupation of Patient.....
8. Nature of Poisoning or Disease from which Patient is suffering.....
9. Has the case been reported to the Certifying Surgeon ?.....

*Signature of Manager*.....

*Dated*.....

FORM No. 21.  
(See rule 102.)

**ABSTRACT OF THE FACTORIES ACT, 1918, AND THE WEST  
BENGAL FACTORIES RULES, 1958.**

*(To be affixed in a conspicuous and convenient place at or near the main entrance  
to the Factory.)*

**Working hours, holidays, intervals for rest, etc.**

**1. Hours of Work (Adults). Sections 51 and 54.**—No adult worker shall be required, or allowed, to work in a factory for more than 48 hours in any week and for more than 9 hours in any day.

**2. Relaxation of Hours of Work (Adults). Sections 5, 64 and 65.**—Limits on working hours are those prescribed by sections 51 and 54, viz., 48 hours a week and 9 hours a day. These limits cannot be exceeded except (1) in cases of public emergency declared by the State Government under section 5, (2) in cases of work covered by the exemption rules framed under section 64 and (3) in cases of permission given by the State Government or the Chief Inspector of Factories for dealing with exceptional press of work.

**3. Payment for Overtime. Section 59.**—Where by virtue of the exemption rules or exempting order a worker works in a factory for more than 9 hours in any day or for more than 48 hours in any week he shall, in respect of overtime work be entitled to wages inclusive of allowances at the rate of twice his ordinary rate of wages.

**4. Weekly Holiday (Adults). Section 52.**—No adult worker shall be required or allowed to work in a factory on the first day of the week, unless he has, or will have, holiday for a whole day on one of the three days immediately before or after the said day, and the Manager of the factory has, before the said day or the substituted day, whichever is earlier, delivered a notice at the office of the Inspector of his intention to require the worker to work on the said day and of the day which is to be substituted, and displayed a notice to that effect in the factory :

Provided that no substitution shall be made which will result in any worker working for more than ten days consecutively without a holiday for a whole day.

Where a worker in a factory, as a result of exemption from the ordinary provision relating to weekly holidays, is deprived of any of the weekly holidays he shall be allowed, within the month in which the holidays were due to him or within the two months immediately following that month, compensatory holidays of equal number to the holidays so lost.

**5. Intervals for Rest and Spreadover (Adults). Sections 55 and 56.**—The periods of work of adult workers in a factory each day shall be so fixed that no period shall exceed 5 hours before he has had an interval for rest of at least half an hour and that inclusive of his intervals for rest they shall not spread over more than 10½ hours in any day. With the permission of the State Government or the Chief Inspector in writing the period worked without an interval may be increased to 6 hours and the spreadover to 12 hours.

**6. Prohibition of Double Employment. Sections 60, 71 and 93.**—No child or, except in certain circumstances, adult worker shall be required or allowed to work in any factory on any day on which he has already been working in any other factory.

If a child works in a factory on any day on which he has already been working in another factory, the parent or guardian of the child or the person having custody of or control over him or obtaining any direct benefit from his wages shall be punishable with fine, which may extend to Rs. 50 unless it appears to the court that the child so worked without the consent or connivance of such parent, guardian or person.

**7. Prohibition of Employment of Children under 14. Section 67.**—No child who has not completed his fourteenth year shall be required or allowed to work in any factory.

**8. Hours of Work (Children). Section 71.**—No child shall be employed or permitted to work in any factory for more than  $4\frac{1}{2}$  hours in any day and during the night.

The provision relating to weekly holidays shall also apply to child workers.

**9. Prohibition of Employment of Women. Section 66.**—No woman unless authorised by the State Government in this behalf shall be employed in any factory for more than 9 hours in any day or between the hours of 7 p.m. and 6 a.m.

#### Leave with Wages.

**10. Leave with Wages. Sections 79, 80 and 83 and Rules.**—(a) Every worker who has worked for a period of 240 days or more in a factory during a calendar year shall be allowed during the subsequent calendar year, leave with wages for a number of days calculated at the rate of—

- (i) if an adult, one day for every twenty days of work performed by him during the previous calendar year;
- (ii) if a child, one day for every fifteen days of work performed by him during the previous calendar year.

The leave admissible shall be exclusive of all holidays whether occurring during or at either end of the period of leave.

(b) For the leave allowed to him, a worker shall be paid at a rate equal to the daily average of his total full-time earning for the days on which he worked during the month immediately preceding his leave, exclusive of any overtime and bonus but inclusive of dearness allowance and the cash equivalent of the advantage accruing through the concessional sale to the worker of foodgrains and other articles.

(c) A worker whose service commences otherwise than on the first day of January, shall be entitled to leave with wages at the rate stated above if he has worked for two-thirds of the total number of days in the remainder of the calendar year.

(d) If a worker is discharged or dismissed from service during the course of the year he shall be entitled to leave with wages at the rate stated above even if he has not worked for the entire period entitling him to earn leave.

(e) If the employment of worker who is entitled to leave in accordance with (a) or (c), as the case may be, is terminated by the occupier before he has taken the entire leave to which he is entitled, or if having applied for and having not been granted such leave, the worker quits his employment before he has taken the leave, the occupier of the factory shall pay him the amount payable in respect of the leave not taken, and such payment shall be made, where the employment of the worker is terminated by the occupier, before the expiry of the second working day after such termination, and where a worker who quits his employment, on or before the next pay day.

(f) The Manager shall maintain a leave with wages register in the prescribed Form No. 15 and shall provide each worker with a book called the "Leave Book" in the prescribed Form No. 16. The Leave Book shall be expressly entrusted to the worker for custody and the Manager or his agent shall not demand it except to make relevant entries therein whenever necessary and shall not keep it for more than a week at a time. If a worker loses his Leave Book, the Manager shall provide him with a copy of payment of one anna and shall complete it from his record.

(g) Every worker shall declare his nominee to whom his leave pay shall be paid if he dies before availing leave due.

#### Health.

11. **Cleanliness. Section 11.**—The precincts of every factory, floors of work-rooms, drains, etc., shall be kept clean as prescribed.

12. **Drinking Water. Section 18.**—In every factory effective arrangements shall be made to provide and maintain at suitable points, conveniently situated for all workers employed therein, a sufficient supply of wholesome drinking water.

In every factory wherein more than 250 workers are ordinarily employed the drinking water shall, during the hot weather, be cooled by ice or other effective methods. The cooled drinking water shall be supplied in every canteen, lunch-room and rest-room and also at conveniently accessible points throughout the factory.

13. **Latrines and Urinals, Section 19 and Rules.**—In every factory sufficient latrine and urinal accommodation of the prescribed type (separate enclosed accommodation for male and female workers) shall be provided conveniently situated and accessible to workers at all times while they are at the factory.

14. **Spitoons. Section 20.**—In every factory, there shall be provided a sufficient number of spitoons of the type prescribed in convenient places and they shall be maintained in a clean and hygienic condition. No person shall spit except in the spitoons provided for the purpose. Whoever spits in contravention of this provision shall be punishable with fine not exceeding five rupees.

#### Safety.

15. **Fencing of Machinery. Section 21.**—In every factory dangerous parts of machines shall be securely fenced by safeguards of substantial construction which shall be kept in position while the parts of machinery they are fencing are in motion or in use.

16. **Work on or near Machinery in Motion. Section 22.**—No woman or young person shall be allowed to clean, lubricate or adjust any part of a prime mover or of any transmission machinery while the prime mover or transmission machinery is in motion, or to clean, lubricate or adjust any part of any machine if the cleaning, lubrication or adjustment thereof would expose the woman or young person to risk of injury from any moving part either of the machine or of any adjacent machinery.

17. **Employment of Young Persons on Dangerous Machinery. Section 23.**—No young person shall work at any machine declared to be dangerous unless he has been fully instructed as to the dangers arising in connection with the machine and the precautions to be observed and has received sufficient training in work at the machine or is under adequate supervision by a person who has a thorough knowledge and experience of the machine.

**18. Casing of New Machinery. Section 23.**—In all machinery driven by power and installed in any factory after 1st April 1949 every set screw, bolt or key on any revolving shaft, spindle, wheel or pinion shall be so sunk, encased or otherwise effectively guarded as to prevent danger; all spur, worm and other toothed or friction gearing which does not require frequent adjustment while in motion shall be completely encased, unless it is so situated as to be as safe as it would be if it were completely encased.

Whoever sells or lets on hire or as agent of a seller or hirer, causes or procures to be sold or let on hire, for use in a factory any machinery driven by power which does not comply with these provisions, shall be punishable with imprisonment of a term which may extend to three months or with fine which may extend to five hundred rupees or with both.

**19. Prohibition of Employment of Women and Children near Cotton Openers. Section 27.**—No woman or child shall be employed in any part of a factory for pressing cotton in which a cotton opener is at work.

**20. Excessive Weights. Section 34.**—No woman or young person shall, unaided by another person, lift, carry or move by hand or on head, any material, article, tool or appliance exceeding the following limits:—

	*lbs.
Adult female .. .. .	65
Adolescent male .. .. .	65
Adolescent female .. .. .	45
Male child .. .. .	35
Female child .. .. .	30

**21. Protection of Eyes. Section 35.**—Effective screens or suitable goggles shall be provided for the protection of persons employed in or in the vicinity of processes which involve risk of injury to the eyes from particles or fragments thrown off in the course of the process or which involve risk of injury to the eyes by reason of exposure to excessive light.

**22. Precautions in case of Fire. Section 38.**—Every factory shall be provided with adequate means of escape in case of fire for the persons employed therein. The doors affording exit from any room shall, unless they are of the sliding type, be constructed to open outwards. Every window, door or other exit affording a means of escape in case of fire, other than the means of exit in ordinary use, shall be distinctively marked. Effective and easily audible means of giving warning in case of fire to every person employed in the factory shall be provided. Effective measures shall be taken to ensure that wherein more than twenty workers are ordinarily employed in any place above the ground-floor, or wherein explosive or highly inflammable materials are used or stored, all the workers are familiar with the means of escape in case of fire and have been adequately trained in the routine to be followed in such case.

#### Welfare.

**23. Washing Facilities. Section 42.**—In every factory adequate and suitable facilities for washing shall be provided and maintained for the use of the workers therein. Such facilities shall include soap and nail brushes or other suitable means of cleaning and the facilities shall be conveniently accessible and shall be kept in a clean and orderly condition.

If female workers are employed separate 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.

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\*Vide Notification No. 1008-L.W., dated 20th August 1964.

**24. Facilities for Storing and Drying Clothing. Section 43 and Rules.**—In the case of certain dangerous operations, *e.g.*, lead processes, liming and tanning of raw hides and skins, etc., suitable places for keeping clothing not worn during working hours and for the drying of wet clothing shall be provided and maintained.

**25. Facilities for Sitting. Section 44.**—In every factory suitable arrangements for sitting shall be provided and maintained for all workers obliged to work in a standing position in order that they may take advantage of any opportunities for rest which may occur in the course of their work.

**26. First Aid and Ambulance Room. Section 45.**—There shall in every factory be provided and maintained so as to be readily accessible during all working hours first-aid boxes or cupboards equipped with the prescribed contents. All such boxes and cupboards shall be kept in the charge of a responsible person who is trained in first-aid treatment and who shall always be available during the working hours of the factory.

In every factory wherein more than 500 workers are employed there shall be provided and maintained an ambulance room of the prescribed size and containing the prescribed equipment. The ambulance room shall be in charge of a qualified medical practitioner assisted by at least one qualified nurse and such other staff as may be prescribed.

**27. Canteens. Section 46 and Rules.**—In every factory wherein more than 250 workers are ordinarily employed, a canteen or canteens shall be provided and maintained by the occupier for the use of the workers. Food, drink and other items served in the canteen shall be sold on a non-profit basis and the prices charged shall be subject to the approval of a Canteen Managing Committee which shall consist of an equal number of persons nominated by the Manager and elected by the workers. The number of elected workers shall be in the proportion of 1 for every 1,000 workers employed in the factory provided that in no case shall there be more than 5 or less than 2 workers on the Committee. The Committee shall be consulted from time to time as to the quality and quantity of foodstuffs to be served in the canteen, the arrangement of the menus, etc., etc.

**28. Shelters, Rest-rooms and Lunch-rooms. Section 47.**—In every factory wherein more than 150 workers are ordinarily employed adequate and suitable shelters or rest-rooms and a suitable lunch-room, with provision for drinking water, where workers can eat meals brought by them shall be provided and maintained for the use of the workers.

**29. Creches. Section 48 and Rules.**—In every factory wherein more than 50 women workers are ordinarily employed there shall be provided and maintained a suitable room or rooms for the use of children under the age of six years of such women. The Creche shall be adequately furnished and equipped and in particular there shall be one suitable cot or a cradle with the necessary bedding for each child, at least one chair or equivalent seating accommodation for the use of the mother while she is feeding or attending to her child and a sufficient supply of suitable toys for older children.

There shall be in or adjoining the Creche a suitable wash-room for the washing of the children and their clothing. An adequate supply of clean clothes, soap and clean towels shall be made available for each child while it is in the Creche. At least half a pint of clean pure milk shall be available for each child on every day it is accommodated in the Creche and the mother of such a child shall be allowed in the course of her daily work suitable intervals to feed the child. For children above two years of age there shall be provided, in addition, an adequate supply of wholesome refreshment. A suitably fenced and shady open air play-ground shall also be provided for the older children.

**30. Welfare Officers. Section 49.**—In every factory wherein 500 or more workers are ordinarily employed the occupier shall employ in the factory such number of Welfare Officers as may be prescribed.

### Special Provisions.

**31. Dangerous Operations. Section 37 and Rules.**—The following operations have been declared to be dangerous :—

Manufacture of aerated water and processes incidental thereto; electrolytic plating or oxidation of metal articles by use of an electrolyte containing chromic acid or other chromium compounds; manufacture or repair of electric accumulators; glass manufacture; grinding or glazing of metals; manufacture, treatment or handling of lead, lead alloys or certain compounds of lead; generating petrol gas from petrol; 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; liming and tanning of raw hides and skins and processes incidental thereto; feeding of jute, hemp or other fibres into softening machines; lifting, stacking, storing and shipping of bales in and from finished goods godowns of Jute Mills; manufacture, use or storage of cellulose solutions; manufacture of chromic acid or manufacture or recovery of the bichromate of sodium, potassium or ammonium; printing presses and type foundries—certain lead processes carried therein.

**32. Notice of Accidents. Section 38 and Rules.**—Where in any factory an accident occurs which causes death or which causes bodily injury by reason of which the person injured is prevented from working for a period of 48 hours or more immediately following the accident or which, though not attended by personal injury or disablement, appertains to fire, explosion, collapse of building, accident to plant, etc., the Manager of the factory shall forthwith send notice thereof to the Inspector.

**33. Notice of Certain Diseases. Section 39 and Rules.**—Where any worker in a factory contracts any of the following diseases the Manager of the factory shall send notice thereof forthwith both to the Chief Inspector and the Certifying Surgeon:

Lead, phosphorus, mercury, manganese, arsenic, carbon bisulphide or benzene poisoning; or poisoning by nitrous fumes, or by halogens or halogen derivatives of the hydrocarbons of the aliphatic series; or of chrome ulceration, anthrax, silicosis, toxic anaemia, toxic jaundice, primary epitheliomatous cancer of the skin, or pathological manifestations due to radium or other radio-active substances or X-rays.

**34. No Charge for Facilities and Conveniences. Section 114.**—No fee or charge shall be realised from any worker in respect of any arrangements or facilities to be provided or any equipments or appliances to be supplied by the occupier under the provisions of the Act.

**35. Powers of Inspectors. Sections 9 and 32.**—Inspectors have power to inspect factories any time and may require the production of registers, certificates, etc., prescribed under the Act and the Rules.

Any Inspector may institute proceedings on behalf of any worker to recover any sum required to be paid by an employer under the provisions relating to leave with wages, which the employer has not paid.



**36. Obligations of Workers. Sections 97 and 111.**—No worker in a factory—

- (i) shall wilfully interfere with or misuse any appliance, convenience or other thing provided in a factory for the purpose of securing the health, safety or welfare of the workers therein.
- (ii) shall wilfully and without any reasonable cause do anything likely to endanger himself or others, and
- (iii) shall wilfully neglect to make use of any appliance or other thing provided in the factory for the purpose of securing the health or safety of the workers therein.

If any worker employed in a factory contravenes any of these provisions or any rule or order made thereunder he shall be punishable with imprisonment for a term which may extend to three months or with the fine which may extend to Rs. 100 or with both.

If any worker employed in factory contravenes any provisions of the Act or any rules or orders made thereunder imposing any duty or liability on workers he shall be punishable with fine which may extend to Rs. 20.

**37. Certificates of fitness. Section 68, 70 and 92.**—No child who has completed his fourteenth year or an adolescent shall be required or allowed to work in any factory unless a certificate of fitness granted with reference to him is in the custody of the Manager of the factory and such child or adolescent carries, while he is at work, a token giving a reference to such certificate. Any fee payable for such a certificate shall be paid by the occupier and shall not be recoverable from the young person, his parents or guardian.

An adolescent who has been granted a certificate of fitness to work in a factory as an adult and who while at work in a factory carries a token giving reference to the certificate shall be deemed to be an adult for all the purposes of the provisions of the Act relating to the working hours of adults and the employment of young persons. An adolescent who has not been granted a certificate of fitness to work in a factory as an adult shall, notwithstanding his age, be deemed to be a child for all the purposes of the Act.

Whoever knowingly uses or attempts to use, as a certificate of fitness granted to himself, a certificate granted to another adolescent to work in a factory as an adult, or who having procured such a certificate knowingly allows it to be used, or an attempt to use it to be made, by another person, shall be punishable with imprisonment for a term which may extend to one month or with fine which may extend to Rs. 50 or with both.

**38. Registers, Notices and Returns. Sections 61, 62, 63, 72, 73, 74 and 110.**—A register of adult workers in the prescribed Form No. 13 and a register of child workers in the prescribed Form No. 14 shall be maintained by the Manager of every factory.

A notice of periods of work for adults and a notice of periods of work for children in the prescribed Form No. 12, Form No. 12A or Form No. 12B shall be correctly maintained and displayed in every factory. No adult worker or child shall be required or allowed to work in any factory otherwise than in accordance with their respective notices of periods of work displayed in the factory.

The owners, occupiers or Managers of factories shall submit the prescribed periodical returns to the Inspector regularly.

[See clause (1) of rule 103]

**ANNUAL RETURN UNDER THE FACTORIES ACT, 1948.**

Year ending 31st December, 19 .

Name of factory.....

Postal Address.....

District.....

Nature of Industry.....

Name of Occupier.....

Name of Manager.....

**PART I**

\*1. Average daily number of workers employed

Men.....

Women.....

Adolescents—

Male.....

Female.....

Children—

Male.....

Female.....

2. Normal hours worked per week :

Men.....

Women.....

Children.....

Vide Notification No. 1008 L.W., dated the 20th August 1964.

3. Number of days worked in the year.....

\*\*4. Average daily number of workers employed in dangerous operations—

\*\*\*5. Average number of workers per shift exempted from the provisions of sections—

51. ....

54. ....

55. ....

56. ....

6. (a)(i) Total number of fatal accidents.....

\*\*\*(ii) Total number of non-fatal accidents.....

(b) Total mandays lost due to the accidents shown against item a(ii) above (total of column 6 of Form No. 24 prescribed under Rule 106).....

\*The average daily number should be calculated by dividing the aggregate number of attendances on working days by the number of working days in the year. In reckoning attendances, attendances by temporary as well as permanent employees should be counted, and all employees should be included, whether they are employed directly or under contractors. Attendances on separate shifts (e.g. night and day shifts) should be counted separately. Days on which the factory was closed, for whatever cause, and days on which the manufacturing processes were carried on should not be treated as working days.

\*\*Manufacture of aerated water and processes incidental thereto, electrolytic plating or oxidation of metal articles by use of an electrolyte containing chromic acid or other chromium compounds; manufacture or repair of electric accumulators; glass manufacture; grinding or glazing of metals; manufacture, treatment or handling of lead, lead alloys or certain compounds of lead; generation of gas from dangerous petroleum; 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; liming and tanning of raw hides and skins and processes incidental thereto; feeding of jute hemp or other fibres into softening machines; lifting, stacking, storing and shipping of bales in and from finished goods godowns of Jute Mills; manufacture use on storage of cellulose solutions; manufacture of chromic acid or manufacture or recovery of the bichromate of sodium, potassium or ammonium; printing presses and type foundries, certain lead process carried on therein; manufacture of compressed hydrogen or compressed oxygen; manufacture of pottery; manufacture of rayon by the viscose process; manufacturing process and processes incidental thereto carried on in Chemical Works mentioned in Appendix I of Schedule XVIII.

\*\*\*This should be calculated by taking the total of the number of workers who were exempted during the year over all the shift worked and dividing this total by the total number of shifts worked during the year.

\*\*\*\*Only those accidents which are reportable under Section 88 of the Factories Act, 1948 should be included.

## PART II

## LEAVE WITH WAGES

1. Total number of workers employed during the year—  
Men.....  
Women.....  
Children.....
  
2. Number of workers who qualified for leave during the year—  
Men.....  
Women.....  
Children.....
  
3. Number of workers whose leave was due during the year (including leave brought forward from previous years)—  
Men.....  
Women.....  
Children.....
  
4. Number of workers who were granted leave during the year—  
Men.....  
Women.....  
Children.....
  
5. Number of workers who did not avail themselves of leave during the year in which the leave accrued—  
Men.....  
Women.....  
Children.....

6. (a) Number of workers discharged or dismissed from service during the year—

.....

(b) Number of discharged workers paid wages in lieu of leave—

.....

PART III

**Compensatory Holidays**

1. Average number of workers per shift exempted from Section 52 of the Factories Act—

Men.....

Women.....

2. Number of persons who received compensatory holidays in the—

(1) same month.....

(2) following month.....

(3) third month.....

Dated.....

.....

*Signature of Manager.*

FORM No. 23.

[See clause (3) of rule 103.]

HALF- YEARLY RETURN

Period ending 30th June 19...../31st December 19.....

Name of Factory.....

Name of Occupier.....

Name of Manager.....

(1) District.....

(2) Postal Address.....

16

(3) Nature of Industry.....

(4) *Average number of workers employed daily.	}	Men ..
		Women ..
		Adolescents—
		Male ..
		Female ..
		Children—
		Female ..
		Male ..

(5) Number of days worked during the half-yearly ending 30th June 19..../  
31st December 19.....

Dated.....

*Signature of Manager.*

\*The average daily number should be calculated by dividing the aggregate number of attendances on working days by the number of working days in the half year. In reckoning attendances, attendances by temporary as well as permanent employees should be counted, and all employees should be included, whether they are employed directly or under contractors. Attendances on separate shifts (e.g., night and day 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 on should not be treated as working days.

FORM No. 24.

(See rule 106.)

## REGISTER OF ACCIDENTS AND DANGEROUS OCCURRENCES.

Name of injured person (if any).	Date of accident or dangerous occurrence.	Date of report (in Form No. 18 or 19) to Inspector.	Nature of accident or dangerous occurrence.	Date of return of injured person to work.	Number of days injured person was absent from work.
1	2	3	4	5	6

FORM No. 25.

(See Schedules VI and XIV to rule 94.)

SPECIAL CERTIFICATE OF FITNESS.

(In respect of persons employed in operations involving use of lead compounds.)

Serial No.....

Date.....

I hereby certify that I have personally examined.....

....., son of.....

....., residing at.....

who is desirous of being employed as.....in the

.....and that his age, as nearly

as can be ascertained from my examination, is.....years,

and that he is, in my opinion, fit for employment at work involving the use of lead compounds. His descriptive marks are—

.....  
 .....

Left thumb-impression of person examined.
--

*Certifying Surgeon.*

I certify that I examined the person mentioned above on—	I extend this certificate until—	Signature of Certifying Surgeon.	Note of symptoms of lead poisoning (if any).



FORM No. 36.

[See clause (6) of rule 103.]

ANNUAL RETURN—CANTEN

Year ending 31st December 19.....

Industry.	Name of factory.	No. of workers ordinarily employed.	Type of canteen.				No. of workers patronising canteen ordinarily.	Whether issues are below cost price. If so, state items provided below cost price.	Items of expenditure borne by employer, if any (details regarding items and amount subsidised should be given).	General remarks.
			Providing cooked food and refreshments, etc. (A)	Providing cooked food only. (B)	Providing refreshments and tea only. (C)	Providing tea only. (D)				
1	2	3	4	5	6	7	8	9	10	11

Date.....

Signature of Manager.

**FORM No. 27.**

[See clause (7) of rule 103.]

**ANNUAL RETURN—CRECHE**

Year ending 31st December 19....

1. Industry.....
2. Name of factory.....
3. Number of women workers ordinarily employed.....
4. Average daily attendance of children at the creche—
  - (a) 2 years and below.....
  - (b) Above 2 years.....
5. Details of facilities provided with regard to—
  - (a) Milk.....
  - (b) Food.....
  - (c) Clothes.....
  - (d) Toys.....
  - (e) Medical aid.....
  - (f) Others.....
6. Details of staff employed—
  - (i) Doctors—
    - (a) Males.....
    - (b) Females.....
  - (ii) Nurses.....
  - (iii) Teachers.....
  - (iv) Ayahs.....
  - (v) Sweepers.....
7. General Remarks.....

Dated.....

Signature of Manager.....

FO. M No. 28.

[See clause (8) of rule 103.]

ANNUAL RETURN—SHELTERS, REST-ROOMS AND LUNCH-ROOMS

Year ending 31st December 19.....

- 1. Industry.....
- 2. Name of factory.....
- 3. Number of workers ordinarily employed.....
- 4. Average daily attendance of workers at the shelter, rest-room or lunch-room.....
- 5. Details of facilities provided with regard to drinking water.....
- 6. Details of accommodation, furniture and other equipment provided.....
- 7. General remarks.....

*Dated*..... *Signature of Manager*.....

By order of the Governor.  
S. K. BANNERJI.  
*Jt. Secy. to the Govt. of West Bengal.*