## DRAFT RULES CHAPTER – I PRELIMINARY

**1.** <u>Short title, extant and commencement</u>.- (1) These rules may be called the Meghalaya Occupational Safety, Health and Working Conditions Rules, 2024.

(2) This Rules shall extend to whole of the State of Meghalaya.

(3) They shall come into force on the date of their final publication in the Official Gazette.

(4) They shall apply to all Factories/ Establishment/ Building or other construction work relating to any establishment in relation to which appropriate Government is the State Government under the Code.

## 2. Definitions. -

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

(a) "access" or "egress" means passageways, corridors, stairs, platforms, ladders and any other means to be used by a building worker for normally entering or leaving the work place or for escaping in case of danger;

(b) "appendix" means an appendix appended to these Rules;

(c) "appellate authority" means the officer as notified by the State Government under Section 4 and include the appellate authority to be notified by the State Government under sub-section (6) of Section 119 of Code;

(d) "approved" means approved in writing by the Chief Inspector cum facilitator or the officer notified by the State Government in this regard as the case may be;

(e) "Artificial humidification" means the introduction of moisture into the air of a room by any artificial means whatsoever, except the unavoidable escape of stream 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 opening at times when the temperature of the room is 26.5 degrees Centigrade or more, shall not be deemed to be artificial humidification.

(f) "Authority" means an Authority designated by the State Government under sub-section (1) of Section 119 of Code;

(g) "base plate" means a plate for distributing the load from a standard in the case of metal scaffolds;

(h) "bay" in relation to scaffolds, means that portion of the scaffold between horizontal or vertical supports whether standards or supports from which the portion is suspended, which are adjacent longitudinally;

(i)"Belt" includes any driving strap or rope;

(j) "Board" means the Meghalaya Occupational, Safety and Health Advisory Board constituted under Section 17 of Code;

(k) "brace" means a member incorporated diagonally in a scaffold for stability;

(1) "bulkhead" means an airtight structure separating the working chamber from free air or from another chamber under a lower pressure than the working pressure;

(m) "caisson" means an air and watertight chamber in which it is possible for men to work under air pressure greater than atmospheric pressure at sea level to excavate material below water level;

(n) "Calendar year" means the period of twelve months beginning with the first day of January in any year;

(o) "casual leave" means leave to cover casual absence of the employees from duty for personal reasons;

(p) "Child" shall have the same meaning as assigned to it in clause (ii) of Section 2 of Child and Adolescent (Prohibition and Regulation) Act, 1986;

(q) "Code" means the Occupational Safety, Health and Working Conditions Code, 2020 (Central Act No. 37 of 2020);

(r)"cofferdam" means a structure constructed entirely or in part below water level or below the level of the water table in the ground and intended to provide a place for work that is free of water;

(s) "compressed air" means air mechanically raised to a pressure higher than atmospheric pressure at sea level;

(t) "Compounding Officer" means an officer notified by the State Government under Section 114 of Code;

(u) "construction site" means any site at which any of the processes or operations, related to a building or other construction work, are carried out;

(v) "conveyor" means a mechanical device used in building or other construction work for transport of building material, articles, or packages or solid bulk from one point to another point;

(w) "danger" means danger of accident or of injury or to health;

(x) "decanting" means the rapid decompression of persons in a man-lock to atmospheric pressure at sea level followed promptly by their recompression in a decant lock, where they are then decompressed according to the appropriate decompression table in accordance with approved decompression procedures;

(y) "Degree" means the degree of a statutory university;

(z) "Degrees" (of temperature) means degrees on the Centigrade scale;

(za) "demolition work" means the work incidental to or connected with the total or partial dismantling or razing of a building or a structure other than a building and includes the removing or dismantling of machines or other equipment;

(zb) "department" means Labour Department, Government of Meghalaya;

(zc) "diploma" means a diploma awarded by a recognized institution;

(zd) "electronically" means any information submitted by digital mode or uploading on the designated portal or digital payment in any mode for the purpose of the Code;4

(ze) "Enquiry Officer" means the Officer appointed by the State Government for holding enquiry under Sub-Section (1) of Section 111 of Code;

(zf) "excavation" means the removal of earth, rock or other material in connection with construction or demolition work;

(zg) "falseworks" means the structural supports and bracing for frameworks or forms;

(zh) "first employment" means the first employment in any manufacturing process to which the relevant Schedule applies and shall also include reemployment in the manufacturing process following any cessation of employment for a continuous period exceeding three calendar months;

(zi) "flashpoint" means the minimum liquid temperature at which a spark or flame causes an instantaneous flash in the vapour space above the liquid;

(zj) "Form" means a form annexed to these Rules;

(zk) "frame or modular scaffold" means a scaffold manufactured in such a way that the geometry of the scaffold is predetermined and the relative spacings of the principal are fixed;

(zl) "guardrail" means a horizontal rail secured to uprights and erected along the exposed sides of scaffolds, floor openings, runways and gangways to prevent persons from a falling;

(zm) "hazardous substance" means any substance which due to its explosiveness, inflammability, radioactivity, toxic or corrosive properties, or other similar characteristics, may-

(i) cause injury; or

(ii) affect adversely the human system; or

(iii) cause loss of the life or damage to property on work-environment, while handling, transporting or storing and classified as such under the national standards or in case such national standards do not exist to the generally accepted international standards;

For the purpose of this sub rule, the hazardous substance is specified in Schedule- C.

(zn) "hazardous waste" means the hazardous waste as defined in clause (17) of sub - rule (1) of Rule 3 of the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 framed under The Environment (Protection) Act,1986 (29 of 1986);

(zo) "Health Officer" means the Municipal or Local Health Officer or District Health Officer or such other official as may be appointed by the State Government in that behalf;

(zp) "high pressure air" means air used to supply power to pneumatic tools and devices;

(zq) "Hygrometer" means an accurate wet and dry bulb hygrometer conforming to the prescribed conditions as regards construction and maintenance;

(zr) "independent tied scaffold" means a scaffold, the working platform of which is supported from the base by two or more rows of standards and which apart from the necessary ties stands completely free of the building;

(zs) "industrial activity" means as defined in sub rule (h) of Rule 2 of the Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989, framed under The Environment (Protection) Act,1986;

(zt) "isolated storage" meansas defined in sub rule (i) of Rule 2 of the Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989, framed under The Environment (Protection) Act,1986;

(zu) "Labour Commissioner" means an officer as such or in the capacity of Labour Commissioner appointed by the State Government;

(zv) "ledger" means a member spanning horizontally and tying scaffolding longitudinally and which acts as a support for putlogs or transom;

(zw) "lifting appliance" means a crane, hoist derrick, winch, gin pole, sheer legs, jack, pulley block or other equipment used for lifting materials, objects or, building worker;

(zx) "lifting gear" means ropes, chains, hooks, slings and other accessories of a "lifting appliance";

(zy) "lock attendant" means the person in charge of a man-lock or medical lock and who is immediately responsible for controlling the compression, recompression or decompression of persons in such locks;

(zz) "low pressure air" means air supplied to pressurise working chambers and man-locks and medical locks;

(zza) "magazine" means a place in which explosives are stored or kept, whether above or below ground;

(zzb) "Maintained" means maintained in an efficient state, in efficient working order and in good repair;

(zzc) "major accident" means an incident as defined in sub-rule (j) of Rule 2 of the Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989, framed under The Environment (Protection) Act,1986;

(zzd) "Major Accident Hazard (MAH) installations" means factories defined in sub-rule (ja) of Rule 2 of the Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989, framed under The Environment (Protection) Act,1986;

(zze) "Manager" means a person nominated or appointed by the employer of the establishment for the purposes of the Code and Rules;

(zzf) "man-lock" means any lock, other than a medical lock used for the compression or decompression of persons entering or leaving a working chamber;

(zzg) "material hoist" means a power or manually operated and suspended platform or bucket operating in guide rails and used for raising or lowering material exclusively and operated and controlled from a point outside the conveyance;

(zzh) "materials lock" means a chamber through which materials and equipments pass from one air pressure environment to another;

(zzi) "medical lock" means a double compartment lock used for the therapeutic recompression and decompression of persons suffering from the ill-effects of decompression;

(zzj) "Medical officer" means a person appointed under Section 42 of the Code by the Government of Meghalaya for the purposes of this Code within such local limits or for such factory or class or description of factories as it may assign to them respectively.

(zzk) "medium enterprise" means an enterprise as defined in clause (g) of Section 2 of the Micro, Small and Medium Enterprises Development Act, 2006;

(zzl) "micro enterprise" means an enterprise as defined in clause (h) of Section 2 of the Micro, Small and Medium Enterprises Development Act, 2006;

(zzm) "national standards" means standards as approved by the Bureau of Indian Standards and in the absence of such standards, the standards approved by the State Government for a specific purpose;

(zzn) "outrigger" means a structure projecting beyond the facade of a building with the inner end being anchored and includes a cantilever or other support;

(zzo) "plant or equipment" includes any plant, equipment, gear, machinery, apparatus or appliance, or any part thereof;

(zzp) "portal" means the website of the Labour department of Government of Meghalaya or Shram Seva Portal for delivering services under the Code and the Rules made thereunder;

(zzq) "Power" means electrical energy or any other form of energy which is mechanically transmitted and is not generated by human or animal agency;

(zzr) "pressure" means air pressure in bars above atmospheric pressure;

(zzs) "pressure plant" means the pressure vessel along with its piping and other fittings operated at a pressure greater than the atmospheric pressure;

(zzt) "prime mover" means any engine, motor or other appliance which generates or otherwise provides power;

(zzu) "Private dwelling house" means a house in which persons engaged in the manufacture of beedi or cigar or both reside;

(zzv) "Public Health Authority" means the Local Health Officer having jurisdiction over the area;

(zzw) "putlog" means a horizontal member on which the board, plank or decking of a working platform are laid;

(zzx) "Qualified Nurse" means a person who possesses a qualification in nursing recognized under the Indian Nursing Council Act, 1947, and who is registered with the Meghalaya Nurses registration Council, or a similar registered body of any other State in India;

(zzy) "recognized university or institution" means,-

(i) any University, incorporated by law, by the Central or any State Government; or

(ii) any other University or institution which is declared by the State Government to be a recognized University or institution for the purposes of these Rules;

(zzz) "Registering Officer" means the registering officer appointed by the State Government for purpose of these Rules and Code;

(zzza) "responsible person" means a person appointed by the employer to be responsible for the performance of specific duty or duties and who has sufficient knowledge and experience and the requisite authority for the proper performance of such duty or duties;

(zzzb) "reveal tie" means the assembly of a tie tube and a fittings used for tightening a tube between two opposite surfaces;

(zzzc) "right angle coupler" means a coupler, other than a swivel or putlog coupler, used for connecting tubes at right angles;

(zzzd)"rock bolt"means a mechanical expansion bolt or a bolt used with cementtitious or resin anchoring system which is set in drilled hole in the arch or wall of a tunnel to improve rock competency;

(zzze) "roofing bracket" means a bracket used in sloped roof construction and having sharp points or other means for fastening to prevent slippage;

(zzzf) "Rules" means the Meghalaya Occupational Safety, Health and Working Conditions Rules, 2024;

(zzzg) "Safety Officer" means a Safety Officer, and includes an Additional Safety Officer, appointed in accordance with the provisions of these Rules;

(zzzh) "safety screen" means an air and water tight diaphragm placed across the upper part of a compressed air tunnel between the face and bulkhead, in order to prevent flooding the crown of the tunnel between the safety screen and the bulkhead to provide a safe means of refuge and exit from a flooding of flooded tunnel;

(zzzi) "safe working load", in relation to an article of lifting gear or lifting appliance, means the load which is the maximum load that may be imposed on such article or appliance with safety in the normal working conditions as accessed and certified by a competent person;

(zzzj) "scaffold" means any temporarily provided structure on or from which building workers perform work in connection with building or other construction work to which these Rules apply, and any temporarily provided structure which enables building workers to obtain access to or which enables materials to be taken to any place at which such work is performed, and includes any working platform, gangway, run, ladder or step-ladder (other than a ladder or step-ladder which does not form part of such structure) together with any guardrail, toe board or other safeguards and all fixings, but does not include lifting appliance or a lifting machine or a structure used merely to support such an appliance or such a machine or to support other plant or equipment;

(zzzk) "Section" means the Section of the Code;

(zzzl) "Schedule" means a Schedule annexed to these Rules;

(zzzm) "segment" includes a cast iron or precast concrete segmented structure formed to the curvature of the tunnel cross-section and used to support the ground surrounding the tunnel;

(zzzn) "service shaft" means a shaft for the passage of building workers or materials to or from a tunnel under construction;

(zzzo) "shaft" means an excavation having a longitudinal axis at an angle greater than forty-five degree from the horizontal-

(i) for the passage of building workers or materials to or from a tunne; or

(ii) leading to an existing tunnel;

(zzzp) "shield" means a moveable frame which supports the working face of a tunnel and the ground immediately behind it and includes equipment designed to excavate and support the excavated areas in a tunnel;

(zzzq)"shoring" means the construction of a temporary structure to support temporarily an unsafe structure. These render lateral support to walls and are used under the following circumstances-

(i) when a wall shows signs of bulging out due to bad workmanship;

(ii) when a wall cracks due to unequal settlement of foundation and the cracked wall needs repair;

(iii) when an adjacent structure is to be dismantled;

(iv) when opening are to be made or enlarged in the wall;

(zzzr) "small enterprise" means an enterprise as defined in clause (m) of section 2 of the Micro, Small and Medium Enterprises Development Act, 2006;

(zzzs) "Social Security Fund" means Meghalaya Unorganised Workers' Social Security Fund established under the Code on Social Security, 2020;

(zzzt) "sole plate" means a member used to distribute the load from the base plate or the standard of wooden scaffolds to the supporting surface;

(zzzu) "sound or good construction" means construction conforming to the relevant national standards or in case such national standards do not exist, to other generally accepted international engineering standards or code of practices;

(zzzv) "sound or good material" means materials of a quality conforming to the relevant national standards or in case such national standards do not exist, to other generally accepted international engineering standards or code of practices;

(zzzw) "standard" means a member used as a vertical support or column in the construction of scaffolds which transmits a load to the ground or to the solid construction;

(zzzx) "standard safe operating practices" means the practice followed in building and other construction activities for the safety and health of workers and safe operation of machineries and equipment used in such activities and such practices conforms to all or any of the following, namely:

(i) relevant standards approved by Bureau of Indian Standards;

(ii) national building code;

(iii) manufacturer's instructions on safe use of equipment and machinery;

(iv) code of practice on safety and health in construction industry published by International Labour Organisation and amended from time-to-time;

(zzzy) "State Government" means the Government of Meghalaya;

(zzzz) "steel rib" includes all steel beams and other structural members shaped to conform to the requirements of a particular tunnel cross section, used for the purpose of supporting and stabilising the excavated areas;

(zzzza) "suspended scaffold" means a scaffold suspended by means of ropes or chains and capable of being raised or lowered but does not include a boatswain's chair or similar appearance;

(zzzzb) "Third Party Auditor" means a person or agency or experts empanelled under Rule 46;

(zzzzc) "tie" means an assembly used to connect a scaffold to a rigid anchorage;

(zzzzd) "toe board" means a member fastened above a working platform, access landing, access way, wheel barrow run, ramp or other platform to prevent building workers and materials from falling therefrom;

(zzzze) "transom" means a member placed horizontally and used to tie transversely one ledger to another, or one standard to another in an independent tie scaffold;

(zzzzf) "trestle scaffold" includes a scaffold in which the supports for the platform are any of the following which are self-supporting, namely:

(i) split heads;

(ii) folding;

(iii) step-ladder;

(iv) tripods; or

(v) moveable contrivances similar to any of the foregoing;

(zzzzg) "tubular scaffold" means a scaffold constructed from tubes and couplers;

(zzzzh) "tunnel" means a subterranean passage made by excavating beneath the over burden into which a building worker enters or is required to enter to work;

(zzzzi) "underground" means any space within the confines of a shaft, tunnel, caisson or cofferdam;

(zzzzj) "vehicle" meansall powered and manually operated truck, fork lift truck, tractor, trailer, locomotive, prime mover and any other such equipment includes a traction engine, road-building machine and transport equipment;

(zzzzk) "quarter" means the period of three consecutive months beginning on the 1st of January, the 1st of April, the 1st of July or the 1st of October;

(zzzzl) "working chamber" means the part of the construction site where work in a compressed air environment is carried out, but does not include a manlock or medical lock;

(zzzzm) "working platform" means a platform which is used to support building workers or materials;

(zzzzn) "working pressure" means pressure, in a working chamber, to which building worker is exposed;

(zzzzo) "workplace" means all places where employees/ workers are required to be present or to go for work and which are under the control of an employer;

(zzzzp) "Workroom" means any place occupied by employees engaged in any manufacturing process, with or without the aid of power;

(zzzzq) "year" means the period of twelve months beginning from the 1<sup>st</sup> day of January in any year;

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

#### 3. Competent person under clause (1), Sub-section 2(1) of Code.-

(1) The Chief Inspector-cum-Facilitator may recognize any person as the competent person within such area and for such period as may be specified for the purposes of carrying out tests, examination, inspection and certification for such buildings, dangerous machinery, hoists and lifts, lifting machines and lifting tackles, pressure plant, confined space, ventilation system and such other processes of plant and equipment located in an establishment as stipulated in the Code and the Rules made there under, if such person possesses the qualifications, experience and other requirements specified in Schedule-A appended to this rule;

Provided that the Chief Inspector-cum-Facilitator may relax the requirements of qualifications in respect of competent person if such a person is exceptionally experience and knowledgeable;

Provided further that where it is proposed to recognise a person employed under the Chief Inspector-cum-Facilitator as a competent person, concurrence of the State Government shall be obtained and such a person after being so recognised, shall not have the powers of an Inspector-cum-Facilitator.

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

(3) The person to be recognised as the competent person under this Rule shall not be above the age of sixty-two years and shall be physically and medically fit for the purpose of carrying out the requisite tests, examination and inspection.

(4) The Chief Inspector-cum-Facilitator may give a notice on portal or any other medium in the month of May every year to recognise any person or institute to be the competent person. The process of recognition may be completed within a period of sixty days from last date of receipt of application(s).

(5) Every application shall be accompanied by a fee (non-refundable) of rupees One thousand and security (refundable without interest) of rupees Twenty Thousand to be paid by the applicant through portal which shall be credited to the treasury in the head of account as may be specified by State Government from time to time. A record of such fee and security shall be maintained by the Chief Inspector-cum-Facilitator.
(6) A person or institute seeking recognition under the Code shall apply in Form-01 or Form-02, respectively.

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Serial	Purpose for	Qualifications	Experience	Facilities
No.	which			at disposal
	competency			
	required			
1.	Certification	(a) Bachelors	(i) an experience of a	
	of buildings	Degree in Civil or	minimum period of ten	
	and their	structural	years in design or	
	stability to be	Engineering or its	construction or testing or	
		equivalent from	repair of structures.	
		recognized	Provided that experience	
		university; and	for those who possesses	
		(b) A Member or	master`s degree shall be	
		Associate Member	minimum of seven years.	
		of an (i) Institution	(ii) Knowledge of non-	
		of Civil Engineers	destructive testing,	
		or (ii) The	various standards and	
		Institution of	Codes of practices that	
		Structural	are current and the effect	
		Engineers; or (iii)	of the vibrations and	
		The Institution of	natural forces on the	
		Engineers (India) in	stability of the building;	
		civil engineering or	and	
		structural	(iii) an ability to arrive at	
		engineering.	a reliable conclusion with	
			regard to the safety of the	
			structure or the building.	
2.	Dangerous	Bachelor's Degree	(i) an experience of	Gauges for
	Machines	in Mechanical or	working for a minimum	measurem
		production	period of ten years in:-	ent and
		Engineering or its	(a) design or operation or	instrument
		equivalent from	maintenance or (b)	s for
		recognized	testing, examination and	measurem
		university.	inspection of relevant	ent of
		-	machinery, their guards,	speed and
			safety devices and	any other
			appliances.	equipment
			(ii) Should :-	or device
			(a) be conversant with	to

SCHEDULE-A (Rule 3)

			safety devices and their proper functioning (b) be able to identify defects and other causes leading to the failure. Provided that experience for those who possesses master`s degree shall be minimum of seven years; and (c) have ability to arrive at a reliable conclusion with regard to proper functioning of safety devices, appliances and machine guards	determine the safety in the use of the dangerous machine.
3.	Hoists & Lifts	Bachelor`s Degree in Mechanical or Metallurgical or Production Engineering or its equivalent from recognized university	<ul> <li>guards</li> <li>(i) an experience of working for a minimum period of ten years in:-(a) design or erection or maintenance of hoists &amp; lifts or</li> <li>(d) test and inspection procedure of hoists &amp; lifts. Provided that experience for those who possesses master's degree shall be minimum of seven years.</li> <li>(ii) Should :-</li> <li>(a) be conversant with the current and relevant codes of practices and test procedures;</li> <li>(b) conversant with other statutory requirements covering the safety of hoists and lifts</li> <li>(c) be able to identify defects and arrive at a reliable conclusion and with regard to the safety of hoists and lifts</li> </ul>	
4.	Lifting Machines, chains, Ropes and Lifting Tackles	Bachelor`s Degree in Mechanical or Metallurgical or Production Engineering or its equivalent from recognized	<ul> <li>(i) an experience of working for a minimum period of ten years in:-</li> <li>(a) design or erection or maintenance of lifting machines, chains, ropes and lifting tackles or (b)</li> </ul>	

universitytest and inspectionprocedure of liftingmachines, chains, ropesand lifting tackles.Provided that experiencefor those who possessesmaster`s degree shall be	
machines, chains, ropes and lifting tackles. Provided that experience for those who possesses	
and lifting tackles. Provided that experience for those who possesses	
Provided that experience for those who possesses	
for those who possesses	
minimum of seven years.	
(ii) Should :-	
(a) be conversant with	
the current and relevant	
codes of practices and	
test procedures.	
(b) fracture machines and	
metallurgy of the	
material of construction;	
and (c) heat treatment or	
stress relieving	
techniques as applicable	
to stress bearing	
components and parts of	
lifting machinery and	
lifting tackles.	
(d) Capable of	
identifying defects and	
arriving at a reliable	
conclusion and with	
regard to the safety of	
lifting machinery, chains,	
ropes and lifting tackles	
	ilities
Plantsin Chemical orworking for a minimumfor	
	ying
Metallurgical or (a) design or erection or out	
	raulic
	non-
	tructive
recognized inspection procedure of test	,
	ges,
Provided that experience equ	uipmen
for those who possesses ts/ g	gadgets
master`s degree shall be for	
minimum of seven years. mea	asurem
(ii) Should :- ent	and
(a) be conversant with any	other
	ipment
	auges
test procedures relating to	
	ermine
	safety

			Statutory requirement concerning the safety of	in the use of Pressure
			unfired pressure vessels and equipments operating under pressure	Vessels.
			(c) conversant with	
			nondestructive	
			Testing techniques as are applicable to pressure	
			vessels; and	
			(d) able to identify	
			defects and arriving at a	
			reliable conclusion and	
			with regard to the safety	
6.	Precautions	Bachelor`s Degree	of pressure plants. (i) an experience of	Meters,
0.	against	in Chemical	working for a minimum	instrument
	dangerousfu	engineering from	period of ten years in;	s &
	mes, gases.	recognized	collection and analysis of	devices
		university	environmental samples	duly
			and calibration of	calibrated
			monitoring equipments. Provided that experience	and certified
			for those who possesses	for
			master`s degree shall be	carrying
			minimum of seven years.	out the
			(ii) should be	tests and
			(a) Be conversant with	certificatio
			the hazardous properties of chemicals and their	n of safety
			permissible limit values;	in working in confined
			(b) Be conversant with	spaces
			current techniques	spaces
			sampling and analysis of	
			environmental	
			contaminants; and	
			(c) able to arrive at a	
			reliable conclusion as regards the safety in	
			respect of entering and	
			carrying out hot work	
7.	Ventilation	Bachelor's Degree	i) a minimum of ten	Facilities
	system as	in Chemical or	years experience in	for testing
	required	Mechanical	design, fabrication,	the
	under various schedules	Engineering its equivalent from	testing of ventilating system used for	ventilating
	framed under	recognized	extraction and collection	system instrument
	Section-82 of	university.	of dust, fumes and	s and
	the Code.		vapours and other	gauges for
			ancillary equipment.	testing the

	Provided that experience for those who possesses	Effectiven ess of
	master`s degree shall be minimum of seven years.	extraction system for
	(ii) he shall be conversant	dusts,
	with relevant codes of	vapours&
	practice and test	fumes and
	procedures that are	any other
	current in respect of	equipment
	ventilation and extraction	needed for
	system for fumes and (iii)	determinin
	be able to arrive	g the
	at a reliable conclusion	efficiency
	with regard to	and
	effectiveness of the	adequacy
	system	of these
		systems. He shall
		have the
		assistance
		of a
		suitable
		qualified
		technical
		person
		who can
		come to a
		reasonable
		conclusion
		as to the
		adequacy
		of system.

(7) If the qualifications and experience of the person(s) proposed to be recognized are found to be in accordance with these Rules, the person may be called to appear for a test and interview before the Interview Board to be constituted by the Chief Inspector-cum-Facilitator.

(8) The Chief Inspector-cum-Facilitator based on the result of test and report of the interview Board and after satisfying himself as regards the competence and facilities available at the disposal of the applicant, may recognize the applicant as the competent person by issuing a certificate of competency in **Form-03** or such application shall be disposed of by rejecting the same specifying reasons thereof.

(9) The Chief Inspector-cum-Facilitator, if he has reason to believe that a competent person,-

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

(b) has carried out a test, examination and inspection or has acted in a manner inconsistent with the intent or the purpose of the Code or the rules made thereunder, or has omitted to act as required under the Code or the Rules made thereunder; or (c) For any other reason to be recorded in writing, may revoke the certificate or competency after giving an opportunity to the competent person for being heard.

(10) If the certificate of competency is revoked, the security deposited by the competent person shall be forfeited.

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

## CHAPTER- II REGISTRATION OF ESTABLISHMENT

## 4. Application for registration under Section 3 of Code.-

(1) Manner and form of filing an application for registration fee and late fee:-

(i) The occupier/employer seeking registration for an establishment shall apply electronically in **Form-04** on the official portal of Meghalaya State Labour Department Portal by giving details about the establishment, and uploading documents related to Registration of the establishment, proof of Identity and address of the occupier/employer(s), as specified in the Form. The Form shall be signed digitally or in any other manner as may be required on the portal. The applicant shall be responsible for veracity of all information submitted in the application.

(ii)The Permanent Account Number (PAN) of the applicant or the establishment, allotted under Income Tax Act, 1961 (43 of 1961) or any other unique number allotted to the establishment under any other Act for the time being in force or any other particular furnished in the said form, may be verified online.

(iii) The application shall be accompanied with a declaration from the applicant that application is in accordance with provisions of the Code and Rules made thereunder, and the applicant fulfills the requirement of registration of the establishment.

(iv) Every application referred to in sub-rule (i), shall be accompanied by the information on inter-state migrant workers in **Form-05**.

(v) The applicant shall pay the fee and the late fee (if applicable) along with application.

(vi)After submission of the application, the concerned officer shall dispose of the application and issue a registration certificate in the manner as given under Section 3 of the Code.

(vii) Fee for registration of the establishment shall be paid at the following rates-

	Number of employees employed in	Amount of fees in rupees
	the establishment	
a.	Up to 20	1000.00
b.	21-50	2000.00
c.	51-100	3000.00

-		
d.	101-150	4000.00
e.	151-200	5000.00
f.	201-250	7000.00
g.	251-500	8000.00
h.	501-750	9000.00
i.	751-1000	10000.00
j.	1001-1500	11000.00
k.	1501-2000	12000.00
1.	2001-3000	13000.00
m.	3001-5000	14000.00
n.	Above 5000	15000.00

(viii) The late fee shall be twenty five percent (25%) per annum of the registration fee.

(ix) The occupier/employer in respect of any establishment registered under any Central and Statelabourlaws (i.e The Factory Act, 1948, Contract Labour (Regulation and Abolition) Act, 1970, Inter-State Migrant Workmen (Regulation of Employment and Conditions of Service) Act, 1979, Building andOther Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996, EPF Act, 1952, ESIC Act, 1948, and Meghalaya Shop and Establishment Act,2004)shall update the registration particulars on the portal within six months from date on which these Rules come into force.

(x) If there is any increase in the number of employees to be employed in the establishment subsequent to its registration, then the differential amount as per the schedule under sub-rule (vii) shall be payable by the occupier/employer concerned.

(2) (i) The certificate of registration shall be issued in Form-06 electronically immediately if the application is complete in all respect but not later than seven days from the date of submission of complete application, failing which such establishment shall be deemed to have been registered and the certificate of registration shall be auto generated;

Provided that in exceptional circumstances the State Government may, for such period, by notification, dispense with requirement of electronic registration, in respect of establishment or class of establishment, for part or whole state, and submission of application in **Form-4** so provided, may be allowed.

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

(iii) Any registration obtained by providing wrong information shall be liable to be cancelled provided that establishment has been given an opportunity to show cause within a period of thirty days, electronically or by registered post or by speed post, as to why the certificate of registration should not be cancelled.

(3) The occupier/employer shall quote the Registration Number on all documents prepared or completed by him in connection with the Code or the Rules or the

Regulations or the Scheme, as the case may be, made there under and in all correspondence with the office concerned.

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

(5) The occupier/employer of an establishment, to which the provisions of the Code apply and whose business activities are in process of closure, may apply for cancellation of registration online on the designated portal of the State Government after giving complete details of the dues payable under the Central Labour Codes or State Labour Rules for the time being in force;

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

(6) The registering officer shall maintain a register of establishment electronically in **Form-07** showing the particulars of establishment in relation to which certificates of registration have been issued by him.

(7) The occupier/employer shall, within thirty days of the commencement and completion of any work, intimate to the Inspector-cum-Facilitator, having jurisdiction in the area where the proposed establishment is situated or as the case may be, the work is to be executed, intimating the actual date of the commencement, completion of work and cessation of establishment, as the case may be, in **Form-08** electronically and the same shall be auto-shared to the Employees' Provident Fund Organization (EPFO) and the Employees' State Insurance Corporation (ESIC).

#### 5. Notice of Commencement and cessation of operation under Section 5.-

(i) Every occupier/employer to whom Section 5 of the Code applies, shall submit a notice of commencement of operation of any factory or relating to contract labour or building or other construction works electronically on official portal of State Government within fifteen days from the date of such commencement.

(ii) Every occupier/employer to whom Section 5 of the Code applies shall submit a notice of cessation of operation of any factory or relating to contract labour or building or other construction works electronically on official portal of State Government before sixty days from the date of such cessation with a certificate that the payment of all dues to the employees/ workers employed in the establishment have been made and the premises are kept free from storage of hazardous chemicals and substances.

(iii) The Notice of Commencement and cessation of operation shall be submitted in **Form -08.** 

#### CHAPTER-III

#### **DUTIES OF EMPLOYER AND EMPLOYEE, ETC.**

## 6. <u>Annual Health Examination of employees under clause (c) of sub-section (1) of</u> <u>Section 6</u>.–

(1) The occupier/employer shall arrange for a medical examination of all the employees above the age of forty years, all persons before employing them, and of all the employees who have met an serious accident in the establishment or have fallen ill during course of employment :

Provided that employees employed in hazardous processes shall be medically examined –once before employment and every year or as per provision specifically notified otherwise.

(2) Records of such examination shall be maintained in Form-09.

(3) The medical examination shall include -

(a) Full medical and occupational history;

(b) Clinical examination with particular reference to-

(i) General physique;

(ii) Vision - Total visual performance using standard orthorator like litmus Vision Tester shall be estimated and suitability for placement shall be ascertained in accordance with the prescribed job standards;

(iii) Hearing - Person with normal hearing must be able to hear a forced whisper at twenty-four feet. Person using hearing aids must be able to hear a warning shout under noisy working conditions;

(iv) Breathing - Peak flow rate shall be measured using standard peak flow meter and the average peak flow rate shall be determined out of the readings of the test performed. The results recorded at pre-placement medical examination could be used as a standard for the same individual at the same altitude for reference during subsequent examination;

(v) Upper Limbs - Adequate arm function and grip (both arms);

(vi) Lower Limbs - Adequate leg and foot function;

(vii) Spine - Adequately flexible for the job concerned;

(viii) General - Mental alertness and stability with good eye, hand and foot coordination.

(c) Any other tests which the examining doctor considers necessary.

The medical examination shall be conducted by a qualified medical practitioner as per tests specified in the **Form-10**.

(4) Record of health examination mentioned in Sub-Rule (2) shall be submitted annualy to the Inspector-cum-facilitator, electronically.

7. Letter of appointment to employee under clause (f) of sub-section (1) of <u>Section 6</u>.-Letter of appointment to every employee on his/her appointment in the establishment shall be in the manner in specified format as-

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

#### Format (Letter of appointment)

(i) Name of employee:

(ii) Father's name:

(iii) Mother's name:

(iv) Aadhar number:

(v) Labour Identification Number (LIN) of the establishment:

(vi) Universal Account Number (UAN)/Insurance Number (ESIC):

(vii) Designation:

(viii) Category of skill:

(ix) Date of joining:

(x) Wages, Basic Pay & Dearness Allowance:

(xi) Other allowance including accommodation whichever is/are applicable:

(xii) Avenue for achieving higher wages/higher position:

(xiii) Applicability of social security EPFO and ESIC benefits applicable:

(xiv) Health check-up:

(xv) Broad Nature of duties to be performed:

(xvi) Any other information:

Signature Occupier or employer or manager

## 8. <u>Notice of accidents and dangerous occurrences under sub-section (1) Section</u> <u>10 and Section 11</u>.-

(1) Notice of any accident in any place in an establishment which either,

(a) causes loss of life; or

(b) disables a person from work on which he was employed for the rest of the day or shift in which the accident occurred; shall forthwith be sent by telephone or special messenger within four hours of the occurrence to,-

(i) the Inspector-cum-facilitator;

(ii) the relatives of the employees /workers when the accident causes loss of life to the employee or is likely to disable the employee from work for more than forty eight hours; and

(iii) in the case of fatal accidents also to:

(a) the officer-in-charge of the nearest Police Station, and,

(b) the District Magistrate or if the District Magistrate by order so directs, the Sub-Divisional Magistrate.

(2) In the case of accidents falling under clause (b) of sub- rule (1) the injured person shall be given first-aid and thereafter immediately transferred to a hospital or other place of treatment.

(3) Where any accident causing disablement subsequently results in the death of employee, notice in writing of the death shall be submitted to the authorities mentioned in sub-rule (1) within 48 hours after the death occurs.

(4) Wherein an establishment there is any dangerous occurrence as specified in the schedule annexed hereto, whether or not, causing bodily injury to any person or damage to any room or place in which persons are employed, in the manner prescribed in sub-rule (1).

(5) If any accident or dangerous occurrence has occurred, the concerned appliance, gear or equipment and the site shall, as far as practicable, be kept undisturbed until inspected by the Inspector-cum-facilitator.

(6) Every notice given under sub-rule (1) and sub-rule (4), shall be confirmed within fourty eight hours of the occurrence by submitting a written report to the Inspectorcum-facilitator in **Form 11**, provided that in case of an accident under Cl. (b) of subrule (1), such written report need be submitted only when the employee is disabled from work on which he was employed for more than forty-eight hours from the time of accident.

Provided further that, if the period of disability from working for 48 hours or more referred to in sub-rule (2) does not occur immediately following the accident, or the dangerous occurrence, but later, or occurs in more than one spell, the report referred to shall be sent to the Inspector-cum-Facilitator in the prescribed form within 24 Hours following the hours when the actual total period of disability from working resulting from the accident or the dangerous occurrence becomes 48 hours.

#### SCHEDULE-C

#### **Classes of Dangerous Occurrences**

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

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

(ii) Collapse or failure of lifting appliances, crane, derrick, winch, hoist, conveyors or other similar equipment used in raising or lowering persons or goods, or any part thereof, or breakage or failure of rope, chain or loose gears; overturning of cranes; falling of objects from height;

(iii) Explosion, explosion due to explosives, fire, leakage or release of harmful toxic gases, bursting out, leakage or escape of any molten metal, or hot liquid or gas;

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

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

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

(vii) fall, collapse, capsizing, toppling or collision of vehicle within the establishment;

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

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

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

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

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

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

#### 9. Notice of certain disease under sub-section (1) and (2) of Section 12.-

(1) A notice in the following format shall be sent forthwith electronically or otherwise, to the Inspector-cum-Facilitator or Chief Inspector-cum-facilitator and Chief Medical Officer of the district within seven days from the date on which it comes to the knowledge of the employer or occupier or manager of an establishment in which there occurs any disease as notified under the Third Schedule of the Code.

#### NOTICE OF DISEASE

(1) Name of establishment:

- (2) Nature of establishment:
- (3) In case of Mines the Name of the Mineral:
- (4) Details of Patient:
  - (a) Name of Patient:
  - (b) Works number of Patient:
  - (c) Address of Patient:
  - (d) Precise occupation of patient:
- (5) Nature of disease from which patient is suffering:
- (6) Date of Detection of Disease:
- (7) Details of Medical Practitioner:
- (8) Has the case been reported to the Medical Officer :

#### Date:

Signature of employer or occupier or manager

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

(a) the name and full postal address, telephone or mobile number of the patient,

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

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

#### 10. Duties of employee under clause (d) and (g) of Section 13.-

(1) If an employee notices any unsafe or unhealthy condition in the establishment, he/she shall report to the occupier/employer, health and safety representative or safety

officer or manager, as soon as practicable, electronically or in writing or telephonically.

(2) Every employee shall strictly adhere to the provisions of the Code and of the Rules made thereunder and to any order or direction issued by the safety officer, health and safety representative or occupier or manager or employer with a view to the safety or convenience of persons not being inconsistent with the Code and Rules; nor shall he neglect or refuse to obey such orders or directions.

(3) No employee shall interfere with, impede or obstruct any person in the discharge of his duties, nor shall he offer or render any service, or use any threat, to any other person with a view to preventing him from complying with the provisions of the Code and of the Rules made thereunder or from performing his duties faithfully.

(4) Every employee shall-

(a) Take reasonable care for their own safety and health and that of other persons who may be affected by their acts and omissions at work including the proper care and use of protective clothing, facilities and equipment placed at their disposal;

(b) Co-operate with the occupier/employer, to permit compliance with the duties and responsibilities placed on the occupier.

(5) No employee shall, except with the authority of an official, remove or pass through any fence, barrier or gate, or remove or pass any danger signal.

(6) No employee shall sleep while on duty.

(7) Subject to the provisions of the Code and of these Rules and orders made thereunder, no employee shall remain in a factory beyond the period over which his shift extends.

(8) No employee shall report in intoxicated condition or consume any intoxicating substance while on duty.

(9) If at any time occupier/employer or any employee has reasonable apprehension of likelihood of imminent serious personal injury or death or imminent danger to health, he shall take immediate remedial action and sent a report on imminent danger and action taken thereon, electronically or otherwise to the Inspector-cum-Facilitator.

(10) Every employee shall perform such other duties as may be assigned by the State Government by general or special order.

#### 11. Rights of Employee under sub-section (3) of Section 14,-

(1)On receipt of information from the employee relating to the existence of an imminent danger to their safety and health, the occupier/employer shall take immediate remedial action in this regard. The occupier/employer, whether satisfied or not, shall send a report forthwith of such actions taken, to the Inspector-cum-facilitator electronically or by registered post or speed post.

(2) Every employee shall have the right to-

(a) obtain from the occupier/employer, information relating to employees' health and safety at work;

(b) get trained annually within the factory wherever possible, or, to get himself sponsored by the occupier/employer for getting trained at a training centre or institute, duly approved by the Chief Inspector-cum-Facilitator of factory or institute as Central Labour Institute or Regional Labour Institute of Directorate General Factory Advice Service and Labour Institute, where training is imparted for employees/workers' health and safety at work;

(c) represent to the Inspector-cum-Facilitator directly or through his representative in the matter of inadequate provision for protection of his health or safety in the factory.

#### **CHAPTER-IV**

#### **OCCUPATIONAL SAFETY AND HEALTH**

## 12. <u>State Occupational Safety and Health Advisory Board under sub-sections (1),</u> (2) and (3) of Section 17.-

(1) The State Government shall constitute a 'Board' to be called the **Meghalaya State Occupational Safety and Health Advisory Board** (hereinafter referred to as the State Advisory Board) to advise the State Government on such matters arising out of the administration of this code as may be referred to it.

(2) The State Advisory Board shall consist of—

(a) The Additional Chief Secretary or Principal Secretary, Labour Department, Government of Meghalaya – Chairperson,*ex officio*;

(b) The Secretary or Joint Secretary, Labour Department, Meghalaya – Member Secretary *ex officio*;

(c) The Chief Inspector-cum-Facilitator, Office of Chief Inspector of Boiler and Factories, Government of Meghalaya- member, *ex officio;* 

(d) The Labour Commissioner, Office of Labour Commissioner, Government of Meghalaya- member, *ex officio;* 

(e) One representative of Meghalaya State Disaster Management Authoritymember; *ex officio*;

(f) One Officers from Public Works Department, One Officers from Department of Micro, Small and Medium Enterprises and One officer from the Meghalaya State Pollution Control Board, nominated by the State Government not below the rank of Special Secretary or Scientist one of which shall be a woman, one officers from Directorate Mineral Resources Department nominated by the State Government - member, *ex officio;* 

(g) Secretary of the Meghalaya Building and Other Constructions Workers Welfare Board- member, *ex officio;* 

(h) One representative of the Directorate of Health Services -member, *ex* officio;

(i) One representative of Employees' State Insurance Scheme, Shillongmember, *ex officio*;

(j) One representative of Regional Labour Institute, Directorate General Factory Advice Service and Labour Institute, Ministry of Labour and Employment, Shillong- member, *ex officio;* 

(k) One representative of Fire and Emergency Service, Govt. of Meghalayamember, *ex officio;*  (l) Five representatives of occupier/employers to be nominated by the State Government- *members;* 

(m)Five representatives of employees nominated by the State Governmentmember; and

(n) Three persons from the field of occupational health and safety having a graduation degree in Engineering or representatives from reputed research institutions or similar other discipline nominated by the State Government*member*.

(o) Special invitees from the State Government or the Central Government for seeking inputs in specific matters or industry or sector which is predominant in that State-*Member*;

(2) The members of the State Advisory Board as specified in Rule 12 (l), (m), (n), (o) shall be nominated and approved by the State Government, Labour Department.

(3) The State Advisory Board will advise the State Government on the matters relating to -

(a) standards, rules and regulations to be declared or framed under this Code;

(*b*) implementation of the provisions of this Code and the standards, rules and regulations relating thereto;

(c) the issues of policy and programme relating to occupational safety and health referred to it, from time to time, by the State Government; and

(*d*) any other matter in respect of this Code referred to it, from time to time, by the State Government.

(4) The terms of office of the Members referred to in clauses (k), (1), (m) and (n) of sub-rule (1) shall be of three years and the procedure for their nomination, and discharge of their functions shall be such as may be prescribed by the State Government:

Provided that where the appointment of the successor of any such member has not been notified in the Official Gazette on or before the expiry of the said period of three years, such member shall, notwithstanding the expiry of the period of his office, continue to hold such office until the appointment of his successor is notified in the Official Gazette.

#### 13.<u>Resignation</u>.-

(1) A member of the State Advisory Board, not being an ex-officio member, may resign his office by a letter in writing addressed to the Chairperson of the State Advisory Board.

(2) The seat of such a member shall fall vacant from the date on which his resignation is accepted by the State Government, or on the expiry of thirty days from the date of receipt of the letter of resignation by the State Government whichever is earlier.

(3) A member appointed to fill a casual vacancy, arising due to death, resignation or otherwise of the member shall hold office for the remaining period of the tenure of Board of the member in whose place he is appointed.

14. <u>Cessation of membership</u>.-If any member of the State Advisory Board, not being an ex-officio member, fails to attend three consecutive meetings of the State Advisory

Board, without obtaining the leave sanctioned by the Chairperson of such State Advisory Board for such absence, he/she shall cease to be a member of State Advisory Board;

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

#### 15. Disqualification for membership.-

A person shall be disqualified for being a member of the State Advisory Board— (i) if he/she is of unsound mind and stands so declared by a competent authority;

(ii) if he/she is an un-discharged insolvent; or

(iii) if he/she has been convicted for an offence, having a penalty of

imprisonment of three months or more;

#### 16. Removal from membership.-

The State Government may remove any member of the State Advisory Board, if in its opinion such member has ceased to represent the interest which he/she purports to represent on such State Advisory Board;

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

#### 17. Travelling Allowance for members.-

(i) the travelling allowance of an official member shall be governed by the Rules applicable to him/her for journey performed by him/her on official duties and shall be paid by the authority paying his/her salary.

(ii) the non-official members of the State Advisory Board shall be paid travelling allowance for attending the meeting of the State Advisory Board at such places as per the instructions issued by Finance Department of Government of Meghalaya from time to time.

**18.** <u>**Disposal of the Business-**</u>(1) The Board constituted under Rule 12 shall meet at least once in six months at the time and place fixed by the Chairperson.

(2) The meeting of the Board shall be called by the Member Secretary with the prior approval of the Chairperson.

(3) The Chairperson shall preside every meeting of the Board in which he is present and in his absence the meeting shall be presided by the any member nominated by Chairperson in this behalf.

(4) Notice intimating the date, time and venue of every meeting together with agenda, to be discussed at the meeting, shall be sent by registered post, email or by special messenger, to each member fifteen days before the meeting;

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

(5) No business, which is not on the list of businesses, shall be considered without permission of the chairperson.

(6) No business shall be transacted at any meeting unless atleast ten members are present:

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

(7) Every question considered at a meeting of the Board shall be decided by a majority of the votes of the members present and voting and in the event of equal votes, the Chairperson shall have and exercise a casting vote.

(8) Every decision taken at the meeting of the Board shall be recorded in a minutes book, which shall be a permanent record.

**19.** <u>Appointment of other Officers and Staff.</u>- (1) The Board may, with approval of State Government, appoint such other officers and employees as it may consider necessary for the efficient discharge of its functions;

(2) The remuneration payable to such officers and staff shall be such as may be decided by the State Government from time to time.

(3) The officers and staff appointed thereunder shall assist the Chairperson of State Advisory Board in convening meetings of the State Advisory Board.

(4) The officers and staff appointed thereunder may attend the meetings of State Advisory Board but shall not be entitled to vote at such meetings.

(5) The officers and staff appointed thereunder shall keep a record of the minutes of the meetings of State Advisory Board.

(6) The officers and staff appointed thereunder shall take necessary measures to carry out the decisions taken at the meetings of State Advisory Board.

#### 20. Technical Committee or Advisory Committee of the State Advisory Board-

The State Government may constitute as many technical committees or advisory committees of the State Advisory Board on the recommendation of State Advisory Board to assist the State Government or State Advisory Board in discharge of their functions, as it thinks fit. The term, function, procedures and allowances of these committees shall be as determined by the Labour Department of Meghalaya State Government.

21. <u>Collection of statistics and portal for inter-State migrant workers under sub-</u> sections (1) and (2) of Section 21- Every employer shall submit the details of occupational safety and health statistics electronically on web portal designated for the purpose.

#### 22. Safety Committee under Section 22.-

(1) In every establishment,-

(a) major accident hazard factories; or

(b) anestablishment which carries on any 'hazardous process' as defined in clause (za) of sub-section (1) of Section 2 and employs fifty or more employees; or

(c) a factory or building and other construction work wherein two hundred fifty or more employees are ordinarily employed; or

(d) every other establishment wherein five hundred or more employees are ordinarily employed; there shall be a Safety Committee, consisting of representatives of employers and employees;

Provided that factories declared under Section 81of the Code situated in a particular area and carrying out 'hazardous process' or 'dangerous operation' of similar nature, shall have a common Safety Committee for them with the prior approval of the Chief Inspector-cum-facilitator for the purpose this rule. The area of common safety committee shall be decided by Chief Inspector-cum-facilitator.

(2) The constitution of the Safety Committee shall comprise of :

(a) Occupier/ employer or Manager or Chief Executive, who by his position is the incharge of overall management in the establishment, shall be the Chairman;(b) In case of factory or building and other construction work, a Safety Officer and a Medical Officer, and the Safety Officer in such a case shall be the Secretary of the Committee;

(c) (i) One representative each from the production, maintenance, human resource and purchase departments; for factories, or

(ii) One representative each from the engineering or technical, plant and machinery and purchasedepartments for building and other construction work; or

(iii) for establishment not having department as mentioned in (i) or (ii), representative from management side may be choosen.

(d) representatives of employees shall be chosen by the employees;

Provided that there shall be adequate representation of the women employees in the committee.Number of representatives from management shall not be more than therepresentatives of employees.

(e) in case of common safety committee, minimum one employee from each factory shall be nominated by the occupier/employer.

(3) The tenure of the Committee shall be atleast hree years. Any change in Safety committee composition has to be supplemented with reconstitution issued by the Occupier/ employer.

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

(5) Safety Committee shall have the right to be adequately and suitably informed of -

(a) potential safety and health hazards to which the employees may be exposed at work place.

(b) data on accidents as well as data resulting from surveillance of the working environment and of the health of employees exposed to hazardous substances so far as the factory is concerned;

Provided that the Committee shall undertake to use the data on measures to improve the working environment and the health and safety of the employees.

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

(a) assisting and cooperating with the management in achieving the aims and objectives outlined in the 'Health and Safety Policy' of the establishment;

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

(c) creating safety awareness amongst all employees ;

(d) undertaking educational, training and promotional activities ;

(e) discussing reports on safety, environment and occupational health surveys, safety audits, risk assessment, emergency and disaster management plans and implementation of the recommendations made in the reports ;

(f) to investigate into the causes of accidents and unsafe practices and to suggest remedial measures;

(g) to go round the establishment with a view to check unsafe practices and detect, unsafe conditions and to recommend remedial measures for their rectification;

(h) carrying out surveys for accessment of health and safety status and performance;

(i) looking into any complaint made on the likelihood of an imminent danger to the safety and health of the employees and suggesting corrective measures; and

(j) to serve as a forum for communication on Safety and occupational health matters.

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

(8) The constitution of Safety Committee and sub-committees shall be communicated to Chief Inspector-cum-Facilitator electronically or otherwise.

(9) The employer/occupier or manager, within a period of 15 days from the date of receipt of the recommendations of the Safety Committee, shall take action to implement the recommendations of the Safety Committee.

(10) The record of minutes of meeting and action taken on recommendation shall be preserved for the period of atleast five years.

## 23. Safety Officer for establishment under sub-section (2) of Section 22 of Code.-

#### A. Qualification of safety officer -

(1) A person shall not be eligible for appointment as a safety officer relating to factory and building and other construction work unless he possesses –

(i) a recognised degree in any branch of engineering or technology and has had practical experience in any factory or building and other construction work in a supervisory capacity or above for a period of not less than 2 years; or a recognised degree in physics or chemistry and has had practical experience in any factory in a supervisory or above capacity for a period of not less than 5 years; or a recognised diploma in any branch of engineering or technology and has had practical experience in any factory or construction establishment in a supervisory capacity for a period of not less than 5 years; or a period of not less than 5 years; and

(ii) possesses a degree or diploma in industrial safety recognised by the State Government in this behalf or possesses a degree or diploma which conducted by Central Labour Institute/Regional Labour Institutes of DGFASLI.

(2) Notwithstanding anything contained in sub-rule (1), any person who - (i) possesses a recognised degree or diploma in engineering or technology and has had experience of not less than 5 years in a department of the Central or State Government which deals with the administration of labour laws in factories or building and other construction work, or

(ii) possesses a recognised degree or diploma in engineering or technology and has had experience of not less than 5 years, full time, on training, education, consultancy, or research in the field of accident prevention in industry or in any institution; shall also be eligible for appointment as a safety officers

(3) No person, who is or becomes the occupier/employer of an establishment or is or becomes directly or indirectly interested therein or in any process or business carried on therein on in any patent or machinery connected therewith, shall be appointed as a Safety Officer or shall be allowed to hold such office after he becomes so interested.

#### B. Conditions of service of Safety Officer in establishment -

(i) Where the number of Safety Officers to be appointed in an establishment as per Rule 25 exceeds one, one of them shall be designated as the Chief Safety Officer and shall have a status higher than that of the others. The Chief Safety Officer shall be in overall charge of the safety functions as envisaged in Rule 24 and other Safety Officers working under his control.

(ii) The Chief Safety Officer or the Safety Officers in the case of establishment where only one Safety Officer is required to be appointed shall be given the status of a senior executive and he/she shall work directly under the control of the chief executive of the establishment. All other Safety Officers shall be given appropriate status to enable them to discharge their functions effectively.

(iii) The scale of pay and the allowances to be granted to the Safety Officers including the Chief Safety Officer, and the other conditions of their service shall be the same as those of the other officers of corresponding status in the establishment.

(d) The Safety Officer shall be provided with adequate technical and secretarial staff and equipment, to enable him to function efficiently.

(e) In the case of dismissal or discharge, a Safety Officer shall have a right to appeal to the State Government whose decision therein shall be final.

**24.**<u>Duties of Safety Officers in establishment</u>. – (1)The duties of a Safety Officer shall be to advise and assist the management of establishment in the fulfillment of its obligations, statutory or otherwise, concerning prevention of personal injuries and maintaining a safe working environment and such duties shall include the following, namely. –

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

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

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

(iv) to advice the purchasing and store departments in ensuring high quality and availability of personal protective equipments.

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

(vi) to carry out plant safety inspections in order to observe the physical conditions of work and the work practices and procedures followed by employees and to render advice on measures to be adopted for removing the unsafe physical conditions and preventing unsafe actions by employees;

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

(viii) to investigate accidents, dangerous occurrences and other incidents;

(ix) to investigate the cases of notifiable diseases listed in the Third Schedule of the Code;

(x) to organise in association with the concerned departments, campaigns, competitions, contests and other activities which will develop and maintain the interest of the employees in establishing and maintaining safe conditions of work and procedures; and

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

(xii) to advice on the maintenance of such records as are necessary relating to accidents, dangerous occurrences and industrial diseases;

(xiii) to promote setting up of safety committees and act as advisor to such committees.

(2) No Safety Officer shall be required or permitted to do any work which is inconsistent with or detrimental to the performance of the duties mentioned in Sub-rule (1).

## 25. Requirement of Safety Officers in establishment.-

(1) Every establishment wherein 250 or more employees are ordinarily employed shall appoint Safety Officers, as laid down in the scale given below:

(a) Upto 500 employees -One Safety Officer.

(b) For every additional 500 employees or part thereof- One Safety Officer.

(2) for factories carrying on hazardous process or establishments carrying on building or other construction works, wherein 100 or more employees are ordinarily employed shall appoint Safety Officers, as laid down in the scale given below:

(a) Upto 250 employees -One Safety Officer

(b) For every additional 250 employees or part thereof.- One Safety Officer.

(3) for Major Accident Hazard Installations, wherein 50 or more employees are ordinarily employed shall appoint Safety Officers, as laid down in the scale given below:

(a) Upto 250 employees -One Safety Officer

(b) For every additional 250 employees or part thereof.- One Safety Officer.

(4) for establishments carrying on building or other construction works as mentioned 'hazardous construction works', wherein 50 or more employees are ordinarily employed shall appoint Safety Officers, as laid down in the scale given below:

(a) Upto 250 employees -One Safety Officer

(b) For every additional 250 employees or part thereof.- One Safety Officer

*Explanation:*Hazardous construction work related to building or other construction work- Excavation or construction work below ground (e.g. excavation for foundation with one basement floor), high rise construction (e.g. construction height more than 15 m from ground level), steel erection, demolition, roof work, work under and above water, work in confied spaces, tunneling work.

(5) Any appointment, when made, shall be notified to the Inspector-cum-Facilitator having jurisdiction in the area, giving full details of the qualifications, terms and conditions of service of such safety officers.

#### **CHAPTER-V**

## HOURS OF WORK AND ANNUAL LEAVE WITH WAGES 26. <u>Daily and weekly working hours under clause (b) of sub-section (1) of Section</u> <u>25 of Code.-</u>

(1) No employee shall be required or allowed to work in an establishment for more than forty eight hours in any week.

(2) If the employee works in the establishment for six days in a week, the period of work of aemployee shall be so arranged that inclusive of his interval for rest shall not spread over for more than ten and half hours per day and the seventh day of the said week for the employee shall be a paid holiday.

(3) If the employee works in the establishment for less than six days in a week arising due to provision of flexibility in working hours, the period of work of aemployee shall be so arranged that inclusive of his interval for rest shall not spread over for more than twelve hours per day and the remaining days of the said week for the employee shall be paid holidays;

Provided that the flexibility in working hours shall be permitted with the consent of sole negotiating union, negotiating union or negotiating council under the

Industrial relations Code, 2020 (35 of 2020) or with the consent of majority of employees/ workers in the absence of such negotiating union or negotiating council. (5) No employee shall be allowed to work for more than five hours continuously before he has had an interval for rest of at least half an hour.

**27. Interruption period allowed in running time under Explanation (a) of subsection (1) of Section 25 of Code.**-A maximum of fifteen minutes interruption shall be allowed any time during which the running of the transport vehicle is interrupted.

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

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

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

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

(4) The Manager shall maintain a Register in **Form No.12** for an establishment as Factory:

Provided that if the Chief Inspector-cum-Facilitator 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 employees/workers in the factory the particulars required for the enforcement of Section 26, 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.

(5) The register maintained under sub-rule (2) shall be preserved for a period of five years after the last entry in it shall be produced.

## 30. Extra Wages for overtime under Section 27 of code.-

(1) In pursuance of Section 27 of Code, where in an establishment a worker works for more than eight hours in any day or for more than forty-eight hours in any week, as the case may be, he shall in respect of such overtime work be entitled to wages at the rate of twice his ordinary rate of wages and shall be paid at the end of each wage period.

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

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

(4) the spread over for the workers shall exceed twelve hours in any one day under the following works and circumstances in factories and building or other construction, namely;

(a) urgent repairs;

(b) work in the nature of preparatory or complimentary work;

(c) work which is necessarily so intermittent that the intervals during which they do not work while on duty ordinarily amount to more than the intervals for rest;

(d) work which for technical reasons must be carried on continuously;

(e) engaged in making or supplying articles of prime necessity which must be made or supplied every day,

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

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

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

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

(k) exceptional press of work and

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

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

**31. Prohibition of overlapping shifts in Factory under Section 29 of code.**-The manager shall arranged the duties of employees as more than one relay of employees is engaged in work of the same kind at the same time.

The Printing Press attached to the newspaper offices shall be exempted from the provisions of Section 29 of the Code, subject to the following conditions, namely:-

In such printing press-

(i) The employees of each relay shall bear a badge of distinct colour which will identify the employees of one relay from that of the order;

(ii) The colour of the badge to be worn by the employees of each relay shall be specified in the notice of periods of work required to be displayed and correctly

maintained and in the copies of the notice to be sent to the Inspector-cum-Facilitator;

(iii) a flag or light having the same colour as that of the badge to be worn by the employees of any relay actually at work shall be displayed during the time of actual working of one or more relays in the department concerned;

(iv) each employees engaged in the work carried on by means of overlapping shifts shall be in possession of an identity card. The identity card shall be supplied to the worker by the factory management free of costs and shall bear the photograph of the workers, his full name, signature or thumb impression and visible identification mark and the signature of the Manager.

#### 32. Restriction on double employment in Factory under Section 30 of code.-

(1) No employee shall be required or allowed to work in any factory on any day if he has already been working in any other factory.

(2) Any employee who is appointed as a part time employee shall be allowed to work in another establishment (except factories) within next twelve hours subject to the condition that total working hours shall not exceed twelve hours, and spread over of work shall not exceed sixteen hours :

Provided that the Meghalaya State Government may, by notification, add any category of employee and condition of double employment.

**33.** Notice of periods of work under sub-section (2) of Section 31 of code.-(1)The notice referred to in sub-section (2) of Section 31 shall be displayed at conspicuous places on a notice board or electronic board and maintained in **Form-13** and copy of such notice shall be sent to Inspector-cum-facilitator electronically or by registered post before the day on which work is begun in the establishment/ factory or building or other construction work.

#### **CHAPTER-VI**

#### MAINTENANCE OF REGISTERS, RECORDS AND RETURNS

## <u>34. Maintenance and production of reports, registers and other records under</u> <u>Section 33</u>.-

(1) Employer of every establishment shall maintain-

i. Register of employment- Form No. 14.

ii. Register of attendance-cum-muster roll- Form No. 15 and Form No.15A.

iii. Register of wages, over time and deduction in Form No.16.

Registers under this chapter shall be maintained electronically or otherwise.

Entries in the registers shall be made in English, Hindi language. Every employer shall produce records and registers, on demand before the Inspector-*cum*-facilitator or any person authorized in that behalf of the State Government.

All the registers and other records shall be preserved in original for a period of five calendar years from the date of last entry made therein.

(2) Every employer shall issue a wage slip electronically or otherwise to the employees in **Form No. 17**, before one day of payment of wages to the employee.

**35. Display of notice board.** Every employer shall cause to display at the conspicuous place of the workplace of the establishment under his control, notice showing the name and address of the establishment, Safety & Health Policy, hours of work, wage period, date of payment of such wages, details of accident and dangerous occurrence in the establishment for the last five years, name and address of the Inspector-cum-facilitator having jurisdiction to such establishment and date of payment of unpaid wages to such workers in English, Hindi and in the Local Language understood by the majority of the workers.

#### 36. Annual Returns-

(a) The employer to which the provisions of this Code applies on or before the 28th or 29th day of February in each year, upload a unified annual return in **Form No. 18** prescribed under the Rules made in the Occupational Safety, Health and Working Conditions Code, 2020 (No.37 of 2020) online on the designated portal of the State Government, giving information as to the particulars specified in respect of the preceding year; provided that during inspection, the Inspector-*cum*-Facilitator may require the production of accounts, books, register and other documents maintained in electronic form or otherwise.

Every employer shall file such returns within such period and in such a manner as may be specified by the State Government by general or special order time to time.

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

(b) If the employer to which the provisions of this Code applies sells, abandons or discontinues the working of the establishment, then he shall, within one month of the date of such sale or abandonment or four months of the date of such discontinuance as the case may be, upload online, on the designated portal of the State Government, a further unified return in **FORM-18 and 18A** referred to in clause (a) in respect of the period between the end of the preceding year and the date of the sale, abandonment or discontinuance.

(i) in case of manual registers and other records, be legibly entered in ink in English language;

(ii) be preserved in original for a period of five years after the date of the last report or entry;

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

(iii) be produced, electronically or by registered post or speed post, on demand before the Chief Inspector-cum-Facilitator or an Inspector-cum-Facilitator or any person authorized in that behalf of the State Government. **37.** <u>Register of accident and dangerous occurrences</u>.- The registers of accident and dangerous occurrences required by sub-clause (v) of clause (a) of Section 33 of the Code shall be maintained in a **Form-19**.

## 38. Register of leave with wages under clause (a) of Section 33.-

(1) The owner, agent or manager of every establishment shall maintain in respect of every employee thereof a record of leave with wages electronically or manually in **Form-20**.

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

## CHAPTER-VII

# INSPECTOR-CUM-FACILITATOR AND OTHER AUTHORITY

# **39.** <u>Appointment of Inspector-cum-Facilitator for Factory under sub-section (1)</u> <u>of Section 34.</u> –

(1)The Chief Inspector of Boilers and Factories, Government of Meghalaya will be the Chief Inspector-cum-Facilitator for the purposes of the execution of the Code in the State for the following provisions –

i. Occupational Safety and Health (Chapter IV)

ii. Factories (part V of chapter XIII)

iii. Notice of accidents under Section 10 and 11

iv. Clause (b) of Section 6

(2) Qualification of Inspector-cum-Facilitator of Establishment as Factories- No person shall be appointed as an Inspector-cum-facilitator for the purpose of the Code unless he/she possesses of the qualifications as hereunder-

(a) He/ She must have a Degree in Mechanical or Production or Power Plant or Metallurgical Engineering or Technology of a recognised university, and preferably with practical experience of at least two years in a workshop or a manufacturing concern of good standing and

(b)Where for a particular, post, special knowledge to deal with special problems is required, the Government may, in addition to the basic qualifications, prescribe appropriate qualifications for such a post.

## 40.<u>An Inspection Scheme of Inspector-cum-Facilitator of Factories under sub-</u> section (2), (3), (4) of Section 34. –

(1) The Government shall lay down an inspection scheme for the generation of webbased inspection and calling of information under this Code, electronically and such scheme shall, inter alia, have provisions to cater to special circumstances for assigning inspection and calling for information from establishment or any other person besides web-based inspections. (2) Under the scheme, the randomised selection of establishment and the Inspectorcum-Facilitator for inspection shall be provided. Unique number, to each establishment (which will be same as the registration number allotted to the establishment registered under Section 3, unique number to each Inspector-cum-Facilitator and to each inspection in such manner as may be assigned by the Government for inspection scheme.

(3) The Inspector-cum-Facilitator shall upload the inspection reports within seven days from the date of inspection made as sub-rule (2).

(4)The special inspection for investigation of accident or dangerous occurrence shall be made as and when required in his jurisdiction as notified by Government.

(5) Routine inspection for smooth discharge of duties is as-

(i) High Risk- required to inspected yearly,

(ii) Mid Risk Industries- required to inspected ones within two years,

(iii) Low risk - required to inspected as required only.

# 41. <u>Appointment of Chief Inspector-cum-facilitator for Factoryunder sub-section</u> (5) of Section 34.-

# Qualification of Chief Inspector-cum-Facilitator of Factories-:

(1) No person shall be appointed to the post of Chief Inspector-cum-Facilitator of Factories unless he/she has obtained a Degree in Mechanical or Production or Power Plant or Metallurgical Engineering or any qualification declared by the Union or State Public Service Commission as equivalent thereof and has served for not less than four years as Deputy Chief Inspector (i.e. Deputy Chief Inspector-cum-Facilitator of Factories) or minimum eight years total experience as Deputy Chief Inspector (i.e. Deputy Chief Inspector cum-Facilitator of Factories) and as Inspector of Boilers & Factories (i.e. Inspector-cum-Facilitator of Factories) or minimum eight years experience as Inspector (i.e. Inspector-cum-Facilitator of Factories) of Boiler & Factories under the Occupational Safety and Health Code or The Factories Act, 1948(earlier) and Indian Boiler Act, 1923.

# Qualification of Deputy Chief Inspector-cum-Facilitator of Factories -:

(2) No person shall be appointed to the post of Deputy Chief Inspector-cum-Facilitator of Factories unless he/she has the requisite qualifications of an Inspector and has served for not less than four years as Inspector (Inspector-cum-Facilitator of Factories) of Boiler & Factories under the Occupational Safety and Health Code or the Factories Act,1948 and Indian Boilers Act,1923 or Inspector-cum-Facilitator of Factories under Occupational Safety and Health Code.

# 42. <u>Appointment of Inspector-cum-Facilitator for establishment other than</u> <u>factory under sub-section (1) of Section 34.</u> –

(1) The Labour Commissioner, Government of Meghalaya will be the ChiefInspectorcum-Facilitator for the purposes of the execution of the Code in theState for the following provisions –

i. Occupational safety and health (chapter IV);

ii. Contract Worker (part I of chapter XIII), Interstate Migrant Worker (Part II of chapter XIII), Audio Visual Worker (Part III of chapter XIII), Beedi and

Cigar workers (part IV of chapter XIII), Building and Other Construction Workers (part VI of chapter XIII),Plantation workers (part VII of chapter XIII); iii. Notice of accidents under Section 10 and 11:

- iv. Clause (b) of Section 6 :
- (2) The State Government may by general or special order, determine the qualification and experience for Chief inspector-cum-Facilitator for the purposes of such establishment or class of establishments.

(3) The Inspector-cum-Facilitator shall exercise suchother power and perform such other duties as may berequired by general or special order of State Government.

# 43. <u>An Inspection Scheme of Inspector-cum-Facilitator of establishment other</u> than factory s under sub-section (2), (3), (4) of Section 34. –

(1) The Government shall lay down an inspection scheme for the generation of webbased inspection and calling of information under this Code, electronically and such scheme shall, inter alia, have provisions to cater to special circumstances for assigning inspection and calling for information from establishment or any other person besides web-based inspections.

(2) Under the scheme, the randomised selection of establishment and the Inspectorcum-Facilitator for inspection shall be provided. Unique number, to each establishment (which will be same as the registration number allotted to the establishment registered under Section 3, unique number to each Inspector-cum-Facilitator and to each inspection in such manner as may be assigned by the Government for inspection scheme.

(3) The Inspector-cum-Facilitator shall upload the inspection reports within seven days from the date of inspection made as sub-rule (2).

(4)The special inspection for investigation of accident or dangerous occurrence shall be made as and when required in his jurisdiction as notified by Government.

(5) Routine inspection for smooth discharge of duties is as-

(i) High Risk- required to inspected yearly,

(ii) Mid Risk Industries- required to inspected ones within two years,

(iii) Low risk – required to inspected as required only.

# 44<u>. Power to take samples of any articles or substances under clause (x) of sub-</u> section (1) of Section 35.-

(1) The Chief Inspector-cum-Facilitator shall recognise any laboratory accredited with the National Accreditation Board for Testing and Calibration Laboratories for taking samples and giving analysis report required under the Code.

(2) A notice on employer of the establishment from where or in vicinity of which sample is to be taken shall be served in **Form-21** by the Inspector-Cum-Facilitator.

(3) The recognised laboratory on the order issued by the Inspector-cum-Facilitator in writing or on request from the employer shall take samples.

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

(5) Samples shall be collected in two parts and shall be placed in containers which shall be sealed, marked and signed by the person collecting sample as well as the employer or any person authorized by him.

(6) One part of sample collected and placed, shall be handed over to the employer or his authorised person present and the other part one shall be sent forthwith to the laboratory for analysis.

(7) The report of the laboratory shall be recorded in **Form-22** in triplicate and signed by the Analyst of the laboratory and sent to the Inspector-cum-Facilitator from whom the order for sampling is received within seven days from the date of completion of analysis of sample.

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

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

# 45. <u>Powers and duties of Inspector-cum-facilitator of Factory or Building</u> andOther Construction work under clause (xiv) of sub-section (1) of Section 35.-

(A) Inspector-cum-Facilitator shall, for the purpose of the execution of the Code have power to do all or any of the following things, that is to say—

(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-cum-Facilitator who is a duly qualified medical practitioner, to carry out such medical examinations, as may be necessary, for the purpose of his duties under the Act;

(c) to seize any record or document for the purposes of examination and satisfying himself that the provisions of the Act and the rules there under were complied with or which he may consider relevant in respect of any offence under the Code which he may have reasons to believe or suspect has been committed by the occupier or the manager;

(d) to direct by an order in writing the occupier or the manager to produce either personally or through his/her agent any prescribed record or register at his/her office or any other place where he/she may be temporarily camping or at any other convenient place;

(e) to direct by an order in writing the manager or the occupier or any other employee of a factory to appear before him/her personally at his/her office or at the place where he/she may be temporarily camping or at any other place, to be examined and interrogated by him on any matter connected with the compliances of the provisions of the Code or the Rules. (f) enter, with such assistants, being persons in the service of the Government, or any local or other public authority, or with an expert as he/she thinks fit, any place which is used, or which he/she has reason to believe is used, as an establishment;

(g) inquire into any accident or dangerous occurrence, whether resulting in bodily injury, disability or not, and take on the spot or otherwise statements of any person which he may consider necessary for such inquiry;

(h) direct the occupier or manager that any premises or any part thereof, or anything lying therein, shall be left undisturbed (whether generally or in particular respects) for so long as is necessary for the purpose of any examination;

(i) in case of any article or substance found in any premises, being an article or substance which appears to him as having caused or is likely to cause danger to the health or safety of the workers, direct it to be dismantled or subject it to any process or test (but not so as to damage or destroy it unless the same is, in the circumstances necessary, for carrying out the purposes of this Code), and take possession of any such article or substance or a part thereof, and detain it for so long as is necessary for such examination.

(j) Inspector-cum-Facilitator shall, after every inspection, as may be deemed necessary, issue prohibition or improvement notice in the **Form-23** pointing out the non-compliance of provisions of safety, health and working conditions under the Code, and rules and regulations framed there under, to the employer or occupier or manager or owner or officer-in-charge of the establishment.

(k) An Inspector-cum-Facilitator shall, at each inspection, ascertain to what extent any shortcomings notified at a previous inspection have been rectified and the notices previously issued have been complied with. His findings and any shortcomings which may come to light during the inspection, together with any order passed by him under the Code or the regulations made there under shall be recorded and maintained.

#### (B) Safety of Building and Machinery under Section 35.-

(1) If it appears to the Inspector cum facilitator that any building or part of a building or any part of the ways, machinery or plant in a factory is in such a condition that it is dangerous to human life or safety, he may serve on the occupier or manager or both of the factory an order in writing specifying the measures which in his opinion should be adopted and requiring them to be carried out before a specified date.

(2) If it appears to the Inspector cum facilitator that use of any building or part or of building or any part of the ways, machinery or plant in a factory involves imminent danger to human life or safety, he may serve on the occupier or manager or both of the factory an order in writing prohibiting its use until it has been properly repaired or altered and after written permission from the Inspector cum Facilitator with prior approval of the Chief Inspector cum Facilitator of factories.

#### (C) Maintenance of Building under Section 35.-

(1) If it appears to the Inspector cum facilitator that any building or part of a building in a factory is in such a state of disrepair as is likely to lead to conditions detrimental to the health and welfare of the workers, he may serve on the occupier or manager or both of the factory an order in writing specifying the measures which in his opinion should be taken and requiring the same to be carried out before such date as is specified in the order.

(2) If it appears to the Inspector cum facilitator that any building or part of a building or any part of the ways, machinery or plant in a factory is in such a condition that it may be dangerous to human life or safety, he may serve on the occupier or manager or both of the factory an order in writing requiring him before a specified date-

(i) to furnish such drawings, specifications and other particulars as may be necessary to determine whether such building, ways, machinery or plant can be used with safety; or

(ii) to carry out such tests in such manner as may be specified in the order, and to inform the Inspector cum facilitator of the results thereof.

# 46. Third Party Audit and Certification for Factory under sub-section (2) of Section 37.-

Third Party Auditor

(1) The State Government or Chief Inspector-*cum*-Facilitator will publish in publicto obtain applications from experts with required qualification for the purpose of such start-up establishments or class of establishment to be specified separately by the State Government.

(2) The Third Party Auditorempanelled under sub-rule (1), shall,—

(a) carry out the safetyaudit and certification in the manner and for the purpose specified in the scheme referred to in sub-rule (1);

(*b*) perform such duties as may be specified in such scheme and submit his report to the concerned employer and to the Inspector-*cum*-Facilitator.

(3) On the basis of applications received, a committee will be formed under the chairmanship of the Chief Inspector-*cum*-Facilitator. The Chief Inspector-cum-facilitator, will empanel such experts as a 'Third Party Auditor' for the purpose mentioned in sub-rule (2) after recommendation of committee, their satisfactory inspection report, written test or technical interview or other guidelines for approval of competency as decided by the Office of Chief Inspector-cum-facilitator.

(4) The Third Party Auditor empanelled will advise health and safety provisions to minimize the accidents, perform safety audit, to concerned establishments.

(5) The committee of expert for empanelment of Third Party Auditors will from time to time fix the total number of such third party auditors to be recognized depending on the total quantum of work available in the State and also the manner in which applications are to be invited.

(6) The Chief Inspector-cum-Facilitator may, after giving an opportunity of being heard to the person recognized as a 'Third Party Auditor cum Expert' revoke the certificate issued to him.

(i) if he has reason to believe that the Third Party Auditor ;

(a) has violated any of the conditions stipulated in the recognition;

(b) has carried out aaudit, test, examination or has otherwise carried in a

manner inconsistent with the intent or the purpose of the Code or the Rules made there under; or

(c) has omitted to Code as required under the Code and the Rules made there under; or

(7) Academic Qualification and Experience:-

**I.** degree in branch of Chemical, Mechanical, Electrical, Production Engineering from recognized institution or university and diploma in industrial safety from recognized institution and having ten years of experience in manufacturing, maintenance, design, project or safety department in the supervisory or above capacity in factories; or

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

**III**. degree or diploma in any branch of Engineering and having ten years of experience in Factory Inspectorate or Chief Inspectorate of Factories or Directorate of Industrial Safety and Health or ten years of experience in the Directorate General Factory Advice Service and Labour Institutes, Ministry of Labour and Employment or Central Labour Institute or Regional Labour Institute of Directorate General Factory Advice Service and Labour Institutes.

(8) Duties and Responsibilities of Experts:-

**I**. Third Party Auditor shall maintain a log book of all safety audits undertaken by him indicating the name and address of the audited establishment, name of the person who has carried out safety audit, contact persons, date of the audit and date of submission of the audit report to the Occupier.

**II.** It shall be scrutinized and approved by jurisdictional officers of the Chief Inspector-*cum*-Facilitator office.

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

**IV.**Third Party Auditor and the person authorized to carry out safety audit shall not disclose, even after ceasing to be a recognized auditor or employee of the institution, any manufacturing or commercial secrets or working processes or other confidential information which may come to his knowledge in the course of their duties as an

auditor. Any failure in this regard, the Third Party Auditor shall be liable revocation of recognition under the rule and he shall not be eligible for recognition in future.

(9) Standards of Safety Audit.- The Safety Audit shall be carried out as per the standards laid down under IS: 14489: 1998 in the Indian Standard Code of Practice on Occupational Safety and Health Audit or any such standards prevailing at the relevant time whichever is latest by the Third Party Auditor or in case of an institution, by the person or employee possessing the qualification, experience and other requirements as set out in sub-rule (2) as a Third Party Auditor.

(10) Periodicity for conducting Safety Audit: The Safety Audit shall be conducted once in every two years in General Category factories & for hazardous process factories or industry and Major Accident Hazard (MAH)industry, the Safety audit shall be conducted every year.

(11) Safety Audit Report.- The Third Party Auditor shall within one month from the date of completion of safety audit shall forward his report with recommendations regarding improvement of the occupational safety and health in an establishment to the occupier and a copy of the same to be submitted to office of the Chief Inspectorcum-Facilitator:

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

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

### 47. Manner of alternative employment under sub-clause (A) of sub-section (1) of

**Section 38.-** (1) It shall be the duty of occupier to provide alternative employment to any person whose employment has been affected by an order under sub-clause (A) of sub-section (1) of Section 38, if any other establishment of the same employer exists within the radius of one hundred kilometer.

(2) The alternative employment may be offered only when the period of employment affected by the order is fifteen days or more.

(3) Such persons shall be given notice at least three days before the actual date of such order.

(4) The wages and other facilities shall not be affected to the detriment of such person.

**48.** Qualification of Medical Officer under Section 42 of the Code– (1) The Medical Officer shall be a medical practitioner who possesses any recognised medical qualification as defined in the National Medical Commission Act, 2019(30 of 2019) and who is enrolled on a Indian Medical Register as defined in the National Medical

Commission Act, 2019 and on a State Medical Register as defined in Section 35, Section 36, Section 37 and Section 40 of the said Act.

(2) In respect of factory, in addition to the qualifications mentioned in sub-rule (1), a person should possess a certificate of Training in Industrial Health of minimum three months duration recognised by the State Government or should possess a diploma in Industrial/ Occupational Health or Associate Fellowship of Industrial Health conducted by the Directorate General Factory Advice Service and Labour Institutes (DGFASLI) or equivalent, including International Labour Organization (ILO) Classification of chest Radiograph duly recognized by the central government.

(3) No person shall be appointed to be, or authorized to exercise the powers of, the medical officer, or having been so appointed or authorized, continue to exercise such powers, who is or becomes the occupier of a factory or is or becomes directly or indirectly interested therein or in any process or business carried on therein on in any patent or machinery connected therewith or is otherwise in the employ of the factory:

Provided that the State Government may, be order in writing and subject to such conditions as may be specified in the order, exempt any person or class of person from the provisions of this sub-rule in respect of any factory or class or description of factories.

#### 49. Dangerous occupations or processes for medical examination.-

Following shall be the dangerous occupations or processes for the purposes of medical examination and certification, namely:-

- (i) operations declared dangerous under Section 82 of the Code;
- (ii) factories carrying hazardous process as per First Schedule of the Code;
- (iii) treatment of Biomedical waste;
- (iv) sewerage treatment;
- (v) solid waste management;
- (vi) marble cutting;
- (vii) ready mix concrete;
- (viii) hot mix concrete;
- (ix) working at height;
- (x) operation of crane or heavy duty machinery;

(xi) stone crushing or stone breaking;

(xi) such other occupation or process as may be notified by the State Government from time to time, to be dangerous.

#### 50. Duties of Medical Officer under sub-section (2) of Section 42.-

(1) On receipt of a reference under clause (c) sub section (2) of Section 42, the medical officer shall, after giving prior notice regarding date, time and place for medical examination and upon examining the worker sent for such examination, prepare the age and fitness certificate in **FORM NO.48** and deliver the same to the manager of the establishment and the worker concerned after retaining a copy thereof. (2) The medical officer may seek opinion of specialists like radiologist, dentist and orthopedic surgeon as the case may be, for the purpose of determination of age.

(3) Medical Officer shall carry out such examination and furnish such report as State Government may direct-

(a) for examination and certification of workers in an establishment in such dangerous occupation or processes as specified in First Schedule to the Code;(b) for medical supervision of any establishment or class of establishment where cases of chronic occupational illness have occurred due to hazardous nature of any process carried on or hazardous condition of work;

(c) in respect of any establishment or class of establishment or description of establishment in which operations involve any risk of injury to the health of any person or class of persons employed therein;

(d) to undertake occupational health survey for any or class of an establishment, where cases of illness have occurred or there is prevalence of diseases as specified in Third Schedule to the Code.

(e) to assess the age and issue fitness of adolescent for employment in an establishment or class of establishment.

### 51. Special Powers of Inspector-cum-Facilitator in respect of factory under

<u>Section 38 of Code</u>-The Inspector-cum-Facilitator shall exercise such other/ special power and perform such other duties as may be required by general or special order of State Government.

#### 52.Employment of Women in establishment under Section 43.-

(1)The following conditions shall be met for employment of women during night or before 6.00 a.m. and beyond 7.00 p.m in any day, namely:-

(a) the consent of women employ shall be taken in writing;

(b) No women shall be employed against the maternity benefit provisions laid down under the Social Security Code, 2020 (36 of 2020);

(c) adequate transportation facilities shall be provided to women employee to pick-up and drop such employee at her residence;

(d) the workplace including passage towards conveniences or facilities concerning toilet, washrooms, drinking water, entry and exit of women employee should be well-lit;

(e) the toilet, washroom, canteen and drinking facilities should be near the workplace where such women employee are employed; and

(f) Provide safe, secure and healthy working condition such that no women employee is disadvantaged in connection with her employment.

(g) in case of below ground level (i.e. basement) not less than 3 women employees shall be on duty at any place.

(h) dedicated telephone numbers of the establishment shall be displayed at conspicuous places both at the establishment as well as inside the vehicles, so that any women employee can utilize them, in case of any exigency or emergency; and

(i) The provisions of the Sexual Harassment of Women at workplace(Prevention, Prohibition and Redressal) Act, 2013 (14 of

2013) and Rules thereunder, as applicable to the establishments, shall be complied with;

(j) during night shift not less than 1/3rd-of strength of the supervisors or shiftin-charge or foreman or other supervisory staff shall be women;

(k) the employer shall send a fortnightly report to the Inspector-cum-Facilitator under the Code about the details of women employees engaged during night shifts and shall also send express report whenever there is some untoward incident to the Inspector-cum-Facilitator and local Police station as well.

# 53. <u>Adequate Safety of employment of women in dangerous operations under</u> <u>Section 44 of code</u>. –

(1) No pregnant women shall be allowed to work in a factory involved in dangerous operations, where she is liked be exposed to hazardous substances which are carcinogenic for herself and teratogenic (for foetus).

(2)All the measures as mentioned in the provisions related to hazardous process and dangerous operation shall be complied with.

(3) Women shall be well trained on their job, shall be rendered knowledge about the hazardous properties of the substances being handled, stored, manufactured, hazards present at their workplace, and measure to overcome with that.

(4) Women employed shall be provided will all the necessary personnel protective appliances at the workplaces, they are deployed.

(5) Women shall be trained and made aware about the means of escape in the events of fire, leakage, spillage hazardous substances.

# Chapter-VIII SPECIAL PROVISIONS

#### PART-I CONTRACT LABOUR

# 54. Conditions of License under sub-section (3) of Section 47 in respect of contract labour.-

The licence issued shall be subject to the following conditions, namely:-

(i) The licence shall be non-transferable;

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

(iii) the rates of wages payable to the contract labour by the contractor shall as per the Code on Wages, 2019 (Central Act No. 29 of 2019) and Rules made there under;

(iv) if the contract labour of the contractor is working at the premises of the principal employer, then, it shall be the responsibility of the principal employer to provide the facilities or amenities such as toilet, washroom, drinking water, bathing facilities if required, changing room, first aid box, canteen and crèche; and

(v) all other facilities and entitlements shall be provided by the contractor.

(vi) In case the contractor fails to make payment of minimum wages to the contract labour, then, the Labour Commissioner or Chief Inspector-cum-Facilitator or his representative, shall cause such payment to be made to the contract labours who have not been paid, out of the security deposit referred to in Rule 63 including by invoking the bank guarantee.

(vii) The contractor shall intimate within fifteen days of the receipt of a contract work order about the details of the contract work order in the manner as as specified in Rule 62.

(vi) the licencee shall notify any change in the number of contract labour or the conditions of work to the designated authority;

(ix) every licence granted under Rule 56 and renewed under Rule 57 shall remain in force for five year from the date it is granted or renewed.

# 55. Issue of licence for contractor under sub-section (1) of Section 48 of the Code.-

(1) Application for issuing license shall be made in **Form24** to the designated authority on Portal.

(2) Every application referred to in sub-rule (1) shall also be accompanied by the security and fees at the rates specified in the Schedule given below:-

# SCHEDULE

Number of workers to be Fee for license Security to be engaged/employed by contractor deposited

	Number of workers employed in the establishment	Amount of fees in
		rupees
a	No license is required up to 49 contract labour	Nil.
b	50 and above but not exceeding 100 contract labour	Rs. 1000
c	101 and above but not exceeding 300 contract labour	Rs. 2000
d	301 and above but not exceeding 500 contract labour	Rs. 3000
e	501 and above but not exceeding 1000 contract	Rs. 5000
	labour	
f	1001 and above but not exceeding 5000 contract	Rs. 10000
	labour	
g	5001 and above but not exceeding 10000 contract	Rs. 20000
	labour	
h	10001 and above but not exceeding 20000 contract	Rs. 30000
	labour	
i	20001 and exceeding contract labour	Rs.40000

(3) Payments as required under sub-rule (2) shall be paid through portal which shall be credited to the treasury in the head of account as may be specified by the State Government from time to time.

(4) After receiving application on portal, the designated authority shall issue license in **Form-25** within a period of forty five days specifying the conditions laid down in Rule 55.

**56.** <u>Renewal of license for contractor under sub-section (3) of Section 48.</u>- (1) Every contractor to whom a license is issued under Rule 55 shall make an application for renewal to the designated authority on portal in the **Form-24** thirty days before the expiry of license.

(2) The designated authority shall renew the license in **Form-25** within thirty days from the date of receipt of application.

# 57. Amendment of license for contractor under sub-section (3) of Section 48.-

(1) Every contractor to whom license is issued under Rule 55 or 56shall make an application for any amendment to the designated authority on portal in the **Form-26** before any change or within three days from such change.

(2)The fee for the amendment of a licence shall be rupees five hundred rupees plus the amount of difference of security and fee required as per the schedule under Rule 55.

(3) After receiving application on portal, the designated authority shall amend and issue the license to contractor in **Form-25** within a period of three days.

**58.** <u>Late fee for license under Section 48</u>.- If the application for renewal or amendment is not received within the time specified in sub-rule (1) of Rules 55 and 56, a fee of twenty five per cent in excess of the fee ordinarily payable for the licence shall be payable on Portal.

# 59. Responsibility of contractor under sub-section (4) of Section 48.-

(1) A contractor shall be responsible for payment of wages to each employee/worker employed by him as contract labour and such wages shall be paid before the expiry of such period as prescribed under Rules made by the appropriate Government under the Code on Wages, 2019 (Central Act No. 29 of 2019).

(2) Every employer shall nominate a representative duly authorised by him to be present at the time of disbursement of wages by the contractor and it shall be the duty of such representative to certify the amounts paid as wages.

(3) It shall be the duty of the contractor to ensure the disbursement of wages in the presence of the authorised representative of the employer.

(4) In case the contractor fails to make payment of wages within the period specified in the Code on Wages, 2019 or makes short payment, then the employer shall be liable to make payment of wages in full or the unpaid balance due, as the case may be, to the contract labour employed by the contractor and recover the amount so paid from the contractor either by deduction from any amount payable to the contractor under any contract or as a debt payable by the contractor.

(5) It shall be the duty of the contractor to look after the welfare of the worker.

(6) It shall be the duty of the contractor to comply with the provisions of the Code.

**60.** Register of contractors under Section 48.- A register of contractors shall be maintained by the designated authority in Form-27 to whom license is issued under Rules 55, 56 and 57.

61. Intimation of work under sub-section (1) of Section 50.-

(1) Every contractor shall within fifteen days of the receipt of a contract work order shall intimate about the contract work order containing the details such as the name of the principal employer, address of the premises where work is being undertaken, date of commencement of the contract work, the number of contract labour employed under that work order, duration of work orders to the authority.

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

(3) The intimation under sub-rule (1) shall also be sent electronically in **Form-28**designated Portal or e-mail of the Labour Commissioner or Chief Inspectorcum-Facilitator or his representative.

# 62. Manner of suspending or cancelling the License of contractor under subsection (2) of Section 51.-

Whenever it comes to the knowledge of the designated authority that any contractor has not given intimation as required under sub-section (1) of Section 51, it may start the proceeding to cancel or suspend the license within two days of such knowledge and the following procedure shall be followed for suspension or cancellation of license, namely:-

(a) the designated authority shall issue a show cause notice to the contractor, electronically or otherwise, to explain his conduct;

(b) the contractor shall reply to the notice given under clause (a) within twenty

four hours from the time of receipt of such notice; and

(c) The designated authority shall examine such reply within the next thirty six hours from the time of receipt of such reply and shall pass speaking orders.

**63. Refund of security under Section 48 and sub-section (4) of Section 55.-** (1) On expiry of the period of license the contractor may, if he does not intend to have his license renewed further, make an application electronically to the licensing authority for the refund of the security deposited by him (in form of bank guarantee) along with copy of licence so expired and notice of completion of work and bank details in which amount is required to be refunded.

(2) If the authority is satisfied that there is no breach of the conditions of license or there is no order for the forfeiture of security deposit or any portion thereof, he shall direct the refund of the security deposit to the applicant.

(3) If there is any order directing the forfeiture of any portion of contractor's security deposit, the amount to be forfeited shall be deducted from the security deposit, and balance, if any, shall be refunded to the contractor within 60 days from the making of application under sub-rule (1).

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

(5) Record of security shall be maintained in Form-29.

# 64. Period of wages for contract labour under sub-section (1) of Section 55.-

It shall be the duty of every contractor to pay the wages to the contract labour as per the provisions of the Code on Wages, 2019 (Central Act No. 29 of 2019) and rules made there, under by the appropriate Government.

65. Mode of payment of wages to contract labour under sub-section (2) of Section

<u>55</u>.- The wages shall be disbursed through bank transfer or electronic mode only.

66. Manner of payment of wages from security deposit under sub-section (4) of Section 55.- If the contractor or principal employer does not pay the wages to the contract labour employed by him, the concerned Labour Commissioner or his representative shall conduct or cause to conduct, an inquiry and after giving an opportunity to be heard to the contractor shall pass an order to make payment if any, of such wages from the amount deposited by the contractor as security deposit. The contractor shall re-furnish the security deposit as by such labour commissioner or representative or officer as the case may be within a period of fifteen days or else his license will be liable to be suspended.

# 67. Experience/ Service certificate to contract labour under Section 56.-

The contractor shall issue an experience certificate to each person employed by adhering to the following key points, namely:-

(i) must be on letter head of contractor;

(ii) date of issue of certificate;

(iii) salutation or declaration "TO WHOM SOEVER IT MAY CONCERN";

(iv) name of employee as per record;

- (v) period of employment (from the date of joining to date of relieving);
- (vi) designation or position;
- (vii) remarks; and

(viii) seal and signature of contractor.

**68.** Form and manner of making application under sub-section (2) of Section 57.-If a question arises as to whether any activity of an establishment is a core activity or otherwise, the aggrieved party may make an application in the Form-30, to the Principal Secretary to the Government of Meghalaya, Department of Labour, Employment and Skill Development giving reasons along with supporting documents and the Principal Secretary shall pass order after hearing the concerned parties.

#### PART-II

### INTER-STATE MIGRANT WORKERS

### 69. Journey allowance to Inter-State Migrant workers under Section 61.-

(1) The employer shall pay to every inter-State migrant worker employed in his establishment, in a year a lump sum amount of fare for to and fro journey to his native place from the place of his employment based on the following conditions, namely:-

(i) the minimum service of the worker entitled for journey allowance shall be one hundred and eighty days;

(ii) the journey allowance shall be provided for minimum second class fare by train or bus; and

(iii) The employer shall pay a lump sum amount of one hundred rupees per family member per day for the period of travel of the worker (if family is staying with him at the location of his workplace) for food during the journey.

(2) the employer shall maintain a register of journey allowance in Form-31.

70. Scheme for availing benefits of public distribution system and building and

**other construction welfare fund.**-The inter-state migrant worker shall have option to avail benefit of the scheme under Section 62 through official portability.

# 71. Toll free help line number under Section 63.-

(1) The Chief Inspector-cum-Facilitator shall establish a toll free number for inter-State migrants to address queries and grievances of the inter-State migrant workers.

(2) A record of calls on toll free number shall be maintained in the format as may be specified by Chief Inspector-cum-Facilitator.

72<u>. Manner of providing for study of inter-State migrant workers under Section</u> <u>64</u>.- The study of Inter-State Migrant workers may be conducted by any reputed institution through its research scholars with or without the funding from State Government to promote safety, health and welfare of inter-state migrant workers.

# PART-III AUDIO-VISUAL WORKERS

**73.** Format of agreement under sub-section (2)(a) of Section 66.- The agreement to be entered into between the producer and the employee of audio-visual programme as envisaged in clause (a) of sub-section (2) of Section 66 shall be in Form-32.

**74.** <u>Submission of agreement under sub-section (3) of Section 66</u>.- The agreement shall be registered and forwarded by the producer of the audio-visual programme to the Chief Inspector-cum-Facilitator and the Inspector-cum-Facilitator concerned.

75. Dispute resolution Mechanism under sub-section (4) (vii) of Section 66.- The procedure for reference of dispute to a conciliation officer or a tribunal shall be in conformity with the Industrial Relation, Code 2020 and rules framed thereunder.

# PART-IV

# **BEEDI AND CIGAR WORKERS**

**76.** License to use place or industrial premises for beedi and cigar work under sub-section (2) of Section 74.- (1) Any person who intends or allows to use any place or premise forbeedi or cigar work shall submit an application in **Form-33** on portal for thegrant of license alongwith fee specified in Schedule C of Rule 91.

(2) A licence in **Form-34** shall be granted by the authority designated under Section 119.

(2) A licence in **Form-34** shall be granted or renewed by the authority designated under Section 119 shall be subject to the following conditions, namely :-

(i) the manufacturing process shall be carried on only in that part of the industrial premises as specified for the purpose in the licence;

(ii) the maximum number of employees employed in the industrial premises shall not on any day exceed the number specified in the licence;

(iii) power-driven machinery not specified in the licence shall not be used in the manufacturing process in the premises ;

(iv) except with the prior permission in writing of the competent authority, the industrial premises shall not be extended and except with the like

permission, no structural alterations shall be made in any building on such premises;

- (v) the licence shall not be transferable;
  - (vi) the fees paid for the grant or renewal of the licence shall be non-refundable.

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

77. Plan of place or industrial premises for beedi and cigar work under subsection (3) of Section 74.- Application for licence shall be accompanied by a plan of the place or premises showing-

(i) the site of such place or premises, the areas therein to be used for manufacturing processes and the immediate surroundings of such place or premises, including adjacent buildings, structures, roads, drains and the like; and

(ii) the plan, elevation and necessary cross-sections of, the details relating to natural lighting, ventilation, means of escape in case of fire, portion of the plant and machinery, if any used, aisles and passageways in or in relation to, the various buildings which are intended to be used for manufacturing processes;

**78.** <u>Renewal of licence for beedi and cigar work under sub-section (6) of Section</u> <u>74</u>.- (1) A licence granted under Rule 76 shall be renewed by the authority designated under Section 119.

(2) Every application for renewal of the licence shall be made on portal in **Form-33**, along with fees specified in sub-rule (3), for a period of one year or any further period up to five years, as the case may be, and shall be submitted in accordance with sub-section (6) of Section 74.

(3) The fees for renewal of licence for one year shall be the same as for the grant thereof. In case an application for renewal has been made for a period of one year or any number of years up to five years, the renewal fees shall be number of years multiplied by the fees payable for renewal of licence for one year, as specified in Rule76:

Provided that if the application for renewal, compete in all respects, is not received within the time specified in sub-rule (2), the licence shall be renewed only on payment of a additional fee of twenty-five percent of the fees ordinarily payable for the renewal of a licence for one year, for which the application has been received late.

# 79. <u>Timeline for renewal or refusal to renew license under sub-section (6) of</u> <u>Section 74.</u>-

The authority designated under Section 119 shall renew or refuse to renew the license within thirty days from the date of receipt of application for renewal.

**80.** <u>Appeals under Section 75.</u> – An appeal against the order of the LicensingAuthority refusing grant or renewal of license shall-

(a) be made electronically within a period of thirty days from the date of receipt the order sought to be appealed against;

(b) be accompanied by a copy of the order appealed against;

(c) memorandum containing grounds and facts;

(d) treasury challan or transaction details of payment made through electronically, as a proof of payment of fees as notified from time to time.

(e) The fees payable in respect of an appeal under Section 75 shall be Rs. 1000.

**81.** <u>Fees</u>. –Every application under sub-section (2) of Section 74 for grant of licence shall be made online electronically through the designated portal of the State Government in Form 33 and on payment of fees as specified in the table below, namely:-

Number of employees proposed to be employed on any day during the financial year for which the licence is required to be granted or	For Industrial premises in which power driver machinery is used	For Industrial premises in which power driven machinery is not used
renewed Not exceeding 10	Rs. 200	Rs. 150
Between 11 and 20	Rs. 400	Rs. 300
Between 21 and 50	Rs. 800	Rs. 600
Between 51 and 100	Rs.2,000	Rs. 1,500
Between 101 to 250	Rs. 3,500	Rs. 3,000
Exceeding 250	Rs. 6,000	Rs. 5,000

(2) Credit of fees. - All fees payable under these rules shall be credited into the Government treasury under the State head of the account notified in this regard.

(3) If the competent authority refuses to grant or renew any licence under Section 74, the fees paid thereof shall not be refunded.

**82.** <u>**Returns**</u>. - The employer in respect of every industrial premises shall send to the Chief Inspector cum Facilitator, this regard on or before the 10th day of every month, a monthly return in **Form 35** electronically or otherwise and furnish to that authority an annual return in **Form 36**electronically or otherwise on or before the 30th April of every year.

**83.** <u>Maintenance of certain registers</u>. -(1) Every employer shall provide free of cost to each home worker two books in **Form 37** (hereinafter referred to as the home workerslog-book) and the home-worker shall keep a record in the logbook of the quantum of raw materials received, the number of beedis or cigars supplied by him, number of standard beedies/cigars, the number of sub-standard or chat beedis/cigars, the wages receivable and received by him for the standard beedis/cigars, sub-standard

or chat beedis/cigars. The book shall be made of good quality paper duly bound and will contain sufficient number of pages to last one year. The supply of books shall be so arranged that one book remains with the home worker at all times during the period between the two successive supplies or raw materials by the employer.

(2) Every employer shall maintain a home workers' employment register in **Form 38** electronically or otherwise containing the names and particulars of all the home workers employed under him and the entries in the register shall be made and kept up-to-date on the basis of the entries in the home-workers' log books.

#### 84. Permission to work by employees outside industrial premises.-

(1) The employer shall make an application addressed to Secretary of the Labour Department on behalf of the employees to obtain permission for wetting or cutting of beedi or tobacco leaves by such employees through the Labour Commissioner. The Labour Commissioner shall forward the application with his comments within a period of seven days to the state Government. The State Government shall decide the application within a period of thirty days. The permission so granted shall be valid only for such period as specified in the order granting permission.

(2)The record to be maintained by the employer of the work permitted under subsection (1) of Section 76 to be carried on outside the industrial premises shall be in **Form 39** electronically or otherwise.

(3) The employer shall in respect of the employees who are permitted to work in their houses (hereinafter referred to as the home-workers) maintain an up-to-date register in **Form 40** electronically or otherwise.(Hereinafter referred to as the Register of Leave with Wages of home workers).

### PART-V

## FACTORIES

# 85. Approval and Licensing of factories under sub-section (1) of Section 79.-

(1) The State Government or the Chief Inspector - cum- Facilitator of Factories may require, for the purposes of the Code, submission of plans of any factory which was either in existence on the date of commencement of the code or which has not been constructed or extended, such plans shall be drawn to scale showing -

(a) the site of the factory and immediate surroundings including adjacent buildings and other structures, roads, drains, hospitals, educational institutions, petrol pumps, storage of inflammable and explosive materials and other structures, water sources and location of nearest residential area, village, town settlement with its distance from the site, etc.;

(b) the plan, elevation and necessary cross sections of the factory buildings indicating all relevant details relating to natural lighting ventilation and means of escape in case of fire and the position of the plants and machinery, aisles and passage ways; and

(c) such other particulars, as the State Government or the Chief Inspector-cum-Facilitator of Factories, as the case may be, may require. (2) No site shall be used for the location of a factory or no building shall be constructed, reconstructed, extended or taken into use as a factory or part of a factory or any other extension of plant or machinery carried out in a factory unless previous permission in writing is obtained from the State Government or the Chief Inspector-cum-Facilitator. Application for permission shall be made electronically in **Form-41** which shall be accompanied by the following documents namely-

(a) a flow chart or flow diagram of manufacturing process indicating safety devices, fittings and mountings on each plant and machinery, the various process and their design conditions, supplemented by a brief description of process and safety devices in its various stages and also indicating the names of raw materials, intermediates and products with their inventories. In the case of chemical substances, their chemical names should also be maintained.;

(b) plans drawn to scale showing-

(i) the site of the factory and immediate surroundings including adjacent buildings and other structures, roads, drains, etc.;

(ii) the plan elevation and necessary cross sections of the various buildings indicating all relevant details relating to natural lighting, ventilation and means of escape in case of fires. The plans shall also clearly indicate the position of the plant and machinery, aisles and passage ways;

(c) The site plan to be sent along with the application shall be drawn to a scale of 1: 100 for plots upto five hundred square meter in size and on a scale of 1:500 for plots above five hundred square meter in size. This site plan shall show the following:-

(i) boundaries of the site and any contiguous features;

(ii) direction of the north point relative to the site;

(iii) streets or roads adjoining the site with their width clearly dimensioned and names, if any;

(iv) area calculations, such as ground coverage, floor area ratio, parking calculations, any other relevant calculations, as required;

(v) disposal of waste water, sewerage and storm water or storage of hazardous waste;

(vi) details of buildings or drains or structures or physical features falling within five hundred meters of factory;

(vii) prominent urban service points above or underground (like sewer or water pipes, gas pipeline, transformers, electric poles or lines, phone distribution boxes, etc.) within five hundred metres area; and

(viii) such other particulars, as may be required by the Chief Inspector-cum Facilitator.

(d) The application shall consist of building plans, sections and elevations shall be drawn to the scale 1: 100 and shall include,

(i) floor plans of all the floors together with covered area clearly indicating the size and spacing of all framing members, sizes of rooms, staircases, ramps, lift wells, means of lighting, ventilation, fire-escapes, position and size of plant or machinery or equipment, drinking water points, details of urinals or latrines,

roof materials, washing facilities or de-trenching facilities, space for storing or drying of clothes, crèche, rest-rooms, mess-rooms, canteens, ambulance room or occupational health centre;

(ii) one section from front showing the height of the building or room;

(iii) one section through the staircase;

(iv) the schedule indicating the size of the doors, windows, openings and other methods of ventilation of each room or area;

(v) provision for differently-abled person, photovoltaic solar power plant, rain water harvesting system wherever required.

(3) The internal height of a workroom, other than those intended for storage, godowns and like purposes and also rooms intended solely for office purposes, where only clerical work is done, shall be not less than 14 feet (4.25meter) measured from the floor level to the lowest part of the roof, and if the roof is of corrugated iron, which is neither covered with tiles nor has an inner ceiling or lining of heat-resisting material with an air space of at least four inches (10 centimeters) between it and the corrugated iron, the internal height shall be not less than 20 feet (6 meter):

Provided that these provisions shall not be applicable in case of factory which proposes to employ fifty or less workmen :

Provided further that in case of buildings having a brick or concrete roof, or a combination of the two, the minimum height may be 12 feet (3.65 meter).

(4) There shall be provided at all times for each person employed in any room of a factory where mechanical or electrical power is used, at least 36 square feet (3.35 square meter) of floor space exclusive of that occupied by machinery and a breathing space of at least 500 cubic feet (14 cubic meter).

(5) The application referred to in sub-rule (2) shall be accompanied by payment of a fee at the rate of 2 times the license fee subject to a 'minimum of [Rs. 2500 (Rupees two thousand five hundred)] only in case of original plan and at the rate of 50% of the license fee subject to a maximum of [Rs. 30,000 (Rupees thirty thousand)] only in case of extension plans, for the purpose of scrutiny and evaluation of such plans.

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

(7) Particulars of each of the rooms, verandahs and other enclosures of the factory shall be entered in **Form 42**.

(8) The application mentioned in sub-rule (1) must also be accompanied with.-

(i) letter of no objection, scanned or otherwise, for the location of the factory from Village Authority or Municipal Authority or notified area, as the case may be;

(ii) a letter of no objection, scanned or otherwise, from State Pollution Control Board;

(iii) a letter of no objection, scanned or otherwise, from Fire Department;

(iv) license / No Objection Certificate (NOC), scanned or otherwise, issued under the Petroleum Rules, 1976 for storage of petroleum as defined in the said Rules of 1976;

(II). Certificate of stability. - No manufacturing process of a factory shall be carried on in any building which has been constructed, reconstructed extended or taken into use as a factory or part of a factory until a certificate of stability in respect of that building, obtained from a competent person in Form-43, has been sent by the occupier or manager of the factory to the Chief Inspector *cum*- facilitator and accepted by him/ her.

(III). Application for renewal of license. - The occupier of every factory shall submit application online through designated portal of State Government to the Chief Inspector- *cum*- facilitator an application in the prescribed Form 33 for the renewal of the factory and grant of license to apply for one year term or three year term license:

Provided that the occupier of premises in use as a factory on the date of the commencement of these rules shall submit such application within 30 days from the date of the commencement of these rules.

(IV). Grant of license to a factory - (1) A license for a factory shall be granted by the Chief Inspector-cum-Facilitator in Form-34 prescribed for the purpose and on payment of the fees specified in Schedule-C and D appended to this rule.

(1-a) A license for three year term shall be granted in **Form-34** by the Chief Inspector–cum- Facilitator on payment of three times or as the case may be of the license fee in vogue.

(2) Every License granted or renewed in **Form-34** under this chapter shall remain in force up to the 31st December of the year for which the license is granted or renewed.

(3) In case of Factories found to be running without proper application for registration and or renewal of license the fees payable shall be double the amount prescribed in **Schedule-C and D**.

(4) Revision of fees under **Schedule C and D** shall be made after each ten years by the Chief Inspector-cum-Facilitator with the prior approval of Finance Department, Government of Meghalaya.

**(V). Amendment of license which is a factory** - (1) A license granted under sub-rule (IV) may be amended by the Chief Inspector-cum-Facilitator.

(2) A licensee whose license requires to be amended by virtue of increase in the number of persons employed or in the horse power installed or change in the name of the factory or any change in manufacturing process or all taken together shall submit to Chief inspector-cum-Facilitator of Factories with an application in **Form 33** stating the nature of amendment.

(3) The fee for amendment of a license by virtue of increase in number of persons or in the horse power installed or change in the name of factory or any change in manufacturing process or all taken together shall be Rs.500/-in addition to the amount (if any) by which the fee that would have been payable if the license had originally been issued in the amended form exceeds the fee originally paid for the license.

**(VI). Renewal of license.** - (1) A license may be renewed by the Chief Inspectorcum-Facilitator. (2) Every application for the renewal of a license shall be made online accompanied by the notice of occupation in the prescribed Form and shall reach the Chief Inspector -cum-Facilitator not less than 2 months before the date on which the license expires.

(2-a) The License shall be deemed to be renewed provided that the application and the fee for renewal of license is received on line with self declaration in **Form 33A** certifying no change in manpower, installed power, factory layout, manufacturing process, occupier and manager.

(3) The same fee shall be charged for the renewal of license as for the grant thereof. Provided that if the application for renewal is not received within the time specified in sub-rule (2) and received thereafter but within the date on which the license expires, the license shall be renewed only on payment of a fee 25 percent in excess of the fee ordinarily payable for the license. If the application is received after the date on which the license expires, the license expires, the license shall be renewed only on payment of a fee 100 percent in excess of the originally payable for license.

(4) The occupier shall have the option to apply for renewal of license for a term of three consecutive calendar years with three times of usual license fee in vogue.

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

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

(VIII) **Revocation of license** - The Chief Inspector-cum-Facilitator may, at any time before expiry of the period for which the license has been granted or renewed, revoke the license on any of the grounds specified in sub-rule (VII) above or if:-

(i) there is imminent danger to life and property in the factory due to explosive or inflammable dust, gas or fumes, and effective measures in his option have not been taken to remove the danger; and/or;

(ii) employment of child worker below 14 years of age noticed;

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

**(IX)** Transfer of license. - (1) The holder of a license may, at any time before the expiry of the license, apply for permission to transfer his license to another person.

(2) Such application shall be made to the Chief Inspector-cum-Facilitator who shall, if he/ she approves of the transfer, enter upon the license, under his/her signature an endorsement to the effect that the license has been transferred to the person named.

(3) A fee of Rupees five hundred shall be charged on each such application.

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

(X). Procedure on death or disability of licensee.- If a licensee dies or becomes insolvent or otherwise disabled, the person carrying on the business of such licensee shall not be liable to any penalty under the Code or Rules for exercising the powers granted to the licensee by the license during such time as may reasonably be required

allow him to make an application for the amendment of the license in his/her own name for the unexpired portion of the original license.

(XI). Prohibiting running of a factory without a valid license.- An occupier shall not use any premises as a factory or carry on any manufacturing process in a factory unless a license has been issued in respect of such premises and is in force for the time being;

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

(XII). Notice of change Manager.- The notice of change of manager shall be in Form-44. The application for change of manager shall be submitted online. The endorsement of change of manager will be made electronically by the Chief Inspector -cum- Facilitator of factories.

(XIII). Suspension of licenses -(1) If at any time an occupier notifies of his intention on the Official Portal of the Labour Department of State Government that the premise, in respect of which licenses is issued will not be used for the working of the factory, the Chief Inspector-cum-Facilitator shall suspend the licenses granted in respect of such factory and will be communicated to the factory through the Portal:

Provided that such application shall be submitted atleast two month before the date of cessation of use of premises as a factory.

(2) A license suspended under sub-rule (1) may be revived on application through the portal accompanied by the license and **Form-45** upon the payment of fee of rupees one hundred.

(XIV) Notice of occupation - The notice of occupation shall be in Form-46.

(XV) Validity period of approval.-Every approval for the proposed building plan shall become null and void, if no construction is started within one year from the date of such approval.

#### SCHEDULED C

Scale of fees payable for License and annual renewal of License for Factories defined in Section 2(w) of the Occupational Safety, Health and Working Conditions Code, 2020 other than Electricity Generating (or Transforming) stations.

	Maximum number of persons to be employed during the year							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Quantity of K.W. installed (Max.K.W.)	20	50	100	250	500	700	1000	Above 1000
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
NIL	1020	1480	2350	3600	3880	5190	4650	4700
10 K.W.	2040	2580	3240	3240	4510	5050	5580	6710
50 K.W.	2680	3370	4000	4720	5300	5870	7090	9920
100 K.W.	3520	4180	4950	5560	6170	7450	10480	12320
250 K.W.	4350	5150	5820	6450	7830	11620	13010	14790
500 K.W.	5350	6070	6760	8210	11580	13670	15610	17260
1000 K.W.	6330	7040	8570	12140	14360	16420	18230	22240
Above 1000 K.W.	10330	13230	15730	18080	20150	21930	23460	24610

#### **SCHEDULED D**

Scale of fees payable for License and annual renewal of License for Electricity Generating (or Transforming) Stations

Total installed capacity of the generating (or transforming) plant (in K.W)	Number of workers to be employed	Fees payable.	
		Rs.	
50 K.W. or less	10 or above	630	
Over 50 K.W. not over 100 K.W.	Do	1150	
Over 100 not over 150 K.W	Do	1380	
Over 150 not over 300 K.W	Do	1800	
Over 300 not over 750 K.W	Do	2160	
Over 750 not over 1000 K.W	Do	2450	
Over 1,000 not over 5,000 K.W	Do	4040	
Over 5,000 not over 10,000 K.W	Do	5400	
Over 10,000 not over 50,000 K.W	Do	6720	
Over 50,000 K.W.	Do	8100	

### 86. Liability of owner of premises in certain circumstances under Section 80 of

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

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

(3) Where in any premises, independent or self-contained, floors or flats are leased to different occupiers for use as separate factories, the owner of the premises shall be liable, as if he/she were the occupier or manager of a factory, of any contravention of the provisions of this Code in respect of-

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

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

(iii) safe means of access to the floors of flats, and maintenance and cleanliness of staircases and common passages;

(iv) precautions in case of fire;

(v) maintenance of hoists and lifts; and

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

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

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

(5) The Chief Inspector- cum - Facilitator shall have, subject to the control of the State Government, the power to issue orders to the owner of the premises referred to in section 80 of the Code.

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

(7)The information of such condition shall submit to the Chief Inspector-cum-Facilitator or Inspector-cum-Facilitator by electronically.

87. Power to apply code to certain premises under sub-section (1), (2) of Section

**<u>81 of Code.</u>** –The State Government or Chief Inspector-cum-Facilitator may, by notification, declare that all or any of the provisions of this chapter shall apply to any place wherein a manufacturing process is carried on with or without the aid of power or is ordinarily carried on irrespective of the number of workers working in the factory. After the publication of such notification, the place or premises shall be deemed to be a factory for the purpose of this Code.

# 88. Dangerous Manufacturing Processes or Operation under Section 82 of Code.-

(1) Provision of clause(a) of Section 82 in regard specifying the following manufacturing process or operation when carried on in any factory are declared to be dangerous operation.

I. Manufacture of aerated water and processes incidental thereto.

II. Electrolytic plating or oxidation of metal articles by use of an electrolyte containing acids, bases or salts of metals such as chromium, nickel, cadmium, zinc, copper, silver, gold, etc.

III. Manufacture and repair of electric accumulators.

IV. Glass Manufacture.

V. Grinding or glazing of metals.

VI. Manufacture and treatment of lead and certain compounds of lead.

VII. Generating petrol gas from petrol.

VIII. Cleaning or smoothing, roughening, etc. of articles by a jet of sand, metal shot or grit or other abrasive propelled by a blast of compressed air or steam.

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

X. Certain lead processes carried on in printing presses and type foundries.

XI. Manufacture of pottery.

XII. Chemical works.

XIII. Manipulation of stone or any other material containing free silica.

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

XV. Handling or manipulation of corrosive substances.

XVI. Processing of cashew nut.

XVII. Compression of oxygen and hydrogen produced by the electrolysis of water.

XVIII. Process of extracting oils and fats from vegetable and animal sources in solvent extraction plants.

XIX. Manufacture or manipulation of manganese and its compounds.

XX. Manufacture or manipulation of dangerous pesticides.

XXI. Manufacture, handling and usage of benzene and substances containing benzene.

XXII. Manufacturing process or operations in carbon disulphide plants.

XXIII. Manufacture or manipulation of carcinogenic dye intermediates.

XXIV. Operations involving high noise and vibration levels.

XXV. Manufacture of Rayon by Viscose Process.

XXVI. Highly flammable liquids and flammable compressed gases.

XXVII. Foundry operations.

(2) Employees employed in a 'dangerous process or operations' shall be medically examined by a qualified medical practitioner, hereinafter referred to a Factory Medical Officer, in the following manner :-

(a) once before employment, to ascertain physical fitness of the person to do a particular job ;

(b) once in a period of 12 months, to ascertain the health status of all the workers in respect of occupational health hazards to which they are exposed, and at a shorter interval in respect of a worker in whose case the Factory Medical Officer is of the opinion that it is necessary to do so;

(c) the details of pre-employment and periodical medical examinations carried out as aforesaid shall be recorded in the Health Register in **Form 47**.

(3) No person shall be employed for the first time without a certificate of fitness in **Form 48** granted by the Factory Medical Officer. If the Factory Medical Officer declares a person unfit for employment in a process covered under sub-rule (1), he shall have the right to appeal to the Inspector-cum-Facilitator of the area who after consultation with a Medical Officer shall decide the appeal which shall be final in this regard.

**Explanation** : For the purpose of the rule, any Government Medical Officer may be nominated by the Chief Inspector cum facilitator, Meghalaya as Medical Officer.

(4) Any finding of the Factory Medical Officer revealing any abnormality or unsuitability of any person employed in the process shall, in turn, examine the concerned worker and communicate his findings to the occupier within 30 days. If the Medical Officer is of the opinion that the worker so examined is required to be taken away from the process for health protection, he/she will direct the occupier accordingly, who shall not employ the said worker in the same process. However, the worker so taken away shall be provided with alternative placement unless he/she, in the opinion of the Medical Officer is fully incapacitated in which case the worker affected shall be suitably rehabilitated.

(5) A Medical Officer on his/ her own motion or on a reference from an Inspector cum facilitator may conduct a medical examination of a worker to ascertain the suitability of his/her employment in a dangerous process or to ascertain his/her health status. The opinion of the Medical Officer in such a case shall be final. The requisite fee for this medical examination shall be paid by the occupier.

(6) The worker taken away from employment in any process under sub-rule (2) may be employed again in the same process only after obtaining the Fitness Certificate from the Medical Officer and after making entries to that effect in the Health Register.(7) The worker required to undergo medical examination under these rules and for any medical survey conducted by or on behalf of the Central or the State Government shall not refuse to undergo such medical examination.

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

(9) Any register or record of medical examinations and tests connected therewith required to be carried out under any of the Schedules annexed hereto in respect of any worker shall be kept readily available to the Inspector-cum-facilitator and shall be preserved till the expiry of one year after the worker ceases to be in employment of the factory.

(10) Prohibiting or restricting the employment of Pregnant woman in the manufacturing process or operation.- Every Occupier or employer shall ensure to prohibit or restrict the employment of pregnant women in hazardous and dangerous operations which exposes them to serious risk of bodily injury, poisoning or disease. However, the Occupier shall make all the necessary arrangements for providing adequate safeguards prior to the employment of pregnant woman in case they are required to work in hazardous or dangerous operations.

Schedules specifying requirements in respect of dangerous processes and operations notified under Section 82 is mentioned below:-

# SCHEDULES SPECIFYING REQUIREMENTS IN RESPECT OF DANGEROUS PROCESSES AND OPERATIONS NOTIFIED UNDER SECTION 82 OF THE OSH CODE.

# SCHEDULE

### **SUB SCHEDULE- I**

#### Manufacture of aerated waters and processes incidental thereto

**Sl.No. 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 form striking any person employed in the factory.

**Sl.No. 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 Sl.No. 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.

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

(2) The Occupier shall provide and maintain in good condition for the use of all persons engaged in corking, crowning, screwing, wiring, foiling, capsuling, sighting or labelling bottles or syphons -

(a) suitable face-guards to protect the face, 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.

**Sl.No. 3.Wearing of face guards and gauntlets**. - All persons engaged in any of the processes specified in Sl.No. 2 of this schedule shall, while at work in such processes, wear the face guards and gauntlets provided under the provisions of the said Sl.No.

# Sl.No. 4. Medical Examination by the medical officer.-

(1) Every worker employed in the processes this schedule applies to, shall be examined by a medical officer. He shall issue fitness on **Form 48**.

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

(3) No person who has been found unfit to work shall be re-employed or permitted to work in the said processes unless the medical officer, after further examination, again certifies him fit for employment in those processes.

(4) Fitness and health register shall be maintained and shall be kept readily available for inspection by the Inspector cum facilitator and Medical Inspector cum facilitator.

### **SUB SCHEDULE II**

# Electrolytic plating or oxidation of metal articles by use of an electrolyte containing acids, bases or salts of metals such as chromium, nickel, cadmium, zinc, copper, silver, gold etc.

# Sl.No. 1. Definitions.- For the purposes of this Schedule-

(a) "electrolytic process" means the electrolytic plating or oxidation of metal articles by the use of an electrolyte containing acids ,bases or salts of metals such as chromium, nickel, cadmium, zinc, copper, silver, gold, etc.:

(b) "bath" means any vessel used for an electrolytic process or for any subsequent process; and

(c) "employed " means employed in any process involving contact with liquid from a bath.

**Sl.No.** 2. **Exhaust draught**. - An efficient exhaust draught shall be applied to every vessel in which an electrolytic process is carried on. Such draught shall be provided by mechanical means and shall operate on the vapour or spray given off in the process as near as may be at the point of origin. The exhaust draught 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.

**Sl.No.** 3. **Prohibition relating to women and young persons**. No women, adolescent or child shall be employed or permitted to work at a bath.

**Sl.No.** 4. **Floor of workrooms**. - The floor of every workroom containing a bath shall be impervious to water. The floor shall be maintained in good and level condition and shall be washed down at least once a day.

# Sl.No. 5. Protective devices. -

(1) The occupier shall provide and maintain in good and clean condition the following articles of protective devices for the use of all persons employed on any process at which they are liable to come in contact with liquid from a bath and such devices shall be worn by the persons concerned

(a) waterproof aprons and bibs; and

(b) for persons actually working at a bath, loose fitting rubber gloves and rubber boots or other waterproof footwear, and chemical goggles.

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

# Sl.No. 6. Water facilities. -

(1) There shall be provided and maintained in good repairs for the use of all persons employed in electrolytic process and processes incidental to it-

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

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

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

(b) a sufficient supply of clean towels renewed daily, and soap or other suitable cleaning material.

(2) In addition to the facility in Sub Sl.no. (1) of Sl.No. 6 of Sub schedule-II, an approved type emergency shower with eye fountain shall be provided and maintained in good working order. Whenever necessary, in order to ensure continuous water supply, storage tank of 1500 litres capacity shall be provided as a source of clean water for emergency use.

**Sl.No.** 7. **Cautionary placard**.- A cautionary placard in the form specified below and printed in the language of the majority of the workers employed shall be affixed in a prominent place in the factory where it can be easily and conveniently read by the workers.

### CAUTIONARY NOTICE Electrolytic Plating

(1) Chemicals handled in this plant are corrosive and poisonous.

(2) Smoking, chewing tobacco, eating food or drinking, in this area is prohibited . No food stuff or drink shall be brought in this area.

(3) Some of these chemicals may be absorbed through the skin and may cause poisoning .

(4) A good wash shall be taken before meals.

(5) Protective devices supplied shall be used while working in this area.

(6) Spillage of the chemicals on any part of the body or on the floor shall be immediately washed away with water.

(7) All workers shall report for the prescribed medical tests regularly to protect their own health.

**Sl.No. 8. Medical facilities and records of examinations and tests.**- (1) The occupier of every factory in which electrolytic processes are carried on shall-

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

(b) provide to the said medical practitioner all the necessary facilities for the purpose referred to in clause (a); and

(c) maintain a sufficient supply of suitable barrier cream, ointment and impermeable water proof plaster in a separate box readily accessible to the workers ad used solely for the purpose of keeping these substances. In case cyanides are used in the both, the box shall also contain an emergency cyanide kit.

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

(3) The record of the examinations referred to in sub-Sl.No. (2) of Sl.No. 8, shall be maintained in a separate register approved by Chief Inspector - cum- Facilitator of Factories which shall be kept readily available for inspection by the Inspector - cum-Facilitator.

**Sl.No.** 9. **Medical examination by the Medical officer**.- (1)Every worker employed in the electroytic processes shall be examined by a Medical Officer before his first employment. Such examination shall include X-ray of the chest and-

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

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

(c) in case of cadmium plating, test for cadmium in urine and -2 microglobulin in urine.

(2) No worker shall be employed in any electrolytic process unless certified fit for such employment by the Medical officer.

(3) Every worker employed in the electrolytic processes shall be re-examined by a Medical officer at least once in every year, except in case of the workers employed in cadmium, chromium and nickel plating processes for whom this examination shall be carried our once in every six months. Such re-examination shall, wherever the Medical Officer considers appropriate, include tests as specified under sub-sl.no.(1) of Sl.no. 9 excluding the X-ray of the chest which shall not be required normally to be carried out earlier then once in three years.

(4) The Medical officer after examining a worker, shall issue a Certificate of Fitness in **Form 48**. The record of examination and re-examinations carried out shall be kept in the custody of the manager of the factory. The record of each examination carried

out under sub-sl.no. (1) and (2) of sl.no. 9 including the nature and the results of the tests, shall also be entered by the Medical officer in a health register in **Form 47**.

(5) The certificate of fitness and the health register shall be kept readily available for inspection by the Inspector - cum- Facilitator.

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

(7) No person who has been found unfit to work as said in sub-sl.no. (6) of sl.no.9 shall be re-employed or permitted to work in the said processes unless the Medical officer after further examination, again certifies him fit for employment in these processes.

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#### **SUB SCHEDULE III**

#### Manufacture and repair of electric accumulators

**Sl.No.** 1. **Savings.**- This schedule shall not apply to the manufacture or repair of electric accumulators or parts thereof not containing lead or any compound of lead; or to the repair on the premises, of any accumulator forming part of a stationary battery. **Sl.No.** 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;

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

**Sl.No.** 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 other processes :-

a. manipulation of raw oxide of lend;

b. pasting;

c. drying of pasted plates;

d. formation with lead turning (tacking)necessarily carried on in connection therewith ; and

e. melting down of pasted plates.

**Sl.No.** 5. **Air space**.- In every room in which a lead process is carried on, there shall be at least 14.2 cubic meters of air space for each person employed therein, and in computing this air space no height over 3.65 meters shall be taken into account.

**Sl.No.** 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.

**Sl.No.** 7. **Distance between workers in pasting room**.- In every pasting room the distance between the centre of the working position of any paster and that of the paster working nearest to him shall not be less than 1.5 meters.

**Sl.No.** 8. Floor of workrooms.-(1) The floor of every room in which lead process is carried on shall be -

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

(b) maintained in sound condition; and

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

(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-Sl.No. (1), (2) and (3), where manipulation of raw oxide of lead or pasting is carried on, the floor shall also be -

(a) kept constantly moist while work is being done;

(b) provided with suitable and adequate arrangements for drainage; and

(c) thoroughly washed daily by means of hose pipe.

**Sl.No.** 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; and

(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; and

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

**Sl.No.** 10. **Exhaust draught**.- (1)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 workroom;

(c) pasting;

(d) trimming, brushing, filing or any other abrading or cutting of pasted plates giving rise to dust and

(e) lead burning, other than -

- (i) tacking in the formation room; and
- (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 from entering the air of any room in which persons work.

**Sl.No.** 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.

**Sl.No.** 12. **Container for dross**.- A suitable receptacle with tightly fitting cover shall be provided and used for dress as it is removed from every melting pot. Such receptacle shall be kept covered while in the workroom, except when dress is being deposited therein.

**Sl.No.** 13. **Container for lead waste.**- A suitable receptacle shall be provided in every workroom in which old plates and waste material which may give rise to dust shall be deposited.

Sl.No. 14. Racks and shelves in drying room.-

(1) The racks or shelves provided in any drying room shall not be more than 2.4 meters from the floor nor more than 60 centimetres in width;

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

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

# Sl.No. 15. Protective clothing.-

(1) Protective clothing shall be provided and maintained in good repair for all persons employed in -

(a) manipulation of raw oxide of lead;

(b) pasting; and

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

(2) The protective clothing shall consist of a waterproof apron and waterproof footwear; and, in addition, as regards persons employed in the manipulation of raw oxide of lead or in pasting, head coverings. The head coverings shall be washed daily.

**Sl.No.** 16. **Messroom**.- There shall be provided and maintained for the use of all persons employed in a lead process and remaining on the premises during the meal intervals, a suitable messroom, which shall be furnished with sufficient tables and benches, and adequate means for warming food. The messroom shall be placed under the charge of a responsible person, and shall be kept clean.

**Sl.No.** 17. **Cloakroom**.- There shall be provided and maintained for the use of all persons employed in a lead process -

(a) a cloakroom for clothing put off during working hours with adequate arrangements for drying the clothing if wet, which accommodation shall be separate from any messroom; and

(b) separate and suitable arrangements for the storage of protective clothing provided under Sl.No. 15 of this sub-shedule.

**Sl.No.** 18. **Washing facilities.**- (1) 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 60 centimetres for every five such persons employed at any one time, and having a constant supply of water from taps or jets above the trough at intervals on not more than 60 centimetres; or

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

(b) 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

(c) a sufficient supply of soap or other suitable cleansing material and of nail brushes.

(2) There shall in addition be provided means of washing in close proximity to the rooms in which manipulation of raw oxide of lead or pasting is carried on if required by notice in writing from the Chief Inspector - cum- Facilitator.

**Sl.No.** 19. **Time to be allowed for washing**.- Before each meal and before the end of the day's work, at least ten minutes, in addition to the regular meal times, shall be allowed for washing to each person who has been employed in the manipulation of raw oxide of lead or in pasting;

Provided that if there be one basin or 60 centimetres of trough for each such person this paragraph shall not apply.

**Sl.No.** 20. **Facilities for bathing**.- Sufficient bath accommodation to the satisfaction of the Chief Inspector - cum- Facilitator shall be provided for all persons engaged in the manipulation of raw oxide of lead or in pasting, and a sufficient supply of soap and clean towels.

**Sl.No.** 21. Food, drinks, etc. prohibited in workrooms.- No food, drink, pan and supari or tobacco shall be consumed or brought by any worker into any workroom in which any lead process is carried on.

**Sl.No.** 22. Medical facilities and records of examinations and tests.- (1)The occupier of every factory in which manufacture and repair of electric accumulators is carried on shall-

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

(b) provide to the said medical practitioner all the necessary facilities for the purpose referred to in clause (a).

(2) The record of medical examinations and appropriate tests carried out by the said medical practitioner shall be maintained in a separate register approved by the Chief

Inspector - cum- Facilitator of Factories, which shall be kept readily available for inspection by the Inspector - cum- Facilitator.

**Sl.No.** 23. **Medical examination by Medical Officer**.- (1) Every worker employed in lead processes shall be examined by a Medical Officer within 15 days of his first employment. Such examination shall include tests for lead in urine and blood. ALA in urine, haemoglobin content, stippling of cells and steadiness test. No worker shall be allowed to work after 15 days of his first employment in the factory unless certified fit for such employment by the Medical Officer.

(2) Every worker employed in the said processes shall be re-examined by a Medical Officer at least once in every three calendar months. Such re-examination shall, wherever the Medical Officer considers appropriate, include tests specified in sub-Sl.No. (1).

(3) The Medical Officer after examining a worker, shall issue a Certificate of Fitness in **Form 48**. The record of examination and re-examinations carried out shall be entered in the Certificate and the Certificate shall be kept in the custody of the manager of the factory. The record of each examination carried out under sub-sl.No. (1) and (2), including the nature and the results of the tests, shall also be entered by the Medical Officer in a health register in **Form 47**.

(4) The Certificate of Fitness and the health register shall be kept readily available for inspection by the Inspector.

(5) If at any time the Medical Officer is of the opinion that a worker is no longer fir for employment in the said process on the ground that continuance therein would involve special danger to the health of the worker he shall make a record of his findings in the said Certificate and the health register. The entry of his findings in these documents should also include the period for which he considers that the said person is unfit for work in the said processes. The person so suspended from the process shall be provided with alternate placement facilities unless he fully is incapacitated in the opinion of the Medical Officer, in which case the person affected shall be suitably rehabilitated.

(6) No person who has been found unfit to work as said in sub-Sl.no. (5) above shall be re-employed or permitted to work in the said processes unless the Medical Officer, after further examination, again certifies him fit for employment in those processes.

# SUB SCHEDULE IV Glass Manufacture

Sl.No. 1. Definitions.- For the purpose of this schedule -

(a) "efficient exhaust draught" means localised ventilation effected by mechanical means for the removal of gas, vapour, dust or fumes so as to prevent them (as far as practicable under the atmospheric conditions usually prevailing) from escaping into the air of any place in which work is carried on. No draught shall be deemed efficient which fails to remove smoke generated at the point where such gas, vapour, fume, or dust originate;

(b) "lead compound" means any compound of lead other than galena which, when treated in the manner described below, yields to an aqueous solution of hydrochloric acid a quantity soluble lead compound exceeding, when calculated as lead monoxide, five percent of the dry weight of the portion taken analysis.

The method of treatment shall be as follows :-

A weighed quantity of the material which has been dried at 100 degrees centigrade and thoroughly mixed shall be continuously shaken for one hour at the common temperature with 1,000 times its weight of an aqueous solution of hydrochloric acid containing 0.25 per cent by weight of hydrogen chloride. This solution shall thereafter be allowed to stand for one hour and then filtered. The lead salt contained in the clear filterate shall then be precipitated as lead sulphide and weighed as lead sulphate.

**Sl.No.** 2.**Exhaust draught**.- The following processes shall not be carried on except under an efficient exhaust draught or such other conditions as may be approved by the Chief Inspector- cum- Facilitator :-

(a) the mixing of raw materials to form a "Bator";

(b) the dry grinding, glazing and polishing of glass or any article of glass;

(c) all processes in which hydrofluoric acid fumes or ammonicalvapours are given off;

(d) all processes in the making of furnace moulds or "pots" including the grinding or crushing of used "pots"; and

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

**Sl.No.** 3. **Prohibition relating to women and young persons**.- No woman or young person shall be employed or permitted to work in any of the operations specified in Sl.No. 2 or at any place where such operations are carried on.

**Sl.No.** 4. **Floor and work-benches**.- The floor and work-benches of every room in which a dry compound of lead is manipulated or in which any process is carried on giving off silica dust shall be kept moist and shall comply with the following requirements :-

(a) the floor shall be -

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

(ii) maintained in sound condition; and

(iii) cleansed daily after being thoroughly spread with water at a time when no other work is being carried on the room; and

(b) the work-benches shall -

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

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

**Sl.No.** 5. Use of hydrofluoric acid.- The following provisions shall apply to rooms in which glass is treated with hydrofluoric acid :-

(a) there shall be inlets and outlets of adequate size so as to secure and maintain efficient ventilation in all parts of the room;

(b) the floor shall be covered with guttaparcha and be tight and shall slope gently down to a covered drain;

(c) the workplaces shall be so enclosed in projecting hoods that openings required for the bringing in the objects to be treated shall be as small as practicable; and

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

**Sl.No.** 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.

**Sl.No.** 7. **Blow pipes**.- Every glass blower shall be provided with a separate blow pipe bearing the distinguishing mark of the person to whom it is issued and suitable facilities shall be readily available to every glass blower for sterilising his blow pipe

**Sl.No.** 8. Food, drinks, etc., prohibited in workrooms.- No food, drink, pan and supari or tobacco shall be brought into or consumed by any worker in any room or workplace wherein any process specified in Sl.no. 2 is carried on.

**Sl.No.** 9. **Protective clothing**.- The occupier shall provide, maintain in good repair and keep in a clean condition for the use of all persons employed in the processes specified in Sl.no. 2 suitable protective clothing, footwear and goggles according to the nature of the work and such clothing, footwear, etc. shall be worn by the persons concerned.

**Sl.No.** 10. **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 Sl.no. 2 -

(a) a wash place with either -

(i) a trough with a smooth impervious surface fitted with a waste pipe, without plug, and of sufficient length to allow of at least 60 centimetres for every five such persons employed at any one time, and having a constant supply of water from taps or jets above the trough at intervals of not more than 60 centimetres; or

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

(b) a sufficient supply of clean towels made of suitable material renewed daily with sufficient supply of soap or other suitable cleansing material and of nail brushes; and

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

**Sl.No.** 11. **Medical facilities and record of examinations and tests**.- (1) The occupier of every factory in which glass manufacturing processes are carried out, shall -

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

(b) provide to the said medical practitioner all the necessary facilities for the purpose referred to in clause (a).

(2) The records of medical examinations and appropriate tests carried out by the said medical practitioner shall be maintained in a separate register approved by the Chief

Inspector of Factories, which shall be kept readily available for inspection by the Inspector - cum- Facilitator.

**Sl.No.** 12. **Medical Examination by Medical Officer**.- (1) Every workers employed in processes specified in Sl.no. 2 shall be examined by the Medical Officer within 15 days of his first employment. Such examination shall include pulmonary function tests and in suspected cases chest X-ray as well as tests for lead and urine. No worker shall be allowed to work after 15 days of first employment in the factory unless certified for such employment by the Medical Officer.

(2) Every worker employed in the said processes shall be re-examined by the Medical Officer at least once in every twelve calendar months. Such re-examination shall, wherever the Medical Officer considers appropriate, include tests as specified in sub-Sl.no. (1).

(3) The Medical Officer after examining a worker, shall issue a Certificate of Fitness in **Form 48**. The record of examination and re-examination carried out shall be entered in the Certificate and the Certificate shall be kept in the custody of the manager of the factory. The record of each examination carried out under sub- Sl.no. (1) and (2), including the nature and the results of the tests, shall also be entered by the Medical Officer in a health register in **Form 47**.

(4) The Certificate of Fitness and the health register shall be kept readily available for inspection by the Inspector.

(5) If at any time the Medical Officer is of the opinion that a worker is no longer fit for employment in the said processes on the ground that continuance therein would involve special danger to the health of worker, he shall make a record of his findings in the said certificate and the health register. The entry of his findings in those documents should also include the period for which he considers that the said person is unfit for work in the said processes. The person so suspended from the process shall be provided with alternate placement facilities unless he is fully incapacitated in the opinion of the Medical Officer, in which the person affected shall be suitable rehabilitated.

(6) No person who has been found unfit to work as said in sub- Sl.no. (5) shall be reemployed or permitted to work in the said processes unless the Medical Officer, after further examination, again certifies him fit for employment in those processes.

**Sl.No.** 13.**Exemption**.- If the Chief Inspector- cum- Facilitator is satisfied in respect of any factory or any class of process that, owing to the special methods of work or the special conditions in a factory or otherwise, any of the requirements of this schedule can be suspended or relaxed without danger to the persons employed therein, or that the application of this schedule or any part thereof is for any reason impracticable, he may be 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.

#### SUB SCHEDULE V

#### Grinding or glazing of metals and processes incidental thereto

**Sl.No.** 1. **Exception**.- (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 Sl.no. 4 of this sub schedule, 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.

Sl.No. 2. Definitions.- For the purposes of this schedule -

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

(b) "abrasive wheel" means a wheel manufactured of bonded emery or similar abrasive;

(c) "grinding" means the abrasion, by aid of mechanical power, of metal, by means of a grindstone or abrasive wheel;

(d) "glazing" means the abrading, polishing or finishing, by aid of mechanical power, of metal, by means of any wheel, buff, mop or similar appliance to which any abrading or polishing substance is attached or applied;

(e) "racing" means the turning up, cutting or dressing of a revolving grindstone before it is brought into use for the first time;

(f) "hacking' means the chipping of the surface of a grindstone by a hack or similar tool; and

(g) "rodding" means the dressing of the surface of a revolving grindstone by the application of a rod, bar or strip of metal to such surface.

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

(a) a hood or other appliance so constructed, arranged, placed and maintained as substantially to intercept the dust thrown off;

(b) a duct of adequate size, air tight and so arranged as to be capable of carrying away the dust, which duct shall be kept free from obstruction and shall be provided with proper means of access for inspection and cleaning, and where practicable, with a connection at the end remote from the fan to enable the Inspector to attach thereto any instrument necessary for ascertaining the pressure of air in the said duct; and

(c) a fan or other efficient means of producing a draught sufficient to extract the dust : Provided that the Chief Inspector - cum- Facilitator may accept any other appliance that is, in his opinion, as effectual for the interception, removal and disposal of dust thrown off as a hood, duct and fan would be.

**Sl.No.** 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: or bulky articles at any such grindstone, abrasive wheel or galzing appliance.

**Sl.No.** 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.

**Sl.No.** 6. **Hacking and rodding.-** Hacking or rodding shall not be done unless during the process either an adequate supply of water is laid on at the upper surface of the grindstone or adequate appliances for the interception of dust are provided in accordance with the requirements of Sl.no. 3.

**Sl.No.** 7. **Examination of dust equipment**.- (1) All equipment for the extraction or suppression of dust shall at least once in every six months be examined and tested by competent person, and any defect disclosed by such examination and test shall be rectified as soon as practicable.

(2) A register containing particulars of such examination and tests shall be kept in **Form 56.** 

**Sl.No.** 8. **Medical facilities and record of examinations and tests**.- (1) The occupier of every factory in which grinding or glazing of metals are carried out, shall -

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

(b) provide to the said medical practitioner all the necessary facilities for the purpose referred to in clause (a).

(2) The record of medical examinations and appropriate tests carried out by the said medical practitioner shall be maintained in a separate register approved by the Chief Inspector- cum- Facilitator of Factories, which shall be kept readily available for inspection by the Inspector- cum- Facilitator.

**Sl.No.** 9. **Medical examination by the Medical Officer.-**(1) Every worker employed in grinding or glazing of metal and processes incidental thereto shall be examined by a Medical Officer within 15 days of his first employment. Such examination shall include pulmonary function tests and in suspected cases chest X-rays. No worker shall be allowed to work after 15 days of his first employment in the factory unless certified fit for such employment by the Medical Officer.

(2) Every worker employed in the said processes shall be re-examined by a Medical Officer at least once in every 12 calendar months. Such re-examination shall, wherever the Medical Officer considers appropriate, include tests as specified in sub-Sl.no. (1).

(3) The Medical Officer after examining a worker, shall issue a Certificate of Fitness in **Form 48**. The record of examination and re-examinations carried out shall be entered in the Certificate and the Certificate shall be kept in the custody of the manager of the factory. The record of each examination carried out under sub-Sl.no. (1) and (2), including the nature and the results of the tests, shall also be entered by the Medical Officer in a health register in **Form 47**.

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

(5) If at any time the Medical Officer is of the opinion that a worker is no longer fit for employment in the said processes on the found that continuance therein would involve special danger to the health of the worker he shall make record of his findings in the said certificate and the health register. The entry of his findings in those documents should also include the period for which he considers that the said person is unfit for work in the said processes. The person so suspended from the process shall be provided with alternate placement facilities unless he is fully incapacitated in the opinion of the Medical Officer, in which case the person affected shall be suitably rehabilitated.

(6) No person who has been found unfit to work as said in sub- Sl.no. (5) shall be reemployed or permitted to work in the said processes unless the Medical Officer, after further examination, again certifies him fit for employment in those processes.

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

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## **SUB SCHEDULE VI**

## Manufacture and treatment of lead and certain compounds of lead

**Sl.No. 1. Application**.- This schedule shall apply to all factories or parts of factories in which any of the following operations are carried on :-

(a) work at a furnace where the reduction or treatment of zinc or lead ores is carried on ;

(b) the manipulation, treatment or reduction of ashes containing lead, the desilvering of lead or the melting of scrap lead or zinc;

(c) the manufacture of solder or alloys containing more than ten percent of lead;

(d) the manufacture of any oxide, carbonate, sulphate, chromate, acetate, nitrate or silicate of lead;

(e) the handling or mixing of lead tetra-ethyl;

(f) any other operation involving the use of a lead compound; and

(g) the cleaning of workrooms where any of the operations aforesaid are carried on.

Sl.No. 2. Definitions.- For this purpose of this schedule -

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

The method of treatment shall be as follows :-

A weighed quantity of the material which has been dried at 100 degree centigrade and thoroughly mixed shall be continuously shaken for one hour, at the common temperature with 1,000 times its weight of an aqueous solution of hydrochloric acid containing 0.25 per cent by weight of hydrogen chloride. This solution shall thereafter be allowed to stand for one hour and then filtered. The lead

salt contained in the clear filtrate shall then precipitated as lead sulphate and weighed as lead sulphate;

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

**Sl.No.** 3. **Prohibition relating to women and young persons**.- No women or young person shall be employed or permitted to work in any of the operations specified in Sl.no. 1.

**Sl.No.** 4. **Requirements to be observed**.- No person shall be employed or permitted to work in any process involving the use of lead compounds if the process is such that dust or fume from a lead compound is produced therein, or the persons employed therein are liable to be splashed with any lead compound in the course of their employment unless the provisions of Sl.no. 5 to 13 of this sub schedule, are complied with.

**Sl.No.** 5. **Exhaust draught**.- Where dust, fume, gas or vapour is produced in the process, provision shall be made for removing them by means of an efficient exhaust draught to contrived as to operate on the dust, fume, gas or vapour as closely as possible to the point of origin.

**Sl.No.** 6. Food, drinks, etc. prohibited in workroom.- No food, drink, pan and supari or tobacco shall be brought into or consumed by any worker in any workroom in which the process is carried on and no person shall remain in any such room during intervals for meals or rest.

**Sl.No.** 7. **Protective clothing**.- Suitable protective overalls and head coverage shall be provided, maintained and kept clean by the occupier and such overalls and head coverings shall be worn by the persons employed.

**Sl.No.** 8. **Cleanliness of workrooms, tools, etc.**- The rooms in which the persons are employed and all tools and apparatus used by them shall be kept in a clean state.

**Sl.No.** 9. **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 of at least 60 centimetres for every five such persons employed at any one time, and having a constant supply of water from taps or jets above the trough at intervals of not more than 60 centimetres; or

(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.

Sl.No. 10. Messroom or canteen.- The occupier shall provide and maintain for the use of the persons employed suitable and adequate arrangements for taking their

meals. The arrangements shall consist of the use of a room separate from any workroom which shall be furnished with sufficient tables and benches, and unless a canteen serving hot meals is provided, adequate means of warming the food. The room shall be adequately ventilated by the circulation of fresh air, shall be placed under the charge of a responsible person and shall be kept clean.

**Sl.No.** 11. **Cloakroom.-** 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.

**Sl.No.** 12. **Medical facilities and record of examinations and tests**.- (1) The occupier of every factory in which grinding or glazing of metals are carried out, shall -

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

(b) provide to the said medical practitioner all the necessary facilities for the purpose referred to in clause (a).

(2) The record of medical examinations and appropriate tests carried out by the said medical practitioner shall be maintained in a separate register approved by the Chief Inspector - cum- Facilitator of Factories, which shall be kept readily available for inspection by the Inspector - cum- Facilitator.

**Sl.No.** 13. **Medical examination by the Medical Officer**.- (1) Every worker employed shall be examined by a Medical Officer within 15 days of his first employment. Such examination shall include pulmonary function tests and in suspected cases chest X-rays. No worker shall be allowed to work after 15 days of his first employment in the factory unless certified fit for such employment by the Medical Officer.

2) Every worker employed in the said processes shall be re-examined by a Medical Officer at least once in every 12 calendar months. Such re-examination shall, wherever the Medical Officer considers appropriate, include tests as specified in sub-Sl.no. (1).

(3) The Medical Officer after examining a worker, shall issue a Certificate of Fitness in **Form 48**. The record of examination and re-examinations carried out shall be entered in the Certificate and the Certificate shall be kept in the custody of the manager of the factory. The record of each examination carried out under sub-Sl.no. (1) and (2), including the nature and the results of the tests, shall also be entered by the Medical Officer in a health register in **Form 47**.

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

(5) If at any time the Medical Officer is of the opinion that a worker is no longer fit for employment in the said processes on the ground that continuance therein would involve special danger to the health of the worker he shall make record of his findings in the said certificate and the health register. The entry of his findings in those documents should also include the period for which he considers that the said person is unfit for work in the said processes. The person so suspended from the process shall be provided with alternate placement facilities unless he is fully incapacitated in the opinion of the Medical Officer, in which case the person affected shall be suitably rehabilitated.

(6) No person who has been found unfit to work as said in sub- Sl.no. (5) shall be reemployed or permitted to work in the said processes unless the Medical Officer, after further examination, again certifies him fit for employment in those processes.

**Sl.No.** 14. **Exemption**.- Where the Chief Inspector - cum- Facilitator is satisfied that all or any of the provisions of this schedule are not necessary for the protection of the persons employed, he may by certificate in writing exempt any factory from all or any of such provisions, subject to such conditions as he may specify.

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## SUB SCHEDULE VII Generating Petrol gas from Petrol

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

**Sl.No.** 2. **Flame traps.-** The plant for generation of gas from dangerous petroleum and associated piping and fittings shall be fitted with at least two efficient flame traps so designed and maintained as to prevent a flash back from any burner to the plant. One of these traps shall be fitted as close to the plant as possible. The plant and all pipes and valves shall be installed and maintained free form leaks.

**Sl.No.** 3. **Generating building or room.-** All plants for generation of gas from dangerous petroleum erected after the coming into force of the provisions specified in this schedule, shall be erected outside the factory building proper in a separate well ventilated building (hereinafter referred to as "generating building"). In the case of such plants erected before the coming into force of the provisions specified in this schedule, there shall be no direct communication between the room where such plants are erected (hereinafter referred to as "the generating room") and the remainder of the factory building. So far as practicable, all such generating rooms shall be constructed of fire-resisting materials.

**Sl.No.** 4. **Fire extinguishers**.- An efficient means of extinguishing petrol fires shall be maintained in an easily accessible position near the plant for generation of gas from dangerous petroleum.

**Sl.No.** 5. **Plant to be approved by Chief Inspector- cum- Facilitator**.- Petrol gas shall not be manufactured except in a plant for generating petrol gas, the design and construction of which has been approved by the Chief Inspector - cum- Facilitator.

**Sl.No.** 6. **Escape of petrol.-** Effective steps shall be taken to prevent petrol from escaping into any drain or sewer.

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

**Sl.No.** 8. Access to petrol or container.- No unauthorised person shall have access to any petrol or to a vessel containing or having actually contained petrol.

**Sl.No.** 9. **Electric fittings**.- All electric fittings shall be of flameproof construction and all electric conductors shall either be enclosed in metal conduits or be lead-sheathed.

**Sl.No.** 10. **Construction of doors**.- All doors in the generating room or building shall be constructed to open outwards or to slide and no door shall be locked or obstructed or fastened in a such a manner that it cannot be easily and immediately opened from the inside while gas is being generated and any person is working in the generating room or building.

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

## **SUB SCHEDULE VIII**

Cleaning or smoothing, roughening, etc. of articles, by a jet of sand, metal shot, or grit, or other abrasive propelled by a blast of compressed air or steam

Sl.No. 1. Definitions.- For the purposes of this schedule -

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

(b) "blasting enclosure" means a chamber, barrel, cabinet or any other enclosure designed for the performance of blasting therein;

(c) "blasting chamber" means a blasting enclosure in which any person may enter at any time in connection with any work or otherwise; and

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

**Sl.No.** 2. **Prohibition of sand blasting**.- Sand or any other substance containing free silica shall not be introduced as an abrasive into any blasting apparatus and shall not be used for blasting :

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

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

**Sl.No.** 3. **Precautions in connection with blasting operations**.- (1)Blasting shall not be done except in a blasting enclosure and no work other than blasting and any work immediately incidental thereto and clearing and repairing of the enclosure including the plant and appliances situated therein, shall be kept closed and air tight while blasting is being done therein.

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

(3) There shall be provided and maintained for and in connection with every blasting enclosure, efficient apparatus for separating, so far as practicable, abrasive which has been used for blasting and which is to be used again as an abrasive, from dust or particles of other materials arising from blasting; and no such abrasive shall be introduced into any blasting apparatus and used for blasting until it has been so separated :

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

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

(5) The ventilating plant provided for the purpose of sub- Sl.no. (4) shall be kept in continuous operation whenever the blasting enclosure is in use whether or not blasting is actually taking place therein, and in the case of a blasting chamber, it shall be in operation even when any person is inside the chamber for the purpose of cleaning.

**Sl.No.** 4. **Inspection and examination**.-(1) Every blasting enclosure shall be specially inspected by a competent person at least once in every week in which it is used for blasting. Every blasting enclosure, the apparatus connected therewith and the ventilating plant shall be thoroughly examined and in the case of ventilating plant, tested by a competent person at least once in every month.

(2) Particulars of the result of every such inspection, examination or test shall forthwith be entered in a register which shall be kept in a form approved by the Chief Inspector - cum- Facilitator and shall be available for inspection by any workman employed in or in connection with blasting in the factory. Any defect found on any such inspection, examination or test shall be immediately reported by the person carrying out the inspection, examination or test to the occupier, manager or other appropriate person and without prejudice to the foregoing requirements of this schedule, shall be removed without avoidable delay.

**Sl.No.** 5. **Provision of protective helmets, gauntlets and overalls**.- (1) There shall be provided and maintained for the use of all persons who are employed in a blasting chamber, whether in blasting or in any work connected therewith or in cleaning such a chamber, protective helmets of a type approved by a certificate of the Chief Inspector - cum- Facilitator; and every such person shall wear the helmet provided for this use whilst he is in the chamber and shall not remove it until he is outside the chamber.

(2) Each protective helmet shall carry a distinguishing mark indicating the person by whom it is intended to be used and no person shall be allowed or required to wear a helmet not carrying his mark or a helmet which has been worn by another person and has not since been thoroughly disinfected.

(3) Each protective helmet when in use shall be supplied with clean and not unreasonably cold air at a rate of not less 170 litres per minute.

(4) Suitable gauntlets and overalls shall be provided for the use of all persons while performing blasting or assisting at blasting, and every such person shall while so engaged, wear the gauntlet and overall provided.

**Sl.No.** 6. **Precautions in connection with cleaning and other work.-** (1) Where any person is engaged upon cleaning of any blasting apparatus or blasting enclosure or of any apparatus or ventilating plant connected therewith or the surroundings thereof or upon any other work in connection with any blasting apparatus or blasting enclosure or with any apparatus or ventilating plant connected therewith so that he is exposed to the risk of inhaling dust which has arisen from blasting, all practicable measures shall be taken to prevent such inhalation.

(2) In connection with any cleaning operation referred to in Sl.no. 5, and with the removal of dust from filtering or settling devices all practicable measures shall be taken to dispose of the dust in such a manner that it does not enter the air of any room. Vacuum cleaners shall be provided and used wherever practicable for such cleaning operations.

**Sl.No.** 7. **Storage accommodation for protective wear**.- Adequate and suitable storage accommodation for the helmets, gauntlets and overalls required to be provided by Sl.no. 5 shall be provided outside and conveniently near to every blasting enclosure and such accommodation shall be kept clean. Helmets, gauntlets and overalls when not in actual use shall be kept in this accommodation.

**Sl.No.** 8. **Maintenance and cleaning of protective wear**.- All helmets, guantlets, overalls and other protective devices or clothings provided and worn for the purposes of this schedule, shall be kept in good condition and so far as is reasonably practicable shall be cleaned on every weekday in which they are used. Where dust arising from the cleaning of such protective clothing or devices is likely to be inhaled, all practicable measures shall be taken to prevent such inhalation. Vacuum cleaners shall, wherever practicable, be used for removing dust from such clothing and compressed air shall not be used for removing dust from any clothing.

**Sl.No.** 9. **Maintenance of vacuum cleaning plant**.- Vacuum cleaning plant used for the purpose of this schedule shall be properly maintained.

**Sl.No.** 10. **Medical facilities and records of examinations and tests.-** (1) The occupier of every factory to which the Schedule applies, shall -

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

(b) provide to the said medical practitioner all the necessary facilities for the purpose referred to in clause (a).

(2) The record of medical examinations and appropriate tests carried out by the said medical practitioner shall be maintained in a separate register approved by the Chief Inspector - cum- Facilitator of Factories, which shall be kept readily available for inspection by the Inspector - cum- Facilitator.

**Sl.No.** 11. **Medical examination by the Medical Officer**.- (1) Every worker employed in any of the processes to which this schedule shall be examined by a Medical Officer within 15 days of his first employment. Such examination shall include pulmonary function tests and chest X-rays. No worker shall be allowed to work after 15 days of his first employment in the factory unless certified fit for such employment by the Medical Officer.

(2) Every worker employed in the said processes shall be re-examined by a Medical Officer at least once in every 12 calendar months and such re-examination shall, wherever the Medical Officer considers appropriate, include pulmonary function test and chest X-ray once in every three years.

(3) The Medical Officer after examining a worker, shall issue a Certificate of Fitness in **Form 48**. The record of examination and re-examinations carried out shall be entered in the Certificate and the Certificate shall be kept in the custody of the manager of the factory. The record of each examination carried out under sub-Sl.no. (1) and (2), including the nature and the results of the tests, shall also be entered by the Medical Officer in a health register in **Form 47**.

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

(5) If at any time the Medical Officer is of the opinion that a worker is no longer fit for employment in the said processes on the ground that continuance therein would involve special danger to the health of the worker he shall make record of his findings in the said certificate and the health register. The entry of his findings in those documents should also include the period for which he considers that the said person is unfit for work in the said processes. The person so suspended from the process shall be provided with alternate placement facilities unless he is fully incapacitated in the opinion of the Medical Officer, in which case the person affected shall be suitably rehabilitated.

(6) No person who has been found unfit to work as said in sub- Sl.no. (5) shall be reemployed or permitted to work in the said processes unless the Medical Officer, after further examination, again certifies him fit for employment in those processes.

**Sl.No.** 12. **Restrictions in employment of young persons**.- (1) No person under 18 years of age shall be employed in blasting or assisting at blasting or in any blasting chamber or in the cleaning of any blasting apparatus or any blasting enclosure or any apparatus or ventilating plant connected therewith or be employed on maintenance or repair work at such apparatus, enclosure or plant.

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

**Sl.No.** 13. **Power to exempt or relax.-** (1) If the Chief Inspector - cum- Facilitator is satisfied that in any factory or any class of factory, the use of sand or other substance containing free silica as an abrasive in blasting is necessary for a particular manufacture or process (other than the process incidental or supplemental to making of metal castings) and that the manufacture or process cannot be carried on without the use of such abrasive or that owing to the special conditions or special method of work or otherwise any requirement of this schedule can be relaxed without endangering the health of the persons employed or that application of any such requirements is for any reason impracticable or inappropriate, he may, with the previous sanction of the State Government, by an order in writing exempt the said factory or class of factory from such period as may be specified in the said order. (2) Where an exemption has been granted under sub- Sl.no. (1), a copy of the order shall be displayed at a notice board at a prominent place at the main entrance or entrances to the factory and also at the place where the blasting is carried on.

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## **SUB SCHEDULE IX**

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

**Sl.No.** 1. **Cautionary notices**.- (1) Cautionary notices as to anthrax in the form specified by the Chief Inspector - cum- Facilitator shall be affixed in prominent positions in the factory where they may be easily and conveniently read by the persons employed.

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

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

(4) Notices shall be affixed in prominent places in the factory stating the position of the first-aid box or 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-Sl.no. (1), (2) and (4) and if chrome solutions are used in the factory, the contents of the notice specified in sub-Sl.no. (3).

**Sl.No.** 2. **Protective clothing**.- The occupier shall provide and maintain in good condition the following articles of protective clothing :-

- (a) waterproof footwear leg coverings, aprons and gloves for persons employed in processes involving contact with chrome solutions, including the preparation of such solutions;
- (b) gloves and boots for persons employed in lime yard;

(c) protective footwear, aprons and gloves for persons employed in processes involving the handling of hides and skins, other than in processes specified in sub- Sl.no. (a) and (b) above :

Provided that the gloves, aprons, leg coverings or boots may be of rubber or leather, but the gloves and boots to be provided under sub- Sl.no. (a) and (b) shall be of rubber.

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

**Sl.No.** 3. **Washing facilities, messroom and cloakroom.**- There shall be provided and maintained in a clean state and in good repair for the use of all persons employed-(a) a trough with a smooth impervious surface fitted with a waste pipe, without plug, and of sufficient length to allow of at least 60 centimetres for every five such persons employed at any one time, and having a constant supply of water from taps or jets above the trough at intervals of not more than 60 centimetres; or at least on washbasin for every ten such persons employed at any one time, fitted with a waste pipe and plug and having a constant supply of clean water; together with, in either case, a sufficient supply of nail brushes, soap or other suitable cleansing material and clean towels;

(b) a suitable messroom, adequate for the number remaining on the premises during the meal intervals, which shall be furnished with sufficient tables and benches and adequate means for warming food and for boiling water. The messroom shall -

(i) be separate from any room or shed in which hides or skins are stored, treated or manipulated;

(ii) be separate from the cloakroom; and

(iii) be placed under the charge of a responsible person; and

(c) suitable accommodation for clothing put off during working hours and another accommodation for protective clothing and also adequate arrangements for drying up the clothing in both the cases, if wet. The accommodation so provided shall be kept clean at all times and placed under the charge of a responsible person.

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

**Sl.No.** 5. **Medical facilities and record of examinations and tests.-** (1) The occupier of every factory in which the schedule applies, shall -

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

(b) provide to the said medical practitioner all the necessary facilities for the purpose referred to in clause (a).

(c) arrange for inspection of the hands of all the persons keeping in contact with chromium substances to be made twice a week; and

(d) prove and maintain and supply suitable ointment and plaster in a box readily accessible to the workers and solely used for the purpose of keeping the ointment and the plaster.

2) The records of medical examinations and appropriate tests carried out by the said medical practitioner shall be maintained in a separate register approved by the Chief Inspector - cum- Facilitator of Factories, which shall be kept readily available for inspection by the Inspector - cum- Facilitator.

**Sl.No.** 6. **Medical Examination by Medical Officer**.- (1) Every workers employed in shall be examined by a Medical Officer within 15 days of his first employment. Such examination shall include No worker shall be allowed to work after 15 days of his first employment in the factory unless certified fit for such employment by the Medical Officer.

(2) Every worker employed in the said processes shall be re-examined by the Medical Officer at least once in every twelve calendar months. Such re-examination shall, wherever the Medical Officer considers appropriate, include tests as specified in sub-Sl.no. (1).

(3) The Medical Officer after examining a worker, shall issue a Certificate of Fitness in **Form 48**. The record of examination and re-examination carried out shall be entered in the Certificate and the Certificate shall be kept in the custody of the manager of the factory. The record of each examination carried out under sub- Sl.no. (1) and (2), including the nature and the results of the tests, shall also be entered by the Medical Officer in a health register in **Form 47**.

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

(5) If at any time the Medical Officer is of the opinion that a worker is no longer fir for employment in the said processes on the ground that continuance therein would involve special danger to the health of the worker, he shall make a record of his findings in the said certificate and the health register. The entry of his findings in those documents should also include the period for which he considers that the said person is unfit for work in the said processes. The person so suspended from the process shall be provided with alternate placement facilities unless he is fully incapacitated in the opinion of the Medical Officer, in which can the person affected shall be suitable rehabilitated.

(6) No person who has been found unfit to work as said in sub- Sl.no. (5) above shall be re-employed or permitted to work in the said processes unless the Medical Officer, after further examination, again certifies him fit for employment in those processes.

#### SUB SCHEDULE X

**Printing presses and type foundries and certain lead processes carried therein. Sl.No.** 1. **Definitions**.- For the purpose of this schedule -

(a) "lead material" means material containing not less than five per cent of lead ;

(b) "lead process" means -

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

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

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

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

(c) "efficient exhaust draught" means localised ventilation effected by head or mechanical means for the removal of gas, vapour, dust or fumes so as to prevent them from escaping into the air of any place in which work is carried on. No draught shall be deemed efficient which fails to remove smoke generated at the point where such gas, vapour, fume, or dust originate.

## Sl.No. 2. Exhaust draught.-

(1) None of the following processes shall be carried on except with an efficient exhaust draught unless carried on in such a manner as to prevent free escape of gas, vapour, fumes or dust into any place in which work is carried on, or unless carried on in electrically heated and thermostatically controlled melting pots:-

(a) melting lead material or slugs; and

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

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

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

**Sl.No.** 4. Separation of certain processes.- Each of the following processes shall be carried on in such a manner and under such conditions as to secure effectual separation from one another and from any other processes :-

(a) melting of lead or any lead material;

- (b) casting of lead ingots; and
- (c) mechanical composing.

**Sl.No.** 5. **Container for dross**.- A suitable receptacle with tightly fitting cover shall be provided and used for dross as it is removed from every melting pot. Such receptacle shall be kept covered while in the workroom near the machine except when the dross is being deposited therein.

**Sl.No.** 6. **Floor of workroom**.- The floor of every workroom where lead process is carried on shall be -

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

**Sl.No.** 7. **Messroom.**- There shall be provided and maintained for the use of all persons employed in a lead process and remaining on the premises during the meal intervals, a suitable messroom which shall be furnished with sufficient tables and benches.

**Sl.No.** 8. **Washing facilities**.- (1) There shall be provided and maintained in a cleanly state and in good repair for the use of all persons employed in a lead process –

(a) a wash place with either -

(i) a trough with a smooth impervious surface fitted with a waste pipe without plug, and of sufficient length to allow at least 60 centimetres for every five such persons employed at any one time, and having a constant supply of water from taps or jets above the trough at intervals of not more than 60 centimetres; or

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

(b) a sufficient supply of clean towels made of suitable materials renewed daily, with a sufficient supply of soap or other suitable cleansing material.

**Sl.No.** 9. Food, drinks, etc. prohibited in workrooms.- No food, drink, pan and supari or tobacco shall be consumed or brought by any worker into any workroom in which any lead process is carried on.

**Sl.No.** 10. **Medical facilities and records of examinations and tests**.- (1) The occupier of every factory to which the schedule applies shall-

- (a) employ a qualified medical practitioner for medical surveillance of the workers employed therein whose employment shall be subject to the approval of the Chief Inspector cum- Facilitator of Factories; and
- (b) provide to the said medical practitioner all the necessary facilities for the purpose referred to in clause (a).

(2) The record of medical examinations and appropriate tests carried out by the said medical practitioner shall be maintained in a separate register approved by the Chief Inspector - cum- Facilitator of Factories, which shall be kept readily available for inspection by the Inspector - cum- Facilitator.

**Sl.No.** 11. **Medical examination by Medical Officer**.- (1)Every worker employed in a lead processes shall be examined by a Medical Officer within 15 days of his first employment. Such examination shall include tests for lead in urine and blood. ALA in urine, haemoglobin content, stippling of cells and steadiness test. No worker shall be allowed to work after 15 days of his first employment in the factory unless certified fit for such employment by the Medical Officer.

(2) Every worker employed in the said processes shall be re-examined by a Medical Officer at least once in every six calendar months. Such re-examination shall, wherever the Medical Officer considers appropriate, include tests as specified in sub-Sl.no. (1).

(3) The Medical Officer after examining a worker, shall issue a Certificate of Fitness in **Form 48**. The record of examination and re-examinations carried out shall be entered in the Certificate and the Certificate shall be kept in the custody of the manager of the factory. The record of each examination carried out under sub- Sl.no. (1) and (2), including the nature and the results of the tests, shall also be entered by the Medical Officer in a health register in **Form 47**.

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

(5) If at any time the Medical Officer is of the opinion that a worker is no longer fit for employment in the said process on the ground that continuance therein would

involve special danger to the health of the worker he shall make a record of his findings in the said Certificate and the health register. The entry of his findings in these documents should also include the period for which he considers that the said person is unfit for work in the said processes. The person so suspended from the process shall be provided with alternate placement facilities unless he is fully incapacitated in the opinion of the Medical Officer, in which case the person affected shall be suitably rehabilitated.

(6) No person who has been found unfit to work as said in sub- Sl.no. (5) above shall be re-employed or permitted to work in the said processes unless the Medical Officer, after further examination, again certifies him fit for employment in those processes.

**Sl.No.** 12. **Exemption.-** Where the Chief Inspector - cum- Facilitator is satisfied that all or any of the provisions of this schedule are not necessary for the protection of persons employed, he may by certificate in writing exempt any factory from all or any such provisions subject to such conditions as he may specify therein. Such certificate may at any time be revoked by the Chief Inspector - cum- Facilitator.

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## **SUB SCHEDULE XI**

## Manufacture of pottery

**Sl.No.** 1. **Savings.-** These provisions shall not apply to a factory in which any of the following articles, but no other pottery, are made :-

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

Sl.No. 2. Definitions.- For the purposes of this schedule -

- (a) "pottery" includes earthenware, stoneware, porcelain, china tiles, and any other articles made from such clay or from a mixture containing clay and other materials such as quartz, flint, feldspar, and gypsum;
- (b) "efficient exhaust draught" means localised ventilation effected by mechanical or other means for removal of dust or fume so as to prevent it from escaping into air of any place in which work is carried on. No draught shall be deemed efficient which fails to remove effectively dust or fume generated at the point where dust or fume originates;
- (c) "fettling" includes scalloping, towing, sand papering, sand sticking, brushing or any other process of cleaning of pottery ware in which dust is given off;
- (d) "leadless glaze" means a glaze which does not contain more than one per cent of its dry weight, of a lead compound calculated as lead monoxide;
- (e) "low solubility glaze" means a glaze which does not yield to dilute hydrochloric acid more than five per cent of its dry weight, of a soluble lead compound calculated as lead monoxide when determined in the manner described below :

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

(f) sound or powdered flint or quartz" does not include natural sands; and

(g) "potter's shop includes all places where pottery is formed by pressing or by any other process and all places where shaping, fettling or other treatment of pottery articles prior to placing for the biscuit fire is carried on.

**Sl.No.** 3. **Efficient exhaust draught**.- The following processes shall not be carried on without the use of an efficient exhaust draught:-

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

(b) fettling operations of any kind, whether on greenware or biscuit, provided that this shall not apply to the wet fettling, and to the occasional finishing of pottery articles without the aid of mechanical power;

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

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

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

(d) pressing of tiles from clay dust, an exhaust opening being connected with each press, and pressing from clay dust of articles other than tiles, unless the material is so damp that no dust is given off;

(e) fettling of tiles made from clay dust by pressure, except where the fettling is done wholly on, or with, damp material, and fettling of other articles made from clay dust, unless the material is so damp that no dust is given off; (f) process of loading and unloading of saggars where handling and manipulation of ground and powdered flint, quartz, aluminia or other materials are involved;

(g) brushing of earthenware biscuit, unless the process is carried on in a room provided with efficient general mechanical ventilation or other ventilation which is certified by the Inspector - cum- Facilitator of Factories as adequate having regard to all the circumstances of the case;

(h) fettling of biscuitware which has been fired in powdered flint or quartz except where this is done in machines so enclosed as to effectually prevent the escape of dust;

(i) where cleaning after the application of glaze by dipping or other process;

(j) crushing and dry grinding of materials for pottery bodies and saggars, unless carried on in machines so enclosed as to effectively prevent the escape of dust or is so damp that no dust can be given off;

(k) sieving or manipulation of powdered flint, quartz, clay grog or mixture of these materials unless it is so damp that no dust can be given off;

(1) grinding of tiles on a power driven wheel unless an efficient water spray is used on the wheel;

(m) lifting and conveying of materials by elevators and conveyors unless they are effectively enclosed and so arranged as to prevent escape of dust into the air in or near to any place in which persons are employed;

(n) preparation or weighing out of flow material, lawning of dry colours, colour dusting and colour blowing;

(o) mould making unless the bins or similar receptacles used for holding plaster of paris are provided with suitable covers; and

(p) manipulation of calcined material unless the material has been made and remains so wet that no dust is given off.

**Sl.No.** 4. **Separation of processes**.- Each of the following processes shall be carried on in such a manner and under such conditions as to secure effectual separation from one another, and from other wet processes:-

(a) crushing and dry grinding or sieving of materials, fettling, pressing of tiles, drying of clay and greenware, loading and unloading of saggars; and

(b) all processes involving the use of a dry lead compound.

**Sl.No.** 5. **Prohibition on use of glaze**.- No glaze which is not a leadless glaze or a low solubility glaze shall be used in a factory in which pottery is manufactured.

**Sl.No.** 6. **Prohibition relating to women and young persons**.- No woman or young person shall be employed or permitted to work in any of the operations specified in Sl.no. 4, or at any place where such operations are carried on.

**Sl.No.** 7. **Provision of screen to potter's wheel**.- The potter's wheel (Jolly and Jigger) shall be provided with screens or so constructed as to prevent clay scrapings being thrown off beyond the wheel.

Sl.No. 8. Control of dust during cleaning-

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

(2) 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.

**Sl.No.** 9. Floor of certain workrooms.- The floors of potter's shops, slip houses, dipping houses and ware cleaning rooms shall be hard, smooth and impervious and shall be thoroughly cleaned daily by an adult male using a moist method.

#### Sl.No. 10. Protective equipment.-

(1) The occupier shall provide and maintain suitable overalls and hand coverings for all persons employed in process included under Sl.no. 3.

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

(3) Aprons provided in pursuance of Sl.no. 10(2) shall be thoroughly cleaned daily by the wearers by sponging or other wet process. All overalls and head coverings shall be washed, cleaned and mended at least once a week, and this washing, cleaning or mending shall be provided for by the occupier.

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

## Sl.No. 11. Washing facilities.-

(1) The occupier shall provide and maintain, in a clean state and in good repair for the use of all persons employed in any of the processes specified in Sl.no. 3 -

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

(i) a trough with a smooth impervious surface fitted with a waste pipe without plug, and of sufficient length to allow of at least 60 centimetres for every five such persons employed at any one time, and having a constant supply of clean water from taps or jets above the trough at intervals of not more than 60 centimetres; or

(ii) at least one tap or stand pipe for every five such persons employed at any one time, and having a constant supply of clean water, the tap or stand pipe being spaced not less than 120 centimetres apart; and

(b) a sufficient supply of clean towels made of suitable materials changed daily, with a sufficient supply of soap and nail brushes.

**Sl.No.** 12. **Time allowed for washing**.- Before each meal and before the end of the day's work, at least ten minutes, in addition to the regular meal times, shall be allowed for washing to each person employed in any of the processes mentioned in Sl.no. 3.

## Sl.No. 13. Messroom.-

(1) There shall be provided and maintained for use of all persons remaining within the premises during the rest intervals, a suitable messroom providing accommodation of 0.93 square meter per head and furnished with -

(a) a sufficient number of tables and chairs or benches with back rest;

(b) arrangements for washing utensils;

- (c) adequate means for warming food; and
- (d) adequate quantity of drinking water.

(2) The room shall be adequately ventilated by the circulation of fresh air and placed under the charge of aresponsible person and shall be kept clean.

**Sl.No.** 14. Food, drinks, etc. prohibited in workrooms.- No food, drink, pan and supari or tobacco shall be brought into, or consumed by any worker in any workroom in which any of the processes mentioned in Sl.no. 3 are carried on and no person shall remain in any such room during intervals for meals or rest.

**Sl.No.** 15. **Cloakrooms etc.-** There shall be provided and maintained for the use of all persons employed in any of the processes mentioned in Sl.no. 3.

(a) a cloakroom for clothing put off during working hours and such accommodation shall be separate from any messroom; and

(b) separate and suitable arrangements for the storage of protective equipment provided under Sl.no. 10.

Sl.No. 16. Medical facilities and records of examinations and tests.-

(1) The occupier of every factory in which manufacture of pottery is carried on, shall -

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

(b) provide to the said medical practitioner all the necessary facilities for the purpose referred to in clause (a).

(2) The record of medical examinations and appropriate tests carried out by the said medical practitioner shall be maintained in separate register approved by the Chief Inspector cum Facilitator of Factories, which shall be kept readily available for inspection by the Inspector - cum- Facilitator.

#### Sl.No. 17. Medical examination by Medical Officer.-

(1) Every worker employed in any process mentioned under Sl.no. 3, shall be examined by a Medical Officer within 15 days of his first employment. Such examination shall include tests for lead in urine and blood, ALA in urine, haemoglobin content, stippling of cells and. No worker shall be allowed to work after 15 days of his first employment in the factory unless certified fit for such employment by the Medical Officer.

(2) All persons employed in any of the processes included under sub- Sl.no. 3(a) and 3(n) shall be examined by a Medical Officer once in every 3 calendar months. Those employed in any other processes mentioned in the remaining Sl.no. 3 shall be examined by a Medical Officer one in every twelve calendar months. Such examinations in respect of all the workers shall include all the tests as specified in sub- Sl.no. (1) except chest X-ray which will be once in 3 years.

(3) The Medical Officer after examining a worker, shall issue a Certificate of Fitness in **Form 48**. The record of examination and re-examinations carried out shall be entered in the Certificate and the Certificate shall be kept in the custody of the manager of the factory. The record of each examination carried out under sub Sl.no. (1) and (2), including the nature and the results of the tests, shall also be entered by the Medical Officer in a health register in **Form 47** 

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

(5) If at any time the Medical Officer is of the opinion that a worker is no longer fit for employment in the said process on the ground that continuance therein would involve special danger to the health of the worker he shall make a record of his findings in the said Certificate and the health register. The entry of his findings in these documents should also include the period for which he considers that the said person is unfit for work in the said processes. The person so suspended from the process shall be provided with alternate placement facilities unless he fully is incapacitated in the opinion of the Medical Officer, in which case the person affected shall be suitably rehabilitated.

(6) No person who has been found unfit to work as said in sub- Sl.no. (5) above shall be re-employed or permitted to work in the said processes unless the Medical Officer, after further examination, again certifies him fit for employment in those processes.

**Sl.No.** 18. **Exemption**.- If in respect of any factory the Chief Inspector - cum-Facilitator of Factories is satisfied that all or any of the provisions of this schedule are not necessary for the protection of the persons employed in such factory, he may by a certificate in writing exempt such factory from all or any of such provisions, subject to such conditions as he may specify therein. Such certificate may at any time be revoked by the Chief Inspector - cum- Facilitator without assigning any reasons.

## **SUB SCHEDULE XII**

#### **Chemical Works**

#### PART I

**Sl.No.** 1. **Application**.- This schedule shall apply to all manufacture and processes incidental thereto carried on in chemical works.

Sl.No. 2. Definitions.- For the purpose of this schedule -

(a) "chemical works" means any factory or such parts of any factory as are listed in appendix `A' to this schedule;

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

(c) "bleaching powder" means the bleaching powder commonly called chloride of lime;

(d) "chlorate" means chlorate or perchlorate;

(e) "caustic" means hydroxide of potassium or sodium;

(f) "chrome process" means the manufacture of chromate or bichromate of potassium or sodium, OT the manipulation, movement or other treatment of these substances;

(g) "nitro or amino process" means the manufacture of nitro or amino derivatives of phenol and of benzene or its homologues, and the making of explosives with the use of any of these substances;

(h) the term `permit to work' system means the compliance with the procedures laid down under para 20 of Part II;

(i) "toxic substances" means all those substances which when they enter into the human body, through inhalation or ingestion or absorption through skin, in sufficient quantities cause fatality or exert serious affliction of health, or chronic harmful effects on the health of persons exposed to it due to its inherent chemical or biological effects. In respect of substances whose TLV is specified in Rule 106, exceeding the concentration specified therein would make the substance toxic;

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

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

(l) "manipulation" means mixing, blending, filling, emptying, grinding, sieving, drying, packing, sweeping, handling, using, etc.;

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

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

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

## PART II

## **General Requirements**

Applying to all the works in Appendix 'A'

**Sl.No.** 1. **Housekeeping**.-(1) Any spillage of materials shall be cleaned up before further processing.

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

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

**Sl.No.** 2. **Improper use of chemicals**.- No chemicals or solvents or empty containers containing chemicals or solvents shall be permitted to be used by workers for any purpose other than in the processes for which they are supplied.

**Sl.No.** 3. **Prohibition on the use of food, etc.-** No food, drink, tobacco, pan or any edible item shall be stored or heated or consumed on or near any part of the plant or equipment.

#### Sl.No. 4. Cautionary Notices and Instructions.-

(1) Cautionary notices in a language understood by the majority of workers shall be prominently displayed in all hazardous areas drawing the attention of all workers about the hazards to health, hazards involving fire and explosion and any other hazard such as consequences of testing of material or substances used in the process or using any contaminated container for drinking or eating, to which the workers' attention should be drawn for ensuring their safety and health.

(2) In addition to the above cautionary notice, arrangement shall be made to instruct and educate all the workers including illiterate workers about the hazards in the process including the specific hazards to which they may be exposed to, in the normal course of their work. Such instructions and education should also deal with the hazards involved in unauthorised and unsafe practices including the properties of substances used in the process under normal conditions as well as abnormal conditions and the precautions to be observed against each and every hazard. Further, an undertaking from the workers shall be obtained within 1 monthoftheir employment and for old workers employed, within one month of coming into operation of the rules, to the effect that they have read the contents of the cautionary notices and instructions, understood them and would abide by them. The training and instructions to all workers and all supervisory personnel shall include the significance of different types of symbols and colours used on the labels stuck or painted on the various types of containers and pipe lines.

## Sl.No. 5. Evaluation and provision of safeguards before the commencement of process.-

(1) Before commencing any process or any experimental work, or any new manufacture covered under Appendix 'A', the occupier shall take all possible steps to ascertain definitely all the hazards involved both from the actual operations and the chemical reactions including the dangerous chemical reactions. The properties of the raw materials used, the final products to be made and any by-products derived during manufacture, shall be carefully studied and provisions shall be made for dealing with any hazards including effects on workers, which may occur during manufacture.

(2) Information in writing giving details of the process, its hazards and the steps taken or proposed to be taken from the design stage to disposal stage for ensuring the safety as in sub-para (1) above should be sent to the Chief Inspector - cum- Facilitator at the earliest but in no case less than 15 days before commencing manufacture, handling, or storage of any of items covered under Appendix `A', whether on experimental basis, or as pilot plant or as trial production, or as large scale manufacture.

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

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

**Sl.No.** 6. **Authorisedentry**.-Authorised persons only shall be permitted to enter any section of the factory or plant where any dangerous operations or processes are being carried on or where dangerous chemical reactions are taking place or where hazardous chemicals are stored.

## Sl.No. 7. Examination of instruments and safety devices.-

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

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

**Sl.No.** 8. **Electrical installations**.- All electrical installations used in the process covered in Appendix 'A' shall be of an appropriate type to ensure safety against the hazard prevalent in that area such as suitability against dust, dampness, corrosion, flammability and explosivity etc. and shall confirm to the relevant ISI specifications governing their construction and use for that area.

#### Sl.No. 9. Handling and storage of chemicals.-

(1) The containers for handling and storage of chemicals shall be of adequate strength taking into consideration the hazardous nature of the contents. They shall also be provided with adequate labelling and colour coding arrangements to enable identification of the containers and their contents indicating the hazards and safe

handling methods and shall conform to the respective ISI standards. The instructions given in the label shall be strictly adhered to. Damaged containers shall be handled only under supervision of a knowledgeable and responsible person and spillage shall be rendered innocuous in a safe manner using appropriate means.

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

(3) Without prejudice to the generality of the requirements in sub- para (2) above, the arrangements shall have suitable ventilation facilities and shall enable the maintenance of safe levels in vessels and containers. Such arrangements shall also take into consideration, the type of flooring and the capacity of flooring and the compatibility requirements of substances with other chemicals stored nearby.

(4) (a) Storage of chemicals and intermediate products, which are highly unstable or reactive or explosive shall be limited to the quantities required for two months use.

(b) Whenever the quantities laid down in the above clause(a) are to be exceeded, the permission of the Chief Inspector - cum- Facilitator shall be obtained.

(c) Notwithstanding anything contained in clause (a) and (b) above, the Chief Inspector - cum- Facilitator of Factories may direct any factory carrying out processes covered in Appendix 'A' to further limit the storage of hazardous substances to quantities less than two months on considerations of safety.

(5) Standby arrangements equal to the biggest container shall always be available to transfer the toxic substances quickly into the standby storage facility if any defect develops in any of the container resulting in the release of toxic substances.

(6) Any storage facility constructed using non-metallic material such as Fibreglass Reinforced Plastics (FRP), all glass vessels etc., shall have adequate strength to withstand the stress, if any, exerted by the contents and shall be properly anchored. Working platforms, access ladders, pipelines etc used in such storage facility shall not have any support on the structure of the storage facility and shall be independently supported.

**Sl.No.** 10. **Facility for isolation**.- The plant and equipment shall be so constructed and maintained as to enable quick isolation of plant or part of plant or equipment, with appropriate indication. One copy of the layout plan indicating the isolation facilities shall always be available with the security personnel, the maintenance and the health and safety personnel and these isolation facilities shall be checked for its effectiveness once in a month.

## Sl.No. 11. Personal protective equipment.-

(1) All workers exposed to the hazards in the processes covered by this Schedule shall be provided with appropriate and approved type of personal protective equipment. Such equipment shall be in a clean, sterile and hygienic condition before issue.

(2) The occupier shall arrange to inform, educate and supervise all the workers in the use of personal protective equipment while carrying out the job.

(3) As regards any doubt regarding the appropriateness of any personal protective equipment, the decision of the Chief Inspector - cum- Facilitator will be final.

#### Sl.No. 12. Alarm Systems.-

(1) Suitable and effective alarm systems giving audible and visible indications, shall be installed at the control room as well as in all strategic locations where process control arrangements are available so as to enable corrective action to be taken before the operational parameters exceed the predetermined safe levels or lead to conditions conducive for an outbreak of fire or explosion to occur. Such alarm systems shall be checked daily and tested every month at least once to ensure its performance efficiency at all times.

(2) The Chief Inspector - cum- Facilitator of Factories may direct such system to be installed in case of plants or processes where toxic materials are being used and spillage or leakage of which may cause wide spread poisoning in or around the plant.

#### Sl.No. 13. Control of escape of substances into the work atmosphere.-

(1) Effective arrangements such as, enclosure, or by pass, or efficient exhaust draught, maintenance of negative pressure etc., shall be provided in all plants, containers, vessels, sewers, drains, flues, ducts, culverts, and buried pipes and equipment, to control the escape and spread or substances which are likely to give rise to fire or explosion or toxic hazards during normal working and in the event of accident or emergency.

(2) In the event of the failure of the arrangements for control resulting in the escape of substances in the work atmosphere immediate steps shall be taken to control the process in such a manner, that further escape is brought down to the safe level.

(3) The substances that would have escaped into the work atmosphere before taking immediate steps as required in sub-para (2), shall be rendered innocuous by diluting with air or water or any other suitable agent or by suitably treating the substances.

**Sl.No.** 14. **Control of dangerous chemical reactions**.- Suitable provision, such as automatic and or remote control arrangements, shall be made for controlling the effects of `dangerous chemical reactions'. In the event of failure of control arrangements automatic flooding or blanketing or other effective arrangements shall come into operation.

#### Sl.No. 15. Testing, examination and repair of plant & equipment.-

(1) All parts of plant, equipment and machinery used in the process which in the likely event of their failure may give rise to an emergent situation shall be tested by a competent person before commencing process and retested at an interval of two years or after carrying out repairs to it. The competent person shall identify the parts of the plant, equipment and machinery required to be tested as aforesaid and evolve a suitable testing procedures. In carrying out the test mentioned above in respect of pressure vessels or reaction vessels the following precautions shall be observed, namely -

(a) before the test is carried out, each vessel shall be thoroughly cleaned and examined externally, and as far as practicable, internally also for surface defects, corrosion and foreign matters. During the process of cleaning and removal of sludge, if any, all due precautions shall be taken against fire or explosion, if such sludge is of pyropheric nature or contains spontaneously combustible chemicals;

(b) as soon as the test is completed, the vessel shall be thoroughly dried internally and shall be clearly stamped with the marks and figures indicating the person by whom testing has been done, and the date of test; and (c) any vessel which fails to pass the test or which for any other reason is found to be unsafe for use shall be destroyed or rendered unusable under intimation to the Chief Inspector - cum- Facilitator.

(2) All parts of plant, equipment, machinery which is the likely event of failure may give rise to an emergent situation shall be examined once in a month by the competent person.

(3) records of testing and examination referred to in Sl.no. (1) and (2) shall be maintained as long as that part of the plant, equipment and machinery are in use.

(4) All repair work including alteration, modification and addition to be carried out to the plant, equipment and machinery shall be done under the supervision of a responsible person who shall evolve a procedure to ensure safety and health of persons doing the work. When repairs or modification is done on pipelines, and joints are required to be welded, butt welding of joints shall be preferred. Wherever necessary, the responsible person shall regulate the aforesaid work through a `Permit to work system'.

## Sl.No. 16. Staging.-

(1) All staging that is erected for the purpose of maintenance work or repair work or for work connected with entry into confined spaces and used in the processes included in Appendix `A', shall be stable, rigid and constructed out of substantial material of adequate strength. Such staging shall conform to the respective Indian Standard specifications.

(2) Staging shall not be erected over any closed or open vessel unless the vessel is so constructed and ventilated to prevent exposure of persons working on the stages.

(3) All the staging constructed for the purpose of this para shall have appropriate access which are safe and shall be fitted with proper hand rails to a height of one metre and toe board.

**Sl.No.** 17. **Seating Arrangements.**- The seating arrangements provided for the operating personnel working in processes covered in Appendix `A' shall be located in a safe manner as to prevent the risk of exposure to toxic, flammable and explosive substances evolved in the work environment in the course of manufacture or repair or maintenance, either due to failure of plant and equipment or due to the substances which are under pressure, escaping into the atmosphere.

## Sl.No. 18. Entry into or work in confined spaces.-

(1) The occupier of every factory to which the provisions of this schedule apply, shall ensure the observance of the following precautions before permitting any person to enter or work inside the confined spaces - (a) identify all confined spaces and the nature of hazards that are encountered in such spaces, normally or abnormally, and arrange to develop the most appropriate safeguards for ensuring the safety and health of persons entering into or working inside, the confined spaces;

(b) regulate the entry or work inside the confined spaces through a `permit to work system' which should include the safeguards so developed as required under subclause (a) above; (c) before testing the confined space for entry into or work, the place shall be rendered safe by washing or cleaning with neutralising agents; or purging with steam or inert gases and making adequate forced ventilation arrangements or such measure which will render the confined space safe;

(d) shall arrange to carry out such tests as are necessary for the purpose by a competent person and ensure that the confined space is safe for the persons to enter or work. Such testing shall be carried out as often as is necessary during the course of work to ensure its continued safety;

(e) shall arrange to educate and train the personnel who would be required to work in confined spaces about the hazards involved in the work. He shall also keep in readiness the appropriate and approved personal protective equipment including arrangements for, rescue resurrection and first aid, and shall arrange supervision of the work at all times by a responsible and knowledgeable person. (2) The manager shall maintain a log of all entry into or work in, confined spaces and such record shall contain the details of persons assigned for the work, the location of the work and such other details that would have a bearing on the log book so maintained shall be retained as long as the concerned workers are in service and produces to the Inspector - cum- Facilitator when demanded.

#### Sl.No. 19. Maintenance work etc.-

(1) All the work connected with the maintenance of plants and equipment including cleaning of empty containers which have held hazardous substances used in the processes covered in this Schedule, shall be carried out under `permit to work system' employing trained personnel and under the supervision of responsible person, having knowledge of the hazards and precautions required to deal with them.

(2) Maintenance work shall be carried out in such a manner that there is no risk to persons in the vicinity or to persons who pass by. If necessary, the place of such work shall be cordoned off or the presence of unconnected persons effectively controlled.

**Sl.No.** 20. **Permit to work system.**- The permit to work system shall inter-alia include the observance of the following precautions while carrying out any specified work to be subjected to the permit to work system-

(a) all work subject to the permit to work system shall be carried out under the supervision of a knowledgeable and responsible person;

(b) all parts of plant or machinery or equipment on which permit to work system is carried out, shall remain isolated from other parts throughout the period of permit to work and the place of work including the parts of plant, machinery shall be rendered safe by cleaning, purging, washing, etc.; (c) all work subject to the permit to work system shall have predetermined work procedures which integrate safety with the work. Such procedures shall be reviewed whenever any change occurs in material or equipment so that continued safety is ensured;

(d) persons who are assigned to carry out the permit to work system shall be physically fir in all respects taking into consideration the demands and nature, of the work before entering into the confined space. Such person shall be adequately informed about the correct work procedures as well as the precautions to be observed while carrying out the permit to work system; (e) adequate rescue arrangements wherever considered necessary and adequate first aid, rescue and resurrection arrangements shall be available in good working condition near the place of work while carrying out the permit to work system, for use in emergency;

(f) appropriate and approved personal protective equipment shall be used while carrying out the `permit to work system';

(g) after completion of work subject to the `permit to work system' the person responsible shall remove all the equipment and tools and restore to the original condition so as to prevent any danger while carrying out regular process.

**Sl.No.** 21. **Safety sampling personnel**.- The occupier shall ensure the safety of persons assigned for collecting samples by instructing them on the safe procedures. Such personnel shall be provided with proper and approved personal protective equipment, if required.

**Sl.No.** 22. **Ventilation.**- Adequate ventilation arrangements shall be provided and maintained at all times in the process area where dangerous or toxic or flammable or explosive substances could be evolved. These arrangements shall ensure that concentrations, which are either harmful or could result in explosion, are not permitted to be built up in the work environment.

Sl.No. 23. Procedures for meeting emergencies.-

(1) The occupier of every factory carrying out the works covered in Appendix 'A', shall arrange to identify all types of possible emergencies that could occur in the processes during the course of work or while carrying out maintenance work or repair work. The emergencies so identified shall be reviewed every year.

(2) The occupier shall formulate a detailed plan to meet all such identified emergencies including arrangements for summoning outside help for rescue and fire fighting arrangements for making available urgent medical facilities.

(3) The occupier shall send the list of emergencies and the details of procedures and plans formulated to meet the emergencies, to the Chief Inspector - cum- Facilitator of Factories.

(4) The occupier shall arrange to install distinctive and recognisable warning arrangements to caution all persons inside the plant as well as the neighbouring community, if necessary, to enable evacuation of persons and to enable the observance of emergency procedures by the persons who are assigned emergency duties. All concerned must be well informed about the warning arrangements and their meaning. The arrangements must be checked for its effectiveness every month.

(5) Alternate power supply arrangements shall be made and interlocked with the normal power supply system so as to ensure constant supply of power to the facilities and equipment meant for compliance with requirements of Sl.no. 10, 11, 12, 13, 14, 18, 22, and this Sl.no. of Part II, Part III, Part IV and Part V of this Schedule.

(6) The occupier shall arrange to suspend the further process work in a place where emergency is established and shall forthwith evacuate all persons in that area except workers who have been assigned emergency duties.

(7) All the employees of the factory shall be trained about the action to be taken by them including evacuation procedures during emergencies.

(8) All emergency procedures must be rehearsed every three months and deficiencies, if any, in the achievement of the objectives shall suitably be corrected.

(9) The occupier shall arrange to have ten percent of the workers trained in the use of First Aid Fire Fighting appliances and in the rendering of specific hazards of the particular process.

(10) The occupier shall furnish immediately on request the specific chemical identity of the hazardous substance to the treating physician where the information is needed to administer proper emergency or first-aid treatment to exposed persons.

#### Sl.No. 24. Danger due to effluents.-

(1) Adequate precautions shall be taken to prevent the mixing of effluents from different processes and operations which may cause dangerous or poisonous gases to be evolved.

(2) Effluents which contain or give rise in the presence of other effluents to poisonous gases shall be provided with independent drainage systems to ensure that they may be trapped and rendered safe.

## PART III

## Fire and Explosion Risks

#### Sl.No. 1. Sources of ignition including lighting installation.-

(1) No internal combustion engine and no electric motor or other electrical equipment, and fittings and fixtures capable of generating sparks or otherwise causing combustion or any other source of ignition or any naked light shall be installed or permitted to be in the process area where there could be fire and explosion hazards.

(2) All hot exhaust pipes shall be installed outside a building and other hot pipes or hot surface or surfaces likely to become hot shall be suitably protected.

(3) The classification of work areas in terms of its hazard potential and the selection of electrical equipment or other equipment that could constitute a source of ignition shall be in accordance with the respective Indian Standard.

(4) Where a flammable atmosphere may be prevalent or could occur, the soles of footwear worn by workers shall have no metal on them, and the wheels of trucks or conveyors shall be conductive type.

(5) All tools and appliances used for work in this area shall be of non-sparking type.

(6) Smoking in process areas where there are risks of fire and explosion shall be prohibited, and warning notices in the language understood by majority of workers shall be posted in the factory prohibiting smoking into specified areas.

## Sl.No. 2. Static Electricity.-

(1) All machinery and plant, particularly, pipe lines and belt drives, on which static charge is likely to accumulate, shall be effectively earthed. Receptacles for flammable liquids shall have metallic connections to the earthed supply tanks to prevent static sparking. Where necessary, humidity shall be regulated.

(2) Mobile tanker wagons shall be earthed during filling and discharge, and precautions shall be taken to ensure that earthing is effective before such filling or discharge take place.

**Sl.No.** 3. **Lightning protection**.- Lightening protection arrangement shall be fitted where necessary, and shall be maintained.

**Sl.No.** 4. **Process heating**.- The method of providing heat for a process likely to result in fire and explosion shall be as safe as possible and where the use of naked flame is necessary, the plant shall be so constructed as to prevent any escaping flammable gas, vapour, or dust coming into contact with the flame, or exhaust gases, or other sources likely to cause ignition. Wherever possible, the heating arrangement shall be automatically controlled at a pre-determined temperature below the danger temperature.

## Sl.No. 5. Leakage of flammable liquids.-

(1) Provision shall be made to confine by means of bund walls, dykes, sumps etc. possible leakages from storage vessels containing flammable liquids.

(2) Waste material in contact with flammable substances shall be disposed off suitably under the supervision of knowledgeable and responsible person.

(3) Adequate and suitable fire-fighting appliances shall be installed in the vicinity of such vessels.

**Sl.No.** 6. **Safety valves**.- Every still and every closed vessel which gas is evolved or into which gas is passed, and in which the pressure is liable to rise above the atmospheric pressure, shall have attached to it a pressure gauge, and a proper safety valve or other equally efficient means to relieve the pressure. These appliances shall be maintained in good condition.

**Sl.No.** 7. **Installation of pipe line etc.**- All pipelines carrying flammable or explosive substances shall be protected from mechanical damage and shall be examined by a responsible person once a week to detect any deterioration or defects, or accumulation of flammable or explosive substances, and record kept of any defects found and repairs made.

## Sl.No. 8. Fire fightingsystems.-

(1) Every factory employing 500 or more persons and carrying out processes listed in Appendix `A' shall provide-

(a) Trained and responsible fire fighting squad so as to effectively handle the fire fighting and life saving equipment in the event of fire or other emergency. Number of persons in this squad will necessarily depend upon the size of risk involved, but in no case shall be less than 8 such trained persons to be available at any time. The squad shall consist of watch & ward personnel, fire pump man and departmental supervisors and operators trained in the operation of fire & emergency services.

(b) Squad leaders shall preferably be trained in a recognised government institution and their usefulness enhanced by providing residence on the premises.

(c) Squad personnel shall be provided with clothing and equipment including helmets, boots and belts.

(2) A muster roll showing the duties allocated to each member of the squad shall be prepared and copies supplied to each leader as well as displayed in prominent places so as to be easily available for reference in case of emergency.

(3) The pump man shall be thoroughly conversant with the location of all appliances. He shall be responsible for maintaining all fire fighting equipment in proper working

order. Any defect coming to his notice shall be immediately be brought to the notice of squad leader.

(4) As far as is practicable, the fire pump room and the main gate(s) of the factory be connected to all manufacturing or storing areas through telephone inter lined and placed in a convenient location near such areas.

## PART IV Risks of Toxic Substances

## Sl.No. 1. Leakage.-

(1) All plants shall be so designed and constructed as to prevent the escape of toxic substance. Where necessary, separate buildings, rooms, or protective structures shall be used for the dangerous stages of the process and buildings shall be so designed as to localise any escape of toxic substances.

(2) Catch pits, bund walls, dykes, or other suitable safeguards shall be provided to restrict the serious effects of such leakages. Catch pits shall be placed below joints in pipelines where there is danger involved to maintenance and other workers from such leakage.

**Sl.No.** 2. **Drainage.**- Adequate drainage shall be provided and shall lead to collection tanks specifically provided for this purpose wherein deleterious material shall be neutralised, treated or otherwise rendered safe before it is discharged into public drains or sewers.

## Sl.No. 3. Covering of vessels.-

(1) Every fixed vessel or structure containing any toxic substance and not so covered as to eliminate all reasonable risk of accidental contact of any portion of the body of a worker, shall be so constructed as to avoid physical contact.

(2) Such vessel shall, unless its edge is at least 90 centimetres above the adjoining ground or platform, be securely fenced to a height of at least 90 centimetres above such adjoining ground or platform.

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

Provided that sub- Sl.no. (2) of this shall not apply to -

(a) saturators used in the manufacture of sulphate of ammonia; and

(b) that part of the sides of brine evaporating pans which require raking, drawing or filling.

## Sl.No. 4. Continuous exhaust arrangement.-

(1) Any process evolving toxic vapour, gas, fume and substance shall have efficient continuous exhaust draught. Such arrangement shall be interlocked in the process control wherever possible.

(2) In the event of failure of continuous exhaust arrangement means shall be provided to automatically stop the process.

**Sl.No.** 5. Work Bench.- All the work benches used in the processes involving the manipulation of toxic substances, shall be graded properly and shall be made of smooth impervious surface which shall be washed daily after the completion of work.

## Sl.No. 6. Waste disposal.-

(1) There shall be provided a suitable receptacle made of non-absorbable material with a tightly fitting cover for depositing waste material soiled with toxic substances and the contents of such receptacle shall be destroyed by burning or using other suitable methods under the supervision of a responsible person.

(2) During the course of manufacture, whenever any batch or intermediate products having toxicity is rejected on considerations of quality, sufficient precautions shall be taken to render them innocuous or otherwise treat them or inactivate them, before disposal.

(3) The empty containers of toxic substances shall be cleaned thoroughly before disposal under the supervision of a responsible person.

## PART V

## Special Provisions

#### Sl.No. 1. Special precautions for Nitro or Amino Processes.-

(1) Unless the crystallised intro or amino substances or any of its liquor is broken or agitated in a completely enclosed process so as not to give rise to dust or fume, such process shall be carried on under an efficient exhaust draught or by adopting any other suitable means in such a manner as to prevent the escape of dust or fume in the working atmosphere.

(2) No part of the plant or equipment or implements which was in contact with nitro or amino compounds shall be repaired, or handled unless they have been emptied and thoroughly cleaned and decontaminated.

(3) Filling of containers with nitro or amino compounds shall be done only by using a suitable scoop to avoid physical contact and the drying of the containers in the stove shall be done in such a manner that the hot and contaminated air from the stove is not drawn into the work room.

(4) Processes involving the steaming into or around any vessel containing nitro or amino compounds or its raw materials shall be carried out in such a manner that the steam or vapour is effectively prevented to be blown back into the working atmosphere.

(5) Suitable antidotes such as methylene blue injections shall always be available at designated places of work for use during emergency involving the poisoning with nitro or amino compounds.

## Sl.No. 2. Special precautions for 'chrome processes'.-

(1) Grinding and sieving of raw materials in chrome processes shall be carried on in such a manner and under such condition as to secure effective separation from any other processes and under an efficient exhaust draught.

(2) There shall be washing facilities located very near to places where wet chrome processes such as leaching, acidification, sulphate settling, evaporation,

crystallisation, centrifugation or packing are carried out, to enable quick washing of affected parts of body with running water.

(3) Weekly inspection of hand and feet of all persons employed in chrome process shall be done by a qualified nurse and record of such inspections shall be maintained in a form approved by the Chief Inspector - cum- Facilitator of Factories.

(4) There shall be always available at designated places of work suitable ointment such as glycerine, vaseline, etc. and water proof plaster in a separate box readily accessible to the workers so as to protect against perforation of nasal septum

## Sl.No. 3. Special precautions for processes carried out in all glass vessels.-

(1) Processes and chemical reactions such as manufacture of vinyl chloride, benzyl chloride etc. which are required to be carried out in all glass vessels shall have suitable means like substantial wire mesh covering to protect persons working nearby in the event of breakage of glass vessel.

(2) Any spillage or emission of vapour from the all glass vessel due to breakage, shall be immediately inactivated or rendered innocuous by suitable means such as dilution with water or suitable solvents so as to avoid the risks of fire or explosion or health hazards.

## Sl.No. 4. Special precautions for processes involving chlorate manufacture.-

(1) Crystallisation, grinding or packing of chlorate shall not be done in a place used for any other purpose and such places shall have hard, smooth and impervious surface made of non-combustible material. The place shall be thoroughly cleaned daily.

(2) The personal protective equipment likes overall, etc. provided for the chlorate workers shall not be taken from the place of work and they shall be thoroughly cleaned daily.

(3) Adequate quantity of water shall be available near the place of chlorate process for use during fire emergency.

(4) Wooden vessels shall not be used for the crystallisation of chlorate or to contain crystallised ground chlorate.

# Sl.No. 5. Special precautions in the use of plant and equipment made from reinforced plastics.-

(1) All plant and equipment shall conform to appropriate Indian or any other National Standard.

(2) Care shall be taken during storage, transport, handling and installation of plant and equipment to avoid accidental damage.

(3) All plant and equipment shall be installed in such a way as to ensure that loads are distributed as intended in design or as per the recommendations of the manufacture.

(4) All pipe work shall be supported so that total loads local to the branches on the vessel or tank do not exceed their design values.

(5) After erection all plant and equipment shall be subjected to a pressure test followed by a thorough examination by a competent person. The test and examination shall be as per relevant Standard. A certificate of test and examination by a competent person shall be obtained and kept available at site.

(6) All plant and equipment shall be subjected to periodical test and examination and record maintained as per Sl.no. 15 in Part II of this Schedule.

(7) Plant and equipment during their use shall not be subjected to over filling or over loading beyond rated capacity.

## PART VI

## **Medical Requirements**

**Sl.No.** 1. **Decontamination facilities**.- In all places where toxic substances are used in processes listed in Appendix

'A' the following provisions shall be made to meet an emergency:

(a) fully equipped first aid box;

(b) readily accessible means of drenching with water persons, parts of body of persons, and clothing of persons who have been contaminated with such toxic and corrosive substances, and such means shall be as shown in the Table below :

No.of persons employed at any time	No. of drenching showers
Upto 50 persons	2
Between 51 to 100	3
Between 101 to 200	3 + 1 for every 50 persons thereafter
Between 201 to 400	5 + 1 for every 100 persons thereafter
401 and above	7 + 1 for every 200 persons thereafter

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

**Sl.No.** 2. **Occupational health centre**.- In all the factories carrying out processes covered in Appendix `A' there shall be provided and maintained in good order an occupational health centre with facilities as per scale laid down hereunder

(1) For factories employing upto workers -

(a) the services of a qualified medical practitioner hereinafter known as Factory Medical Officer, available on a retainership basis, in his notified clinic near to the factory for seeking medical help during emergency. He will also carry out the pre-employment and periodical medical examinations as stipulated in Sl.no. 4 of this Part.(b) A minimum of five persons trained in first aid procedures, amongst whom at least one shall always be available during the working period.

(c) A fully equipped first aid box.

(2) For factories employing 51 to 200 workers -

(a) The occupational health centre shall have a room having a minimum floor area of 15 sq.m., with floors and walls made of smooth, hard and impervious surface and shall be adequately illuminated, ventilated and equipped.

(b) A part-time Factory Medical Officer will be in over all charge of the Centre who shall visit the factory minimum twice in a week and whose services shall be readily available during emergencies.

(c) There shall be one qualified and trained dresser-cum-compounder on duty throughout the working period.

(d) A fully equipped first aid box.

(3) For factories employing above 200 workers -

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

(b) The occupational health centre in this case shall have a minimum of 2 rooms each having a minimum floor area of 15 sq.m. with floors and walls made of smooth, hard and impervious surface and shall be adequately illuminated, ventilated and equipped.

(c) There shall be one trained nurse, one dresser-cum-compounder and one sweepercum-ward boy throughout the working period.

(d) The Occupational Health Centre in this case shall be suitably equipped to manage medical emergencies.

## Sl.No. 3. Ambulance van.-

(1) In every factory carrying out processes covered in Appendix 'A', there shall be provided and maintained in good condition, a suitably constructed and fully equipped ambulance van as per Appendix 'C' manned by a full-time driver-cum-mechanic and a helper, trained in first aid for the purposes of transportation of serious cases of accidents or sickness unless arrangements for procuring such facility at short notice during emergencies have been made with the nearby hospital or other places. The ambulance van shall not be used for any purpose other than the purpose stipulated herein and will always be available near the Occupational Health Centre.

(2) The relaxation to procure Ambulance Van from nearby places provided for in subpara (1) above will not be applicable to factories employing more than 500 workers.

# Sl.No. 4. Medical examination.-

(1) Workers employed in processes covered in Appendix `A' shall be medically examined by a Factory MedicalOfficer in the following manner -

(a) Once before employment, to ascertain physical suitability of the person to do the particular job;

(b) Once in a period of 6 months, to ascertain the health status of the worker, and

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

(2) Any finding of the Factory Medical Officer revealing any abnormality or unsuitability of any person employed in the process shall immediately be reported to the Medical Officer who shall in turn, examine the concerned workers and communicate his findings within 30 days. If the Medical Officer is of the opinion that the person so examined is required to be suspended from the process for health protection he will direct the occupier accordingly, who shall not employ the said worker in the same process. However, the person so suspended from the process shall be provided with alternate placement facilities unless he is fully incapacitated in the opinion of the Medical Officer, in which case the person affected shall be suitably rehabilitated :

Provided that the Medical Officer on his own may examine any other worker whom he feels necessary to be examined for ascertaining the suitability of his employment in the process covered in Appendix `A' or for ascertaining the health status of any other worker and his opinion shall be final. (3) No person shall be newly appointed without the Certificate of Fitness granted by the Factory Medical Officer. If the Factory Medical Officer declares a person unfit for being appointed to work in the process covered in Appendix `A', such person shall have a right of appeal to the Medical Officer, whose opinion shall be final in this regard.

(4) The worker suspended from the process owing to the circumstances covered in sub-para (2) shall be employed again in the same process only after obtaining the Fitness Certificate from the Medical Officer and after making entries to that effect in the health register.

#### PART VII

#### **Additional Welfare Amenities**

#### Sl.no. 1. Washing facilities.-

(1) There shall be provided and maintained in every factory for the use of all the workers taps for washing, at the rate of one every 15 persons including liquid soap in a container with tilting arrangements and nail brushes or other suitable means for effective cleaning. Such facilities shall be conveniently accessible and shall be kept in a clean and hygienic condition.

(2) If washing facilities as required above are provided for women, such facilities shall be separate for them and adequate privacy at all times shall be ensured in such facilities.

#### Sl.no. 2. Mess room facilities.-

(1) The occupier of all the factories carrying out processes covered in Appendix'A' and employing 50 workers or more, shall provide for all the workers working in a shift mess room facilities which are well ventilated and provided with tables and sitting facilities along with the provision of cold and hygienic drinking water facilities.

(2) Such facilities shall include suitable arrangements for cleaning and washing and shall be maintained in a clean and hygienic condition.

#### Sl.no. 3. Cloakroom facilities.-

(1) The occupier of every factory carrying out any process covered in Appendix 'A' shall provide for all the workers employed in the process cloak room facilities with lockers. Each worker shall be provided with two lockers, one for work clothing and another separately for personal clothing and the lockers should be such as to enable the keeping of the clothing in a hanging position.

(2) The cloak room facilities provided in pursuance of sub-para (1) shall be located as far as possible near to the facilities provided for washing in pursuance of para 1(1). If it is not possible to locate the washing facilities the cloakroom facilities shall have adequate and suitable arrangements for cleaning & washing.

#### Sl.no. 4. Special bathing facilities.-

(1) The occupier of any factory carrying out the process covered under Appendix 'B' shall provide special bathing facilities for all the workers employed and such facilities shall be provided at the rate of 1 for 25 workers and part thereof, and shall be maintained in a clean and hygienic condition.

(2) The occupier shall insist all the workers employed in the processes covered in Appendix `B' to take bath after the completion of the day's or shift work using the bathing facilities so provided and shall also effectively prevent such of those workers taking bath in any place other than the bathing facilities.

(3) Notwithstanding anything contained in sub-para (1) above, the Chief Inspector - cum- Facilitator may require in writing the occupier of any factory carrying out any other process for which his opinion bathing facilities are essential from the health point of view, to provide special bathing facilities.

#### PART VIII

## Sl.no. 1. Duties of workers.-

(1) Every worker employed in the processes covered in Appendix 'A' and Appendix 'B' shall not make safety device or appliance or any guarding or fencing arrangement, inoperative or defective and shall report the defective condition of the aforesaid arrangements as soon as he is aware of any such defect.

(2) Before commencing any work, all workers employed in processes covered in Appendix 'A' shall check their workplace as well as the machinery, equipment or appliance used in the processes and report any mal-function or defect immediately to the supervisor or any responsible person of the management.

(3) All workers shall co-operate in all respects with the management while carrying out any work or any emergency duty assigned to them in pursuance of this schedule and shall always use all the personal protective equipment issued to them in a careful manner.

(4) All workers employed in the processes covered in Appendix 'A' or Appendix 'B' shall not smoke in the process area or storage area. If special facilities are provided by the management only such facilities should be used.

(5) All workers employed in the processes covered in Appendix 'A' shall not remain in unauthorised place or carry cut unauthorised work or improvise any arrangement or adopt short out method or misuse any of the facilities provided in pursuance of the Schedule, in such a manner as to cause risk to themselves as well as or to others employed.

(6) The workers shall not refuse undergoing medical examination as required under these rules.

#### PART IX

# Restrictions on the employment of young persons under 18 years of age and women

(1) The Chief Inspector - cum- Facilitator of Factories may by an order in writing, restrict or prohibit the employment of women and young persons under the age of 18, in any of the processes covered in Appendix `A' of this schedule on considerations of health and safety of women and young persons.

(2) Such persons who are restricted or prohibited from working in the process due to the order issued in pursuance of sub-para (1) above shall be provided with alternate work which is not detrimental to their health or safety.

#### PART X

## Exemptions

1. **Power of exemption**.- The State Government or subject to the control of the State Government the Chief Inspector - cum- Facilitator may exempt from the compliance with any of the requirements of this Schedule partly or fully, any factory carrying out processes covered in Appendix `A', if it is clearly and satisfactorily established by the occupier that the compliance with any of the requirement is not necessary to ensure the safety and health of persons employed suitable and effective alternate arrangements are available to any of the requirements covered in this schedule.

#### Appendix `A'

Any works or that part of works in which -

(a) the manufacture, manipulation or recovery of any of the following is carried on :-

(i) sodium, potassium, iron, aluminium, cobalt, nickel, copper, arsenic, antimony, chromium, zinc, selenium, magnesium, cadmium, mercury, beryllium and their organic and inorganic salts, alloys, oxides and hydroxides;

(ii) ammonia, ammonium hydroxide and salts of ammonium;

(iii) the organic or inorganic compounds of sulphurous, sulphuric, nitric, nitrous, hydrochloric, hydrofluoric, hydriodic, hydro sulphuric, hydrobromic, boric;

(iv) cyanogen compounds, cyanide compounds, cyanate compounds;

(v) phosphorous and its compounds other than oregano phosphorus insecticides.

(vi) chlorine

(b) hydrogen sulphide is evolved by the decomposition of metallic sulphides, or hydrogen sulphide is used in the production of such sulphides;

(c) bleaching powder is manufactured or chlorine gas is produced in chlor-alkali plants;

(d) (i) gas tar or coal tar or bitumen or shale oil asphalt or any residue of such tar is distilled or is used in any process of chemicals manufacture;

(ii) tar based synthetic colouring matters or their intermediates are produced;

(e) nitric acid is used in the manufacture of nitro compounds;

(f) explosives are produced with the use of nitro compounds;

(g) aliphatic or aromatic compounds or their metallic and non-metallic derivatives or substituted derivatives, such as chloroform, ethylene glycol, formaldehyde, benzyle chloride, phenol, methyl ethyl keytone peroxide, cobalt carbonyl, tungsten carbide etc. are manufactured or recovered.

#### Appendix 'B'

# **Concerning Special Bathing Accommodation in pursuance of Para 4 of Part VII**

1. Nitro or amido processes

2. All chrome processes

3. Processes of distilling gas or coal tar or processes of chemical manufacture in which tar is used

4. Processes involving manufacture, manipulation, handling or recovery of cyanogen compound, cyanide compound, cyanate compounds

5. Processes involving manufacture of bleaching powder or production of chlorine gas in chlor-alkali plants

6. Manufacture, manipulation or recovery of nickel and its compounds

7. All processes involving the manufacture, manipulation or recovery of aliphatic or aromatic compounds or their derivatives or substituted derivatives.

# Appendix `C'

Ambulance should have the following equipment :

# General

- An wheeled stretcher with folding and adjusting devices; Head of the stretcher must be capable of being tilted upward;
- Fixed suction unit with equipment;
- Fixed oxygen supply with equipment;
- Pillow with case;
- Sheets;
- Blankets;
- Towels;
- Emesis bag;
- Bed pan;
- Urinal;
- Glass

# Safety equipment :-

- Flares with life of 30 minutes
- Flood lights;
- Flash lights;
- Fire extinguisher dry powder type;
- Insulated gauntlets.

# **Emergency care equipment :-**

# **Resuscitation** :-

- Portable suction unit;
- Portable oxygen unit;
- Bag-valve-mask, hand operated artificial ventilation unit;
- Airways;
- Mouth gags;
- Tracheostomy adapters;
- Short spine board;

- I.V. Fluids with administration unit;
- B.P. manometer;
- Cugg;
- Stethoscope

# Immobilisation

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

# **Dressings :-**

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

# **Poisoning :-**

- Syrup of Ipecac; } } Pre packeted in doses
- Activated charcoal; }
- Snake bite kit;
- Drinking water.

# **Emergency Medicines**

# SUB SCHEDULE XIII

# Manipulation of stone, or any other material containing free silica

The following Manufacturing Process shall be considered as Manipulation of Stone or other material containing free Silica:

- 1. Stone Crushers
- 2. Gem and Jewellery
- 3. Slate Pencil Making
- 4. Agate Industry
- 5. Cement Industry
- 6. Pottery
- 7. Glass Manufacturing

Sl.no. 1. **Application** - This schedule shall apply to all factories or parts of factories in which the above said manufacturing activity containing free silica is carried on.

Sl.no. 2. Definitions- For the purpose of this Schedule -

(a) "manipulation" means crushing, breaking, chipping, dressing, grinding, sieving, mixing, grading or handling of stone or any other material containing free silica or any other operation involving such stone or material;

(b) "stone or any other material containing free silica" means a stone or any other solid material containing not less than 5% by weight of free silica.

## Sl.no. 3. Preventive Control Measures

No manipulation shall be carried out in a factory or part of a factory unless the following preventive control measures are adopted, namely -

# 3(I) Engineering Control Measures-

(1) Wet Methods:

(a) Airborne Silica Dust should be minimized or suppressed by applying water to the process or clean up;

(b) Water should be provided for drilling or sawing of concrete or masonry;

(2) Ventilation:

(a) An effective Local exhaust system should be provided and maintained to control/remove silica dust from industrial processes.

(b) Dilution/ventilation may be used to reduce free silica dust concentration to below the permissible limits in large areas.

(c) Dust collectors /HEPA filter should be set up so that dust shall be removed from the source and all transfer points to prevent contaminating work areas.

(d) Ventilation systems should be kept in good working conditions.

(3) Isolation:

(a) Containment methods should be used while carrying out sand blasting.

(b) Cabins of vehicles or machinery cutting & drilling that might contain free silica should be enclosed and sealed.

(4) Dust Control:

(a) Vacuum System with High Efficiency Particle Air (HEPA) filter shall be used to remove dust from work areas and at all transfer points.

(b) The belt conveyors transferring crushed material shall be totally enclosed throughout its length.

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

# 3(II) Medical Control Measures-

(1) The occupier of every factory in which a worker employed in the processes specified in Sl.no. 1, shall ensure that every worker employed be examined by a Medical Officer of Factories/ Medical Officer within 15days of his first employment. Such medical examination shall include pulmonary function test and chest X Ray-Posterior Anterior (PA) view to be compared with standard ILO Radiographs on Pneumoconiosis. No worker shall be allowed to work after 15 days of his first employment in the factory unless certified fit for such employment by the Medical Officer.

(2) Every worker employed in the said processes shall be re-examined by a Medical Officer at least once in every twelve months. Such re-examination shall, wherever the Medical Officer considers appropriate, include all the tests as specified in sub- Sl.no.(1) except chest X-ray which shall be read by a radiologist specialized/ trained in the

field of reading ILO Radiographs on Pneumoconiosis and the chest x-ray which shall be carried out at least once in 3 years.

(3) Every worker employed in any of the aforesaid processes on the date on which the schedule comes into force shall be radiological examined by the qualified Radiologist at the cost of the occupier using a standard size X-ray plates and the power of the X-Ray machine shall be more than 300 milli ampere (mA). The report of such X-Ray shall be submitted to the Medical Officer of Factories - cum- Facilitator / Medical Officer / Chief Inspector - cum- Facilitator for within three months of the said date.

(4) If at any time the Medical Inspector of Factories/ Medical Officer is of the opinion that a worker is no longer fit for employment in the said process on the ground that continuance therein would involve special danger to the health of the worker he shall make a record of his findings in the said Certificate and the health register. The entry of his findings in these documents should also include the period for which he considers that the said person is unfit for work in the said processes. The person so suspended from the process shall be provided with alternate placement facilities unless he fully is incapacitated in the opinion of the Medical Officer, in which case the person affected shall be suitably rehabilitated.

(5) No person who has been found unfit to work as said in sub- Sl.no. (4) above shall be re-employed or permitted to work in the said processes unless the Medical Officer, after further examination, again certifies him fit for employment in those processes.

(6) If a worker already in employment and declared unfit by the Medical Inspector of Factories/ Medical Officer shall not be allowed to work on any of the processes specified in sub rule 1, unless he has been examined again along with standard size chest x-ray plate from a qualified Radiologist, at the cost of the occupier and has been certified to be fit to work on the said processes again.

(7) For the purpose of medical supervision by the medical practitioner/ Medical Officer so appointed by the occupier shall be provided for his exclusive use a room in the factory premises which shall be properly cleaned, adequately lighted ventilated and furnished with a screen, a table with office stationary, chairs and other facilities and other instruments including x-ray arrangements for such examinations and such other equipments as may be prescribed by the Chief Inspector - cum- Facilitator for time to time. The medical practitioner so appointed shall perform the following duties (a) maintain health register;

(b) undertake medical supervision of persons employed in the factory;

(c) look after health, education and rehabilitation of sick, injured or affected workers;

(d) carry out inspection of work rooms where dangerous operations are carried out and advise the management of the measures to be adopted for the protection of health of the workers employed therein

(8) The Health Records of the workers exposed to silicosis, shall be kept up to a minimum period of 40 years from the beginning of the employment or 15 years after retirement or cessation of the employment, whichever is later and shall be accessible to workers concerned or their representatives.

(9) The record of medical examinations and appropriate tests carried out by the said medical practitioner, a certificate of fitness and health shall be maintained in separate

register approved by the Chief Inspector - cum- Facilitator of Factories, which shall be kept readily available for inspection by the Inspector and produce on demand.

### 3 (III) Administrative Control Measures-

(1) Work place/ Environment Monitoring: The occupier to ensure work place/ environment monitoring to be performed to determine magnitude of exposure/ concentration to evaluate engineering controls, selecting respiratory protection, work practices and the need for medical surveillance.

a) Exposure/ concentration measurements should be made in the employee's actual breathing zone.

b) Total sampling time shall be at least 7 hours.

c) Work place/ Environment Monitoring shall be repeated quarterly.

d) The report of dust sampling by occupier shall be made available to the public.

(2) Training/ Awareness: Workers shall be trained in the following:-

(a) Health effects of free silica dust exposure.

(b) Operations and material that produce free silica dust hazards.

(c) Engineering controls and work practice controls that reduce dust concentration.

(d) The importance of good housekeeping and cleanliness.

(e) Proper use of personal protective equipment such as respirators etc.

(f) Personal hygiene practices to reduce exposure.

(3) House Keeping: Maintenance of floors)

All floors or places where fine dust is likely to settle on and whereon any person has to work or pass shall be of impervious material and maintained in such condition that they can be thoroughly cleaned by a moist method or any other method which would prevent dust being airborne in the process of cleaning once at least during each shift.

b) For this purpose Dry sweeping or compressed air shall be used for cleanup of dust or wet methods or vacuum system with a HEPA filter shall be used.

c) Dust on over head ledges and equipment should be removed before it becomes air borne due to vibration, traffic and random air current.

(4) Change room and washing facilities

(a) Washing and bathing facilities shall be conveniently located at a place easily accessible to the workers..

(b) Cloak room with individual lockers shall be provided for employees to store uncontaminated clothing.

(c) Workers shall take bath and change the work clothes before they leave the work site.

(d) Work clothes shall not be cleaned by blowing or shaking. .

(e) Eating/lunch areas shall be located away from exposed areas.

(5) Display of Notices:

(a) Warning signs/ Posters shall be displayed conspicuously in a prominent place.

(b) The warning signs/poster shall contain the Hazards and precautions to be taken.

(c) The display of notice shall be in the local language and also in the language understood by the majority of the workers.

(6) Personal Protective Equipment

The occupier of the every factory to which this schedule apply shall provide the following PPEs as per relevant National Standards or International Standards and as applicable to a given work place.

(a) Dust respirator.

(b) HEPA filter respirator or fume respirator.

(c) HEPA filter respirator with full face piece.

(d) Self contained breathing apparatus (SCBA)

(e) Supplied air respirator with a full face piece, helmet or hood.

(f) SCBA with full face piece.

(g) Powered air purifying respirator with a HEPA filter.

Sl.no. 4. **Prohibition relating young person's-** No young person shall be employed or permitted to work in any of the operations involving manipulation or at any place where such operations are carried out.

Sl.no. 5. **Exemptions** (1) - If in respect of any factory, the Chief Inspector cum-Facilitator is satisfied that owing to the exceptional circumstances or in frequency of the processes or for any other reason, all or any of the provisions of this schedule is not necessary for protection of the workers in the factory, the Chief Inspector cum-Facilitatormay by a certificate in writing, which he may in his discretion revoke at any time, exempt such factory from all or any of such provisions subject to such conditions, if any, as he may specify therein.

(2) The notification of Silicosis and free silica related occupational diseases by Medical Practitioner / Medical Officer should be strictly enforced and in case of any Violation, the Medical Practitioner/ Medical Officer shall be liable to be prosecuted under Rule 9 (2).

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#### **SUB SCHEDULE XIV**

# Handling and Processing of Asbestos, Manufacture of any Article or Substance of Asbestos and any other Processes of Manufacture or otherwise in which Asbestos is used in any Form

#### Sl.no. 1. Application.-

(1) This schedule shall apply to all manufacturing process as defined under Section 2(zi) of the Code, carried on in a factory involving exposure of workers to asbestos and/or product containing Asbestos.

(2) The Government may, at any time, for the purpose of giving effect to any scientific proof obtained from specialised institutions or experts in the field, notification in the Office Gazette, make suitable changes in the said schedule:

(3) The provisions of this schedule shall apply to all workers exposed to asbestos in the factory and it shall be the responsibility of the occupier of the factory to comply with the provisions of the schedule in respect of the workers.

(4) (a) The occupier of the factory wherein asbestos or substances containing asbestos are in use, shall prepare work procedures and practices, in the light of scientific research and technological progress for approval by the Chief Inspector- cum-Facilitator and shall follow only such approved procedures.

(b) Notwithstanding anything mentioned in sub- Sl.no. (1) use of asbestos is prohibited in the manufacturing process as may be notified by the Government in this behalf.

(c) (i) spraying of all forms of asbestos is prohibited in a factory.

(ii) The prohibition in respect of spraying of asbestos referred to in sub-para (i) may be exempted by the Chief Inspector- cum- Facilitator if the Occupier represents that such spraying is inevitable certain purposes provided adequate measures for ensuring the safety and health of workers are undertaken by the occupier to the satisfaction of the Chief Inspector- cum- Facilitator.

## Sl.no. 2. Definition.-

For the purpose of this Schedule –

(a) "asbestos" means any fibrous silicate mineral and any admixture containing actionlite, amosite, anthophyllite, chrysotile, crocidolite, tremolite or any mixture thereof, whether crude, crushed or opened;

(b) "asbestos textiles" means yarn or clothes composed of asbestos or asbestos mixed with any other materials;

(c) "approved" means approved for the time being in writing by the Chief Inspector;

(d) "breathing apparatus" means a helmet or face piece with necessary connection by means of which a

person using it breathes air free from dust, or any other approved apparatus;

(e) "efficient exhaust draught" means a localised ventilation by mechanical means for the removal of dust so as to prevent dust from escaping into air of any place in which work is carried on. No draught shall be deemed to be efficient which fails to control dust produced at the point where such dust originates;

(f) "preparing" means crushing, disintegrating, and any other processes in or incidental to the opening of asbestos;

(g) "protective clothing" means overalls and head covering, which (in either case) will when worn exclude asbestos dust;

(h) "asbestos dust" means airborne particles of asbestos or settled particles of asbestos which are liable to become airborne in the factory;

(i) "airborne asbestos dust" means, for the purposes of measurement, dust particles measured by gravimetric assessment or other equivalent method;

(j) "repairable asbestos fibres" means asbestos fibres having diameter of less than 3 micrometre and a length to diameter ratio greater than 3:1;

(k) "exposure to asbestos" means exposure to airborne repairable asbestos fibres or asbestos dust; whether originating from asbestos or from minerals, materials or products containing asbestos in the factory.

# Sl.no. 2-A Demolition of plants or structures -

No person shall carry out any demolition of plants or structures containing friable asbestos insulation material and removal of asbestos from building or structures in which asbestos is liable to become air-borne, unless he is recognized and duly empowered by the Chief Inspector - cum- Facilitator of Factories as qualified to carry out such work in accordance with the provisions of this Schedule.

## Sl.no. 3. Tools and equipment.-

Any tools or equipment used in processes to which this schedule applies shall be such that they do not create asbestos dust above the permissible limit or are equipped with efficient exhaust draught.

# Sl.no. 4. Exhaust draught.-

(1) An effective exhaust draught shall be provided and maintained to control dust from the following processes and machines as per the relevant National Standards -

(a) manufacture and conveying machinery namely -

(i) preparing, grinding, or dry mixing machines;

(ii) carding, card waste and ring spinning machines, and looms;

(iii) machines or other plant fed with asbestos;

(iv) machines used for the sawing, grinding, turning, drilling, abrading or polishing; in the dry state, of articles composed wholly or partly of asbestos;

(b) cleaning, and grinding of the cylinders or other parts of a carding machine;

(c) chambers, hoppers or other structures into which loose asbestos is delivered or passes;

(d) work-benches for asbestos waste sorting or for other manipulation or asbestos by hand;

(e) workplaces at which the filling or emptying of sacks, skips or other portable containers, weighing or other process incidental thereto which is effected by hand, is carried on;

(f) sack cleaning machines;

(g) mixing and blending of asbestos by hand; and

(h) any other process in which dust is given off into the work environment.

(2) Exhaust ventilation equipment provided in accordance with sub-paragraph (1) shall, while any work of maintenance or repair to the machinery, apparatus or other plant or equipment in connection with which it is provided is being carried on, be kept in use so as to produce an exhaust draught which prevents the entry of asbestos dust into the air of any work place.

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

(4) The asbestos bearing dust removed from any workroom by the exhaust system shall be collected in suitable receptacles or filter bags which shall be isolated from all work areas.

# Sl.no. 5. Testing and examination of ventilating systems.-

(1) All ventilating systems used for the purpose of extracting or suppressing dust as required by this schedule shall be as per the relevant Indian Standards, examined and inspected once every week by a responsible person. It shall be thoroughly examined and tested by a competent person once in every period of 12 months. Any defects found by such examinations or test shall be rectified forthwith.

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

Sl.no. 6. Segregation in case of certain process.-

Mixing or blending of asbestos by the hand, or making or repairing of insulating mattresses composed wholly or partly of asbestos shall not be carried on in any room in which any other work is done.

## Sl.no. 7. Storage and distribution of loose asbestos.-

All loose asbestos shall, while not in use, be kept in suitable closed receptacles which prevent the escape of asbestos dust there from. Such asbestos shall not be distributed within a factory except in closed receptacles or in a totally enclosed system of conveyance.

## Sl.no. 8. Asbestos sacks –

(1) All sacks used as receptacles for the purpose of transport of asbestos within the factory shall be constructed of impermeable materials and shall be kept in good repair.
 (2) A sack which has contained asbestos shall not be cleaned by hand beating but by a machine, complying with Sl.no. 4.

(3) Asbestos sacks or receptacles which contain asbestos shall be disposed off in a safe manner.

# Sl.no. 9. Maintenance of floors and workplaces.-

(1) In every room in which any of the requirements of this schedule apply -

(a) the floors, work-benches, machinery and plant shall be kept in a clean state and free from asbestos debris and suitable arrangements shall be made for the storage of asbestos not immediately required for use; and

(b) the floors shall be kept free from any materials, plant or other articles not immediately required for the work carried on in the room, which would construct the proper cleaning of the floor.

(2) The cleaning as mentioned in sub-rule (1) shall so far as is practicable, as carried out by means of vacuum cleaning equipment so designed and constructed and so used that asbestos dust neither escapes nor is discharged into the air of any work place.

(3) When the cleaning is done by any method other than that mentioned in sub-Sl.no.(2), the persons doing cleaning work and any other person employed in that room shall be provided with respiratory protective equipment and protective clothing.

(4) The vacuum cleaning equipment used in accordance with provisions of sub- Sl.no.(2), shall be properly maintained and after each cleaning operation, its surfaces kept in a clean state and free from asbestos waste and dust.

(5) Asbestos waste shall not be permitted to remain on the floors or other surfaces at the work place at the end of the working shift and shall be transferred without delay to suitable receptacles. Any spillage of asbestos waste occurring during the course of the work at any time shall be removed and transferred to the receptacles maintained for the purpose without delay.

(A) The occupier shall replace asbestos or of certain types of asbestos or products containing asbestos by other materials or products or shall use alternative technology, scientifically evaluated as harmless or less harmful, wherever this is possible.

(B) The occupier should take all the measures to prevent or control the release of asbestos in to the air and to ensure that the exposure limits or other exposure criteria are complied with and also reduce exposure to as low as a level as is reasonably practicable.

#### Sl.no. 10. Breathing Apparatus, Personnel Protective Equipment and Clothing-

(1) The occupier of every factory to which this schedule applies shall provide to workers personnel protective equipments such as hand gloves shoes helmets, goggles earplug, aprons safety belt, overall suit, etc. as per the relevant National or International Standards as may be required.

The approved breathing apparatus and appropriate work clothing as per the relevant National or international standards in consultation with the workers representatives and maintained in good conditions for use of every person employed - (a) in chambers containing loose asbestos;

(b) in cleaning, dust settling or filtering chambers of apparatus;

(c) in cleaning the cylinders, including the defer cylinders, or other parts of a carding machine by means of hand-stickles;

(d) in filling, beating, or levelling in the manufacture or repair of insulating mattresses; and

(e) in any other operation or circumstances in which it is impracticable to adopt technical means to control asbestos dust in the work environment within the permissible limit.

(2) Suitable accommodation in conveniently accessible position shall be provided for the use of persons when putting on or taking off breathing apparatus and protective clothing provided in accordance with this rule and for the storage of such apparatus and clothing when not in use.

(3) All breathing apparatus and protective clothing not in use shall be stored in the accommodation provided in accordance with sub-rule (2) above.

(4) All protective clothing in use shall be de-dusted under an efficient exhaust draught or by vacuum cleaning and shall be washed at suitable intervals. The cleaning schedule and procedure should be such as to ensure the efficiency in protective the wearer.

(5) All breathing apparatus shall be cleaned and disinfected at suitable intervals and thoroughly inspected once every month by a responsible person.

(6) A record of the cleaning and maintenance and of the condition of the breathing apparatus shall be maintained in a register provided for that purpose which shall be readily available for inspection by an Inspector - cum- Facilitator.

(7) No person shall be employed to perform any work specified in sub-paragraph (1) for which breathing apparatus is necessary to be provided under that sub-paragraph unless he has been fully instructed in the proper use of that equipment.

(8) No breathing apparatus provided in pursuance of sub-paragraph (1) which has been worn by a person shall be worn by another person unless it has been thoroughly cleaned and disinfected since last being worn and the person has been fully instructed in the proper use of that equipment.

(9) No worker shall take home any work clothing or special protective clothing or personal protective equipment provided to him for protection against exposure to asbestos.

Sl.no. 11. Separate accommodation for personal clothing.-

A separate accommodation shall be provided in a conveniently accessible position for all persons employed in operations to which this schedule applies for storing of personal clothing. This should be separated from the accommodation provided under sub- Sl.no. (2) of Sl.no. 10 to prevent contamination of personal clothing.

## Sl.no. 12. Washing and bathing facilities.-

(1) There shall be provided and maintained in a clean state and in good repair for the use of all workers employed in the processes covered by the schedule, adequate washing and bathing places having a constant supply of water under cover at the rate of one such place for every 15 persons employed.

(2) The washing places shall have standpipes placed at intervals of not less than one metre.

(3) Not less than one half of the total number of washing places shall be provided with bathrooms.

(4) Sufficient supply of clean towels made of suitable material shall be provided: Provided that such towels shall be supplied individually for each worker if so ordered by the Inspector- cum- Facilitator.

(5) Sufficient supply of soap and nail brushes shall be provided.

## Sl.no. 13. Mess Room.-

(1) There shall be provided and maintained for the use of all workers employed in the factory covered by this schedule, remaining on the premises during the rest intervals, a suitable mess room which shall be furnished with:-

(a) sufficient tables and benches with back rest, and

(b) adequate means for warming food.

## Sl.no. 14. Prohibition of employment of young persons.-

No young person shall be employed in any of the process covered by this schedule.

# Sl.no. 15. Prohibition relating to smoking.-

No person shall smoke in any area where processes covered by this schedule are carried on. A notice in the language understood by majority of the workers shall be posted in the plant prohibiting smoking at such areas.

## Sl.no. 16. Pictorial Cautionary notices.-

Cautionary notices in the form specified in appendix and printed in the language easily read and understood by the majority of the workers shall be displayed in prominent places in the workrooms where asbestos or substances containing asbestos are manufactured, handled or used.

## Sl.no. 17. Air monitoring.-

To ensure the effectiveness of control measures in continuous or repetitive processes, the monitoring of asbestos fibres in air as well as personal monitoring of workers shall be carried out at least once in every shift and the result so obtained shall be entered in register and

(a) There should be no substantial change in workplace conditions.

(b) The results of the two (2) preceding measurements have not exceeded half the relevant control limit.

(c) "All factories should adopt membrane filter test as per the relevant National standards without fail.

#### Sl.no. 18. Medical control measures. -

(1) The occupier of every factory in which a worker employed in the processes specified in Sl.no. 1, shall ensure that every worker employed be examined by a Medical Inspector - cum- Facilitator of Factories/ Medical Officer within 15 days of his first employment. Such medical examination shall include sputum examination for asbestos bodies, pulmonary function test and chest X Ray - Posterior Anterior (PA) view to be compared with standard ILO Radiographs on Pneumoconiosis. No worker shall be allowed to work after 15 days of his first employment in the factory unless certified fit for such employment by the Medical Officer.

(2) Every worker employed in the said processes shall be re-examined by a Medical Officer at least once in every twelve months. Such re-examination shall, wherever the Medical Officer considers appropriate, include all the tests as specified in sub- Sl.no. (1) except chest X-ray which shall be read by a radiologist specialized/ trained in the field of reading ILO Radiographs on Pneumoconiosis and the chest x-ray which shall be carried out at least once in 3 years.

(3) Every worker employed in any of the aforesaid processes on the date on which the schedule comes into force shall be radiological examined by the qualified Radiologist at the cost of the occupier using a standard size x-ray plates and the power of the X Ray machine shall be more than 300 milli ampere (mA). The report of such X Ray shall be submitted to the Medical Inspector- cum- Facilitator of Factories / Medical Officer / Chief Inspector - cum- Facilitator for within three months of the said date.

(4) If at any time the Medical Inspector of Factories / Medical Officer is of the opinion that a worker is no longer fit for employment in the said process on the ground that continuance therein would involve special danger to the health of the worker he shall make a record of his findings in the said Certificate and the health register. The entry of his findings in these documents should also include the period for which he considers that the said person is unfit for work in the said processes. The person so suspended from the process shall be provided with alternate placement facilities unless he fully is incapacitated in the opinion of the Medical Officer, in which case the person affected shall be suitably rehabilitated.

(5) No person who has been found unfit to work as said in sub- Sl.no. (4) above shall be re-employed or permitted to work in the said processes unless the Medical Officer, after further examination, again certifies him fit for employment in those processes.

(6) If a worker already in employment and declared unfit by the Medical Inspector of Factories / Medical Officer shall not be allowed to work on any of the processes specified in sub rule 1, unless he has been examined again along with standard size chest x-ray plate from a qualified Radiologist, at the cost of the occupier and has been certified to be fit to work on the said processes again.

(7) For the purpose of medical supervision by the medical practitioner/ Medical Officer so appointed by the occupier shall be provided for his exclusive use a room in the factory premises which shall be properly cleaned, adequately lighted ventilated and furnished with a screen, a table with office stationary, chairs and other facilities and other instruments including x-ray arrangements for such examinations and such

other equipments as may be prescribed by the Chief Inspector - cum- Facilitator for time to time. The medical practitioner so appointed shall perform the following duties (a) maintain health register;

(b) undertake medical supervision of persons employed in the factory;

(c) look after health, education and rehabilitation of sick, injured or affected workers;

(d) carry out inspection of work rooms where dangerous operations are carried out and advise the management of the measures to be adopted for the protection of health of the workers employed therein.

(8) The Health Records of the workers exposed to asbestos, shall be kept up to a minimum period of 40 years from the beginning of the employment or 15 years after retirement or cessation of the employment, whichever is later and shall be accessible to workers concerned or their representatives.

(9) The record of medical examinations and appropriate tests carried out by the said medical practitioner, a certificate of fitness and health shall be maintained in separate register approved by the Chief Inspector - cum- Facilitator of Factories, which shall be kept readily available for inspection by the Inspector and produce on demand. Sl.no. 19. Exemptions.-

(1) If in respect of any factory, the Chief Inspector - cum- Facilitator is satisfied that owing to the exceptional circumstances or infrequency of the processes or for any other reason, all or any of the provisions of this schedule is not necessary for protection of the workers in the factory, the Chief Inspector cum Facilitator may by a certificate in writing, which he may at his discretion revoke at any time, exempt such factory from all or any of such provisions subject to such conditions, if any, as he may specify therein.

(2) The Chief Inspector - cum- Facilitator may permit temporary derogation, through a notification in an official gazette, from the measures prescribed in this Schedule under conditions and within limits of time determined after consultation with the representative organizations of employers and workers concerned.

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#### **SUB SCHEDULE – XV**

# HANDLING OR MANIPULATION OF CORROSIVE SUBSTANCES

Sl.no. 1. **Definitions** – For the purposes of this schedule –

(a) "corrosive operation" means an operation of manufacturing, storing, handling processing, packing, or using any corrosive substance in a factory; and

(b) "corrosive substance" includes sulphuric acid, nitric acid, hydrochloric acid, hydrofluoric acid, carbolic acid, phosphoric acid, liquid chlorine, liquid bromine, ammonia, sodium hydroxide and potassium hydroxide and a mixture thereof, and any other substance which the State Government by notification in the Official Gazette specify to be corrosive substance.

Sl.no. 2. Flooring – The floor of every workroom of a factory in which corrosive operation is carried on shall be made of impervious, corrosion and fire resistance material and shall be so constructed as to prevent collection of any corrosive substance. The surface of such flooring shall be smooth and cleaned as often as necessary and maintained in a sound condition.

Sl.no. 3. **Protective equipment**- (a) the occupier shall provide for the use of all persons employed in any corrosive operation suitable protective wear for hands and feet, suitable aprons, face shields, chemical safety goggles, and respirators.

The equipment shall be maintained in good order and shall be kept in clean andhygienic condition by suitably treating to get rid of the ill effects of any absorbedchemicals and by disinfecting. The occupier shall also provide suitable protectivecreams and other preparations wherever necessary.

(b) The Protective equipment and preparations provided shall be used by thepersons employed in any corrosive operation.

Sl.no. 4. Water facilities – Where any corrosive operation is carried on, there shallbe provided as close to the place of such operation as possible, a source of clean water at a height of 210 centimetres from a pipe of 1.25 centimetresdiameter and fitted with a quick acting valve so that in case of injury to theworker by any corrosive substance, the injured part can be thoroughly floodedwith water. Whenever necessary, in order to ensure continuous water supply, a storage tank having a minimum length, breadth and height of 210 centimetres, 120 centimetres and 60 centimetres respectively or such dimensions as areapproved by the Chief Inspector-cum-Facilitator shall provided as the sourceof clean water.

Sl.no. 5. **Cautionary notice** – A cautionary notice in the following form and printedin the language which majority of the workers employed understand, shall bedisplayed prominently close to the place where a corrosive operation is carriedout and where any of the operation mentioned in clause 2 above is carried outand where it can be easily and conveniently read by the workers. If any worker is illiterate, effective steps shall be taken to explain carefully to him the contentsof the notice so displayed.

### CAUTIONARY NOTICE DANGER !

Corrosive substances cause severe burns and vapours thereof may be extremely hazardous. In case of contact, immediately flood the part affected with plenty of water for at least 15 minutes.

## Get medical attention quickly.

Sl.no. 6. **Transport** - (1) Corrosive substances shall not be filled, moved or carriedexcept in containers or through pipes and when they are to be transported incontainers, they shall be p laced in crates of sound construction and of sufficientstrength.

(2) A container with a capacity of 11.5 litres or more of a corrosive substanceshall be placed in a receptacle or crate and then carried by more than oneperson at a height below the waist line unless a suitable rubber wheeled truckis used for the purpose.(3) Containers for corrosive substances shall be plainly labelled.

Sl.no. 7. **Devices for handling corrosive** – (1) Tilting, lifting of pumpingarrangements shall be used for emptying jars, carboys and other containers of corrosives.

(2) Corrosive substance shall not be handled by bare hands but by means of asuitable scoop or other device.

Sl.no. 8. **Opening of valves** – Valves fitted to containers holding a corrosivesubstance shall be opened with great care. If they do not work freely, theyshall not be forced open. They shall be opened by a worker suitably trained for the purpose.

Sl.no. 9. Cleaning tanks, stills, etc. -(1) In cleaning out or removing residues from stills or other large chambers used for holding any corrosive substance, suitable implements made of wood or other material shall be used to prevent production of arseniuretted hydrogen (arsine).

(2) Whenever it is necessary for the purpose of cleaning or other maintenancework for any worker to enter chamber, tank, vat, pit or other confined space where a corrosive substance had been stored, all possible precautions required under rules framed under Schedule II of the Code shall be taken to ensure the worker's safety.

(3) Wherever possible, before repairs are undertaken to any part of equipmentin which a corrosive substance was handled, such equipment or part thereofshall be freed of any adhering corrosive substance by adopting suitable methods.

Sl.no. 10. **Storage** - (1) Corrosive substances shall not be stored in the same roomwith other chemicals, such as turpentine, carbides, metallic powders and combustible materials, the accidental mixing with which may cause a reactionwhich is either violent or gives rise to toxic fumes and gases.

(2) Pumping or filling overhead tanks, receptacles, vats or other containers forstoring corrosive substances shall be so arranged that there is no possibility of any corrosive substance overflowing and causing injury to any person.

(3) Every container having a capacity of twenty litres or more and everypipeline, valve, and fitting used for storing or carrying corrosive substancesshall be thoroughly examined every year for finding out any defects, and defectsso found out shall be removed forthwith. A register shall be maintained of every such examination made and shall be produced before the Inspectorcum-Facilitator whenever required.

Sl.no. 11. Fire extinguishers and fire fighting equipment – An adequate number of suitable types of fire extinguishers or other stored, shall be provided. Such extinguishers or other equipment shall be regularly tested and refilled. Clear instructions as to how the extinguishers or other equipment should be used, printed in the language which majority of the workers employed understand, shall be affixed near each extinguisher or other equipment.

Sl.no. 12. **Exemption** – If in respect of any factory on application made by themanager, the Chief Inspector-cum-Facilitator is satisfied that owing to the exceptional circumstances, or the infrequency of the process or for any otherreason to be recorded by him in writing, all or any of the provisions of thisschedule are not necessary for the protection of the persons employed therein, he may by a certificate in writing, which he may at anytime revoke, exemptthe factory from such of the provisions and subject to such conditions as hemay specify therein.

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#### **SUB SCHEDULE – XVI**

#### **PROCESSING OF CASHEW**

1. Application: This schedule shall apply to all factories in which roasting, scrubbing and shelling of cashewnut or extracting oil from cashewnut or cashewnut shells are carried on.

2. Prohibition of employment of women and young persons: No woman or young person shall be employed in any of the processes specified in Sl.no. 1 except in shelling of roasted cashewnuts.

3. Protective clothing and equipment: The occupier shall provide and maintain for the use of all persons employed in roasting and scrubbing of cashewnuts or extracting oil from cashewnuts or cashewnut shells—(a) suitable rubber or washable leather gloves; (b) suitable type of impervious aprons with sleeves to cover body down to knees and shoulders; and (c) suitable type of footwear to afford protection to feet and legs against cashewnut oil;

—and, for the workers employed in cashewnut shelling, either:— (d) a protective ointment containing 10% of shelzac, 55% of alcohol, 10% of sodium perborate, 5% of carbitol and 20% of talc; or,

(e) suficient quantity of kaolin and coconut oil; and (f) any other material or equipment which the Chief Inspector of Factories may deem to be necessary for the protection of the workers.

4. Use of protective clothing and equipment: Every person employed in processes specified in Sl.no. 1 shall make use of protective clothing and equipment supplied and arrangements shall be made by the occupier to supervise its use, maintenance and cleanliness.

5. Disposal of shells, as hes or oil of cashewnut: (1) Shells, as hes or oil of cashewnut shall not be stored in any room in which workers are employed and shall be removed at least twice a day to any pit or enclosed place in the case of shells and as hes and to closed containers kept in a separate room in the case of oil; (2) No worker shall be allowed to handle shells or oil of cashewnuts without using the protective clothing or equipment provided under Sl.no. 3 above.

6. Floors of workrooms: The floor of every workroom in which processes specified in Sl.no. 1 are carried on, shall be of hard material so as to be smooth and impervious and of even surface and shall be cleaned daily, and spillage of any cashewnut oil in any workroom shall be washed with soap and cleaned immediately.

7. Seating accommodation: Workers engaged in shelling of cashewnuts shall be provided with adequate seats or work benches which shall be cleaned daily.

8. Messrooms: (1) There shall be provided and maintained for the use of all persons employed in processes specified in Sl.no. 1, a suitable restroom furnished with sufficient tables and chairs or benches; (2) separate lockers shall be provided where food etc. shall be stored by workers before it is consumed in the restroom.

9. Food, drinks etc prohibited in work rooms: No food, drink, pan, supari or tobacco shall be brought or consumed by any worker in any room in which processes specified in Sl.no. 1 are carried out and no person shall remain in any such room during intervals for meal or rest.

10. Washing facilities: Where roasting, scrubbing and shelling of cashewnuts or extracting oil from cashewnuts or cashewnut shells is carried on, there shall be provided and maintained in a clean state and good repair washing facilities, with a sufficient supply of soap, coconut oil, nail brushes and towels at the scale of one tap or stand pipe for every 10 workers; and the taps or stand pipes shall be spaced not less than 1.2 metres apart.

11. Time allowed for washing: Before each meal and before the end of the day's work, at least ten minutes, in addition to the regular meal times, shall be allowed for washing, to each person employed in processes specified in Sl.no. 1.

12. Smoke or gas produced by roasting cashewnuts: Where smoke or gas is produced in the operatrion of roasting, provision shall be made for removing the smoke or gas through a chimney of sufficient height and capacity or by such other arrangements as may be necessary to prevent the gas or smoke escaping into the air or any place in which workers are employed.

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

14. Medical facilities and records of examinations and tests: (1) The occupier of every factory to which this schedule applies shall— (a) employ a qualified medical practitioner for medical surveillance of the workers employed therein whose employment shall be subject to the approval of the Chief Inspector cum facilitator of Factories; and (b) provide to the medical practitioner all the necessary facilities for the purpose referred to in clause (a).

(2) The said medical practitioner shall inspect daily the hands and feet of all the persons employed in the processes specified in Sl.no. 1.

(3) The record of such examinations carried out by the medical practitioner shall be maintained in a separate register approved by the Chief Inspector cum facilitator of Factories, which shall be kept readily available for inspection by the Inspector.

(4) The first-aid box maintained shall also contain Burrough's Solution (1:20) and aqueous solution of tannic acid (10%) for treatment of cases of dermatitis.

14A. Medical examination by Medical Officer: (1) Every worker employed in the processes specified in Sl.no. 1 shall be examined by a Medical Officer within 15 days of his first employment. Such examinations shall include skin tests for dermatitis and no worker shall be allowed to work after 15 days of his first employment in the factory unless certified fit for such employment by the Medical Officer.

The person so suspended from the process shall be provided with alternate placement facilities unless he is fully incapacitated in the opinion of the Medical Officer in which case the person affected shall be suitably rehabilitated.

(2) Every worker employed in the said processes shall be re-examined by the Medical Officer at least once inevery three calendar months. Such examinations shall, wherever the Medical Officer considers appropriate, include a skin test for dermatitis.

(3) The Medical Officer after examining a worker shall issue a certificate of fitness in **Form 48**. The record of examination and re-examinations carried out shall be entered

in the certificate and the certificate shall be kept in the custody of the Manager of the factory. The record of each examination carried out under sub- Sl.no. (1) and (2), shall also be entered by the Medical Officer in a health register in **Form 47**.

(4) The certificate of fitness and the health register shall be kept readily available for inspection by the Inspector cum facilitator.

(5) If at any time the Medical Officer is of the opinion that a worker is no longer fit for employment in the said processes on the ground that continuance therin would involve special danger to the health of the worker, he shall make a record of his findings in the said cetificate and the health register. The entry of his findings in those documents should also include the period for which he considers that the said person is unfit to work in the said processes.

(6) No person who has been unfit to work as said in sub- Sl.no. (5) shall be reemployed or permitted to work in the said processes unless the Medical Officer, after further examination, again certifies him fit for employment in those processes.

15. Exemption: The Chief Inspector cum facilitator of Factories may grant exemptions from the operation of any of these provisions where he is satisfied that their

observance is not necessary for safeguarding the health of the workers.

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# SUB SCHEDULE -XVII COMPRESSION OF OXYGEN AND HYDROGEN PRODUCED BY ELECTROLYSIS OF WATER

Sl.no. 1.<u>Location of electrolyser plant</u>: The room in which electrolyser plant is installed shall be separate from the plant for storing and compressing the oxygen and hydrogen and also the electric generator room.

Sl.no. 2.<u>Testing of purity</u>:(1) The purity of oxygen and hydrogen shall be tested by a competent person at least once in every shift at the following posts:—(a) in the electrolysis room; (b)at the gas holder inlet; and (c) at the suction end of the compressor.

(2)The purity figure shall be entered in a register and signed by the persons carrying out such tests;

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

Sl.no. 3.<u>Restriction as to the compression</u>: The oxygen and hydrogen gases shall not be compresed if their purity as determined under Sl.no. 2 above falls below 98% at any time.

Sl.no. 4.<u>Limit switch for gasholder</u>: The bell of any gas holder shall not be permitted to go within the 30 centimetres of its lowest position when empty and a limit switch shall be fitted to the gasholder in such a manner as to switch off the compressor motor when the limit is reached.

Sl.no. 5.<u>Provision of negative pressure switch</u>:In addition to the limit switch in the gasholder, a sensitive negative presure switch shall be provided in or adjacent to the suction main for hydrogen close to the gasholder and between the gasholder and the

hydrogen compressor to switch off the compressor motor in the event of the gasholder being emptied to the extent as to cause vacuum.

Sl.no. 6.<u>Purity of caustic soda</u>:The water and caustic soda used for making lye shall be chemically pure within pharmaceutical limits.

Sl.no. 7.<u>Precautions against reversal of polarity</u>: Electrical connections at the electrolyser cells and at the electric generator terminals shall be so constructed as to preclude the possibility of wrong connections leading to the reversal of polarity an in addition an automatic device shall be provided to cut off power in the event of reversal of polarity owing to wrong connections either at the switch board or at the electric generator terminal

Sl.no. 8. <u>Colouring of gas pipes</u>:Oxygen and hydrogen gas pipes shall be painted with distinguishing colours and in the event of leakage at the joints of the hydrogen gas pipes, the pipe after reconnection shall be purged of all air before drawing in hydrogen gas.

Sl.no. 9.<u>Use of flameproof fitings</u>:All electrical wiring and apparatus in the electrolyser room shall be of flame proof construction or enclosed in flame proof fittings and no naked light or flame shall be allowed to be taken either in the electrolyser room or where compression and filling of the gases is carried on and such warning notices shall be exhibited in prominent places.

Sl.no. 10.<u>Prohibition of hot work</u>:No part of the electrolyser plant and the gasholder and compressor shall be subjected to welding, brazing,soldering or cutting until steps have been taken to remove any explosive substances from that part and render the part safe for such operations and after the completion of such operations no explosive substances shall be allowed to enter that part until the metal has cooled sufficiently to prevent risk of explosion.

Sl.no. 11. <u>Repair etc. to be done under supervision</u> : 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. No electric generator after erection or repairs shall be switched on to the electrolysers unless the same is certified by the competent persons under whose direct supervision erection or repairs are carried on to be in a safe condition and the terminals have been checked for the polarity as required by Sl.no. 7.

Sl.no. 12.<u>Checking of plant</u>: Every part of the electrolyser plant and the gasholders and compresor shall have a regular schedule of overhaul and checking and every defect noticed shall be rectified forthwith.

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# SUB SCHEDULE XVIII PROCESS OF EXTRACTING OILS AND FATS FROM VEGETABLES AND ANIMAL SOURCES IN SOLVENT EXTRACTION PLANTS

Sl.no. 1.<u>Definitions</u>: For the purposes of this schedule—

(a)"solvent extraction plant" means a plant in which the process of extracting oils and fats from vegetable and animal sources by use of solvent is carried on;

(b)"solvent" means an inflammable liquid such as pentane, hexane and heptane used for the recovery of vegetable oils;

(c) "flame proof enclosure" as applied to electrical machinery or apparatus means an enclosure that will withstand, when covers or other access doors are properly secured, an internal explosion of the flammable gas or vapour which may enter or which may originate inside the enclosure without sufering damage and without communicating internal inflammation (or explosion) to the external flammable gas or vapour;

(d)"competent person" for the purpose of this schedule shall be at least a member of the Institue of Engineers (India) or an Associate Member of the said institution with 10 years experience in a responsible position as may be approved by the Chief Inspector;

provided that a graduate in Mechanical Engineering or Chemical Technology with specialised knowledge of oils and fats and with a minimum experience of 5 years in a solvent extraction plant shall also be considered to be a competent person;

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

Sl.no. 2.<u>Location and layout</u>:(1) No solvent extraction plant shall be permitted to be constructed or extended to within a distance of 30 metres from the nearest residential locality;

(2)A 1.5 metre high continuous wire fencing shall be provided around the solvent extraction plant upto a minimum distance of 15 metres from the plant;

(3)No persons shall be allowed to carry any matches or an open flame or fire inside the area bound by the fencing;

(4)Boiler houses and other buildings where open flame processes are carried on shall be located at least 30 metres away from the solvent extraction plant;

(5) If godowns and preparatory processes are at a distance of less than 30 metres from the solvent extraction plant, these shall be at least 15 metres distant from the plant; and a continuous barrier wall of non-combustible material 1.5 metres high shall be erected at a distance of not less than 15 metres from the solvent extraction plant so that it extends to at least 30 metres of vapour travel around its ends from the plant to the possible sources of ignition.

Sl.no. 3.<u>Electrical installation</u>: (1) All electrical motors and wiring and other electrical equipment installed or housed in solvent extraction plant shall be of flame proof construction;

(2)All metal parts of the plant and building including various tanks and containers where solvents are stored or are present and all parts of electrical equipment not required to be energised shall be properly bonded together and connected to earth so as to avoid accidental rise in the electrical potential of such parts above the earth potential.

Sl.no. 4.<u>Restriction on smoking</u>: Smoking shall be strictly prohibited within 15 metres distance from solvent extraction plant. For this purpose, "Nosmoking" signs shall be permanently displayed in the area.

Sl.no. 5.<u>Precautions against friction</u>: (1)All tools and equipments including ladders, chains and other lifting tackles required to be used in the solvent extraction plant shall be of non-sparking type;

(2)No machnery or equipment in solvent extraction plant shall be belt driven unless the belt used is of such a type that it does not permit accumulation of static electricity to any dangerous level;

(3)No person shall be allowed to enter and work in the solvent extraction plant ifwearing clothes made of nylon or such other fibre that can generate static electrical charge, or wearing footwear which is likely to cause sparks by friction.

Sl.no. 6.<u>Fire fighting apparatus</u>: Adequate number of portable fire extinguishers suitable for use against flammable liquid fire shall be provided in the solvent extraction plant;

(2)An automatic water spray sprinkler system on a wet pipe or open-head deluge system with sufficient supply of storage water shall be provided over solvent extraction plant and throughout the building housing such plant.

Sl.no. 7.<u>Precautions against power failure</u>: Provision shall be made for the automatic cutting off of steam in the event of power failure and also for emergency overhead water supply for feeding water by gravity to condenser which shall come into play automatically with the power failure.

Sl.no. 8.<u>Magnetic separators</u>: Oil cake shall be fed to the extractor by a conveyor through a hopper and magnetic separator shall be provided to remove any pieces of iron during its transfer.

Sl.no. 9.<u>Venting:</u>(1)Tanks containing solvents shall be protected with emergency venting to relieve excessive internal pressure in the event of fire;

(2) All emergency relief vents shall terminate at least 6 metres above the ground and be so located that vapours will not re-enter the building in which solvent extraction plant is located.

Sl.no. 10.<u>Waste water</u>: Process waste water shall be passed through a flash-evaporator to remove any solvent before it is discharged into a sump which should be located within the fenced area but not closer than 8 metres to the fence.

Sl.no. 11.<u>Ventilation</u>: The solvent extraction plant shall be well ventilated and if the plant is housed in building, the building shall be provided with mechanical ventilation with provision for at least six air changes per hour.

Sl.no. 12.<u>House keeping</u>:(1) Solvents shall not be stored in an area covered by solvent extraction plant except in small quantities which shall be stored in approved safety cans;

(2)Waste materials such as oily rags, other wastes and absorbents used to wipe off solvent and paints and oils shall be deposited in approved containers and removed from the premises at least once a day;

(3) Space within the solvent extraction plant within 15 metres from the plant shall be kept free from any combustible materials and any spills of oil or solvent, shall be cleaned up immediately.

Sl.no. 13.<u>Examination and rerpairs</u>: (1) The solvent extraction plant shall be examined by the competent person to determine any weakness or corrosion and wear once in

every 12 months. Report of such examination shall be supplied to the Inspector cum facilitator with his observation as to whether or not the plant is in safe condition to work;

(2) No repairs shall be carried out to the machinery or plant except under the direct supervision of the competent person;

(3) Facility shall be provided for purging the plant with inert gas or steam before opening for cleaning or repairs and before introducing solvent after repairs.

Sl.no. 14.<u>Operating personnel</u>: The operation of the plant and machinery in the solvent extraction plant shall be in the charge of such duly qalified and trained persons as are certified by the competent person to be fit for the purpose and no other person shall be allowed to operate the plant and machinery.

Sl.no. 15.<u>Employment of women and young persons</u>: No women or young person shall be employed in the solventextractionplant.

Sl.no. 16.<u>Vapour detection</u>: A suitable type of flameproof and portable combustible gas indicator shall be provided and maintained in good working order and a schedule of routine sampling of atmosphere at various locations as approved by the Chief Inspector cum facilitator shall be drawn out and entered in a register maintained for the purpose.

Sl.no. 17.<u>Exemption</u>: If in respect of any factory, the Chief Inspector cum facilitator is satisfied that owing to exceptional circumstances or infrequency of process or for any other reasons, all or any of the provisions of this schedule is not necessary for the protection of the workers in the factory, the Chief Inspector cum facilitator may by a certificate in writing (which he may in his discretion revoke at any time) exempt such factory from all or any of such provisions subject to conditions, if any, as he may specify therein.

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# SUB SCHEDULE XIX MANUFACTURE OR MANIPULATION OF MANGANESE AND ITS COMPOUNDS

Sl.no. 1.<u>Application</u>: This schedule shall apply to every factory in which or in any part of which any manganese process is carried on.

Sl.no. 2.<u>Definitions</u>: For the purpose of this schedule— (a) "manganese process" means processing, manufacture or manipulation of manganese or any compound of manganese or any ore or any mixture containing manganese;

(b) "first employment" means first employment in any manganese process and includes, also re-employment in any manganese process following any cessation of employment for a continuous period exceeding three calendar months;

(c) "manipulation" means mixing, blending, filling, emptying, grinding, sieving, drying, packing, sweeping or otherwise handling of manganese or a compound of manganese or any ore or any mixture containing manganese; and

(d) "efficient exhaust ventilation" means localised ventilation effected by mechanical means for the removal of dust or fume or mist at its source of origin so as to prevent it from escaping into the atmosphere of any place where any work is carried on. No

draught shall be deemed to be efficient which fails to remove the dust or fume or mist at the point where it is generated and fails to prevent it from escaping into and spreading into the atmosphere of a work place.

Sl.no. 3.<u>Isolation of a process</u>: Every manganese process which may give rise to dust, vapour or mist containing manganese shall be carried on in a totally enclosed system or otherwise effectively isolated from other processes so that other plants and processes and other parts of the factory and persons employed on other processes may not be affected by the same.

Sl.no. 4.<u>Ventilation process</u>: No process in which any dust, vapour or mist containing manganese is generated, shall be carried out except under an efficient exhaust ventilation which shall be applied as near to the point of generation as practicable.

Sl.no. 5.<u>Personal protective equipment</u>: (1) The occupier of the factory shall provide and maintain in good and clean condition suitable overalls and head coverings for all persons employed in any manganese process and such overalls and head coverings for all persons employed in any manganese process and such overalls and head coverings shall be worn by the persons while working on a manganese process;

(2) The occupier of the factory shall provide suitable respiratory protective equipment for use by workers in emergency to prevent inhalation of dusts, fumes or mists. Sufficient number of complete sets of such equipment shall always be kept near the work place and the same shall be properly maintained and kept always in a condition to be used readily;

(3) The occupier shall provide and maintain for the use of all persons employed, suitable accommodation for the storage and make adequate arrangements for cleaning and maintenance of personal protective equipment.

Sl.no. 6.<u>Prohibition relating to women and young persons</u>: No women or young persons shall be employed or permitted to work in any manganese process.

Sl.no. 7.<u>Food, drinks etc. prohibited in the work rooms</u>: No food, drink, pan and supari or tobacco shall be allowed to be brought into or consumed by any worker in any work room in which any manganese process is carried on.

Sl.no. 8. <u>Messroom</u>: There shall be provided and maintained for the use of the persons employed in a manganese process a suitable messroom which shall be furnished with sufficient tables and benches and adequate means for warming of food. The messroom shall be placed under the charge of a responsible person and shall be kept clean.

Sl.no. 9.<u>Washing facilities</u>: There shall be provided and maintained in clean state and in good condition, for the use of persons employed on manganese process— (a) a wash place under cover, with either—

(i) a trough with a smooth impervious surface fitted with a waste plug without plug, and of sufficient length to allow at least 60 centimetres for every ten such persons employed at any one time; and having a constant supply of water from taps or jets above the trough at intervals of not more than 60cm. ;or

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

(b) sufficient supply of soap or other suitable cleaning material and nail brushes and clean towels.

Sl.no. 10.<u>Cloakroom</u>: If the Chief Inspector cum facilitator so requires, there shall be provided and maintained for the use of persons employed in a manganese process a cloakroom for clothing put off during working hours with adequate arrangements for drying the clothing.

Sl.no. 11.<u>Cautionary placard and instructions</u>: Cautionary notices in the form specified in appendix and printed in the language of the majority of the workers employed shall be afixed in prominent places in the factory where they can be easily and conveniently read by the workers and arrangement shall be made by the occupier to instruct periodically all workers employed in a manganese process regarding the health hazards connected with their duties and the best preventinve measures and methods to protect themselves. The notices shall always be maintained in a legible condition.

Sl.no. 12.<u>Medical facilities and records of examination and tests</u>: (1) The occupier of every factory to which the schedule applies, shall— (a) employ a qualified medical practitioner for medical surveillance of the workers employed therein whose employment shall be subject to the approval of the Chief Inspector cum facilitator of Factories; and

(b) provide to the said medical practitioner all the necessary facilities for the purpose referred to in clause (a).

(2) The record of medical examinations and appropriate tests carried out by the said medical practitioner shall be maintained in a separate Register approved by the Chief Inspector cum facilitator of Factories, which shall be kept readily available for inspection by the Inspector.

Sl.no. 12A. <u>Medical examination by Medical Officer</u>: (1) Every person employed in any manganese process shall be medically examined by a Medical Officer within 15 days of his first employment. Such examination shall include test for detection of serum calcium, serum phosphate and manganese in blood and urine and also include steadiness tests and other neuro-muscular co-ordination tests. No worker shall be allowed to work after 15 days of his first employment in the factory unless certified fit for such employment by the Medical Officer. The person so suspended from the process shall be provided with alternate placement facilities unless he is fully incapacitated in the opinion of the Medical Officer in which case the person affected shall be suitably rehabilitated.

(2) Every person employed in a manganese process shall be re-examined by a Medical Officer at least once in every three calendar months and such examination shall, wherever the Medical Officer considers appropriate, include all the tests in sub-Sl.no. (1).

(3) The Medical Officer after examining a worker, shall issue a certificate of fitness in **Form 48**. The record of examination and re-examinations carried out shall be entered in the certificate and the certificate shall be kept in the custody of the Manager of the factory. The record of each examination carried out under sub- Sl.no. (1) and (2),

including the nature and the results of these tests, shall also be entered by the Medical Officer in a health register in **Form 47**.

(4) The certificate of fitnes and the health register in **Form 48** shall be kept readily available for inspection by the Inspector cum facilitator.

(5) If at any time the Medical Officer is of the opinion that the worker is no longer fit for employment in the said process on the ground that cotinuance therein would involve special danger to the health of the worker, he shall make a record of his findings in the said certificate and the health register. The entry of his findings in those documents should also include the period for which he considers that the said person is unfit to work in the said process.

(6) No person who has been found unfit to work as said in sub- Sl.no. (5) shall be reemployed or permitted to work in the said processes unless the Medical Officer, after further examination, again certifies him fit for employment in those processes.

Sl.no. 13.<u>Exemption</u>: If in respect of any factory, the chief Inspector cum facilitator is satisfied that owing to any exceptional circumstances, or infrequency of the process, or for any other reason, application of all or any of the provisions of this schedule is not necessary for the protection of the persons employed in such factory he may, by an order in writing which he may at his discretion revoke, exempt such factory from all or any of the provisions on such conditions and for such period as he may specify in the said order.

## APPENDIX CAUTIONARY NOTICE

## Manganese and manganese compounds

1. Dusts, fumes and mists of manganese and its compounds are toxic when inhaled or when ingested.

- 2. Do not consume food or drink near the work place.
- 3. Take a good wash before taking meals.
- 4. Keep the working area clean.
- 5. Use the protective clothing and equipment provided.
- 6. When required to work in situations where dusts, fumes or mists are likely to be inhaled, use respiratory protective equipment provided for the purpose.
- 7. If you get severe head aches, prolonged sleeplessness or abnormal sensatiions on the body, report to the Manager who would make arrangements for your examination and treatment.

# SUB SCHEDULE- XX

# MANUFACTURE OR MANIPULATION OF DANGEROUS PESTICIDES

Sl.no. 1.<u>Application</u>: This schedule shall apply in respect of all factories or any part thereof in which the process of manufacture or manipulation of dangerous pesticides hereinafter referred to as the said manufacturing process, is carried on. Sl.no. 2. Definitions: For the purpose of this schedule—

SI.no. 2. <u>Definitions</u>: For the purpose of this schedule—

(a) "dangerous pesticides" means any product proposed or used for controlling, destroying or repelling any pest or for preventing growth or mitigating effects of such

growth including any of its formulations which is considered toxic under and is covered by The Insecticides Act,1968 and the rules made thereunder and any other product, as may be notified from time to time by the State Government;

(b) "manipulation" includes mixing, blending, formulating ,filling, emptying, packing or otherwise handling;

(c) "efficient exhaust draught" means localised mechanical ventilation for removal of smoke, gas, vapour, dust, fume or mist so as to prevent them from escaping into the air of any workroom in which work is carried on. No exhaust draught shall be considered efficient if it fails to remove smoke generated at the point where such gas, fume, dust, vapour or mist originates from the process;

(d) "first employment" shall mean first employment in any manufacturing process to which this schedule applies and shall also include re-employment in the said manufacturing process following any cessation of employment for a continuous period exceeding three calendar months.

Sl.no. 3.<u>Instruction to workers</u>: Every worker on his first employment shall be fully instructed on the properties including dangerous properties of the chemicals handled in the said manufacturing process and the hazards involved. The employees shall also be instructed on the measures to be taken to deal with any emergency. Such instructions shall be repeated periodically.

Sl.no. 4.<u>Cautionery notices and placards</u>: Cautionary notices and placards in the form specified in the appendix to this schedule and printed in the language of the majority of the workers shall be displayed in all work places in which the said manufacturing process is carried on so that they can be easily and conveniently read by the workers. Arrangements shall be made by the occupier and the manager of the factory to periodically instruct the workers regarding the health hazards arising in the said manufacturing process and methods of protection. Such notices shall include brief instructions regarding the periodical clinical tests required to be undertaken for protecting the health of the workers.

Sl.no. 5.<u>Prohibition relating to employment of women or young persons</u>: No woman or young person shall be employed or permitted to work in any room in which the said manufacturing process is carried on or in any room in which dangerous pesticide is stored.

Sl.no. 6.<u>Food, drinks and smoking prohibited</u>: (1) No food, drink, tobacco, pan or supari shall be brought into or consumed by any worker in any workroom in which the said manufacturing process is carried out;

(2) Smoking shall be prohibited in any workroom in which the said manufacturing process is carried out.

Sl.no. 7.<u>Protective clothing and protective equipment</u>: (1) Protective clothing consisting of long pants and shirts or overalls with long sleeves and head coverings shall be provided for all workers employed in the said manufacturing process;

(2) (a) Protective equipment consisting of rubber gloves, gum boots, rubber aprons, chemical safety goggles and respirators shall be provided for all workers employed in the said manufacturing process; (b)Gloves, boots, aprons shall be made from synthetic rubber where a pesticide contains oil.

(3)Protective clothing and equipment shall be worn by the workers supplied with such clothing and equipment.

(4) Protective clothing and equipment shall be washed daily from inside and outside if the workers handle pesticidescontaining nicotine or phosphorus and shall be washed frequently if handling other pesticides. (5)Protective clothing and equipment shall be maintained in good repair

Sl.no. 8.<u>Floors and work benches</u>: (1) Floors in every work room where dangerous pesticides are manipulated shall be of cement or other impervious material giving a smooth surface;

(2) Floors shall be maintained in good repair, provided with adequate slope leading to a drain and thoroughly washed once a day with hose pipe;

(3) Work benches where dangerous pesticides are manipulated shall be made of smooth, non-absorbing material preferably stainless steel and shall be cleaned at least once daily.

Sl.no. 9.<u>Spillage and waste</u>: (1) If a dangerous pesticide during its manipulation splashes or spills on the work-bench, floor or on the protective clothing worn by a worker, immediate action shall be taken for thorough decontamination of such areas or articles;

(2) Clothes, rags, paper or other material soaked or soiled with a dangerous pesticide shall be deposited in a suitable receptacle with tight fitting cover.Contaminated waste shall be destroyeed by burning at least once a week;

(3) Suitable deactivating agents, where available, shall be kept in a readily accessible place for use while attending to a spillage;

(4) Easy means of access shall be provided to all parts of the plant for cleaning, maintenance and repairs.

Sl.no. 10.<u>Empty containers used for dangerous pesticides</u>: Containers used for dangerous pesticides shall be thoroughly cleaned of their contents and treated with an inactivating agent before being discarded or destroyed.

Sl.no. 11.<u>Manual handling</u>: (1) A dangerous pesticide shall not be required or allowed to be manipulated by hand except by means of a long handled scoop;

(2) Direct contact of any part of the body with a dangerous pesticide during its manipulation shall be avoided.

Sl.no. 12.<u>Ventilation</u>: (1) In every work room or areas where a dangerous pesticide is manipulated, adequate ventilation shall be provided at all times by the circulation of fresh air;

(2)Unless the process is completely enclosed, the following operations during manipulation of dangerous pesticide shall not be undertaken without an efficient exhaust draught:—(a) emptying a container holding a dangerous pesticide;

(b) blending a dangerous pesticide;

(c) preparing a liquid or powder formulation containing a dangerous pesticide ; and (d) changing or filling a dangerous pesticide into a container, tank, hopper or machine or small sized containers.

(3) In the event of a failure of the exhaust draught provided on the above operation, the said operations shall be stopped forthwith.

Sl.no. 13.<u>Time allowed for washing</u>: (1) Before each meal and before the end of the day's work at least ten minutes in addition to the regular rest interval shall be allowed for washing to each worker engaged in the manipulation of dangerous pesticide;

(2) Every worker engaged in the manipulation of dangerous pesticides shall have a thorough wash before consuming any food and also at the end of the day's work.

Sl.no. 14.<u>Washing and bathing facilities</u>: (1) There shall be provided and maintained in a clean state and in good repair for the use of all workers employed in the factory where the said manufacturing process is carried on , adequate washing andbathing places having a constant supply of water under cover at the rate of one such place for every five persons employed.

(2) The washing places shall have stand pipes placed at intervals of not less than one metre;

(3) Not less than one half of the total number of washing places shall be provided with bathrooms;

(4) Sufficient supply of clean towels made of suitable material shall be provided; — provided that such towels shall be supplied individually for each worker if so ordered by the Inspector;

(5) Sufficient supply of soap and nail brushes shall be provided.

Sl.no. 15.<u>Cloakroom</u>: There shall be provided and maintained for the use of all workers employed in the factory where the said manufacturing process is carried on— (a) a cloakroom for clothing put off during working hours with adequate arrangements for drying clothing, if wet; and

(b) separate and suitable arrangements for the storage of protective clothing provided under Sl.no. 7.

Sl.no. 16.<u>Messroom</u>: (1) There shall be provided and maintained for the use of all workers employed in which the said manufacturing process is carried on and remaining on the premises during the rest intervals, a suitable messroom which shall be furnished with— (a) sufficient tables and benches with back rest; and

(b) adequate means of food;

(2) The messroom shall be placed under the charge of a resposible person and shall be kept clean.

Sl.no. 17.<u>Manipulation not to be undertaken</u>: Manufacture or manipulation of a pesticide shall not be undertaken in any factory unless a certificate regarding its dangerous nature or otherwise is obtained from the Chief Inspector cum facilitator.

Sl.no. 18.<u>Medical facilities and records of examinations and tests</u>: (1) The occupier of every factory to which the schedule applies, shall— (a) employ a qualified medical practitioner for medical surveillance of the workers employed therein whose employment shall be subject to the approval of the Chief Inspector cum facilitator of Factories; and (b) Provide to the said medical practitioner all the necessarry facilities for the purpose referred to in clause (a);

(2) The record of medical examinations and appropriate tests carried out by the said medical practitioner shall be maintained in a separate register approved by the Chief Inspector cum facilitator of Factories, which shall be kept readily available for inspection by the Inspector cum facilitator.

Sl.no. 19.<u>Medical examination by Medical Officer</u>: (1) Every worker employed in the processes mentioned in Sl.no. 1 shall be examined by the Medical Officer within 15 days of his first employment. Such examination in respect of Halogenated Pesticides shall include tests for determination of the chemical in blood and in fat tissues, EEG-abnormalities and memory tests. In respect of organo phosphorus compounds, such examination shall include test for depression of cholinesterase in plasma and red blood cells. No worker shall be allowed to work after 15 days of his first employment in the factory unless certified fit for such employment by the Medical Officer. The person so suspended from the process shall be provided with alternate placement facilities unless he is fully incapacitated in the opinion of the Medical Officer in which case the person affected shall be suitably rehabilitated;

(2) Every worker employed in the said processes shall be examined by a Medical Officer at least once in every six calendar months. Such examination shall, wherever the Medical Officer considers appropriate, include the test specified in sub- Sl.no. (1). Further, every worker employed in the said processes shall also be examined once in every three months by the Factory Medical Officer.

(3) The Medical Officer after examining a worker, shall issue a certificate of fitness in **Form 48**. The record of examination and re-examinations carried out shall be entered in the certificate and the certificate shall be kept in the custody of the Manager of the factory. The record of each examination carried out under sub- Sl.no. (1) and (2) including the nature and the results of these tests, shall also be entered by the Medical Officer in a health register in **Form 47**.

(4) The certificate of fitness and the health register shall be kept readily available for inspection by the Inspector cum facilitator.

(5) If at any time the Medical Officer is of the opinion that a worker is no longer fit for employment in the said processes on the ground that continuance therein would involve special danger to the health of the workers, he shall make a record of his findings in the said certificate and the health register. The entry of his findings in those documents should also include the period for which he considers that the said person is unfit to work in the said processes.

(6) No person who has been found unfit to work as said in sub- Sl.no. (5) shall be reemployed or permitted to work in the said processes unless the Medical Officer, after further examination, again certifies him fit for employment in those processes.

Sl.no. 20.<u>Exemption</u>: If in respect of any factory the Chief Inspector cum facilitator is satisfied that owing to the exceptional circumstances or the infrequency of the said manufacturing process or any other reason which he shall record in writing all or any of the provisions of this schedule are not necessary for the protection of the workers employed in the factory, he may by a certificate in writing exempt such factory, from all or any of the provisions on such condition as he may specify therein. Such certificate may at any time be revoked by the Chief Inspector cum facilitator after recording his reasons therefor.

## CAUTIONARY NOTICE Insecticides and pesticides

- 1. Chemical handled in this plant are poisonous subtances
- 2. Smoking, eating food or drinking, chewing tobcco in this area is prohibited. No food stuff or drink shall be brought in this area.
- 3. Some of these chemicals may be absorbed through skin and may cause poisoning.
- 4. A good wash shall be taken before meals.
- 5. A good bath shall be taken at the end of the shift.
- 6. Protetive clothing and equipment supplied shall be used while working in this area.
- 7. Containers of pesticides shall not be used for keeping food stuffs.
- 8. Spillage of the chemicals on any part of the body or on the floor or work-bench shall be immediately washed away with water.
- 9. Clothing contaminated due to splashing shall be removed immediately.
- 10. Scrupulous cleanliness shall be maintained in this area.
- 11. Do not handle pesticides with barehand; use scoops provided with handles.
- 12. In case of sickness like nausea, vomiting, giddiness, the Manager should be informed who will make necessary arrangements for treatment.

13. All workers shall report for the prescribed medical tests regularly to protect their own health.

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#### SUB SCHEDULE XXI

# MANUFACTURE, HANDLING, AND USAGE OF BENZENE AND SUBSTANCES CONTAINING BENZENE

Sl.no. 1.<u>Application</u>: This schedule shall apply in respect of factories or parts thereof in which benzene or substances containing benzeze are manufactured, handled or used.

Sl.no. 2.<u>Definitions</u>: For the purposes of this schedule— (a) "substances containing benzene" means substances wherein benzene content exceeds one percent by volume;

(b) "substitute" means a chemical which is harmless or less harmful than benzene and can be used in place of benzene;

(c)"enclosed system" means a system which will not allow escape of benzene vapours to the working atmosphere; and

(d) "efficient exhaust draught" means localised ventilation effected by mechanical means for removal of gases, vapours and dusts or fumes so as to prevent hem from escaping into the air of any workroom. No draught shall be deemed to be efficient if it fails to remove smoke generated at the point where such gases, vapours, fumes or dust originate.

Sl.no. 3.<u>Prohibition and substitution</u>: (1) The use of benzene and substances containing benzene is prohibited in the following processes— (a) manufacture of varnishes, paints and thinners; and

(b) cleaning and degreasing operations.

(2) Benzene or substances containing benzene shall not be used as a solvent or diluent unless the process in which it is used is carried on in an enclosed system or unless the process is carried on in a manner which is considered equally safe as if it were carried out in an enclosed system;

(3) Where suitable substitutes are available, they shall be used instead of benzene or substance containing benzene. This provision, however, shall not apply to the following processes—(a) Production of benzene; (b)Process where benzene is used for chemical synthesis; and (c) Motor spirits (used as fuel).

(4) The Chief Inspector cum facilitator may, subject to confirmation by the State Government, permit exemption from the percentage laid down in sub-Sl.no. 2 (a) and also from the provisions of sub-Sl.no. (2) of this Sl.no. temporarily under conditions and within limits of time to be determined after consultations with the emoployers and workers concerned.

Sl.no. 4.<u>Protection against inhalation</u>: (1) The process involving the use of benzene or substances containing benzene shall as far as practicable be carried out in an enclosed system.

(2) Where, however, it is not practicable to carryout the process in an enclosed system, the workroom in which benzene or substances containing benzene are used shall be equipped with an efficient exhaust draught or other means for the removal of benzene vapours to prevent their escape into the air of the workroom so that the concentration of benzene in the air does not exceed 25 parts per million by volume or 80 milligrams per cubic metre.

(3) Air analysis for the measurement of concentration of benzene vapours in air shall be carried out every 8 hours or at such intervals as may be directed by the Chief Inspector cum facilitator at places where process involving use of benzene is carried on and the result of such analysis shall be rrecorded in a register specially maintained for the purpose. If the concentration of benzene vapours in air as measured by air analysis, exceeds 25 parts per million by volume or 80 milligrams per cubic metre, the Manager shall forthwith report the concentration to the Chief Inspector cum facilitator stating the reason for such increase.

(4) Workers who for special reasons are likely to be exposed to concentration of benzene in the air of the workroom exceeding the maximum referred to in subparagrah (2) shall be provided with suitable respirators or face masks. The duration of such exposure shall be limited as far as possible.

Sl.no. 5.<u>Measures against skin contact</u>: (1) Workers who are likely to come in contact with liquid benzene or liquid substances containing benzene shall be provided with suitable gloves, approns, boots and where necessary vapour tight chemical goggles, made of material not affected by benzene or its vapours;

(2) The protective wear referred to in sub- Sl.no. (1) shall be maintained in good condition and inspected regularly.

Sl.no. 6.<u>Prohibition relating to employment of women and young persons</u> : No women or young person shall be employed or permitted to work in any workroom involving exposure to benzene or substances containing benzene.

Sl.no. 7.<u>Labelling</u>: Every container holding benzene or substances containing benzene shall have the word 'Benzene' and approved danger symbols clearly visible on it and shall also display information on benzene content,warning about toxicity and warning about inflammability of the chemical.

Sl.no. 8.<u>Improper use of benzene</u>: (1) The use of benzene or substances containing benzene by workers for cleaning their hands or their work-clothing shall be prohibited;

(2) Workers shall be instructed on the possible dangers arising from such misuse.

Sl.no. 9.<u>Prohibition of consuming food etc. in workrooms</u>: No worker shall be allowed to store or consume food or drink in the workroom in which benzene or substances containing benzene are manufactured, handled or used. Smoking and chewing tobacco or pan shall be prohibited in such workrooms.

Sl.no. 10.<u>Instructions as regards risks</u>: Every worker on his first employment shall be fully instructed on the properties of benzene or substances containing benzene which he has to handle and of the dangers involved. Workers shall also be instructed on the measures to be taken to deal with an emergency.

Sl.no. 11.<u>Cautionary notices</u>: Cautionary notices in the form specified in appendix and printed in the language easily read and understood by the majority of the workers shall be displayed in prominent places in the workrooms where benzene or substances containing benzene are manufactured, handled or used.

Sl.no. 12.<u>Washing facilities, cloakroom and messroom</u>: In factories in which benzene or substances containing benzene are manufactured, handled or used, the occupier shall provide and maintain in a clean state and in good repair—

(a) washing facilities under cover, of the standard of at least one tap for every 10 persons having constant supply of water with soap and a clean towel provided individually to each worker if so ordered by the Inspector;

(b) a cloakroom with locker for each worker, having two compartments—one for streeet clothing and one for work-clothing; and

(c) a messroom furnished with tables and benches with means for warming food, provided that where a canteen or other proper arrangements exist for the workers to take their meals, the requirement of messroom shall be dispensed with.

Sl.no. 13.<u>Medical facilities and records of examinations and tests</u>: (1) The occupierof every factory to which the schedule applies shall— (a) employ a qualified medical practitioner for medical surveillance of the workers employed therein whose

employment shall be subject to the approval of the Chief Inspector cum facilitator of Factories; and

(b) provide to the said medical practitioner all the necessary facilities for the purpose referred to in clause (a).

(2) The record of medical examinations and appropriate tests carried out by the said medical practitioner shall be maintained in a separate register approved by the Chief Inspector cum facilitatorof Factories, which shall be kept readily available for inspection by the Inspector.

Sl.no. 14.<u>Medical examination by the Medical Officer</u>: (1) Every worker employed in processes mentioned in Sl.no. 1, shall be examined by a Medical Officer within 15 days of his first employment. Such examination shall include test for detection of phenol in urine and determination of urinary sulphide ratio and C.N.S. and haemotological tests. No worker shall be allowed to work after 15 days of his first employment in the factory unless certified fit for such employment by the Medical Officer. The person suspended from the process shall be provided with alternate placement facilities unless he is fully incapacitated in the opinion of the Medical Officer, in which case the person affected shall be suitably rehabilitated.

(2) Every worker employed in the said processes shall be re-examined by a Medical Officer at least once in every twelve calendar months and such examination shall, wherever the Medical Officer considers appropriate, include all tests specified in subaragraph (1). Further, every worker shall also be examined once in every three calendar months by the factory medical officer.

(3) The Medical Officer after examining a worker shall issue a certificate of fitness in **Form 48**. The records of examination and re-examinations carried out shall be entered in the certificate and the certificate shall be kept in the custody of the manager of the factory. The record of each examination carried out under sub-paragraphs (1) and (2), including the nature and the results of these tests, shall also be entered by the Medical Officer in a health register in **Form 47**.

(4) The certificate of fitness and the health register shall be kept readily available for inspection by the Inspector cum facilitator.

(5) If at any time the Medical Officer is of the opinion that a worker is no longer fit for employment in the said processes on the ground that continuance therein would involve special danger to the health of the worker, he shall make a record of his findings in the said certificate and the health register. The entry of his findingds in those documents should also include the period for which he considers that the said person is unfit to work in the said processes.

(6) No person who has been found unfit to work as said in sub-paragraph (5) shall be re-employed or permitted to work in the said processes unless the Medical Officer, after further examination, again certifies him fit for employment in those processes.

## APPENDIX CAUTIONARY NOTICE

## Benzene and substances containing benzene

1. Hazards:

(a) Benzene and substances containing benzene are harmful.

(b) Prolonged or repeated breathing of benzene vapour may result in acute or chronic poisoning.

(c) Benzene can also be absorbed through skin which may cause skin and other disease.

2. Preventive measures:

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

(e) Keep all the containeres of benzene closed.

(f) Handle, use and process benzene and substances containing benzene carefully in order to prevent their spillage on floor.

(g) maintain good house keeping.

3. Protective equipment:

(a) Use respiratory protective equipment in places where benzene vapours are present in high concentration.

(b) In emergency, use self generating oxygen mask or oxygen or air cylinder masks.

- (c) Wear hand gloves, aprons, goggles and gumboots to avoid contact of benzene with your skin and body parts.
- 4. First-aid measures in case of acute benzene poisoning:
- (a) Remove the clothing immediately if it is wetted with benzene.

(b) If liquid benzene enters eye, flash thoroughly for at least 15 minutes with clean running water and immediately secure medical attention.

(c) In case of unusual exposure to benzene vapour, call a physician immediately. Until he arrives, do the following:—

(i) If the exposed person is conscious—(a) Move him to fresh air in open; (b) Lay down without a pillow and keep him quiet and warm;

(ii) If the exposed person is unconscious— (a) Lay him down preferably on the left side with the head low;

(b) Remove any false teeth, chewing gum, t obacco or other foreign objects which may be in his mouth; (c) Provide him artificial respiration in case difficulty is being experienced in breathing;

(d) Incase of shallow breathing or cyanosis (blueness of skin, lips, ears, finger-nail beds), he should be provided with medical oxygen or oxygen carbon dioxide mixture. If needed, he should be given artificial respiration. Oxygen should be administered by a trained person only.

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# SUB SCHEDULEXXII MANUFACTURING PROCESS OR OPERATIONS IN CARBON DISULPHIDE PLANTS

Sl.no. 1.<u>Application</u>: This schedule shall aply to all electric furnaces in which carbon disulphide is generated and all other plants where carbon disulphide after generation,

is condensed, refined and stored. This schedule is in addition to and not in derogation of any of the provisions of the Act and Rules made thereunder.

Sl.no. 2.<u>Construction, installation and operation</u>: (1) The buildings in which electric furnaces are installed and carbon disulphide after generation is condensed and refined shall be segregated from other parts of the factory and shall be of open type to ensure optimum ventilation and the plant layout shall be such that only a minimum number of workers are exposed to the risk of any fire or explosion at any time.

(2) Every electric furnaces and every plant in which carbon disulphide is condensed, refined and stored with all their fittings and attachments shall be of good construction, sound material and of adequate strength to sustain the internal pressure to which the furnace or the plant may be subjected to and shall be so designed that carbon disulphide and gas are in closed system during their normal working.

(3) The electric furnace supports shall be firmly grouted about 60 centimetres in concrete or by other effective means.

(4) Every electric furnace shall be installed and operated according to manufacturers' instructions and these instructions shall be clearly imparted to the personnel-in-charge of construction and operation.

(5) The instructions regarding observance of correct furnace temperature, sulphur dose, admissible current or power consumption and periodcal checking of charcoal level shall be strictly complied with.

Sl.no. 3.<u>Electrodes</u>: (1) Where upper ring electrodes made of steel are used in the electric furnace, they shall be of seamless tube construction and shall have arrangement for being connected to cooling water system through a siphon built in the electrodes or through a positive pressure water pump;

(2) The arrangement for cooling water referred to in sub- Sl.no. (1) shall be connected with automatic alarm system which will actuate in the event of interruption of cooling water in the electrodes and give visible and audible alarm signals in the control room and simultaneously stop power supply for the furnace operation and to stop the further supply of water. The alarm system and the actuating device shall be checked every day.

Sl.no. 4.<u>Maintenance of charcoal level</u>: When any electric furnace is in operation, it shall be ensured that the electrodes are kept covered with charcoal bed.

Sl.no. 5.<u>Charcoal separator</u>: A cyclone type of charcoal separator shall be fitted on the offtake pipe between the electric furnace and sulphur separator to prevent entry of pieces of charcoal into the condensers and piping.

Sl.no. 6.<u>Rupture disk and safety seal</u>: (1) At least two rupture disks of adequate size which shall blow off a pressure twice the maximum operating pressure shall be provided on each furnace and shall either be mounted directly on the top of the furnace or each through an independent pipe as close as possible to the furnace;

(2) A safety water seal shall be provided and tapped from a pont between the charcoal separator and the sulphur separator.

Sl.no. 7.<u>Pyrometer and manometers</u>: (1) Each electric furnace shall be fitted with adequate number of pyrometers to give an indication of the temperature as correctly

as reasonably practicable at various points at the furnace. The dials for reading temperatures shall be located in the Control Room.

(2) Manometers or any other suitable devices shall be provided for indicating pressure— (a) in the offtake pipe before and after the sulphur separator ; and (b) in primary and secondary condensers.

Sl.no. 8<u>Check valves</u>: All piping carrying carbon disulphide shall be fitted with check valves at suitable positions so as to prevent gas from flowing back into any electric furnace in the event of its shut down.

Sl.no. 9.<u>Inspection and maintenance of electric furnaces</u>: (1) Every electric furnaces shall be inspected internally by a competent person— (a) before being placed in serviceafter installation; (b) before being placed in service after reconstruction; and (c) periodically every time the furnace is opened for cleaning or de-ashing or for replacing electrodes.

(2) When an electric furnace is shut down for cleaning or de-ashing— (a) the brick lining shall be checked for continuity and any part found defective shall be removed;(b) after removal of any part of the lining referred to in (a) the condition of the shell shall be closely inspected; and (c) any plates forming shell found corroded to the extent that the safety of the furnace is endangered, shall be replaced.

Sl.no. 10.<u>Maintenance of records</u>: The following hourly records shall be maintained in a log book — (a) manometer reading at the points specified in sub-Sl.no. 7(2); (b) gas temperature indicated by pyrometers and all other vital points near the sulphur separator and primary and secondary condensers; (c) water temperature and flow of water through the siphon in the electrodes; and (d) primary and secondary voltages and current and energy consumed.

Sl.no. 11.<u>Electrical apparatus, wiring and fittings</u>: All buildings in which carbon disulphide is refined or stored shall be provided with electrical apparatus, wirings and fittings which shall afford adequate protection from fireand explosion.

Sl.no. 12.<u>Prohibition relating to smoking</u>: No person shall smoke or carry matches, fire or naked light or other means of producing a naked light or spark in buildings in which carbon disulphide is refined or stored, and a notice in the language understood by the majority of the workers shall be posted in the plant prohibiting smoking and carrying of matches, fire or naked light or other means of producing naked light or spark into such rooms.

Sl.no. 13.<u>Means of escape</u>: Adequate means of escape shall be povided and maintained to enable persons to move to a safe place as quickly as possible in case of an emergency. At least two independent staircases of adequate width shall be provided in every building housing the furnaces at reasonable intervals at opposite ends. These shall always be kept clear of all obstructions and so designed as to afford easy passage.

Sl.no. 14.<u>Warning in case of fire</u>: There shall be adequate arrangements for giving warnings in case of fire or explosion which shall operate on electricity and in case of failure of electricity, by some mechanical means.

Sl.no. 15.<u>Fire-fighting equipment</u>: (1) Adequate number of suitable fire extinguishers or other fire fighting equipment shall be kept in constant readiness for

dealing with risks involved and depending on the amount and nature of materials stored;

(2) Clear instructions as to how the extinguishers or other equipment should be used, printed in the language which the majority of the workers employed understand, shall be affixed to each extinguisher or other equipment and the personnel trained in their use.

Sl.no. 16.<u>Bulk sulphur</u>: (1) open or semi enclosed spaces for storage of bulk sulphur shall be sited with due regard to the dangers which may arise from sparks given off by nearby locomotives etc., and precautions shall be taken to see that flames, smoking and matches and other sources of ignition do not come in contact with the clouds of dust arising during handling of bulk sulphur;

(2) All enclosures for bulk sulphur shall be of non-combustible construction, adequately ventilated and so designed as to provide a minimum of ledges on which dust may lodge;

(3) The bulk sulphur in the enclosures shall be handled in such a manner as to minimise the formation of dust clouds and no flame, smoking and matches or other sources of ignition shall be employed during handling and non-sparking tools shall be used whenever sulphur is shovelled or otherwise removed by hand; (4) No repairs involving flames, heat or use of hand or power tools shall be made in the enclosure where bulk sulphur is stored.

Sl.no. 17.<u>Liquid sulphur</u>: Open flames, electric sparks and other sources of ignition, including smoking and matches, shall be excluded from the vicinity of molten sulphur.

Sl.no. 18.<u>Training and supervision</u>: (1) All electric furnaces and all plants in which carbon disulphide is condensed, refined or stored shall be under adequate supervision at all time while the furnaces and plant are in operation; (2) Workers in charge of operation and maintenance of electric furnaces and the plants shall be properly qualified and adequately trained.

Sl.no. 19.<u>Washing facilities</u>: (1) The occupier shall provide and maintain in a clean state and in good repair, for the use of all persons employed wash place under cover with at least one tap or stand pipe, having a constant supply of clean water for every five such persons, the taps or stand pipes being spaced not less than 120 centimetres apart with a sufficient supply of soap and clean towels, provided that the towels shall be supplied individually to each worker if so ordered by the Inspector; (2) All the workers employed in the sulphur storage, handling and melting operations shall be provided with a nail brush.

Sl.no. 20.<u>Personal protective equiupment</u>: (1) Suitable goggles and protective clothing consisting of overalls without pockets, gloves and footwear shall be provided for the use of operatives — (a) when operating valves or cocks controlling fluids etc.; (b) drawing off of molten sulphur from sulphur pot; and (c) handling of charcoal or sulphur.

(2) Suitable respiratory protective equipment shall be provided and stored in the appropriate place for use during abnormal conditions or in an emergency;

(3) Arangements shall be made for proper and efficient cleaning of all such protective equiupment.

Sl.no. 21.<u>Cloakrooms</u>: There shall be provided and maintained for the use of all persons employed in the processes a suitable cloakroom for clothing put off during work hours and a suitable place separate from the cloakroom for the storage of overalls or working clothes. The accommodation so provided shall be placed in the charge of a responsible person and shall be kept clean.

Sl.no. 22.<u>Unauthorised persons</u>: Only maintenance and repair personnel, persons directly connected with the plant operation and those acompanied by authrised persons shall be admitted into the plant.

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## SUB SCHEDULE XXIII MANUFACTURE OR MANIPULATION OF CARCINOGENIC DYE INTERMEDIATES

Sl.no. 1.<u>Applications</u>: The schedule shall apply in respect of all factories or any part thereof where processes in which the substances mentioned in Sl.no. 3 and 4 are formed, manufactured, handled or used and the processes incidental thereto in the course of which these substances are formed, are carried on. The process indicated in this paragraph shall be referred to hereinafter as 'the said processes', and such a reference shall mean any or all the processes described in this paragraph.

2.<u>Definition</u>: For the purpose of this schedule the following definitions shall apply, unless the context otherwise requires— (a) "controlled substances" means chemical substances mentioned in Sl.no. 4 of this schedule;

(b) "first employment" means first employment in the said processes and also reemployment in such processes following any cessatiomof employment for a continuous period exceeding three calendar months; (c)"efficient exhaust draught" means localised ventilation effected by mechanical means for the removal of gas, vapour, dust or fume so as to prevent them from escaping into the air of any place in which work is carried on. No draught shall be deemed to be efficient which fails to remove smoke generated at the point where such gas, vapour, fume or dust originates; and

(d) "prohibited substances" means chemical substances mentioned in Sl.no. 3 of this schedule.

Sl.no. 3.<u>Prohibited substances</u>: For the purpose of this schedule, the following chemical substances shall be clasified as 'prohibited substances' except when these substances are present or are formed as a by-product of a chemical reaction in a total concentration not exceeding one percent :— (a) beta naphthylamine and its salts; (b) benzidine and its salts; (c) 4-amino diphenyl and its salts; (d) 4-nitro diphenyl and its salts; and (e) any substance containing any of these compounds.

Sl.no. 4.<u>Controlled substances</u>: For the purpose of this schedule , the following chemical substances shall be classified as "controlled substances":— (a) alpha-naphthylamine or alpha-naphthylamine containing not more than 1.00% of beta-naphthylamine either as by-product of chemical reaction or otherwise, and its salts; (b) ortho-tolidine and its salts; (c) dianisidine and its salt; (d) dichlorobenzidine and its salts; (e) auramine; and (f) magneta.

Sl.no. 5.<u>Prohibition of employment</u>: No person shall be employed in the said processes in any factory in which any prohibited substance is formed, manufactured,

processed, handled or used except as exempted by the Chief Inspector cum facilitator as stipulated in Sl.no. 23.

Sl.no. 6. Requirements for processing or handling controlled substances:

(1)Wherever any of the controlled substances referred to in Sl.no. 4 are formed, manufactured, processed, handled or used, all practical steps shall be taken to prevent inhalation, ingestion or absorption of the said controlled substance by the workers while engaged in processing that substance; and its storage or transport within the plant ;or in cleaning or maintenance of the concerned equipment, plant, machinery and storage areas; (2) As far as possible all operations shall be carried out in a totally enclosed system. Wherever such enclosure is not possible, efficient exhaust draught shall be applied at the point where the controlled substances are likely to escape into the atmosphere during the process; (3) The conrolled substances shall be received in the factory in tightly closed containers and shall be kept so except when these substances are in process or in use. The controlled substances shall leave the factory only in tightly closed containers of appropriate type. All the containers shall be plainly labelled to indicate the contents.

Sl.no. 7.<u>Personal protective equipment</u>: (1) The following items of personal protective equipment shall be provided and issued to every worker employed in the said processes:— (a) long trousers and shirts or overalls with full sleeve and head coverings. The shirt or overalls shall cover the neck completely; and (b) rubber gumboots.

(2) The following items of personal protective equipment shall be provided in sufficient numbers for use by workers employed in the said processes when there is danger of injury during performance of normal duties or in the event of emergency:—(a) rubber hand gloves; (b) rubber approns; and (c) airline respirators or other suitable respiratory protective equipment.

(3) It shall be the responsibility of the manager to maintain all items of personal protective equipment in a clean and hygienic condition and in good repair.

Sl.no. 8.<u>Prohibition relating to employment of women and young persons</u>: No woman or young person shall be employed or permitted to work in any room in which the said processes are carried on.

Sl.no. 9.<u>Floors of work room</u>: The floor of every workroom in which the said processes are carried on shall be (a) smooth and impervious to water provided that asphalt or tar shall not be used in the composition of the floor; (b) maintained in a state of good repair; (c) with a suitable slope for easy draining and provided with gutters and (d) thoroughly washed daily with the drain water being left into a sewer through a closed channel.

Sl.no. 10.<u>Disposal of empty containers</u>: Empty containers used for holding controlled substances shall be thoroughly cleaned of their contents and treated with an inactivating agent before being discarded.

Sl.no. 11.<u>Manual handling</u>: Controlled substances shall not be allowed to be mixed, emptied or handled except by means of a scoop with a handle. Such scoop shall be thoroughly cleaned daily.

Sl.no. 12.<u>Instructions rergarding risk</u>: Every worker on his first employment in the said processes shall be fully instructed on the properties of the toxic chemicals to which he is likely to be exposed to, of the dangers involved and the precautions to be taken. Workers shall be instructed on the measures to be taken to deal with an emergency.

Sl.no. 13.<u>Cautionary placards</u>: cautionary placards in the Form specified in appendix attached to this schedule and printed in the language of the majority of the workers

employed in the said processes shall be affixed in prominent places frequented by them in the factory, where the placards can be easily and conveniently read. Arrangements shall be made by the manager to instruct periodically all such workers regarding the precautions contained in the cautionary placards.

Sl.no. 14.<u>Obligation of the workers</u>: It shall be the duty of the persons employed in the said processes to submit themselves for the medical examination including exfoliative cytology of urine by the Medical Officer or the qualified medical practitioner as provided for under these rules.

Sl.no. 15.<u>Washing and bathing facilities</u>: (1) The following washing and bathing facilities shall be provided and maintained in a clean state and in good rtepair for the use of all workers employed in the said processes:— (a) a wash place under cover having constant suply of water and provided with clean towels, soap and nail brushes and with at least one stand pipe for every five such workers; (b)50% of the stand pipes provided under clause (a) shall be locate in bathrooms where both hot and cold water shall be made available during the working hours of the factory and for one hour thereafter; (c) the washing and bathing facilities shall be in close proximity of the area housing the said processes; (d) clean towels shall be provided individually to each worker; and (e)in addition to taps mentioned under clause (a), one stand pipe in which warm water is made available, shall be provided on each floor.

(2) Arrangement shall be made to wash factory uniforms and other work clothes every day.

Sl.no. 16.<u>Food,drinks etc. prohibited in workroom</u>: No worker shall consume food, drink, pan, supari or tobacco or shall smoke in any workroom in which the said processes are carried on and no worker shall remain in any such workroom during intervals for meals or rest.

Sl.no. 17.<u>Cloakroom</u>: There shall be provided and maintained in a clean state and in good repair for the use of the workers employed in the said processes (a) a cloakroom with lockers having two compartments—one for street clothes and the other for work clothes, and (b) a place separate from the locker room and the messroom, for the storage of protective equipment provided under Sl.no. 7. The accommodation so provided shall be under the care of a responsible person and shall be kept clean.

Sl.no. 18.<u>Messroom</u>: There shall be provided and maintained for the use of workers employed in the said processes who remain on the premises during the meal intervals, a messroom which shall be furnished with tables and benches and provided with suitable means for warming food.

Sl.no. 19.<u>Time allowed for washing</u>: Before the end of each shift 30 minutes shall be allowed for bathing for each worker who is employed in the said processes. Further, at least 10 minutes shall be allowed for washing before each meal in addition to the regular time allowed for meals.

Sl.no. 20.<u>Restriction on age of persons employed</u>: No worker under the age of 40 years shall be engaged in the factory in the said process for the first time after the date on which the schedule comes into force.

Sl.no. 21.<u>Medical facilities and records of examinations and tests</u>: (1) The occupier of every factory to which the schedule applies, shall— (a) employ a qualified medical practitioner for medical surveillance of the workers employed therein whose employment shall be subject to the approval of the Chief Inspector cum facilitator of Factories, and (b) provide to the said medical practitioner all the necessary facilities for the purpose referred to in clause (a).

(2) The record of medical examinations and appropriate tests carried out by the said medical practitioner shall be maintained in a separate register approved by the Chief Inspector cum facilitator of Factories, which shall be kept readily available for inspection by the Inspector cum facilitator.

Sl.no. 22.<u>Medical examination by Medical Officer</u>: (1) Every worker employed in the said processes shall be examined by a Medical Officer within 15 days of his first employment. Such examination shall include tests for detection of methemoglobin in blood (Haematological tests), paranitrophenol in urine, pulmonary function tests and C.N.S. tests. No worker shall be allwed to work after 15 days of his first employment in the factory unless certified fit for such employmentby the Medical Officer. The person so suspended from the process shall be provided with alternate placement facilities unless he is fully incapacitated in the opinion of the Medical Officer, in which case the person affected shall be suitably rehabilitated.

(2) Every worker employed in the said processes shall be re-examined by a Medical Officer at least once in every six calendar months and such re-examination shall, wherever the Medical Officer considers appropriate, include all the tests specified in sub- Sl.no. (1).

(3) The Medical Officer after examining a worker shall issue a certificate of fitness in **Form 48**. The record of examination and re-examintion carried out shall be entered in the certificate and the certificate shall be kept in the custody of the Manager of the factory. The record of each examination carried out under sub- Sl.no. (1) and (2), including the nature and the results of those tests, shall also be entered by the Medical Officer in a health register in **Form 47**.

(4) The certificate of fitness and the health register shall be kept readily available for inspection by the Inspector cum facilitator.

(5) If at any time the Medical Officer is of the opinion that a worker is no longer fit for employment in the said processes on the ground that continuance therein would involve special danger to the health of the worker, he shall make a record of his findings in the said certificate and the health register. The entry of his findings in those documents should also include the period for which he considers that the said person is unfit to work in the said processes.

(6) No person who has been found unfit to work as said in sub- Sl.no. (5) shall be reemployed or permitted to work in the said processes unless the Medical Officer, after further examination, again certifies him fit for employment in those processes.

Sl.no. 23.<u>Exemptions—prohibited substances</u>: (1) The Chief Inspector cum facilitator may by a certificate in writing (which he may at his discretion revoke at any time), subject to such conditions if any, as may be specified therein, exempt any process in the course of which any of the prohibited substances is formed, processed, manufactured, handled or used, from the provision of Sl.no. 5 if he is satisfied that the process is carried out in a totally enclosed and hermetically sealed system in such a manner that the prohibited substance is not removed from the system except in quantities not greater than that required for the purpose of control of the process or such purposes as is necessary to ensure that the product is free from any of the prohibited substances.

(2) The Chief Inspector cum facilitator may allow the manufacture, handling or use of benzidine hydrochloride provided that all the processes in connection with it are carried out in a totally enclosed system in such a manner that no prohibited substances other than benzidine hydrochloride is removed therefrom except in quantities not greater than that required for the purpose of control of the processes or such purposes as is necessary to ensure that the product is free from prohibited substances and that

adequate steps are taken to ensure that benzedine hydrochloride is, except while not in a totally enclosed system, kept wet with not less than one part of water to two parts of benzidine hydrochloride at all times.

Sl.no. 24.<u>Exemptions—general</u>: If in respect of any factory, the Chief Inspector cum facilitator is satisfied that owing to the exceptional circumstances or infrequency of the processes or for any other reason, all or any of the provisions of this schedule is not necessary for the protection of the workers in the factory, the Chief Inspector may by a certificate in writing (which he may in his discretion revoke at any time), exempt such factory from all or any of such provisions subject ot such conditions if any, as he may specify therein.

#### APPENDIX

#### CAUTIONARY PLACARD/ NOTICE Carcinogenic dye intermediates.

- 1. Dye intermediates which are nitro amino derivatives or aromatic hydrocarbons are toxic. You have to handle these chemicals frequently in this factory.
- 2. Use the various items of protective wear to safeguard your own health.
- 3. Maintain scrupulous cleanliness at all times. Thoroughly wash hands and feet before taking meals. It is essential to take a bath before leaving the factory.
- 4. Wash off any chemical falling on your body with soap and water. If splashed with a solution of the chemical, remove the contaminated clothing immediately. These chemicals are known to produce cyanosis. Contact the Medical Officer or appointed doctor immediately and get his advice.
- 5. Handle the dye intermediates only with a long handled scoops, never with bare hands.

6. Alcoholic drinks should be avoided as they enhance the risk of poisoning by the chemicals.

- 7. Keep your food and drinks away from work place. Consuming food, drinks or tobacco in any form at the place of work is prohibited.
- 8. Serious effects from work with toxic chemicals may follow after many years. Great care must be taken to maintain absolute cleanliness of body, clothes, machinery and equipment.

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#### SUB SCHEDULE XXIV

## **OPERATIONS INVOLVING HIGH NOISE LEVELS**

- Sl.no. 1. <u>Applications</u>: This schedule shall appy to all operations in any manufacturing process having high noise level.
- Sl.no. 2. <u>Definitions</u>: For the purpose of this schedule— (a) "Noise" means any unwanted sound;
- (b) "High noise level" means any noise level measured on the A-weighted scale is 90 dB or above;
- (c) "Decibel" means one-tenth of "Bel" which is the fundamental division of a logarithmic scale used to express the ratio of two specified or implied quantities, the number of "bels" denoting such a ratio being the logarithm to the base of 10 of this ratio. The noise level (or the sound pressure level) corresponds to reference pressure of 20x106 newtons per square metre or 0.0002 dynes per square centimetre which is the threshold of hearing, that is, the lowest sound pressure level necesary to produce the sensation of hearing in average healthy listeners. The decibel in abbreviated form is dB;

- (d) "Frequency" is the rate of pressure variations expressed in cycles per second or hertz;
- (e) "dBA" refers to sound level in decibels as measured on a sound level meter operating on the A-weighted network with slow meter response;
- (f) "A-weighted" means making graded adjustments in the intensities of sound of various frequencies for the purpose of noise measurement so that the sound pressure level measured by an instrument reflects the actual response of the human ear to the sound measured.
- Sl.no. 3. <u>Protection against noise</u>: (1) In every factory, suitable engineering control or administrative measure shall be taken to ensure, so far as is reasonably practicable, that no worker is exposed to sound levels exceeding the maximum permissible noise exposure levels specified in tables 1 and 2.

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

TABLE – I		
Permissible exposure in cases of continuous noise		

Notes: 1. No exposure in excess of 115 dBA is to be permitted.

2. For any period of exposure falling in between any figure and the next higher or lower figure as indicated in column 1, the permissible sound pressure level is to be determined by extrapolation on a proportioate basis.

TABLE – 2Permissible exposure levels of impulsive or impact noise

Peak sound pressure level in dB	Permitted number of impulses or impacts
140	per day 100
135	315
130	1,000
125	3,160
120	10,000

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

2. For any peak sound pressure level falling in between any figure and the next higher or lower figure as indicated in column 1, the permitted number of impulses or impacts per day is to be determined by extrapolation on a proportionate basis.

(2) For the purposes of this schedule, if the variations on the noise level involve maxima at intervals of one second or less, the noise is to be considered as a continuous one and the criteria given in table 1 would apply. In other cases, the noise is to be considered as impulsive or impact noise and the criteria given in table 2 would apply.

(3) When the daily noise exposure is composed of two or more periods of noise exposure at different levels, their combined effect should be considered, rather than the individual effect of each. The mixed exposure should be considered to exceed the limit value if the sum of the fractions C1/T1 +C2/ T2+ .....Cn/ Tn, exceeds unity;

Where:---

C1,C2 etc. indicate the total time of actual exposure at a specified noise level and T1, T2 etc. denote the time of exposure permissible at that level. Noise exposure of less than 90 dBA may be ignored in the above calculation.

(4) Where it is not possible to reduce the noise exposure to the levels specified in sub rule (1) by reasonably practicable engineering control or administrative measures, the noise exposure shall be reduced to the greatest extent feasible by such control measures and each worker so exposed shall be provided with suitable ear protectors so as to reduce the exposure to noise to the levels specified in sub-rule (1).

(5) Where the ear protectors provided in accordance with sub-paragraph (2) and worn by a worker cannot still attenuate the noise reaching near his ear, as determined by subtracting the attenuation value in dBA of the ear protectors concerned from the measured sound pressure level to a level permissible under Table 1 or Table 2 as the case may be, the noise exposure period shall be suitably reduced to correspond to the permissible noise exposures specified in sub- Sl.no. (1).

(6) (a) In all cases where the prevailing sound levels exceeds the permissible levels specified in sub- Sl.no. (1) there shall be administered an effective hearing conservation programme which shall include among other hearing conservation measures, pre-employment and periodical auditory surveys conducted on workers exposed to noise exceeding the permisiible levels, and rehabilitation of such workers either by reducing the exposure to the noise levels or by transferring them to places where noise levels are relatively lesws or by any other suitable means.

(b) Every worker employed in areas where the noise exceeds the maximum permissible exposure levels specified in sub-rule (1) shall be subjected to an auditory examination by a Medical Officer within 14 days of his first employment and thereafter, shall be re-examined at least once in every 12 months. Such initial and periodical examinations shall include tests which the Medical Officer may consider appropriate, and shall include determination of auditory thresholds for pure tones of 125, 250, 500,1000,2000, 4000 and 8000 cycles per second.

#### 4. Medical examination by Medical officer-

(1) The occupier shall ensure that the workers who are likely to be exposed to high noise at above exposure action value are subjected to periodical medical examination once in a year. The medical examination shall include tests which the Medical officer may consider appropriate and shall include determination of auditory thresholds for pure tones of 125, 250, 500, 1000, 2000, 4000 and 8000 cycles per second.

(2) Every worker exposed to high noise level shall be examined by a Medical officer within 15 days of his first employment. No worker shall be allowed to work after 15 days of his first employment in the factory unless certified fit for such employment by the Medical officer.

(3) Every worker employed in process involving high noise shall be reexamined by a Medical officer at least once in every 12 months and such examination shall, wherever the Medical officer considers appropriate, include all the tests in sub Sl.no. (1).

(4) The Medical officer after examining a worker, shall issue a Certificate of Fitness in **Form-48**. The record of examination and reexaminations carried out shall be entered in the Certificate and the Certificateshall be kept in the custody of the occupier of the factory. The record of eachexamination carried out under sub- Sl.no. (1) and (2),including the natureand the results of this test, shall also be entered by the Medical officer in a health register in **Form-47**.

(5) The Certificate of Fitness and the health register shall be kept readily available for inspection by the Inspector-cum-Facilitator.

(6) If at any time the Medical officer is of the opinion that a worker is no longer fit for employment in the said processes on the ground that continuance therein would involve special danger to the health of the worker, he shall make a record of his findings in the said certificate and the health register. The entry of his findings in those documents should also include the period for which he considers that the said person is unfit to work in the said process shall be provided with alternate placement facilities unless he is fully incapacitated in the opinion of the Medical officer , in which case the person affected shall be suitably rehabilitated.

(7) No person who has been found unfit to work as said in subparagraph

(6) shall be re-employed or permitted to work in the said processes unless the Medical officer, after further examination, again certifies him fit for employment in those processes.

#### PART-B HIGH VIBRATION LEVELS

#### Sl.no. 1. Applications

This part of the Schedule shall apply to all operations in a manufacturing part of the process having high undesired vibrations.

#### Sl.no. 2. Definition:

(a) "daily exposure" means the quantity of mechanical vibration to which a worker is exposed during a working day, which takes account of the magnitude and duration of the vibration;

(b) "Vibration" means a mechanical phenomenon where by oscillations occur about equilibrium point. The oscillations may be periodic or random.

(c) "high vibration" means any exposure greater than the exposure limit value and action value specified in clause-3.

(d) "exposure action value" means the level of daily exposure set out in clause-3 for any worker which, if reached or exceeded, requires specified action to be taken to reduce risk;

(e) "exposure limit value" means the level of daily exposure for any worker which must not be exceeded, as specified in sub clause-3

(f) "hand-arm vibration" means mechanical vibration which is transmitted into the hands and arms during a work activity;

(g) "mechanical vibration" means vibration occurring in a piece of machinery or equipment or in a vehicle as a result of its operation; and

(h) "whole-body vibration" means mechanical vibration which is transmitted into the body, when seated or standing, through the supporting surface, during a work activity or as described in sub clause 3(2).

#### Sl.no. 3. Exposure limit values and action values.

(1) For hand-arm vibration

(a) the daily exposure limit value is  $5 \text{ m/s}^2 A(8)$ ;

(b) the daily exposure action value is  $2.5 \text{ m/s}^2A(8)$ , and daily exposure shall be ascertained on the basis set out in the relevant National/ International Standards specified in table 1 below.

(2) For whole body vibration

(a) the daily exposure limit value is  $1.15 \text{ m/s}^2\text{A}(8)$ ;

(b) the daily exposure action value is 0.5 m/s2A(8), and daily exposure shall be ascertained on the basis set out in the relevant National/International Standards.

#### Table 1

The Threshold Limit Values (TLVs) for exposure of the hand to vibration in X, Y, or Z direction of axes in the three dimensional system shall be asgiven below:

Total Daily Exposure Duration (hours)	Maximum value of frequency weighted acceleration (m/s2) in any direction
4 to less than 8 hours	4
2 to less than 4 hours	6
1 to less than 2 hours	8
less than 1hour	12

3 Assessment of vibration exposure shall be made for each applicable direction (X, Y, Z)) since vibration is a vector quantity (magnitude and direction). In each direction, the magnitude of the vibration during normal operation of the power tool, machine or work piece should be expressed by the root-meansquare(RMS) value of the frequency –weighted component acceleration, in units of meter per second squared (m/s<sup>2</sup>)

Sl.no. 4. Assessment of risk to health due to vibration at the work place.

(1) An occupier who carries out work which is liable to expose any worker from vibration shall make a suitable and sufficient assessment of the risk createdby that work to the health and safety of those and the risk assessment shall identify the control measures that need to be taken.

(2) The risk assessment should be reviewed whenever it is felt the changes in the process makes the earlier risk assessment no longer valid.

#### Sl.no. 5. Engineering control measures

1. The occupier shall ensure that risk from the exposure of workers to vibration is either eliminated at source or, where this is not reasonably practicable, reduced to as low a level as is reasonably practicable.

(a) Where it is not reasonably practicable to eliminate risk at source pursuant to paragraph.

(b) and an exposure action value is likely to be reached or exceeded, the employer shall reduce exposure to as low a level as is reasonably practicable by establishing and implementing a programme of engineering control measures which are appropriate to this type of activity.

(c) The occupier shall ensure that the workers are provided with the following measures:-

(i) work equipment of appropriate ergonomic design which, taking account of the work to be done, produces the least possible vibration;

(ii) the provision of auxiliary equipment which reduces the risk of injuries caused by vibration; and install appropriate maintenance programmes for work equipment, the workplace and workplace systems;

(iii) Subject to sub clause 5, the employer shall ensure that his employees are notexposed to vibration above an exposure limit value; and shall take necessary to identify the reasons for the limit being exceeded and take appropriate steps to reduce the exposure to vibration to below limit value.

Provided that where the exposure of an employee to vibration is usually below the exposure action value but varies markedly from time to time and may occasionally exceed the exposure limit value.

Provided further that– any exposure to vibration averaged over oneweek is less than the exposure limit value and there is evidence to show that therisk from the actual pattern of exposure is less than the corresponding risk from constant exposure at the exposure limit value; and that the (b) risk isreduced to as low a level as is reasonably practicable, taking into account thespecial circumstances.

#### Sl.no. 6. Medical examination by Medical officer-

(1) The occupier shall ensure that the workers who are likely to be exposed to vibration at above exposure action value are subjected to periodical medical examination once in a year. The medical examination shall include general and physical examination as well as special test for Reynaud's phenomenon.

(2) Every worker employed in the processes specified in Sl.no. 1 shall be examined by a Medical officer within 15 days of his first employment. No worker shall be allowed to work after 15 days of his first employment in the factory unless certified fit for such employment by the Medical officer.

(3) Every worker employed in a manganese process shall be re-examined by a Medical officer at least once in every 12 months and such examination shall, wherever the Medical officer considers appropriate, include all the tests in sub Sl.no. (1).

(4) The Medical officer after examining a worker, shall issue a Certificate of Fitness in **Form-46**. The record of examination and re-examinations carried out shall be entered in the Certificate and the Certificate shall be kept in the custody of the occupier of the factory. The record of each examination carried out under sub-Sl.no. (1) and (2),including the nature and the results of this test, shall also be entered by the Medical officer in a health register in **Form-47**.

(5) The Certificate of Fitness and the health register shall be kept readilyavailable for inspection by the Inspector-cum-Facilitator.

(6) If at any time the Medical officer is of the opinion that a worker is no longer fit for employment in the said processes on the ground that continuance therein would involve special danger to the health of the worker, he shall make a record of his findings in the said certificate and the health register. The entry of his findings in those documents should also include the period for which he considers that the said person is unfit to work in the said process shall be provided with alternate placement facilities unless he is fully incapacitated in the opinion of the Medical officer , in which case the person affected shall be suitably rehabilitated.

(7) No person who has been found unfit to work as said in sub- Sl.no. (5) shall be reemployed or permitted to work in the said processes unless the Medical officer, after further examination, again certifies him fit for employment in those processes.

Sl.no. 7. Personal Protective equipment

(1) The occupier shall ensure that the worker who are likely to be exposed to high level of vibration are provided with appropriate PPE and protective clothing confirming to national or international standards. Such Personal Protective Equipment should include hand gloves and safety shoes. The protective clothing shall be able to protect the workers from cold and dump.

(2) The occupier shall ensure that workers are given periodical training in the use care and maintenance of the Personal Protective Equipment.

## Sl.no. 8. Administrative Control Measures

(1) The occupier shall ensure that as far as reasonably practicable as all necessary control measures are taken to ensure that the unwanted vibrations does not affect the health of the workers employed in the process to which this part of schedule apply.

(2) The occupier shall provide all workers with information instruction and training to be adopted to limit the exposure limit values and action values as setout in sub clause-3.

(3) Without prejudice to the generality of paragraph (1), the information, instruction and training provided under that paragraph shall include–

I. the exposure limit values and action values set out in sub clause -3.

II. safe working practices to minimise exposure to vibration; and

III. suitable and sufficient information and training for employees, such that work equipment may be used correctly and safely, in order to minimize their exposure to vibration;

IV. limitation of the duration and magnitude of exposure to vibration;

V. appropriate work schedules with adequate rest periods; and

VI. The information, instruction and training required by Sl.no. (2) shall be updated to take account of significant changes in the type of work carried out or the working methods used by the employer.

(4) The Occupier shall display pictorial cautionary notices/warning signs at conspicuous places where there are possibilities of workers being exposed to undesired high vibrations.

# Sl.no. 9. Prohibition in employment of pregnant women, adolescent andpersons with disabilities.

No pregnant women or adolescent or persons with disabilities shall be employed in the process covered by this part of the schedule

#### Sl.no. 10. Exemptions

If in respect of any factory, the Chief Inspector-cum-Facilitator is satisfied that owing to any exceptional circumstances, or infrequently of the process, or for any other reason, application of all or any of the provisions of this schedule is not necessary for the protection of the persons employed in such factory, he may by an order in writing which he may at his discretion revoke, exempt such factory from all or any of the provisions on such conditions and for such period as he may specify in the said matter.

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# SUB SCHEDULEXXV

# MANUFACTURE OF RAYON BY VISCOSE PROCESS

Sl.no. 1.<u>Definition</u>: For the purpose of this schedule—

(a) "approved" means aproved for the time being in writing by the Chief Inspectorcum facilitator;

(b) "breathing apparatus" means a helmet or face piece with necessary connections by means of which the person using it in a poisonous, asphyxiating or irritant atmosphere breathes unpolluted air; or any other approved apparatus;

(c) "churn" means the vessel in which alkali cellulose pulp is treated with carbon disulphide;

(d) "dumping" means transfer of cellulose xanthate from a dry churn to a dissolver;

(e) "efficient exhaust draught" means localised ventilation by mechanical means for the removal of any gas or vapour, so as to prevent it from escaping into the air of of any place in which work is carried on. No draught shall be deemed to be efficient if it fails to control effectively any gas or vapour generated at the point where such gas or fume originates;

(f) "fume process" means any process in which carbon disulphide or hydrogen sulphide is produced, used or given off;

(g) "life belt" means a belt made of leather or other suitable material which can be securely fastened round the body with suitable length of rope attached to it, each of which is sufficiently strong to sustain the weight of a man;

Sl.no. 2. <u>Ventilation</u>: (1) In all work rooms where a fume process is carried on, adequate ventilation by natural or mechanical means shall be provided so as to control, in association with other control measures, the concentration of the pollutants in the air of every work environment within the permissible limits.

(2) An efficient exhaust draught shall be provided and maintained to control gas or vapour at the following locations:— (a) dumping hoppers of dry churns; (b) spinning machines; (c) trio rollers and cutters used in stapple fibre spinning; (d) hydro-extractors for yarn cakes; (e) after treatment processes; and (f) spin baths.

(3) In so far as the spinning machines and trio rollers and cutters used in staple fibre spinning are concerned, they shall be for the purpose of ensuring the effectiveness of the exhaust draft to be provided as required in sub- Sl.no. (1), enclosed as fully as practicable and provided with suitable shutters in sections to enable the required operations to be carried out without giving rise to undue quantities of vapours of pollutants escaping to the work environment.

(4) No dry churns shall be opened after completion of reaction without initially exhausting the residual vapours of carbon disulphide by operation of a suitable and efficient arrangement for exhausting the vapours wich shall be continued to be operated as long as the churn is kept opened.

(5) Whenever any ventilation apparatus normally required for the purpose of meeting the requirements in sub- Sl.no. (2), (3) and (4) is ineffective, fails or is stopped for any purpose whatsoever, all persons shall be required to leave the work areas where the equipment or processes specified in the above said sub- Sl.no. are in use, as soon as possible and in anycas not later than 15 minutes after such an occrrence.

(6) (i) All ventilation systems provided for the purposes as required in sub-Sl.no. (2), (3) and (4) shall be examined and inspected once every week by a responsible person. It shall be thoroughly examined and tested by a competent person once in every period of 12 months. Any defects found by such examinations or tests shall be rectified forthwith; (ii) Aregister containing particulars of such examinations and tests and the state of the systems and the repairs or alterations (if any) found to be necessary shall be kept and shall be available for inspection by an Inspectorcum facilitator.

Sl.no. 3. <u>Waste from spinning machines</u>: Waste yarn from the spinning machines shall be deposited in suitable containers provided with close fitting covers. Such wastes shall be disposed off as quickly as possible after decontamination.

Sl.no. 4.<u>Lining of dry churns</u>: The inside surface of all dry churns shall be coated with a non-sticky paint so that cellulose xanthate will not stick to the surface of the churns. Such coating shall be maintained in good condition.

Sl.no. 5.<u>Air monitoring</u>: (1) To ensure the effectiveness of the control measures, monitoring of carbon disulphide and hydrogen sulphide in air shall be carried out once atleast in every shift and the record of the results so obtained shall be entered in a register specially maintained for the purpose;

(2) For the purpose of the requirement in sub- Sl.no. (1) instantaneous gas detector tubes shall not be used. Samples shall be collected over a duration of not less than 10 minutes and analysed by an approved method. The locations whrer such monitoring is to be done shall be as directed by the Inspector;

(3) If the concentration of either carbon disulphide or hydrogen sulphide exceeds the permissible limits for such vapour or gas laid down in Rules, suitable steps shall be taken for controlling the concentrations in air of such contaminants. Areport of such occurrences shall be sent to the Chief Inspectorcum facilitator forthwith.

Sl.no. 6. <u>Prohibition to remain in fume process room</u>: No person during his intervals for meal, or rest shall remain in any room wherein fume process is carried on.

Sl.no. 7.<u>Prohibition relating to employment of young persons</u>: No young person shall be employed or permitted to work in any fume process or in any room in which any such process is carried on.

Sl.no. 8.<u>Protective equipment</u>: The occupier shall provide and maintain in good condition protective equipment as specified in the Table for use of persons employed in the processes referred to therein.

Process	Protective Equipment
1. Dumping	Overalls, face shields, gloves and foot
	wear—all made of suitable material.
2. Spinning	Suitable approns, gloves and footwear.
3. Process involving or likely to involve	Suitable gloves and footwear.
contact with viscose solution	
4. Handling of sulphur	Suitable chemical goggles.
5 Any other process involving contact	Protective equipment as may be directed
with hazardous chemicals	by the Chief Inspector by an order in
	writing.

TABLE

(2) A suitable room or locker shall be provided exclusively for the storage of all the protective equipment supplied to workers and no such equipment shall be stored at any place other than the room, roms or lockers so provided.

(2) (i) The breathing apparatus and other appliances referred to in sub-Sl.no. (1) shall be maintained in good condition and kept in appropriate locations so as to be readily available; (ii) The breathing apparatus and other appliances referred to in clauses (a) and (b) of sub-Sl.no. (1) shall be cleaned and disinfected at suitable intervals and

Sl.no. 9.<u>Breathing apparatus</u>: (1) There shall be provided in every factory where fume process is carried on, sufficient supply of— (a) breathing appaqratus; (b) oxygen and suitable appliances for its administration; and (c) life belts.

thoroughly inspected once every month by a responsible person; (iii) A record of the maintenance and of the condition of the breathing apparatus and other appliances referred to in sub-clause (i) shall be entered in a register provided for that purpose which shall be readily available for inspection by an Inspectorcum facilitator.

(3) Sufficient number of workers shall be trained and periodically retrained in the use of breathing apparatus and administering artificial respiration so that at least two such trained persons would be available during all the working hours in each room in which fume process is carried on.

(4) Breathing aparatus shall be kept properly labelled in clean,dry, light-proof cabinetsa and if liable to be affected by fumes, shall be protected by placing them in suitable containers.

(5) No person shall be employed to perform any work specified in sub- Sl.no. (1) for which breathing apparatus is necssary to be provided under that sub- Sl.no. unless he has been fully instructed in the proper use of that equipment.

(6) No breathing apparatus provided in pursuance of sub- Sl.no. (1) which has been worn by a person shall be worn by another person unless it has been thoroughly cleaned and disinfected since last being worn and the person has been fully instructed in the proper use of that equipment.

Sl.no. 10.<u>Electric fittings</u>: All electric fittings in any room in which carbon disulphide is produced, used or given off or is likely to be given off into the work environment, other than a spinning room, shall be of flame-proof construction and all electric conductors shall either be enclosed in metal conduits or be lead-sheathed.

Sl.no. 11.<u>Prohibition relating to smoking etc.</u>: No person shall smoke or carry matches, fire or naked light or other means of producing a naked light or spark in a room in which fume process is carried on. A notice in the language understood by the majority of the workers shall be posted in prominent locations in the plant prohibiting smoking and carrying of matches, fire or naked light or other means of producing naked light or spark into such rooms;

Provided that fire, naked light or other means of producing a naked light or spark may be carried on in such room only when required for the purposes of the process itself under the direction of a responsible person.

Sl.no. 12.<u>Washing and bathing facilities</u>: (1) There shall be provided and maintained in a clean state and in good repair for the use of all workers employed in the processes covered by the schedule, adequate washing and bathing places having a constant supply of water under cover at the rate of one such place for every 25 such persons employed; (2) The washing places shall have standpipes placed at intervals of not less than one metre; (3) Not less than one half of the total number of washing places shall be provided with bathrooms; (4) Sufficient supply of clean towels made of suitable materials shall be provided; provided that such towels shall be supplied individually for each worker if so ordered by the Inspector; (5) Sufficient supply of soap and nail brushes shall be provided.

Sl.no. 13.<u>Rest rooms</u>: A rest room shall be provided for the workers engaged in dofing operations of filament yarn spinning process; (2) Such rest room shall be provided with fresh air supply and adequate seating arangement.

Sl.no. 14.<u>Cautiion notice and instructions</u>: (1) The following cautionary notice shall be prominently displayed in each fume process room. This notice shall be in a language understood by the majority of the workers and displayed where it can be easily and conveniently read. If any worker is illiterate, effective steps shall be taken to explain carefully to him the contents of the notice so displayed.

## CAUTIONARY NOTICE

1. Carbon disulphide (CS/2) and Hydrogen sulphide (H2/S) which may be present in this room are hazardous to health

2. Follow safety instructions.

3. Smoking is strictly prohibited in this area.

4. Use protective equipment and breathing apparatus as and when required.

(2) The occupier shall make arrangements to instruct each worker employed in the fume process room regarding the health hazard connected with their work and the preventive measures and method to protect themselves. Such instructions shall be given on his first employment and repeated periodically;

(3) Simple and special instructions shall be framed to ensure that effective measures will be carried out in case of emergency involving escape of carbon disulphide and hydrogen sulphide. Those instructions shall be displayed in the concerned areas and the workers shall be instructed and trained in the actions to be taken in such emergencies.

Sl.no. 15.<u>Medical facilities and records of examinations and tests</u>: (1) The occupier of each factory to which this schedule applies, shall— (a) employ a qualified Medical Officer for medical surveillance of the workers employed therein whose employment shall be subject to the approval of the Chief Inspector cum facilitator of Factories; and (b) provide to the said medical officer all the necessary facilities for the purpose referred to in clause (a).

(2) The record of medical examinations and appropriate tests carried out by the said medical officer shall be maintained in a separate register approved by the Chief Inspector of Factories, which shall be kept readily available for inspection by the Inspectorcum facilitator.

Sl.no. 16.<u>medical examination by the Medical Officer</u>: (1) Every worker employed in any fume process shall be examined by a Medical Officer within 15 days of his first employment. Such examination shall include tests for estimation of exposure-co-efficient (iodine azide test on urine), as well as electro-cardiogram (ECG) and Central Nervous System (CNS) tests. No worker shall be allowed after 15 days of his first employment in the factory unless certified fit for such employment by the Medical Officer, The person so suspended from the process shall be provided with alternate placement facilities unless he is fully incapacitated in the opinion of the Medical Officer in which case the person affected shall be suitably rehabilitated;

(2) Every worker employed in any fume process shall be re-examined by a Medical Officer at least once in every twelve calendar months. Such examination shall, wherever the Medical Officer considers appropriate, include all the tests as specified in sub-Sl.no. (1).

(3) The Medical Officer after examining a worker, shall issue a certificate of fitness in Form 28. The record of re-examinations carried out shall be entered in the certificate and the certificate shall be kept in the custody of the Manager of the factory. The record of each examination carried out under sub- Sl.no. (1) and (2) including the nature and the results of the tests, shall also be entered by the Medical Officer in a health register in Form 29.

(4) The certificate of fitness and the health register shall be kept readily available for inspection by the Inspectorcum facilitator.

(5) If at any time the Medical Officer is of the opinion that a worker is no longer fit for employment in the said processes on the ground that continuance therein would involve special danger to the health of the worker, he shall make a record of his findings in the said certificate and the health register. The entry of his findings in those documents should also include the period for which he consders that the said person is unfit for work in the fume process.

(6) No person who has been found unfit to work as said in sub- Sl.no. (5) above shall be re-employed or permitted to work in the fume process unless the Medical Officer, after further examination again certifies him fit for employment in such process.

Sl.no. 17.<u>Exemptions</u>: If in respect of any factory, The Chief Inspectorcum facilitator is satisfied that owing to the exceptional circumstances or infrequency of the processes or for any other reason, all or any of the provisions of this schedule is not necessary for protection of the workers in the factory the Chief Inspectorcum facilitator may by a certificate in writing, which he may athis discretion revoke at any time, exempt such factory from all or any of such provisions subject to such conditions if any, as he may specify therein.

## SUB SCHEDULE XXVI HIGHLY FLAMMABLE LIQUIDS AND FLAMMABLE COMPRESSED GASES

Sl.no. 1.<u>Application</u>: These rules will be applicable to all factories where highly flammable liquids or flammable compressed gases are manufactured, stored, handled or used.

Sl.no. 2.<u>Definitins</u>: For the purpose of this schedule— (a) "highly flammable liquid" means any liquid including its solution, emulsion or suspension which when tested in a manner specified by section 14 and 15 of the Petroleum Act,1934, (30 Of 1934) gives off flammable vapours at a temperature less than 32°Centigrade; (b) "flammable compressed gas" means flammable compressed gas as defined in section 2 of the Static and Mobile Pressure Vessels (Unfired) Rules- 1981, framed under the Explosives Act,1884.

Sl.no. 3.<u>Storage</u>: (1) Every flammable liquid or flammable compressed gas used in every factory shall be stored in suitable fixed storage tank, or in suitable closed vessel located in a safe position under the ground in the open or in a stores room of adequate fire resistsnt construction;

(2)Except as necessary for use, operation or maintenance, every vessel or tank which contains or had contained a highly flammable liquid or flammable compressed gas shall be aways kept closed and all reasonably practicable steps shall be taken to contain or immediately drain off to suitable container

any spill or leak that may occur.

(3) Every container, vessel, tank, cylinder or store room used for storing highly flammable liquid or flammable compressed gas shall be clearly and in bold letters marked "DANGER! HIGHLY FLAMMABLE LIQUID"; OR "DANGER! FLAMMABLE COMPRESSED GAS".

Sl.no. 4.<u>Enclosed systems for conveying highly flammable liquids</u>: Wherever it is reasonably practicable, highly flammable liquids shall be conveyed within a factory in totally enclosed systems consisting of pipelines, pumps and similar appliances from

the storage tank or vessel to the point of use. Such enclosed systems shall be so designed, installed, operated and maintained as to avoid leakage or the risk of spilling. Sl.no. 5.<u>Preventing formation of flammable mixture with air</u>: Wherever there is a possibility for leakage or spill of highly flammable liquid or flammable compressed gas from an equipment, pipe line, valve, joint or other part of a system, all practicable measures shall be taken to contain, drain off or dilute such spills or leakage as to prevent formation of flammable mixture with air.

Sl.no. 6. Prevention of ignition: (1) In every room, work place or other location where highly flammable liquid or flammable combustible gas is stored, conveyed, handled or used or where there is danger of fire or explosion from accumulation of highly flammable liquid or flammable compressed gas in air, all practicable measures shall be taken to exclude the sources of ignition. Such precautions shall include the following:-(a) All electrical apparatus shall either be excluded from the area of risk or they shall be of such construction and so installed and maintained as to prevent the danger of their being a source of ignition; (b) effective measures shall be adopted for prevention of accumulation of static charges to a dangerous extent; (c) no person shall wear shoes with iron or steel nails or any other exposed ferrous materials which is likely to cause sparks by friction; (d) smoing, lighting or carrying of matches, lighters or smoking materials shall be prohibited; (e) transmission belts with iron fasteners shall not be used; and (f) all other precautions, as are reasonably practicable, shall be taken to prevent initiation of ignition from all other possible sources such as open flames, frictional sparks, overheated surfaces of machinery or plant, chemical or pysical-chemical reaction and radiant heat.

Sl.no. 7.<u>Prohibition of smoking</u>: No person shall smoke in any place where highly flammable liquid or flammable compressed gas is present in circumstances that smoking would give rise to a risk of fire. The occupier shall take all practicable measures to ensure compliance with this requirement including display of a bold notice indicating prohibitioin of smoking at every place where this requirement applies.

Sl.no. 8.<u>Fire-fighting</u>: In every factory where highly flammable liquid or flammable compressed gas is manufactured, stored, handled or used, appropriate and adequate means of fighting a fire shalll be provided. The adequacy and suitability of such means which expression includes the fixed and portable fire extinguishing systems, extinguishing material, procedures and the process of fire fighting shall be to the standards and levels prescribed by the Indian standards applicable, and in any case not inferior to the stipulations under in the Rules.

Sl.no. 9.<u>Exemptions</u>: If in respect of any factory, the chief Inspectorcum facilitator is satisfied that owing to the exceptional circumstances or infrequency of the processes or for any other reason, all or any of the provisions of this schedule is not necessary for protection of the workers in the factory, the Chief Inspector may by a certificate in writing, which he may at his discretion revoke at any time, exempt such factory from all or any of such provisions subject to such conditions, if any, as he may specify therein.

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#### SUB SCHEDULE XXVII OPERATIONS IN FOUNDRIES

Sl.no. 1.<u>Application</u>: Provisions of this schedule shall apply to all parts of factories where any of the following operations or processes are carried on:— (a) the production of iron castings or, as the case may be, steel castings by casting in moulds made of sand, loam, moulding composition or other mixture of materials, or by shell

moulding, or by centrifugal casting and any process incidental to such production; (b) the production of non-ferrous castings by casting metal in moulds made of sand, loam, metal, moulding composition or other makings or mixture of materials or by shell mouldings, die-casting (including pressure die-casting), centrifugal casting or continuous casting and any process incidental to such production; and (c) the melting and casting of non-ferrous metal for the production of ingots, billets, slabs or other similar products ;and the stripping thereof:

—but shall not apply with respect to: (a) any process with respect to the smelting and manufacture of lead and the Electric Accumulators; (b) any process for the purposes of a printing works; or (c) any smelting process in which metal is obtained by a reducing operation or any process incidental to such operation; or (d) the

production of steel in the form of ingots; or (e) any process in the course of the manufacture of solder or any process incidental to such manufacture; or (f) the

melting and casting of lead or any lead-based alloy for the production of ingots, billets, slabs or other similar products or the stripping thereof; or any process incidental to such melting, casting or stripping.

Sl.no. 2.<u>Definition</u>: For the purpose of this schedule:— (a) "approved respirator" means a resprator of a type approved by the Chief Inspectorcum facilitator;

(b) "cupola or furnace" includes a receiver associated therewith;

(c) "dressing or fettling operations" includes stripping and other removal of adherent sand, cores, runners, risers, flash and other surplus metal from a casting and the production of reasonably clean and smooth surface, but does not include (i) the removal of metal from a casting when performed incidentally in connection with the machining or assembling or casting after they have been dressed or fettled ;or (ii) any operation which is a knock-out operation within the meaning of this schedule;

(d) "foundry" means those parts of a factory in which the production of iron or steel or non-ferrous casting (not being the production of pig iron or the production of steel in the form of ingots) is carried on by casting in moulds made of sand, loam, moulding composition or other mixture of materials, or by shell moulding or by centrifugal casting in metal moulds lined with sand, or die casting including pressure die casting, togetherwith any part of the factory in which any of the following processes are carried on as incidental processes in connection with and in the course of such production, namely the preparation and mixing of materials used in foundry process, the preparation of moulds and cores, knock out operations and dressing or fettling operations;

(e) "knock out operations" means all methods of removing castings from moulds and the following operations, when done inconnection therewith, namely, stripping, coring-out and the removal of runners and risers;

(f) "pouring aisle" means an aisle leading from a main gangway or directly from a cupola or furnace to where metal is poured into moulds.

Sl.no. 3.<u>Prohibition of use of certain materials as parting materials</u>: (1) A material should not be used as a parting material if it is a material containing compounds of silicon calculated as silica to the extent more than 5% by weight of the dry material; —provided that this prohibition shall not prevent the following being used as a parting material if the material does not contain an admixture of any other silica:— (a) Zirconium silicate (Zircon); (b) Calcined china clay;(c) Calcined aluminous fireclay; (d) Silimanite; (e) Calcined or fused alumina; (f) Olivine; and (g) Natural sand.

(2) Dust or other matter deposited from a fettling or blasting process shall not be used as a parting material or as a constituent in a parting material.

Sl.no. 4.<u>Arrangement and storage</u>: For the purposes of promoting safety and cleanliness in workroom the following requirements shall be observed:— (a)

moulding boxes, loam plates, ladles, patterns, pattern plates, frames, boards, box weights and other heavy articles shall be so arranged and placed as to enable work to be carried on without unnecessary risk; (b) suitable and conveniently accessible racks, bins or other receptacles shall be provided and used for the storage of other gear and tools; (c) where there is bulk storage of sand, fuel, metal scrap or other materials or residues— suitable bins, bunkers or other receptacles shall be provided for the purpose of such storage.

Sl.no. 5.<u>Construction of floors</u>: (1) Floors of indoor workplaces in which the processes are carried on, other than parts which are of sand, shall have an even surface of hard material; (2) no part of the floor of any such indoor workplace shall be of sand except where this is necessary by reason of the work done; (3) All parts of the surface of the floor of any such indoor workplace which are of sand shall, so far is practicable, be mintained in an even and firm condition.

Sl.no. 6.<u>Cleanliness of indoor workplaces</u>: (1) All accessible parts of the walls of every indoor workplace in which the processes are carried on and of everything affixed to those walls shall be effectively cleaned by a suitable method to a height of not less than 4.2 metres from the floor at least once in every period of fourteen months. A record of the carrying out of every such effective cleaning in pursuance of this paragraph including the date (which shall be not less than five months nor more than nine months after the last immediately preceding washing, cleaning or other treatment);

(2) Effective cleaning by a suitable method shall be carried out at least once every working day of all accessible parts of the floor of every indoor workplace in which the processes are carried on , other than parts which are of sand; and the parts which are of sand shall be kept in good order.

Sl.no. 7.<u>Manual operations involving molten metal</u>: (1) There shall be provided and properly maintained for all persons employed on manual operations involving molten metal with which they are liable to be splashed, a working space for that operation:—(a) which is adequate for the safe performance of the work; and (b) which, so far as reasonably practicable, is kept free from obstruction. (2) Any operation involving the carrying by hand of a container holding molten metal shall be performed on a floor all parts of which where any person walks while engaged in the operation shall be on the same level;

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

Sl.no. 8.<u>Gangways and pouring aisles</u>: (1) In every workroom to which this paragraph applies constructed, reconstructed or converted for use as such after the making of this schedule and, so far as reasonably practicable, in every other workroom to which this paragraph applies, sufficient and clearly defined main gangways shall be provided and properly maintained which:— (a) shall have an even surface of hard material and shall, in particular, not be of sand or have on them more sand than is necessary to avoid risk of flying metal from accidental spillage;

(b) shall be kept, so far as reasonably practicable, free from obstruction;

(c) if not used for carrying molten metal, shall be at least 920mm in width;

(d) if used for carrying molten metal, shall be— (i) where truck ladles are used exclusively, at least 600 mm wider than the overall width of the ladle; (ii) where hand shanks are carried by not more than two men, at least 920 mm. in width; (iii) where land shanks are carried by more than two men, at least 1.2 metres in width; and

(iv) where used for simultaneous travel in both directions by men carrying hand shanks, at least 1.8 metres in width.

(2) In workroom to which this paragraph applies constructed, reconstructed or converted for use as such after the making of this schedule, sufficient and clearly defined pouring aisles shall be provided and properly maintained which— (a) shall have an even surface of hard material and shall, in particular, not be of sand or have on them more sand than is necessary to avoid risk of flying metal from accidental spillage; (b) shall be kept so far as reasonably practicable free from obstruction; (c) if molten metal is carried in hand ladles or bull ladles by not more than two men per ladle, shall be at least 460 mm wide, but where any moulds alongside the aisle are more than 510 mm above the floor of the aisle, the aisle shall be not less than 600 mm wide; (d) if molten metal is carried in hand ladles or bull ladles by more than two men per ladle, shall be at least 760 mm wide; (e) if molten metal carried in crane, trolley or truck ladles, shall be of a width adequate for the safe performance of the work;

(3) Requirements of sub- Sl.no. (1) and (2) shall not apply to any workroom or a part of a workroom if by reason of the nature of the work done therein, the floor of that workroom or, as the case may be, that part of a workroom has to be of sand.

(4) In this paragraph "workroom to which this paragraph applies" means a part of a ferrous or non-ferrous foundry in which molten metal is transported or used and a workroom to which this paragraph applies shall be deemed for the purposes of this paragraph to have been constructed, reconstructed or converted for use as such after the making of this schedule if the construction, reconstruction or conversion thereof was begun after the making of this schedule.

9.<u>Work near cupolas and furnaces</u>: No person shall carry out any work within a distance of 4 metres from a vertical line passing through the delivery end of any spout of cupola or furnace, being a spout used for delivering molten metal, or within a distance of 24 metres from a vertical line passing through the nearest part of any ladle which is in position at the end of such a spout, except in either case where it is necessary for the proper use or maintenance of cupola or furnace that work should be carried out within that distance of that work being carried out at such a time and under such conditions that there is no danger to the person carrying it out from molten metal which is being obtained from the cupola or furnace or is in a ladle in a position at the end of the spout.

Sl.no. 10.<u>Dust and fumes</u>: (1) Open coal, coke or wood fires shall not be used for heating or drying ladles inside a workroom unless adequate measures are taken to prevent, so far as practicable, fumes or other impurities from entering into or remaining in the atmosphere of the workroom

(2) No open coal, coke or wood fires shall be used for drying moulds except in circumstances in which the use of such fires is unavoidable.

(3) Mould stoves, core stoves and annealing furnaces shall be so designed, constructed, maintained and worked as to prevent, so far as practicable, offensive or injurious fumes from entering into any workroom during any period when a person is employed therein.

(4) All knockout operations shall be carried out— (a) In a separate part of the foundry suitably partitioned off, being a room or part in which so far as reasonably practicable,

effective and suitable local exhaust ventilation and a high stamdard of general ventilation are provided; or (b) in an area of the foundry in which, so far as reasonably practicable, effective and suitable local exhaust ventilation is provided; or where compliance with this requirement is not reasonably practicable, a high standard of general ventilation is provided.

(5)All dressing or fettling operations shall be carried out— (a) in a separate room or in a separate part of the foundry suitably partitioned off; or (b) in an area of the foundry set apart for the purpose; and shall, so far as reasonably practicable, be carried out with effective and suitable local exhaust ventilation or other equally effective means of suppressing dust, operating as near as possible to the point of origin of the dust.

Sl.no. 11.<u>Maintenance and examination of exhaust plant</u>: (1) All ventilation plant used for the purpose of extracting, suppressing or controlling dust or fumes shall be properly maintained; (2) All ventilating plant used for the purpose of extracting, suppressing or controlling dust or fumes shall be examined and inspected once every week by a responsible person. It shall be thoroughly examined and tested by a competent person at least once in every period of twelve months; and particulars of the results of every such examination and test shall be entered in an approved register which shall be available for inspection by an Inspector. Any defect found on any such examination and test shall be immediately reported in writing by the person carrying out the examination and test to the occupier or manager of the factory.

Sl.no. 12.<u>Protective equipment</u>: (1) The occupier shall provide and maintain suitable protective equipment specified for the protection of the workers; (a) suitable gloves or other protection for the hands for workers engaged in handling any hot material likely to cause damage to the hands by burn, scald or scar; or in handling pig iron, round castings or other articles likely to cause damage to the hands by cut or abrasion; (b) approved respirators for workers carrying out any operations creating a heavy dust concentration which cannot be dispelled quickly and effectively by the existing ventilation arrangements.

(2) No respirators provided for the purposes of clause 1(b) which has been worn by a person shall be worn by another person if it has not since been thoroughly cleaned and disinfected.

(3) Persons who for any of their time:— (a) work at a spout of or attend to, a cupola or furnace in such circumstances that material therefrom may come into contact with the body, being material at such a temperature that its contact with the body would cause a burn; or (b) are engaged in ,or in assisting with, the pouring of molten metal; or (c) carry by hand or move by manual power any ladle or mould containing molten metal; or (d) are engaged in knocking-out operations involving material at such a temperature that its contact with the body would cause a burn ; — shall be provided with suitable footwear and gaiters which worn by them prevent, so far as reasonably practicable, risk of burns to his feet and ankles.

(4) Where appropriate, suitable screens shall be provided for protection against flying materials (including splashes of molten metal and sparks and chips thrown off in the course of any process).

(5) The occupier shall provide and maintain suitable accommodation for the storage and make adequate arrangements for cleaning and maintaining of the protective equipment supplied in pursuance of this paragraph.

(6) Every person shall make full and proper use of the equipment provided for his protection in pursuance of sub- Sl.no. (1) and (4) and shall without delay report to the occupier, manager or other appropriate person any defect in, or less of, the same.

Sl.no. 13.<u>Washing and bathing facilities</u>: (1) There shall be provided and maintained in clean state and good repair for the use of all workers employed in the foundry:—

(a) a wash place under cover with either:— (i) a trough with impervious surface fitted with a waste pipe without plug and of sufficientlength to allow at least 60 centimetres for every 10 such persons employed at any one time and having a constant supply of clean water from taps or jets above the trough at intervals of not more than 60 cm; or (ii) at least one tap or stand pipe for every 10 such persons employed at any one time, and having a constant supply of clean water, the tap or stand pipe being spaced not less than 1.2 metres apart; and

(b) not less than one half of the total number of washing places provided under clause (a) shall be in the form of bath rooms.

(c) a sufficient supply of clean towels made of suitabl material changed daily, with sufficient supply of nail brushes and soap.

(2) The facilities provided for the purposes of sub- Sl.no. (1) shall be placed in charge of a responsible person or persons and maintained in a clean and orderly condition.

Sl.no. 14.<u>Disposal of dress and skimmings</u>: Dress and skimmings removed from molten metal or taken from a furnace shall be placed forthwith in suitable receptacles.

Sl.no. 15.<u>Disposal of waste</u>: Appropriate measures shall be taken for disposal of all waste products from shell moulding (including waste burnt) and as soon as reasonably practicable after the castings have been knocked out.

Sl.no. 16.<u>Material and equipment left out of doors</u>: All material and equipment left out of doors (including material and equipment so left only temporarily or occasionally) shall be so arranged and placed as to avoid unnecessary risk. There shall be safe means of access to all such material and equipment and so far as reasonably practicable, such access shall be by roadways or pathways which shall be properly maintained. Such roadways or pathways shall have a firm and even surface and shall, so far as reasonably practicable be kept free from obstruction.

Sl.no. 17.<u>Medical facilities and records of examinations and tests</u>: (1) The occupier of every factory to which the schedule applies, shall— (a) employ a qualified medical practitioner for medical surveillance of the workers employed therein whose employment shall be subject to the approval of the Chief Inspectorcum facilitator of Factories; and

(b) provide to the said medical practitioner all the necessary facilities for the purpose referred to in clause (a).

(2) The record of medical examinations and appropriate tests carried out by the said medical practitioner shall be maintained in a separate register approved by the Chief Inspectorcum facilitator of Factories, which shall be kept readily available for inspection by the Inspectorcum facilitator.

Sl.no. 18.<u>Medical examination by Medical Officer</u>: (1) Every worker employed in a foundry shall be examined by a Medical Officer within 15 days of his first employment. Such medical examination shall include pulmonary function tests and chest X-ray. No worker shall be alowed to work unless certified fit for such employment by the Medical Officer.

(2)Every worker employed in the said processes shall be re-examined by a Medical Officer at least once in every twelve months. Such examination shall, wherever the Medical Officer considers appropriate, include all the tests as specified in sub- Sl.no. (1) except chest X-ray which will be once in three years.

(3) The Medical Officer after examining a worker, shall issue a certificate of fitness in **Form 48**. The record of examination and re-examinations carried out shall be entered in the certificate and the certificate shall be kept in the custody of the manager of the

factory. The record of each examination carried out under sub- Sl.no. (1) and (2) including the nature and the results of the tests, shall also be entered by the Medical Officer in a health register in **Form 47**.

(4) The certificate of fitness and the health register shall be kept readily available for inspection by the Inspector.

(5) If at any time the Medical Officer is of the opinion that a worker is no longer fit for employment in the said processes on the ground that continuance therein would involve special danger to the health of the worker, he shall make a record of his findings in the said certificate and the health register. The entry of his findings in those documents should also include the period for which he considers that the said person is unfit for work in the said processes. The person so suspended from the process shall be provided with alternate placement facilities unless he is fully incapacitated in the opinion of the Medical Officer, in which case the person affected shall be suitably rehabilitated.

(6) No person who has been found unfit to work as said in sub- Sl.no. (5) above shall be re-employed or permitted to work in the said processes unless the Medical Officer, after further examination, again certifies him fit for employment in those processes.

Sl.no. 19.<u>Exemption</u>: If in respect of any factory, the Chief Inspectorcum facilitator is satisfied that owing to the exceptional circumstances or infrequency of the processes or for any other reason, all or any of the provisions of this schedule is not necessary for protection of the workers in the factory, the Chief Inspector may by a certificate in writing, which he may at his discretion revoke at any time, exempt such factory from all or any of such provisions subject to such conditions, if any, as he may specify therein.

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## SUB SCHEDULE – XXVIII USE OF OVENS AND DRIERS IN FACTORIES

Sl.no. **1. Application-** this schedule shall apply to ovens and driers, except thoseused in laboratories and kitchens of any establishment and those which have acapacity below 325 litres.

Sl.no. 2. Definitions- for the purpose of this schedule, oven or drier means anyenclosed structure, receptacle, compartment or box which is used for baking,drying or otherwise processing of any article or substance at a temperature higher than that ambient temperature of air in the room of space in which theoven or drier is situated, and in which the flammable or explosive mixture of airand flammable substance is likely to be evolved with the enclosed structure, receptacle, compartment or box or part thereof on account of article or substancewhich is baked or dried or otherwise processed within it.

Sl.no. **3. Separate electric connection-** Electric power supplied to every oven ordrier shall be by means of separate circuit provided with an isolated switch.

Sl.no. **4. Design, construction, examination and testing-** (1) every oven or driershall be properly designed on sound engineering practice and be of goodconstruction, sound materials and adequate strength free from any patent defectand safe, if properly used.

(2) no oven or drier shall be taken into use in factory for the first time unless acompetent person has thoroughly examined all its parts carried out the tests asare required to establish that the necessary safe systems and control provided for safety in operation for the processes for which it is to be used and acertificate of such examination and tests signed by that competent person hasbeen obtained and are kept available for inspection.

(3) all parts of an oven or drier has undergone any alteration or repair which has the effect of modifying any of the design characteristics, shall not be used unless a thorough examination and tests as have been mentioned in clause (b) have been carried by the competent person and a certificate of suchexamination and tests signed by that competent person has been obtained andare kept available for inspection.

Sl.no. 5. Safety, Ventilation- (1) every oven or drier shall be provided with a positive and effective safety ventilation system using one or more motor drivencentrifugal fans so as to dilute any mixture of air and flammable substance that may be formed within the oven or drier and maintain the concentration of theflammable substance in the air at safe level of dilution.

(2) The safe level of dilution referred to in clause (a) shall be so as to achieve concentration of concerned flammable material in air of not more than 25 % of its lower explosive limit;

Provided that level of concentration in the air up to 50% of the lowerexplosive limit of the concerned flammable substance may be permitted to exist subject to installation and maintenance of an automatic device which:-

(a) Shows continuously the concentration of the flammable substance in airpresent in the oven or drier at any instant;

(b) Sounds an alarm when the concentration of the flammable substance in airpresentin any part of oven or drier reaches a level of 50% of explosive limit

(c) Shuts down the heating system of the oven or drier automatically when the concentration of the flammable substance in air present in any part of oven ordrierreaches a level of 60% of lower explosive limit, is provided to the oven ordrier and maintained in the efficient working condition.

(d) No oven or drier shall be operated without its safety ventilation systemworking inefficient manner.

(e) no oven or drier shall be operated with a level of dilution less than what isreferred in clause (b)

(f) exhaust ducts of safety ventilation system should be so designed and placed that their ducts discharge the mixture of air and flammable substance away from the workroom and not near windows or doors or other openings from where the mixture could re-enter the work room.

(g) The fresh air admitted into the oven or drier by means of safety ventilationsystem shall be circulated adequately by means of circulating fans or fansthrough all parts of the oven or drier so as to ensure that their are no location where the flammable substance can accumulate in the air become pocketed toany dangerous degree.

(h) Throttling dampers in any safety ventilation system should be so designed by cutting away the portion of damper or otherwise that system will handle atleast the minimum ventilation rate required for safety when they are set intheir maximum throttling position.

Sl.no. **6. Explosion panels** – (1) every oven or drier having an internal total spaceof not less than half cubic meter shall be provided with suitably design explosionpanel so as to allow the release of the pressure of any possible explosionwithin the oven or drier through explosions vents. The area of opening of anyaccess doors which are provided with suitable arrangements for their release in case of an explosion shall not be less than2200 sq cm for every 1 cu m of thevolume of the oven or drier. The design of the explosion panel and doors asstated above shall be such as to secure their complete release under an internal pressure of 0.25 kg/sq cm.

(2) The explosion releasing panel shall, as far as practicable, be situated on theroof of the oven or drier or at those portions of the walls where persons don'tremain in connection with operation of oven or drier.

Sl.no. **7. Inter locking arrangement** – In each oven or drier efficient inter lockingarrangement shall be provided and maintain to insure that(a) All ventilating fans and circulating fans whose failure would adverselyeffect the ventilation rate of flow pattern, are in operation before any mechanical conveyor that may be provided for feeding the article or substances to be processed in the oven or drier, input into operation

(b) Failure of any the ventilating or circulating fans will automatically stop anyconveyor as referred to in clause (a) as may be provided as well as so thefume supply by closing the shut of valve and shut off the ignition in the case ofgas or oil fired ovens and in case of electrically heated oven switch off theelectrical supply to the heater

(c) The afore said mechanical conveyor is set in operation before the said shutoff valve can be energies

(d) The failure of the aforesaid conveyor will automatically closed the saidshut off valve in the case of oven and drier heated by gas, oil or steam anddeactivate the ignition system or cut off the electrical heater in the case of electrically heated ovens are furnaces

Sl.no. **8.** Automatic ventilation; - Every oven or drier heated by oil, gas, steam orelectricity shall be provided with an efficient arrangement for automatic ventilation consisting of at least three volume changes with fresh air by operation fast safety ventilation fans and circulating fans so as to effect purging of the oven or drier of any mixture of air and flammable substance before the heatingsystem can be activated and before the conveyor can be placed in position.

Sl.no. 9. Temperature control – Every oven or drier shall be provided with anautomatic arrangement to ensure that the temperature which does not exceeda maximum temperature required in respect of the particular process is beingcarried out Sl.no. 10. Multi stage processes – Whatever material are to be processed inovens or driers in successive operation suitable arrangements should be provided to ensure that the operating temperature necessary for safe operation at eachstage are maintain

within the design limit Sl.no. **11. Combustible substances not to drip on electrical heater or burnerflame** –

Effecting arrangement shall be provided in every oven or drier to preventdripping of combustible substances on electrical heater or burner flame usedfor heating.

Sl.no. **12. Periodical examination, testing and maintenance** – (a) All parts of every oven or drier shall be properly maintain and thoroughly examined and the various control as mentioned in the schedule and the working of the ovenor drier shall be tested at frequent interval to ensure its safe operation by aresponsible person authorized by the occupier or manager in this behalf whoby his experience and knowledge of necessary precaution against risk of explosion, is fit to undertake such work

(b) A register shall be maintained in which the details of various tests carriedout from time to time under clause (a) shall be entered and every entry shall be signed by the person making the test.

Sl.no. **13.** - **Training of operator** – No person shall be assigned any task connected with operation of any oven or drier unless he has completed 18 yrs of age and isproperly trained

Sl.no. 14. Polymerizing machine - (a) Printed fabric shall be thoroughly dried bypassing them over drying canes or through hot flue or other equally effecting means before the same is allowed to pass through polymerizing machines

(b) Infra ray heater of polymerizing machines shall be cut off while running thePrint.

#### 89. Constitution of site appraisal committee in respect of factory under Section

**<u>83 Code.-</u>**The Government shall constitute a technical committee to be called 'Site Appraisal Committee' to assist the State Government or State Advisory Board relating to consider and to give recommendations on an application for grant of permission for the initial location of a factory involving a hazardous process or for the expansion of such factory;

(1) Constitution: The following provisions shall govern the functioning of the Site Appraisal Committee, hereinafter referred to as the 'Committee' in these rules:—

(a) The State Government may constitute a Site Appraisal Committee and reconstitute the committee as and when necessary;

(b) The State Government shall nominate Chief Inspector-cum-facilitator as Chairman of the Committee and nominate a Senior Technical Officer of the Inspectorate, to be the Member Secretary of the committee:

(c)The State Government may appoint the following as members of the committee:—(i) A representative of the Fire & Emergency Service Department;

(ii) A representative of the Department of Commerce &Industries;

(iii) A representative of the Regional Labour Institute Shillong, Director General of Factory Advice Service and Labour Institutes (DGFASLI) not below than Assistant Director (Safety) or Assistant Director (Industrial Hygiene).

(iv) A technical representative of Meghalaya State Pollution Control Board not below the rank of the Assistant Director/ Engineer.

(2) No member, unless it is required to do so by a Court of Law, shall disclose otherwise than in connection with the purpose of the Code, at any time any information relating to manufacturing or commerial business or any working process which may come to his knowledge during his tenure as a member of the committee.

(a) Online application for appraisal of sites in respect of the factories covered under Section 2(za) of the Code, First Schedule, shall be submitted to the Chairman of the Site Appraisal Committee;

(b)The online application for site appraisal shall be submitted in the Form annexed to this rule. The committee may dispense with furnishing information on any particular item in the application form if it considers the same to be not relevant to the application under consideration.

(4) Functions of the committee -

(a) The Secretary shall arrange to register the application received for appraisal of site in a separate register and acknowledge the same within a period of 7 days by electronically; (b)The Secretary shall fix up meeting in such a manner that all the applications received and registered are referred to the committee within a period of one month from the date of their receipt;

(c)The committee may adopt a procedure for its working keeping in view the need for expeditious disposal of applications;

(d) The committee shall examine the application for appraisal of a site with reference to the prohibitions and restrictions on the locations of industry and carrying on of processes and operations in different areas as per the provisions of Rule 5 of the Environment (Protection) Rules, 1986 framed under the Environment Protection Act, 1986;

(e)The committee may call for documents, examine experts, inspect the site if necessary and take other steps for formulating its views in regard to the suitability of the site;

(f)Wherever the proposed site requires clearance by the Ministry of Environment and Forests, the application for site appraisal will be considered by the Site Appraisal Committee only after such clearance has been received.

# FORMAT OF APPLICATION OF THE SITE APPRAISAL COMMITTEE

1. Name and address of the applicant:

## 2. Site ownership data:

2.1: Revenue details of site such as Survey No., Plot No., etc.

2.2:Whether the site is classified as forest and if so, whether approval of the Central Government under Section 5 of the Indian Forests Act,1927 has been taken.

2.3:Whether the proposed site attracts the provisions of Section 3(2)(v) of the

E.P.Act,1986; if so ,the nature of the restrictions:

2.4:Local authority under whose jurisdiction the site is located.

## 3.Site plan:

3.1:Site plan with clear identification of boundaries and total area proposed to be occupied and showing the following details nearby the proposed site:—

(a)Historical monument, if any, in the vicinity; (b)Names of paighbouring monufacturing units and huma

(b)Names of neighbouring manufacturing units and human habitats, educational and training institutions, petrol installations, storages of LPG and other hazardous substances in the vicinity and their distances from the proposed unit;

(c) Water sources (rivers, streams, canals, dams, water filtration plants etc.)in the vicinity;

(d)Nearest hospitals, fire stations, civil defence stations and police stations and their distances;

(e) High tension electrical transmission lines, pipe lines for water, oil, gas or sewerage; railway lines, roads, stations; jetties and other similar installations.

3.2:Details of soil conditions and depth at which hard strata obtained:

3.3:Contour map of the area showing nearby hillocks and difference in levels:

3.4:Plot plan of the factory showing the entry and exit points, roads within; water drains etc.

## 4.Project report:

4.1:A summary of the salient features of the project:

4.2: Status of the organisation (Government, semi-Government, Public or Private etc.):

4.3:Maximum number of persons likely to be working in the factory:

4.4:Maximum amount of power and water requirements and source of their supply:

4.5:Block diagram of the buildings and installations in the proposed supply:

4.6:Details of housing colony, hospital, school and other infrastructural facilities proposed:

## 5. Organisation structure of the proposed manufacturing unit/factory:

5.1:Organisation diagram of:

---(i)proposed enterprise in general;

—(ii)Health, safety and environment protection departments and their linkage to operation and technical departments:

5.2: Proposed Health and Safety Policy:

5.3: Area allocated for treatment of wastes and effluent:

5.4:Percentage outlay on safety, health and environment protection measures:

## 6.Metrological data relating to the site:

6.1: Average, minimum and maximum of

(i)Temperature:

(ii) Humidity:

(iii) Windvelocities; during the previous ten years:

6.2: Seasonal variations of wind direction:

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

6.4:Lightning and seismic data of the area:

## 7. Communication links:

7.1: Availability of telephone/telex/wireless and other communication facilities for outside communication:

7.2:Internal communication facilities proposed:

## 8. Manufacturing process information:

8.1:Process flow diagram:

8.2:Brief write up on process and technology:

8.3:Critical process parameters such as pressure build up, temperature rise and runaway reactions:

8.4:Other external effects critical to the process having safety implications such as ingress of moisture or water, contact with incompatable substance, sudden power failure:

8.5:Highlight of the built-in safety/pollution control devices or measures incorporated in the manufacturing technology:

9. Information of hazardous materials:

9.1:Raw materials, intermediates, products and by-products and their quantities (Enclose Material Safety Data Sheet in respect of each hazardous substance):9.2:Main and intermediate storages proposed for raw materials/intermediates/

products/ by-products (maximum quantities to be stored at any time) :

9.3:Transportation methods to be used for materials inflow and outflow, their quantities and likely routes to be followed:

9.4:Safety measures proposed for: —(i) handling for materials;

—(ii) internal and external transportation; and

--(iii) disposal ( packing and forwarding of finished products):

# 10. Information and dispersal/ Disposal of wastes and pollutants:

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

10.2:Quality and quantity of solid wastes generated, method of their treatment and disposal:

10.3:Air, water and soil pollution problems anticipated and the proposed measures to control the same, including treatment and disposal of effluents:

## 11. Process hazard information:

11.1:Enclose a copy of the report on environmental impact assessment:

11.2:Enclose a copy of the report on Risk Assessment Study:

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

12. Information of proposed safety and occupational health measures:

12.1: Details of fire fighting facilities and minimum quantities of water, CO2 and/ or other fire fighting measures needed to meet the emergencies:

12.2:Details of in-house medical facilities proposed:

# 13.Information on Emergency Preparedness:

13.1:Onsite emergency plan:

13.2:Proposed arrangements, if any, for mutual aid scheme with the group of

neighbouring factories

# 14. Any other information:

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

Name and signature of the Applicant.

**90.** Disclosing of information by occupier of a factory under sub-section (1) of Section 84 of Code.-(1) The occupier of every factory carrying on a hazardous process shall supply to all employees, the following information in relation to handling of hazardous materials or substances in the manufacture, transportation, storage and other process :-

(a) requirements of Sections 84, 85 and 89 of the Code;

(b) a list of hazardous process carried on in the factory;

(c) location and availability of all material safety data sheets as per Rule 100;

(d) Physical and health hazards arising from the exposure to or handling or, substances;

(e) measures taken by the occupier to ensure safety and control of physical and health hazards;

(f) measures to be taken by the employees to ensure safe handling, storage and transportation of hazardous substances ;

(g) personal protective equipment required to be used by employees employed in hazardous process of dangerous operations ;

(h) meaning of various labels and markings used on the containers of hazardous substances as provided under Rule 106;

(i) signs and symptoms likely to manifest on exposure to hazardous substances and to whom to report ;

(j) measures to be taken by the employees in case of any spillage or leakage of a hazardous substance ;

(k) role of employees vis-a-vis the emergency plan of the factory, in particular the evacuation procedures;

(l) any other information considered necessary, by the occupier to ensure safety and health of employees.

(2) The information required by sub-rule (1) shall be compiled and made known to employees individually through supply of booklets or leaflets and display of cautionary notices at the workplaces.

(3) The booklets, leaflets and the cautionary notices displayed in the factory shall be in the language understood by the majority of the employees and shall also be explained to them.

(4) The Chief Inspector-cum-Facilitator may direct the occupier to supply further information to the employees as deemed necessary.

## 91. <u>Interval of information by occupier of a factory under sub-section (2) under</u> <u>Section 84 of Code</u>.-

(1) The occupier of every factory carrying on a hazardous process shall furnish, in writing, to the Chief Inspector-cum-facilitator a copy of all the information furnished to the employees.

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

(3) The occupier shall also furnish any other information asked for by the Chief Inspector-cum-facilitator from time to time for the purpose of the Code and the Rules made thereunder.

## 92. Health and Safety Policy-

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

(a) covered under Section 2(w) (i) but employing less than 40 workers;

(b) covered under Section 2(w) (ii) but employing less than 80 workers; are exempted from requirements of sub-rule(1):

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

(3) Notwithstanding anything contained in sub-rule (2) the Chief Inspector- cumfacilitator may required the occupiers of any of the factories or class or description of factories to comply with the requirements of sub-rule (1) if, in his opinion, it is expedient to do so.

(4) The Health and Safety Policy should contain or deal with: (a) declared intention and commitment of the top management to health, safety and environment and compliance with all the relevant statutory requirements; (b) organisational set-up to carry out the declared policy clearly assigning the responsibility at different levels; and (c) arrangements for making the policy effective.

(5) In particular, the Policy should specify the following:

(a) arrangements for involving the workers;

(b) intention of taking into account the health and safety performance of individuals at different levels while considering their career advancement;

(c) fixing the responsibility of the contractors, sub-contractors, transporters and other agencies entering the premises;

(d) providing a resume of health and safety performance of the factory in its Annual Report;

(e) relevant techniques and methods, such as safety audits and risk assessment for periodical assessment of the status on health, safety and environment and taking all the remedial measures;

(f) stating its intentions to integrate health and safety, in all decisions including those dealing with purchase of plant, equipment, machinery and material as well as selection and placement of personnel;

(g) arrangements for informing, educating and training and retraining its own employees at different levels and the public, wherever required.

(6) A copy of the declared Health and Safety Policy signed by the occupier shall be made available to the Inspector-cum-facilitator having jurisdiction over the factory and to the Chief Inspector-cum-facilitator;

(7) The Policy shall be made widely known by –(a) making copies available to all workers including contract workers, apprentices, transport workers suppliers, etc. (b) displaying copies of the policy at conspicuous places; and (c) any other means of communication; in a language understood by majority of workers.

(8) The occupier shall revise the Safety Policy as often as may be appropriate, but it shall necessarily be revised under the following circumstances: -

(a) whenever any expansion or modification having implications on safety and health of persons at work is made; or

(b) whenever new substance(s) or articles are introduced in the manufacturing process having implications on health and safety of persons exposed to such substances.

**93.** Intimation to Chief Inspector-cum-Facilitator by the occupierof the factory proposed to be engaged in hazardous process.-Information under sub-section (5) of Section 84 shall be in Form 49 and shall be communicated to Chief Inspector-cum-Facilitator electronically or otherwise.

## 94. <u>Manner of Compulsory disclosure of information by occupier under sub-</u> section (5) and (7) of Section 84 of Code.-

## (1) Disclosure of information to workers:-

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

a) Requirements of Sections 84, 85 and 89 of the Code;

b) A list of 'hazardous processes' carried on in the factory;

c) Location and availability of all Material Safety Data Sheets as per annexed ;

d) Physical and health hazards arising from the exposure to or handling of substances;

e) Measures taken by the occupier to ensure safety and control of physical and health hazards;

f) Measures taken by the workers to ensure safe handling, storage and transportation of hazardous substances;

g) Personal Protective Equipment required to be used by workers employed in 'hazardous process' or 'dangerous operations';

h) Meaning of various labels and markings used on the containers of hazardous substances as provided under annexed ;

i) Signs and symptoms likely to be manifested on exposure to hazardous substances and to whom to report;

j) Measures to be taken by the workers in case of any spillage or leakage of a hazardous substance;

k) Role of workers vis-à-vis the emergency plan of the factory, in particular the evacuation procedures;

1) Any other information considered necessary by the occupier to ensure safety and health of workers.

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

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

## (2) Disclosure of information to General Public :-

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

(a) Name of the factory and address where situated;

(b) Identification, by name and position, of the person giving the information;

(c) Confirmation that the factory has approval from the Factories Inspectorate-Office of Chief Inspector of Boilers & Factories and Pollution Control Board;

(d) An explanation in simple terms of the hazardous process(es) carried on in the premises;

(e) The common names of the hazardous substances used which could give rise to an accident likely to affect them, with an indication of their principal harmful characteristics;

(f) Brief description of the measures to be taken to minimize the risk of such an accident in compliance with its legal obligations under relevant safety statutes;

(g) Salient features of the approved disaster control measures adopted in the factory;

(h) Details of the factory's emergency warning system for the General Public;

(i) General advice on the action members of the public should take on hearing the warning;

(j) Brief description of arrangements in the factory, including liaison with the emergency services, to deal with foreseeable accidents of such nature and to minimize their effects; and

(k) Details of where further information can be obtained.

(3) Disclosure of information to the Local Authority

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

## (4) Disclosure of information to the Chief Inspector-cum-Facilitator

(i) The occupier of a factory carrying on a hazardous process, shall intimate to the Chief Inspector -cum- Facilitator all information having a bearing on preparation of an on-site emergency plan and a disaster control and management plan in respect of the factory.

(a) a report on status relating to risk assessment and environmental impact assessment and the measures taken for prevention of accidents,

Rules made thereunder.

(5) Onsite Emergency Plan- (1) The occupier of a factory carrying on a hazardous process shall prepare a draft on-site emergency plan and submit it to the Chief Inspector-*cum*-Facilitator. The Chief Inspector-*cum*-Facilitator may make such modification in the plan as necessary, in consultation with the occupier and approve the same.

The information furnished shall include the quantity of the solid and liquid wastes generated per day their characteristic and the methods of treatment such as incineration of solid wastes, chemical and biological treatment of liquid wastes, and arrangements for their final disposal. It shall also include information on the quality and quantity of gaseous waste discharge through the stacks or other openings and arrangements such as provisions of scrubbers, cyclone separators, electrostatic precipitators of similar such arrangements made for controlling pollution of the environment.

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

#### (6) Confidentiality of Information

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

a. His workers;

b. District Emergency Authority;

c. Local Inspector-cum-Facilitator; and

d. Chief Inspector-cum-Facilitator

as required under sub rules (3), (6) and (7) of Rule 91. If the occupier is of the opinion that the disclosure of details regarding the process and formulations will adversely

affect his business interests, he may make a representation to the Chief Inspectorcum-Facilitator stating the reasons for withholding such information. The Chief Inspector-cum-Facilitator shall give an opportunity to the occupier of being heard and pass an order on the representation.

(ii) An occupier aggrieved by an order of Chief Inspector cum facilitator may prefer an appeal before the State Government within a period of 30 days. The State Government shall give an opportunity to the occupier of being heard and pass an order. The order of the Government shall be final.

# **SCHEDULE** Material Safety Data Sheet SAMPLE MODEL

SECTION I – MATERIAL IDENTIFICATION AND USE

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

### SECTION II – HAZARDOUS INGREDIENTS OF MATERIAL

БЕСПОНИ	пшппросонко			
Hazardous	Approximate	C.A.S. or UN	LD 50 (Specify	LC 50 (Specify
Ingredients	Concentration %	Numbers	Species and	Species and Route)
_			Route)	

### SECTION III – PHYSICAL DATA FOR MATERIAL

Physical	Odour and	Odour Threshold	Specific Gravity
State	Apperance	(p.p.m)	
Gas			
Liquid			
Solid			
Vapour	Vapour density	Evaporation Rate	Boiling point Freezing
Pressure	(Air=1)		(oC) (oC)
Solubility in	pН	Density (g/ml)	Coefficient of water / oil
water (200C)	_		Distribution

### SECTION IV - FIRE AND EXPLOSION HAZARD OF MATERIAL

Flammability

Yes / No. If yes, under what conditions Moone of Entinetion

Means of Extinction		
Special Procedures		
Flash Point (°C) and Method	Upper Explosion Limit (%	Lower Explosion Limit (%
	by Volume)	by Volume)
Anti-ignition	TDG Flammability	Hazardous Combustion
Temperature (oC)	Classification	Products
Explosion Data-Sensitivity	Sensitivity to Static Discharge	

Explosion Data-Sensitivity | Sensitivity to Static Discharge

Chemical Impact
SECTION V - REACTIVITY DATA
Chemical Stability
Yes No. If no, under what conditions
Incompatibility to other substances
Yes No. If yes, which ones
Reactivity and under what conditions
Hazardous Decomposition Products
Material
Name / Identifier
SECTION VI – TOXICOLOGICAL PROPERTIES OF MATERIAL
Route of Entry
Eye Contact Skin AbsorptionEye Contact
Inhalation AcuteInhalation ChronicIngestion
Effects of Acute Exposure to Material
Effects of Chronic Exposure to Material
Exposure Irritancy of
Limit(s) Material
Sensitization to Carcinogenicity, Reproductive
Material Effects, Teratogenicity,
Mutagenicity
Synergistic Materials
SECTION VII – PREVENTIVE MEASURES
Personal Protective Equipment
Gloves (specify) Respiratory (specify) Eyes (specify)
Footwear (specify) Clothing (specify) Other (specify)
Engineering Controls (e.g. ventilation, enclosed process, etc.)
Please specify
Leak and Spill Procedures
Waste Disposal
Handling Procedures and Equipment
Storage Requirements
Special Shipping Information
SECTION VIII – FIRST AID MEASURE
First Aid Measure
Sources used
Additional information
SECTION IX – PREPARATION DATE OF M.S.D.S.
Prepared by (Group, Department, etc.) (Phone No.) Date

#### NOTES:

1. CAS or UN Number – Chemical Abstract Service or United Nations (UN) Number.

2. LD 50 – Lethal Dose – 50% (LD50 – Specify species and route).

3. LC 50 – Lethal Concentration – 50% (LC50 – Specify species and route).

4. TDG Flammability – Transport of Dangerous Goods Flammability Classification by United Nations.

95. Measure and disposal laid down under sub-section (7) of Section 84-

Information under sub-section (7) of Section 84 shall be publicized by displaying the same on Notice Board at the gate or gates of the factory and such information shall also be given to District Magistrate and Chief Inspector cum- Facilitator.

96. The conditions for accessibility of the record by the workers under clause (a)

of Section 85.- (1) The occupier of every factory carrying out a 'hazardous process' shall make accessible the health records including the record of worker's exposure to hazardous process or, as the case may be, the medical records of any worker for his perusal under the following conditions:-

i. Once in every six months or immediately after the medical examination, whichever is earlier;

ii. If the Factory Medical Officer is of the opinion that the worker has manifested signs and symptoms of any notifiable disease as specified in the Third Schedule of the Code.

iii. If the worker leaves the employment;

iv. If any one of the following authorities so direct

(a) the Chief Inspector cum facilitator;

(b) the Health Authority of the State Government;

(c) the Commissioner of Employees Compensation;

(d) the Director, Employees State Insurance Corporation (Medical Benefits); and

(e) the Director General, Factory Advice Service and Labour Institutes.

(2) A copy of the up to date health records including the record of worker's exposure to hazardous process or, as the case may, the medical records shall be supplied to the worker on receipt of an application from him.

X-ray plates and other medical diagnostic reports may also be made available for reference to his medical practitioner.

# 97. <u>Qualification and experience of persons handling hazardous substance and</u> manner of providing necessary facilities for protecting the workers under clause (b) of Section 85.-

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

(a) a degree in Chemistry or Diploma in Chemical Engineering or Technology with five years experience; or

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

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

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

Issuance of guidelines- For the purposes of compliance with the requirements of Section 84 or of Section 85, the Chief Inspector-cum-facilitator may, if deemed necessary, issue guidelines from time to time to the occupiers of factories carrying on 'hazardous process'.

Such guidelines may be based on national standards, Code of practice or recommendations of international bodies such as International Labour Organization and World Health Organisation.

## 98. <u>The manner of providing for medical examination of a worker under sub-</u> clause (ii) of clause (c) of Section 85. -

**Medical Examination** (1) Employees employed in a 'hazardous process' shall be medically examined by a qualified medical practitioner, hereinafter referred to a Factory Medical Officer, in the following manner :-

(a) once before employment, to ascertain physical fitness of the person to do a particular job;

(b) once in a period of 12 months, to ascertain the health status of all the workers in respect of occupational health hazards to which they are exposed, and at a shorter interval in respect of a worker in whose case the Factory Medical Officer is of the opinion that it is necessary to do so;

(c) the details of pre-employment and periodical medical examinations carried out as aforesaid shall be recorded in the Health Register in **Form 47**.

(2) No person shall be employed for the first time without a certificate of fitness in **Form 48** granted by the Factory Medical Officer. If the Factory Medical Officer declares a person unfit for employment in a process covered under sub-rule (1), he shall have the right to appeal to the Inspector-cum-Facilitator of the area who after consultation with a Medical Officer shall decide the appeal which shall be final in this regard.

Explanation : For the purpose of the rule, any Government Medical Officer may be nominated by the Chief Inspector cum facilitator, Meghalaya as Medical Officer.

(3) Any finding of the Factory Medical Officer revealing any abnormality or unsuitability of any person employed in the process shall, in turn, examine the concerned worker and communicate his findings to the occupier within 30 days. If the Medical Officer is of the opinion that the worker so examined is required to be taken away from the process for health protection, he will direct the occupier accordingly, who shall not employ the said worker in the same process. However, the worker so taken away shall be provided with alternative placement unless he, in the opinion of the Medical Officer is fully incapacitated in which case the worker affected shall be suitably rehabilitated.

(4) A Medical Officer on his own motion or on a reference from an Inspector may conduct a medical examination of a worker to ascertain the suitability of his employment in a hazardous process or to ascertain his health status. The opinion of the Medical Officer in such a case shall be final. The requisite fee for this medical examination shall be paid by the occupier.

(5) The worker taken away from employment in any process under sub-rule (2) may be employed again in the same process only after obtaining the Fitness Certificate from the Medical Officer and after making entries to that effect in the Health Register.(6) The worker required to undergo medical examination under these rules and for any medical survey conducted by or on behalf of the Central or the State Government shall not refuse to undergo such medical examination.

## 99. The measures or standards under sub-section (1) of Section 86.-

(I) Occupational Health Centers- (1) In respect of any factory carrying on 'hazardous process' there shall be provided and maintained in good order, an

Occupational Health Center with the services and facilities as per scale laid down hereunder :

(a) For factories employing up to 50 employees :-

(i) the services of a Factory Medical Officer on retainer-ship basis in his clinic which shall be notified by the occupier who shall carry out pre employment and periodical medical examinations as stipulated in Rule 104 and render medical assistance during an emergency;

(ii) a minimum of 5 persons trained in first aid procedures of whom at least one shall always be available during the working period; and

(iii) a fully equipped first aid box in all the departments.

(b) For factories employing 51 to 200 employees :-

(i) an Occupational Health Center having a room with a minimum floor area of 15 square metre with floors and walls made of smooth and impervious surface and with adequate illumination and ventilation as well as equipment as per the sub rule (5), (6) annexed to these Rules ;

(ii) a part time Factory Medical Officer shall be in overall charge of the Center who shall visit the factory at least twice in a week and whose services shall be readily available during medical emergencies;

(iii) one qualified and trained dresser-cum compounder on duty throughout the working period; and

(iv) a fully equipped first aid box in all departments.

(c) For factories employing above 200 employees :-

(i) one full-time Factory Medical Officer for factories employing up to 500 employees and one more Medical Officer for every additional 1000 employees or part thereof ;

(ii) an occupational Health Center having at least two rooms each with a minimum floor area of 15 square metre with floors and walls made of smooth and impervious surface and adequate illumination and ventilation as well as equipment as per the Schedule annexed to this Rule ;

(iii) one nurse, one dresser-cum-compounder and one sweeper-cum-ward boy throughout the working period ; and

(iv) the Occupational Health Center shall be suitably equipped to manage medical emergencies.

(2) The Factory Medical Officer required to be appointed under sub-rule (1) shall have qualifications as defined in the National Medical Commission Act, 2019 (30 of 2019) and who is enrolled on a Indian Medical Register as defined in the National Medical Commission Act, 2019 and on a State Medical Register as defined in Section 35, Section 36, Section 37 and Section 40 of the said Act and possess a Certificate of Training in Industrial Health of a minimum of three months duration recognised by the State or Central Government:

Provided that a person possessing a Diploma in Industrial Health or its equivalent shall not be required to possess the certificate of training as aforesaid :

Provided further that the Chief Inspector cum facilitator may, subject to such conditions as he may specify, grant exemption from the requirement of this sub-rule, if in his opinion a suitable person possessing the necessary qualification is not available for appointment:

Provided also that in case of a person who has been working as a Factory Medical Officer for a period of not less than three years on the date of commencement of this rule, the Chief Inspector -cum -facilitator may, subject to the condition that the said person shall obtain the aforesaid certificate of training within a period of three years, relax the qualification.

(3) The syllabus of the course leading to the above certificate, and the organisations conducting the course shall be approved by the Directorate General, Factory Advice Service and Labour Institutes (DGFASLI), Ministry of Labour and Employment, Government of India or the State Government in accordance with the guidelines issued by the Directorate General, Factory Advice Service and Labour Institutes (DGFASLI), Ministry of Labour and Employment.

(4) Within one month of the appointment of Factory Medical Officer, the occupier of the factory shall furnish to the Chief Inspector-cum-facilitator the following particulars :-

(a) name and address of the Factory Medical Officer; (b) qualifications;

(c) experience, if any; and

(d) sub-rule under which the Factory Medical Officer has been appointed.

(5) Equipment for Occupational Health Centre in Factories shall include :-

(a) a glazed sink with hot and cold water (must be always available);

(b) a table with a smooth top of at least 180 cm x 105 cm;

(c) means for sterilizing instruments;

(d) a couch;

(e) two buckets or containers with closely fitting lids;

(f) a kettle and spirit stove or other suitable means of boiling water;

(g) one bottle of spiritus ammonia aromaticus (120 ml.);

(h) two medium sizes sponges;

(i) two 'Kidney' trays;

(j) four cakes of toilet soap, preferably antiseptic, soap;

(k) two glass tumblers and two wine glasses;

(l) two clinical thermometers;

(m) two tea spoons;

(n) two graduated (120 ml.) measuring glasses;

(o) one wash bottle (1000 cc) for washing eyes;

(p) one bottle (one litre) carbolic lotion in 20;

(q) three chairs;

(r) one screen;

(s) one electric hand torch;

(t) an adequate supply of tetanus toxoid;

(u) coramine liquid (60 ml.);

(v) tablets -antihistamine, antispasmodic (25 each);

(w) syringes with needles-2 cc and 10 cc;

(x) two needle holders, big and small;

(y) suturing needles and materials;

(z) one pair of dressing forceps;

(za) one pair of dressing forceps;

(zb) one scalpel;

(zc) one stethoscope;

(zd) rubber bandage-pressure bandage;

(ze) oxygen cylinder with necessary attachments;

(zf) one blood pressure apparatus;

(zg) one patella hammer;

(zh) one Peak-flow meter for lung function measurement;

(zi) one stomach wash set; and

(zj) any other equipment recommended by the Factory Medical Officer relating to the specific manufacturing process;

(6) In addition to the equipments specified in sub-rule (5), an Occupational Health Centre of :-

(a) Factories employing 51 to 200 employees, equipments shall include :-

(i) four plain wooden splints of 900 mmx100mmx6mm;

(ii) four plain wooden splints of 350 mmx75mmx6mm;

(iii) two plain wooden splints of 250 mmx50mmx12mm;

(iv) one pair of artery forceps;

(v) injections-morphia, pethidine, atropine, adrenaline, coramine, novacan (2 each): and

(vi) one pair of surgical scissors;

(b) For factories employing above 200 workers, equipments shall include :-

(i) eight plain wooden splints of 900mmx100mmx6mm;

(ii) eight plain wooden splints of 350 mmx75mmx6mm;

(iii) four plain wooden splints of 250mmx50mmx12mm;

(iv) two pairs of artery forceps ;

(v) injection-morphia, pethidine, atropine, adrenaline, coramine, novocan  $(2 \mbox{ each})$  ; and

(vi) two pairs of surgical scissors.

(II) Ambulance Van (1) In every factory carrying on a 'hazardous process' there shall be provided and maintained in good condition, a suitably constructed ambulance van equipped with items specified in sub-rule (2) of this rule and manned by a full time driver-cum-mechanic and a helper trained in first-aid, for the purposes of sickness. The ambulance van shall not be used for purposes other than the purpose stipulated herein and will normally be stationed at or near the Occupational Health Centre :

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

(2) The ambulance van shall have the following equipments :-

(A) General :

(a) a wheeled stretcher with folding and adjusting devices with the head of the stretcher capable of being tilted upward ;

(b) fixed suction unit with equipment ;

(c) fixed oxygen supply with equipment ;

(d) pillow with case, sheets, blankets towels ; and

(e) emesis bag, bed pan, urinal, glass ;

(B) Safety equipments such as :-

(a) flares with life of 30 minutes, flood lights ;

(b) flash light, fire extinguisher-dry powder type ; and

(c) insulated gauntlets.

(C) Emergency Care Equipments such as :-

(a) Resuscitation Equipmentslike :-

(i) portion suction unit ; portable oxygen unit ;

(ii) bag - valve-mask, hand operated artificial ;

(iii) ventilation unit;

(iv) airways ; mouth bags ; tracheetomyadapters ;

(v) short spine board, I. V. fluids with Administration unit ; and

(vi) B. P. manometer ;Cugg ; stethoscope ;

(b) Immobilization Equipments :-

(i) long and short padded boards wire ladder splints ; and

(ii) triangular bandage ; long and short spine boards.

(c) Dressings like :-

(i) gauze pads -4"x4" universal dressing 10"x36";

(ii) roll of aluminiumfoils ; soft roller bandages 6"x5" Yards ; adhesive tape in 3" roll ; safety pins ; and

(iii) bandage sheets ; burn sheet ;

(d) Poisoning Equipments to deal with poisoininglike:-

(i) syrup of Ipecac; Codeivated Charcoal prepacketed in doses; snake bite kit ; and

(ii) drinking water ;

(e) Emergency medicines as per requirement (under the advice of Medical Officer only).

(III). Decontamination Facilities- In every factory carrying out hazardous process the following provisions shall be made to meet an emergency:-

(a) fully equipped first aid box ;

(b) readily accessible means of water for washing by employees as well as for drenching of clothing of employees who have been contaminated with hazardous and corrosive substance ; and such means shall be as per the scale shown in the table below :

Number of persons employed at any time	Number of drenching showers
(i) Upto 50 employees	2
(ii) Between 51 and 200	2+1 for every additional
employees.	50 or part thereof
(iii) Between 201 and 500	5+1 for every additional
employees	100 or part thereof
(iv) 501 employees and	8+1 for every additional
above.	200 or part thereof.

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

**100.** Permissible levels of certain chemical substances in work environment under Section 88.- Without prejudice to the requirements in any other provisions of the code, the requirements specified in the Schedule appended to this rule shall apply to all factories.

# SCHEDULE

1. Definitions: for the purpose of this schedule –

(a) "mg/m<sup>3</sup>" means milligrams of a substances per cubic metre of air;

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

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

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

Time weighted average  $C1T1 + C2T2 + \dots CnTn$ 

Concentration

T1 + T2 + .....Tn

Where C1 represents the concentration of the substance for duration T1 (in hours); C2 represents the concentration of the substance for duration T2 (in hours);

and Cn represents the concentration of the substance for duration Tn (in hours).

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

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

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

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

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

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

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

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

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

C1 C2 Cn

----- + ------ + ------- + ------

L1 L2 Ln

Where C1, C2..... Cn are the time weighted concentration of toxic substances 1, 2-----, and n respectively, determined after measurement at work location;

And L1, L2 ......Ln are the permissible time weighted average concentration of the toxic substances 1, 2, and n respectively.

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

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

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

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

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

	TABLE –	1		
Substance	Permissible level of exposure			
	Time-weigh	nted average	short-term maximum	
	concentratio		concentration	
	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
Acetic acid	10	25	15	37
Acrolein	0.1	0.25	0.3	0.8
Aldrin (Skin)		0.25		0.75
Ammonia	25	18	35	27
Aniline (Skin)	2	10	5	20
Anilidine (Opisomers Skin)	0.1	0.5		
Arsenic & Compounds (as As)		0.2		
Benzene	10	30		
Bromine	0.1	0.7	0.3	2
2 Butanone (Methyl-Ethyl Ketone	200	590	300	885
MEK)				
n-Butyle Acetate	150	710	200	950
Sec./tert. Butyl Acetate	200	950	250	1190
Cadmium dust and salts (as Cd)		0.05		0.2
Calcium Oxide		2		
Carbaryl (Sevin)		5		10
Carbofuran (Furadan)		0.1		
Carbon disulphide (Skin)	20	60	30	90

Carbon monoxide	50	55	400	440
Carbon tetrachloride (Skin)	10	65	20	130
Carbonyl chloride (phosgene)	0.1	0.4	20	
Chlordance (Skiri)	0.1	0.4		2
Chlorobenzene (monochloro-	75	350		
Bezene)	15	330		
Chlorine	1	3	3	9
Bis-chloromethyl ether	0.001			
Chromic acid and Chromites (as	••	0.05		
Cr.)		0.05		
Chromium, Sel. Chormic		0.5		
Chromous		0.5		
Salts (as Cr.)				
Copper Fume		0.2		
Cotton dust raw		0.2		0.6
Cresol, all isomers (Skin)	5	22		
Cyanides (as CN)-(Skin)		5		
Cyanogen	10	20		
DDT (Dichloriodiphenyl		1		3
trichloroethane)		1		5
Demeton skin	0.01	0.1	0.03	0.3
Diazinon-skin		0.1		0.3
Dibutyle Phthalate		5	•••	10
Dichlorves (DD VP)-skin	0.01	1	0.3	3
Dield-rin-skin	0.01	0.25		0.75
Dinitro Benzene (all isomers-skin)	0.15	1	0.5	3
Dinitrotoluene-skin		1.5		4
Diphenyl	0.2	1.5	0.6	4
Endosulfan (Thinodan)-skin		0.1		0.3
Endrin-skin		0.1		0.3
Ethyl Acetate	400	1		
Ethyl Amine	100	18		
Ethyl Alcohol	1000	1900		
Flourides (as F)		2.5		
Flourine	 1	2.5	2	4
Hydrogen cyanide-skin	10	11	15	16
Hydrogen Sulphide	10	15	15	27
Iron oxide from (Fe2O3 as Fe)		5		10
Isoamyl Acetate	100	525	125	655
Isobutyl Alcohol	100	360	125	450
Isoamyl Alcohol	50	150	75	225
Lead, inorg, fumes and dust (as Pb)		0.15		0.15
Linda-he-skin		0.15		1.5
Malathoion-skin		10		
Manganese fume (as Mn)		1		3
Mercury (as Hg)		0.05		0.15
Mercury (aikyl)	0	0.01	0.003	0.03
Compounds skin) (as Hg)				0.02
Methyl Alcohol (methanol) skin	200	260	250	310
Methyl collosove-skin (2-methoxy	25	80	35	120
ethanol)	23			120
	l	1	<u> </u>	l

Methyl isobutyl Ketone-skin	100	410	125	510
Napthalene	10	50	15	75
Nickel carbonyl (as Ni)	0.05	0.35		
Nitric Acid	2	5	4	10
Nitric Oxide	25	30	35	45
Nitrobenzine-skin	1	5	2	10
Oil mist-mineral		5		10
Parathion-skin		0.1		0.3
Phenol-skin	5	19	10	38
Phroate (Thimet)-skin		0.05		
Phosgene (Carbonyl chloride)	0.1	0.4		
Phosphine	0.3	0.4	1	1
Phosphorus (Yellow)		0.1		0.3
Posphorus pentachloride		1		3
Phosphorus trichloride	0.5	3		
Picric acid-skin		0.1		0.3
Pyridine	5	15	10	30
Sila-ne (Sillicontetrahydrine)	0.5	0.7	1	1.5
Styrene, monomer (phenyl,	100	420	125	525
othylene)				
Sulfur dioxide	5	15		
Sulfuric acid		1		
Toluene (toluo) skin	100	375	1545	560
O-Toludine	5	22	10	44
Trichloroethylene	100	535	150	800
Vinyl chloride	5	10		
Wielding Fumes (NOC)		5		
Xylene (o-m-p-isomers) skin	100	435	150	655

	Table-2
Substance	Permissible time-weighted average concentration.
1. Silica-	
(a) Crystalline-	
(i) Quartz-	
(1) in term of dust count	= 1060/ (% quartz +10) in mppcm
(2) In terms of respirable	= 10/ (% respirable quartz + 2) in mg/cubic metre
dust	
(3) In terms of total dust	= 30/ (% quartz + 3) in mg/cubic metre
ii) Cristobalite	Half the limits given against quartz.
(iii) Tridymite	Half the limits given against quartz.
(iv) Silica fused	Same limit as for quartz.
(v) Tripoli	Same limit as in formula in item 2 given against quartz.
b) Amorphous.	705 mppcm
2. Silicate having less than	
1% free silca by weight-	
(a) Asbestos (fibres longer	2 fibres per cubic centimeter
than 5 microns)	
(b) Mica	705 mppcm.
(c) Mineral wool fibre	10 mg/m3
(d) Porlite	1060 mppcm.

(e) Portland cement	1060 mppcm.
(f) Soap stone	705 mppcm.
(g) Talc (non-abosti form)	705 mppcm.
(h) Talc (fibrous)	Same limit as for asbestos.
(i) Tromolite	Same limit as for asbestos.
3. Coal dust-	
(1) For air born dust having	2mg/m3
less than 5% silicon dioxide	
by weight.	
2) For air-borne dust having	as for item (2) of quartz
over 5% silicon dioxide	
against quartz.	

TABLE – 3				
Substance	Permissible limit of			
	ppm	mg/m3		
Acetic anhydride	5	20		
O-Dichlorobenzene	50	300		
Formaldehyde	2	3		
Hydrogen Chloride	5	7		
Manganese & compounds (as Mn)	-	5		
Nitrogen dioxide	5	9		
Nitroglycerin-skin	0.2	2		
Potassium hydroxide	-	2		
Sodium hydroxide	-	2		
- 2 2, 4, 6 – Trinitrotoluene (TNT)	-	0.5		

**101.** <u>Appeal against the order of Inspector-cum-Facilitator in case of factory</u> <u>under Section 90 of Code</u>- Occupier of any factory aggrieved by an order made by Inspector-cum-Facilitator/Deputy Chief Inspector-cum- Facilitator/ Chief Inspectorcum-Facilitator may, within fifteen days from the date on which the order is communicated to him, make an appeal to the Deputy Chief Inspector-cum-Facilitator/Chief Inspector-cum-Facilitator/ respectively who shall, after giving the appellant an opportunity of being heard, dispose of theappeal as expeditiously as possible.

**102.** Form and manner of making application under Section 90.-(1) The occupier shall make an application in Form-50 to the appropriate authority.

(2) The appropriate authority shall refer the matter within three days to the Deputy Chief Inspector-cum-Facilitator, Meghalaya.

(3) The Deputy Chief Inspector-cum-Facilitator, Meghalaya shall examine the matter within fifteen days from the date of receipt.

(4) The Deputy Chief Inspector-cum-Facilitator, Meghalaya shall submit report within next two days to the appropriate authority.

(5) The appropriate authority shall pass an order within three days from date of receipt of report.

**103.** <u>Persons defined to hold positions of supervision or management under</u> clause (a) of sub-section (1) of Section 91.- The following persons in factories shall be deemed to hold position of supervision or management and to be employed in confidential position, namely:- (i) Managing Director, President, Chief Executive or Senior Vice-President, Vice – President or General Manager;

(ii) Deputy General Manager or Manger or Factory Manager or Plant Head;

(iii) Deputy Manager or Deputy Factory Manager, Assistant Manager or Assistant Factory Manager;

(iv) Chief Welfare Officer or Welfare Officer or Lab our Welfare Officer;

(v) Heads of Departments;

(vi) Superintending Engineer;

(vii) Executive Engineer or Assistant Engineer ;

(viii) Secretary or Personal Assistant to the persons listed above at serial numbers (i) to (vii);

(ix) Sub-Station Engineer;

(x) Head Electrician;

(xi) Supervisor or Foreman;

(xii) Head Store Keeper or Store keeper;

(xiii) Head Time-Keeper or Time keeper ;

(xiv) Store Purchase Officer;

(xv) Security In-charge; and

(xvi) any other person employed as such and so declared by the Chief Inspector-cum-Facilitator in writing.

**104.** <u>List to be maintained of persons holding confidential position or position of</u> <u>supervision or management</u>.-A list showing the names and designations of allpersons referred to in Rule 104 shall be maintained in every factory.

# Other Schedule for the factory arementioned below:

# **SCHEDULE -I**

# Textile Machinery except Machinery used in Jute Mills

Sl.no. 1. **Application**- The requirements of this schedule shall apply to machinery in factories engaged in the manufacture or processing of textiles other than jute textiles. The schedule would not apply to machinery in factories engaged exclusively in the manufacture of synthetic fibres.

Sl.no. 2. Definitions- For the purpose of this schedule-

(a)"Calendar" means a set of heavy rollers mounted on vertical side frames and arranged to pass cloth between them. Calendars may have two to ten rollers or bowls, some of which can be heated.

(b)"Embossing calendar" means a calendar with two or more rolls, one of which is engraved for producing figure-effects of various kinds on a fabric.

(c)"Card" means a machine consisting of cylinders of various sizes; and in certain cases flats - covered with card clothing and set in relation to each so that fibres in staple-form may be separated into individual relationship. The speed of the cylinders and their direction of rotation varies. The finished product is delivered as a sliver. Cards of different types are: the revolving flat card, the roller and clearer card etc.

(d)"Card clothing" means the material with which the surface of the cylinder, deffer, flats etc. of a card are covered and consists of a thick foundation material made of, either textile fabrics through which are pressed many fine closely spaced, specially bent wires, or mounted saw toothed wire.

(e)"Comber" means a machine for combing fibres of cotton, wool etc. The essential parts are device for feeding forward a fringe of fibres at regular intervals and an arrangement of combs or pins which, at the right time, pass through the fringe. All tangled fibres, short fibres and nips are removed and the long fibres are laid parallel.

(f)"Combing machinery" means a general classification machinery including combers, sliver lap machines, ribbon lap machines and grill boxes, but excluding cards.

(g)"Rotary staple cutter" means a machine consisting of one or more rotary blades used for the purpose of cutting textile fibres into staple lengths.

(h) "Garnet machine" means any of a number of types of machine for opening hard twisted waste of wool, cotton, silk etc. Essentially, such machines consist of a licker-in; one or more cylinders, each having a competent worker and stripper rolls; and a fancy roll and a deffer. The action of this machine is some what like that of a wool card but it is much more severe in that the various rolls are covered with garnett wire instead of card clothing.

(i)"Gill box" means a machine used in the worsted system of manufacturing yarns. Its function is to arrange fibres in parallel order. Essentially, it consists of a pair of feed rolls and a series of followers where the followers move at a faster surface speed and perform a combing action.

(j)"In-running rolls" means any pair of rolls or drums between which there is a 'nip'.

(k)"Interlocking arrangement" means a device that prevents the setting in motion of a dangerous part of a machine or the machine itself while the guard-cover or door provided to safeguard against danger is open or unlocked, and which will also hold the guard, cover or door closed and locked while the machine or the dangerous part is in motion.

(l)"Kier" means a large metal vat, usually a pressure type, in which fabrics may be boiled out, bleached etc.

(m)"Ribbon lapper" means a machine or a part of a machine used to prepare laps for feeding a cotton comb; its purpose is to provide a uniform lap in which the fibres have been straightened as much as possible.

(n)"Sliver lapper" means a machine or a part of a machine in which a number of parallel card slivers are drafted slightly, laid side by side in a compact sheet and wound into a cylindrical package.

(o)"Loom" means a machine for effecting the interlocking of two series of yarns crossing one another at right angles. The warp yarns are wound on a warp beam and pass through headles and reeds. The filling is shot across in a shuttle and settled in place by reeds and slay, and the fabric is wound on a cloth beam.

(p)"Starch mangle" means a mangle that is used specifically for starching cotton goods. It commonly consists of two large rolls and a shallow open vat with several immersion rolls. The vat contains the starch solution.

(q)"Water mangle" means a calendar having two or more rolls used for squeezing water from fabrics before drying. Water mangles also may be used in other ways during the finishing of various fabrics.

(r)"Mule" means a type of spinning frame having a head stock and carriage as its two main sections. The head stock is stationary. The carriage is movable and it carries the spindles which draft and spin the roving into yarn. The carriage extends over the whole width of the machine and moves slowly towards and away from the head stock during the spining operation.

(s)"Nip" is the danger zone between two rolls or drums which by virtue of their positioning and movement create a nipping hazard.

(t)"Openers and pickers" means a general classification of machinery which includes breaker pickers, intermediate pickers, finisher pickers, single process pickers, multiple process pickers, willow machines, card and picker waste cleaners, thread extractors, shredding machines, roving waste openers, shoddy pickers, bale breakers, feeders, vertical openers, lattice cleaners, horizontal cleaners and any similar machinery equipped with either cylinders, screen section, calendar section, rolls or beaters used for the preparation of stock for further processing.

(u)"Paddler" means a trough for a solution and, two or more squeeze rools between which cloth passes after being passed through a mordant or dye bath.

(v)"Plaiting machine" means a machine used to lay cloth into folds of regular length for convenience of subsequent process or use.

(w)"Roller printing machine" means a machine consisting of a large central cylinder, or pressure bowl, around the lower part of the perimeter of which is placed a series of engraved color rollers (each having a colour trough), furnisher roller, doctor blades etc. The machine is used for printing fabrics.

(x)"Continuous bleaching range" means a machine for bleaching of cloth in rope or open-width form with the following arrangement; The cloth, after wetting out, pass through a squeeze roll into a saturator containing a solution of caustic soda and then to an enclosed J-Box. A V-shaped arrangement is attached to the front part of the J-Box for uniform and rapid saturation of the cloth, with steam before it is packed down in the J-Box. The cloth, in a single strand rope form, passes over a guide roll down the first arm of the 'V' and up the second. Steam is injected into the 'V' at the upper end of the second arm so that the cloth is rapidly saturated with steam at this point. The J-Box capacity is such that cloth will remain hot for a sufficient time to complete the scouring action. It then passes a series of washers with a squeeze roll in between. The cloth then passes through a second set of saturator, J-Box and washer, where it is treated with the peroxide solution. By slight modification of the form of the unit, the same process can be applied to open-width cloth.

(y)"Mercerizing range" means a 3-bowl mangle, a tenter frame and a number of boxes for washing and scouring. The whole set up is in a straight line and all parts operate continuously. The combination is used to saturate the cloth with sodium hydroxide, stretch it while saturated and washing out most of the caustic before releasing tension.

(z)"Sanforizing machine" means a machine consisting of large steam-heated cylinder and endless, thick woolen felt blanket which is in close contact with the cylinder for most of its perimeter, and electrically heated shoe which presses the cloth against the blanket while the latter is in a stretched condition as it curves around feed-in roll.

(aa)"Shearing machine" means machine used for shearing cloth. Cutting action is provided by a number of steel blades spirally mounted on a roller. The roller rotates in close contact with a fixed ledger blade. There may be from one to six such rollers on a machine.

(bb)"Singeing machine" means a machine which comprises of a heated roller, plate or an opened gas flame. The cloth or yarn is rapidly passed over the roller or the plate or through the open gas flame to remove fuzz or hairiness by burning.

(cc)"Slasher" means a machine used for applying a size mixure to warp yarns. Essentially, it consists of a stand for holding section beams, a size box, one or more cylindrical dryers or an enclosed hot air dryer, and a beaming end for winding the yarn on the loom beams.

(dd)"Tenter frame" means a machine for drying cloth under tension. It essentially consists of a pair of endless travelling chains fitted with clips of fine pins and carried on tracks. The cloth is firmly held at the salvages by the two chains which diverge as they move forward so that cloth is brought to the desired width.

(ee)"Warper" means a machine for preparing and arranging the yarns intended for the warp of a fabric, specifically, a beam warper.

Sl.no. 3. **General safety requirements**: (1) Every textile machine shall be provided with individual mechanical or electrical means for starting and stopping such machines. Belt shifter on machine driven by belts and shafting should be provided with a belt shifter lock of an equivalent positive locking device.

(2)Stopping and starting handles or other controls shall be of such design and so positioned as to prevent the operator's hand or fingers from striking against any moving part of any other part of the machine.

(3)All belts, pulleys, gears, chains, sprocket wheels and other dangerous moving parts of machinery which either form part of machinery or are used in association with it, shall be securely guarded.

Sl.no. 4. **Openers and pickers:** (1) In all opening or picker machinery, beaters and other dangerous parts shall be securely fenced by suitable guards so as to prevent contact with them. Such guards and doors or covers or openings giving access to any dangerous part of the machinery shall be provided with interlocking arrangement.

Provided that in the case of doors or covers of openings giving access to any dangerous part, other than beater covers, instead of the interlocking arrangement, such openings may be so fenced by guards which prevent access to any such dangerous part and which is either kept positively locked in position or fixed in such a manner that it cannot be removed without the use of hand tools.

(2) The feed rools on all opening and picking machinery shall be covered with a guard designed to prevent the operator from reaching the nip while the machinery is in operation.

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

Provided that the foregoing provision shall not apply to the machine equipped with automatic lap forming devices.

Provided further that any such machine equipped with an automatic lap forming device shall not be used unless the automatic lap forming device is in efficient working order.

Sl.no. 5. **Cotton cards:** (1) All cylinder doors shall be secured by an interlocking arrangement which shall prevent the door being opened until the cylinder has ceased to revolve and shall render it imposible to restart the machine until the door has been closed.

Provided that the latter requirement in respect of the automatic locking device shall not apply while stripping or grinding operations are carried out;

Provided further that stripping or grinding operations shall be carried out only by specially trained adult workers wearing tight fitting clothing whose names have been recorded in the Register prescribed in this behalf as required in Sub-section (1) of Section 22.

(2) The licker-in shall be guarded so as to prevent access to the dangerous parts.

(3) Every card shall be equipped with an arrangement that would enable the card cylinder to be driven by power during stripping/grinding operations without having to either shift the main belt to the fast pulley of the machine or to dismantle the interlocking mechanism. Such an arrangement shall be used only for stripping or grinding operations.

Sl.no. 6. Garnett machines: (1) Garnett licker-in shall be enclosed.

(2) Garnett fancy rolls shall be enclosed by guards. These shall be installed in a way that keeps worker rolls reasonably accessible for removal or adjustment.

(3) The underside of the garnett shall be guarded by a screen mesh or other form of enclosures to prevent access.

Sl.no. 7. **Gill boxes:** (1) The feed end shall be guarded so as to prevent fingers being caught in the pins of the intersecting rollers.

(2) All nips of in-running rolls shall be guarded by suitable nip guards conforming to the following specifications:—

Any opening which the guard may permit when fitted in position shall be so restricted with respect to the distance of the opening from any nip point through that opening and in any circumstances the maximum width of the opening shall not exceed the following:—

Distance of opening from nip point Maximum width of opening

	10	to	38 mm		6 mm		
	39	to	63 mm	10 mm	1		64
to 88 mm				13 mm		89	to
140 mm				15 mm		141	to
165 mm				19 mm		166	to
190 mm				22 mm		191	to
215 mm				32 mm			

Sl.no. 8. Silver and ribbon lappers (cotton): The calender drums and the lap spool shall be provided with a guard to prevent access to the nip between the in-running rolls.

Sl.no. 9. **Speed frames**: Jack box wheels at the head stock shall be guarded and the guard shall have interlocking arrangement.

Sl.no. 10. **Spinning mules:** Wheels on spinning mule carriages shall be provided with substantial wheel guards, extending to within 6 mm of the rails.

Sl.no. 11. **Warpers:**Swivelled double-bar gates shall be installed on all warpers operating in excess of 410 metres/minute. These gates shall have interlocking arrangement, except for the purpose of inching or jogging;

Provided that the top and bottom bars of the gate shall be at least 1.05 and 0.53 metres high from the floor or working platform, and the gate shall be located 38 mm from the vertical tangement to the beam head.

Sl.no. 12. Slashers: (1) Cylinder dryers—

(a) All open nips of in-running rolls shall be guarded by nip guards conforming to the requirements in Sl.no. 7.

(b) When slushers are operated by control levers, these levers shall be connected to a horizontal bar or treadle located not more than 170 cm above the floor to control the operation from any point.

(c) Slashes operated by push button control shall have stop and start buttons located at each end of the machine, and additional buttons located on both sides of the machine at the size box and the delivery end. If calender rolls are used, additional buttons shall be provided at both sides of the machine points near the nips except when slashers are equipped with an enclosed dryer as in Sl.no. (b).

(2) Enclosed hot air dryer: (a) All open nips of the top squeezing rollers shall be guarded by nip guards conforming to the requirement in Sl.no. 7 (2).

(b) When slashers are operated by control levers, these levers shall be connected to a horizontal bar or treadle located not more than 170 mm above the floor to control the operation from any point.

(c) Slashers operated by push-button control shall have stop and start buttons located at each end of the machine and additional stop and start buttons located on both sides of the machines at intervals spaced not more than 1.83 metres on centres.

Sl.no. 13. Looms: (1) Each loom shall be equipped with suitable guards designed to minimise the danger from flying shuttles.

(2) Beam weights for tension in beam shall be of such construction so as to prevent it from falling during its adjustment.

Sl.no. 14. Valves of kiers, tanks and other containers: (1) Each valve controlling the flow of steam, injurious gases or liquids into a kier or any other tank or container into which a person is likely to enter in connection with a process, operation, maintenance or for any other purpose, shall be provided with a suitable locking arrangement to enable the said person to lock the valve securely in the closed position and retain the key with him before entering the kier, tank or container.

(2) Wherever boiling tanks, caustic tanks and any other containers from which liquids which are hot, corrosive or toxic may overflow or splash, are so located that the operator cannot see the contents from the floor or working area, emergency shut off valves which can be controlled from a point not subject to danger of splash shall be provided to prevent danger.

Sl.no. 15. **Shearing machines**: All revolving blades or shearing machines shall be guarded so that the opening between the cloth surface and the bottom of the guard will not exceed 10 mm.

Sl.no. 16. **Continuous bleaching range (cotton and rayon):** The nip of all inrunning rolls on open-width bleaching machine rolls shall be protected with a guard to prevent the worker from being caught at the nip. The guard shall extend across the entire length of the nip.

Sl.no. 17. **Mercerizing range (piece goods):** (1) A stopping device shall be provided at each end of the machine.

(2) A guard shall be provided at each end of the frame between the in-running chain and the clip opener.

(3) A nip guard shall be provided for the in-running rolls of the mangle and washers and the guard shall conform to the requirements in Sl.no. 7(2).

Sl.no. 18. **Tender frames**: (1) A stopping device shall be provided at each end of the machine.

(2) A guard shall be provided at each end of the machine frame at the inrunning chain and clip opener.

Sl.no. 19. **Paddlers:** Suitable nip guards conforming to the requirement in Sl.no. 7(2) shall be provided to all dangerous in-running rolls.

Sl.no. 20. **Centrifugal extractors:** (1) Each extractor shall be provided with a guard with a basket, and the guard shall have interlocking arrangement.

(2) Each extractor shall be equipped with a mechanically or electrically operated brake to quickly stop the basket when the power driving the basket is shut off.

Sl.no. 21. Squeezer or wringer extractor, water mangle, starch mangle, back washer (worsted yarn) crabbing machines and decating machines: All in-running rolls shall be guarded with nip guards conforming to the requirements in Sl.no. 7(2).

Sl.no. 22. **Sanforizing and palmer machine:** (1) Nip guards shall be provided on all accessible in-running rolls and these shall conform to the requirements in Sl.no. 7(2).

(2) Access from the sides of the nips of in-running rolls should be fenced by suitable side guards.

(3) A safety trip rod, cable or wire centre cord shall be provided across the front and back of all palmer cylinders extending the length of the face of the cylinder. It shall operate readily whether pushed or pulled. The safety trip shall not be more than 170 cm above the level at which the operator stands and shall be readily accessible.

Sl.no. 23. **Rope washers**: (1) Splash guards shall be installed on all rope washers unless the machine is so designed as to prevent the water or liquid from splashing the operator, the floor or the working surface.

(2) A safety trip rod, cable or wire centre cord shall be provided acrooss the front and back of all rope washers extending the length of the face of the washer. It shall operate readily whether pushed or pulled. This safety trip shall be not more than 170 cm above the level on which the operator stands and shall be readily accessible.

Sl.no. 24. **Laundry washer tumbler or shaker:** (1) Each drying tumbler, each double cylinder shaker or clothes tumbler and each washing machine shall be equipped with an interlocking arrangement which will prevent the power operation of the inside cylinder when the outer door on the case or shell is open and which will prevent the outer door on the case or shell from being opened without shutting off the power and the cylinder coming to a stop. This should not prevent the movement of the inner cylinder by means of a hand operated mechanism or on an inching device.

(2)Each closed barrel shall also be equipped with adequate means for holding open the doors or covers of the inner and outer cylinders or shells while it is being loaded or unloaded.

Sl.no. **25. Printing machine (roller type):** (1) All in-running rolls shall be guarded by nip guards conforming to the requirement in Sl.no. 7(2).

(2)The engraved roller gears and the large crown wheel shall be guarded.

Sl.no. **26. Calenders:** The nip at the in-running side of the rolls shall be provided with a guard extending across the entire length of the nip and arranged to prevent the fingers of the workers from being pulled in between the rolls, or between the guard and the rolls, and so constructed that the cloth can be fed into the rolls safely.

Sl.no. **27. Rotary staple cutters:** The cutter shall be protected by a guard to prevent the hands reaching the cutting zone.

Sl.no. **28. Plaiting machines**: Access to the trap between the knife and card bar shall be prevented by a guard.

Sl.no. **29. Hand bailing machine**: An angle iron handle stop guard shall be installed at right angle to the frame of the machine. The stop guard shall be so designed and so located that it will prevent the hand from travelling beyond the vertical position should the handle slip from the operator's hand when the pawl has been released from the teeth of the take up-gear.

Sl.no. **30. Flat-work ironer:** Each flat-work or collar ironer shall be equipped with a safety bar or other guard across the entire front of the feed or first pressure rolls, so arranged that the striking of the bar and guard by hand of the operator or other person will stop the machine. The guard shall be such that the operator or other person cannot reach into the rolls without removing the guard. This may be either a vertical guard in

all sides or a complete cover. If a vertical guard is used, the distance from the floor or working platform to the top of guard shall be not less than 1.83 metres.

# SCHEDULE II Cotton Ginning

**Line Shaft:** The line shaft of second motion in cotton ginning factories when below floor level, shall be completely enclosed by a continuous wall or unclimbable fencing with only so many openings as are necessary for access to the shaft for removing cotton seed, cleaning and oiling; and such openings shall be provided with gates or doors which shall be kept closed and locked.

# SCHEDULE III Woodworking Machinery

Sl.no. 1. Definitions: For the purpose of this schedule-

(a) "Woodworking machine" means a circular saw, band saw, planing machine, chain mortising machine or vertical spindle moulding machine operating on wood or cork.

(b) "Circular saw" means a circular saw working in a bench (including a rack bench), but does not include a pendulum or similar saw which is moved towards the wood for the purpose of cutting operation.

(c) "Band saw" means a band saw, the cutting portion of which runs in a vertical direction but does not include a log saw or band re-sawing machine; and

(d) "Planing machine" means a machine for overhand planing or for thicknessing or for both operations.

Sl.no. 2. **Stopping and starting device**: An efficient stopping and starting device shall be provided on every woodworking machine. The control of this device shall be in such a position as to be readily and conveniently operated by the person in charge of the machine.

Sl.no. 3. **Space around machines**: The space surrounding every woodworking machine in motion shall be kept free from obstruction.

Sl.no. 4. **Floors**: The floor surrounding every woodworking machine shall be maintained in good and level condition, and shall not be allowed to become slippery, and as far as practicable shall be kept free from chips or other loose material.

Sl.no. 5. **Training and supervision**: (1) No person shall be employed at a woodworking machine unless he has been sufficiently trained to work that class of machine, or unless he works under the adequate supervision of a person who has a thorough knowledge of the working of the machine.

(2) A person who is being trained to work a woodworking machine shall be fully and carefully instructed as to the dangers of the machine and the precautions to be observed to secure safe working of the machine.

(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 not exceeding the radius of the largest saw used on the bench;

(ii) the knife shall be maintained as close as practicable to the saw, having regard to the nature of the work being done at the time, and at the level of the bench table the distance between the front edge of the knife and the teeth of the saw shall not exceed 12 mm; and (iii) for a saw of a diameter of not less than 60 cm, the knife shall extend upwards from the bench table to within 25 mm of the top of the saw, and for a saw of a diameter 60 cm or over shall extend upwards from the bench table to a height of at least 23 cm.

(b) the top of the saw shall be covered by a strong and easily adjustable guard, with a flange at the side of the saw farthest from the fence. The guard shall be kept so adjusted that the said flange shall extend below the roots of the teeth of the saw. The guard shall extend from the top of the riving knife to a point as low as practicable at the cutting edge of the saw; and

(c) the part of the saw below the bench table shall be protected by two plates of metal or other suitable material, one on each side of the saw; such plates shall not be more than 15 cm apart, and shall extend from the axis of the saw outwards to a distance of not less than 5 cm beyond the teeth of the saw. Metal plates, if not beaded, shall be of a thickness of at least 2.5 mm or, if beaded, be of a thickness of at least 1.25 mm.

Sl.no. 7. **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.

Sl.no. 8. Band saws: Every band saw shall be guarded as follows:

(a) both sides of the bottom pulley shall be completely encased by sheet or expanded metal or other suitable material;

(b) the front of the top pulley shall be covered with sheet or expanded metal or other suitable material; and

(c) all portions of the blade shall be enclosed or otherwise securely guarded, except the portion of the blade between the bench table and the top guide.

Sl.no. 9. **Planing machine**: (1) A planing machine (other than a planing machine which is mechanically fed) shall not be used for over hand 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 vertical and horizontal direction.

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

Sl.no. 10. Vertical spindle moulding machine: (1) The cutter of every vertical spindle moulding machine shall be guarded by the most efficient guard having regards 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.

Sl.no. 11. **Chain mortising machine**: The chain of every chain mortising machine shall be provided with a guard which shall enclose the cutters as far as practicable.

Sl.no. 12. Adjustment and maintenance of guards: The guards and other appliances required under this schedule shall be—

(a) maintained in an efficient state;

(b) constantly kept in position while the machinery is in motion; and

(c) so adjusted as to enable the work to be done without unnecessary risk.

13. **Exemptions:**Sl.no. 6, 8, 9 and 10 shall not apply to any woodworking machine in respect of which it can be proved that other safeguards are provided, maintained and used which render the machine as safe as it would be if, guarded in the manner prescribed in this schedule.

### **SCHEDULE IV**

### **Rubber mills**

1. **Installation of machines**: Mills for breaking down cracking, grating, mixing, refining and warming rubber compound shall be so installed that the top of the front roll is not less than 105 centimetres 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—

(a)hoppers so constructed or guarded that it is impossible for the operators to come in contact in any manner with the tip of the rolls; or

(b) horizontal safety-trip rods or tight wire cables across both front and rears, 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 mill shall extend across the entire length of the face of the rolls and shall be located not more than 175 cm 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 Centrifugal Machines

Sl.no. 1. **Definition**: "Centrifugal machines" include centrifugal extractors, separators and driers.

Sl.no. 2. **Design, construction, maintenance etc**: Every part of centrifugal machine shall be—

(a) of good design and construction and of adequate strength;

(b) properly maintained; and

(c) examined thoroughly by a competent person at regular intervals.

Sl.no. 3. **Inter-locking guard for drum or basket**: (1) The cage housing the rotating drum or basket of every centrifugal machine shall be provided with a strong lid. The design and construction of the cage as well as of the lid shall be such that no access is possible to the drum and basket when the lid is closed.

(2) Every centrifugal machine shall be provided with an efficient inter-locking device that will effectively prevent the lid referred to in sub- Sl.no. (1) from being opened while the drum or basket is in motion and prevent or basket from being set in motion while the lid is in the open position.

Sl.no. 4. **Braking arrangement**: Every centrifugal machine shall be provided with an effective braking arrangement capable of bringing the drum or basket to rest within as short a period of time as reasonably practicable after the power is cut off.

Sl.no. 5. **Operating speed:** No centrifugal machine shall be operated at a speed in excess of the manufacturer's rating which shall be legibly stamped at easily visible places both on the inside of the basket and on the outside of the machine casing.

Sl.no. 6. **Exceptions**: Sub-Sl.no. (2) of Sl.no. 3, Sl.no. 4 and 5 shall not apply in case of top lung machines or similar machines used in the sugar manufacturing industry.

### **SCHEDULE VI**

### **Power press**

Sl.no. 1. **Application:** The schedule shall apply to all types of power presses including press brakes, except when used for working hot metal.

Sl.no. 2. Definition: For the purpose of this schedule—

(a) "approved" means approved by the Chief Inspectorcum facilitator;

(b) "fixed fencing" means fencing provided for the tools of a power press being fencing which has no moving part associated with or dependent upon the mechanism of a power press and includes that part of a closed tool which acts as a guard;

(c) "power press" means a machine used in metal or other industries for moulding, pressing, blanking, raising, drawing and similar purposes;

(d) "Safety device" means the fencing and any other safeguard provided for the tools of a power press.

Sl.no. 3. **Starting and stopping mechanism**: The starting and stopping mechanism shall be provided with safety stop so as to prevent over running of the press or descent of the ram during tool setting etc.

Sl.no. 4. **Protection of tool and die**: (1) Each press shall be provided with a fixed guard with a slip plate on the under side enclosing the front and all sides of the tool.

(2) Each die shall be provide 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.

(3) The design, construction and mutual position of the guard referred to in (1) and (2) shall be such as to preclude the possibility of the worker's hand or fingers reaching the dangerous zone.

(4) 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.

(5) Notwithstanding anything contained in sub-clause(1) and (2), an automatic or inter-locked guard may be used in place of a fixed guard, but where such guards are used they shall be maintained in an efficient working condition and if any guard develops a defect, the power press shall not be operated unless the defect of the guard is removed.

Sl.no. 5. **Appointment of persons to prepare power presses for use**: (1) Except as provided in sub- Sl.no. (4) no person shall set, reset, adjust or try out the tools on a power press or install or adjust any safety device thereon, being installation or adjustment preparatory to production of die proving, or carry out an inspection and test of any safety device thereon required by Sl.no. 8 unless he-

(a) has attained the age of eighteen;

(b) has been trained in accordance with the sub- Sl.no. 2) and has been appointed by the occupier of the factory to carry out those duties in respect of the class or description of power press or the class or description of safety device to which the power press or the safety device(as the case may be) belongs; and the name of every such person shall be entered in a Register in **Form 9**.

(2) The training shall include suitable and sufficient practical instruction in the matters in relation to each type of power press and safety device in respect of which it is proposed to appoint the person being trained.

Sl.no. 6. Examination and testing of power presses and safety devices: (1) No power press or safety device shall be taken into use in any factory for the first time in that factory, or incase of a safety device for the first time on any power press, unless it has been thoroughly examined and tested, in the case of a power press after installation in the factory, or in the case of a safety device, when in position on the power press in connection with which it is to be used.

(2) No power press shall be used unless it has been thoroughly examined and tested by a competent person within the immediately preceding period of twelve months.

(3) No power press shall be used unless every safety device (other than fixed fencing) thereon has within the immediately preceding period of six months when in position on that power press, been thoroughly examined and tested by a competent person.

(4) The competent person carrying out an examination and test under the foregoing provisions shall make a report of the examination and test containing the following particulars and every such report shall be kept readily available for inspection:—

(a) Name of the occupier of the factory:

(b) Address of the factory:

(c) Identification number or mark sufficient to identify the power press or the safety device:

(d) Date on which the power press or the safety device was first taken into use in the factory:

(e) The date of each periodical thorough examination carried out as per the requirement of sub- Sl.no. (2) above:

(f) Particulars of any defect effecting the safety working of the power press or the safety device found at any such thorough examination and steps taken to remedy such defects.

Sl.no. 7. **Defects disclosed during a thorough examination and test:** (1) Where any defect is disclosed in any power press or in any safety device by any examination and test under Sl.no. 6 and in the opinion of the competent person carrying out the examination and test either-

(a) the said defect is a cause of danger to workers and in consequence the power press or safety device (as the case may be) ought not to be used until the said defect has been remedied; or

(b) the said defect may become a cause of danger to workers and in consequence the power press or safety device (as the case may be) ought not to be used after the expiration of a specified period unless the said defect has been has been remedied, such defect shall, as soon as possible after the completion of the examination and test, be notified in writing by the competent person to the occupier of the factory and, in the case of a defect falling within clause (b) of this sub- Sl.no. such notification shall include the period within which, in the opinion of the competent person, the defect ought to be remedied.

(2) In every case where notification has been given under this Sl.no. a copy of the reports made under Sl.no. 6(4) shall be sent by the competent person to the Inspector for the area within fourteen days of the completion of the examination and test.

(3) Where any such defect is notified to the occupier in accordance with the foregoing provisions of this Sl.no. the power press or safety device (as the case may be) having the said defect shall not be used—

(a) in the case of a defect falling within clause (a) of sub- Sl.no. (1), until the said defect has been remedied; and

(b) in the case of a defect falling within clause (b) of sub- Sl.no. (1) has after the expiration of the said defect has been remedied.

(4) As soon as is practicable after any defect of which notification has been given under sub- Sl.no. (1) has been remedied, a record shall be made by or on behalf of the occupier stating the measures by which and the date on which the defect was remedied.

Sl.no. 8. **Inspection and test of safety devices**: (1) No power press shall be used after the setting, resetting or adjustment of the tools thereon unless a person appointed or authorised for the purpose under Sl.no. 5 has inspected and tested every safety device thereon while it is in position on the said power press;

Provided that an inspection, test and certificate as aforesaid shall not be required where any adjustment of the tools has not caused or resulted in any alteration to or disturbance of any safety device on the power press and if after the adjustment of the tools, the safety devices remain, in the opinion of such a person as aforesaid, in efficient working order.

(2) Every power press and every safety device thereon while it is in position on the said power press shall be inspected and tested by a trained person every day.

Sl.no. 9. **Defects disclosed during an inspection and test:** (1) Where it appears to any person as a result of any inspection and test carried out by him under Sl.no. 8 that any necessary safety device is not in position or is not properly in position on power press or that any safety device which is in position on a power press is not in his opinion suitable, he shall notify the Manager forthwith.

(2) Except as provided in sub- Sl.no. (3) where any defect is disclosed in a safety device by any inspection and test under Sl.no. 8, the person carrying out the inspection and test shall notify the Manager forthwith.

(3) Where any defect in a safety device is the subject of a notification in writing under Sl.no. 7 by virtue of which the use of the safety device may be continued during a specified period without the said defect having been remedied, the requirement in sub- Sl.no. (2) of this Sl.no. shall not apply to the said defect until the said period has expired.

Sl.no. 10. **Identification of power presses and safety devices:** For the purpose of identification every power press and every safety device provided for the same shall be distinctively and plainly marked.

Sl.no. 11. **Training and instructions to operators**: The operators shall be trained and instructed in the safe method of work on any power press.

Sl.no. 12. **Exemptions:** (1) If in respect of any factory the Chief Inspector- cum-Facilitator is satisfied that owing to the circumstances or infrequency of the processes or for any other reason, all or any of the provisions of this schedule are not necessary for the protection of the workers employed on any power press or in any class or description of power press or in the factory, the Chief Inspector-cum- Facilitator may, by a certificate in writing (Which he may in his discretion revoke at any time), exempt such factory from all or any of such provisions subject to such conditions, if any, as he may specify therein.

(2) Where such exemption is granted, a legible copy of the certificate, showing the conditions (if any) subject to which it has been granted, shall be kept posted in the factory in a position where it may be conveniently read by the persons employed.

### **SCHEDULE VII**

### Shears, Slitters and Guillotine Machines

Sl.no. 1. Definition: For the purpose of this schedule—

(a) "Guillotin" means a machine ordinarily equipped with straight level-edged blade operating vertically against a stationery resisting edge and used for cutting metallic or non-metallic substances;

(b) "Shears" or "Shearing machine" means a machine ordinarily equipped with straight, level-edged blades operating vertically against the resisting edges, or with

rotary, overlapping cutting wheels, and used for shearing metals or non-metallic substances;

(c) "Slitter" or "Slitting machine" means a machine ordinarily equipped with circular dice-type knives, and used for trimming or cutting into metal or non-metallic substances or for slitting them into narrow strips; for the purpose of this Schedule this term includes bread or other food slicers equipped with rotary knives or cutting discs.

Sl.no. 2. **Guillotines and shears**: (1) Where practicable, a barrier metal guard of adequate strength shall be provided at the front of the knife, fastened to the machine frame and shall be so fixed as would prevent any part of the operator's body to reach the descending blade from above, below or through the barrier guard or from the sides;

Provided that in case of machines used in the paper printing and allied industries, where a fixed barrier metal guard is not suitable on account of the height and volume of the material being fed, there shall be provided suitable starting devices which require simultaneous action of both the hands of the operator or an automatic device which will move both the hands of the operator from the danger zone at every descent of the blade.

(2) At the back end of such machines, an inclined guard shall be provided over which the slit pieces would slide and be collected at a safe distance in a manner as would prevent a person at the back from reaching the descending blade.

(3) Power-driven guillotin cutters, except continuous feed trimmers, shall be equipped with:—

(a) starting devices which require the simultaneous action of both hands to start the cutting motion and of at least one hand on a control during the complete stroke of the knife; or

(b) an automatic guard which will remove the hands of the operator from the danger zone at every descent of the blade, used inconjunction with one-hand starting devices which require two distinct movements of the device to start the cutting motion, and so designed so as to return positively to the non-starting position after each complete cycle of the knife.

(4) Where two or more workers are employed at the same time on the same power-driven guillotine cutter equipped with two hand control, the device shall be so arranged that each worker shall be required to use both hands simultaneously on the safety trip to start the cutting motion and at least one hand on a control to complete the cut.

(5) Power-driven guillotine cutters, other than continuous trimmers, shall be provided, in addition to the brake or other stopping mechanism, with an emergency device which will prevent the machine from operating in the event of failure of the brake when the starting mechanism is in the non-starting position.

Sl.no. 3. **Slitting Machines:** (1) Circular disc-type knives on machines for cutting metal and leather, paper, rubber, textiles or other non-metallic substances shall, if within reach of operators standing on the floor or working level, be provided with guards enclosing the knife edges at all times as near as practicable to the surface of the material, and which may either—

(a) automatically adjust themselves to the thickness of the material; or

(b) be fixed or manually adjusted so that the space between the bottom of the guard and the material will not exceed 6 mm(1/2 in) at any time.

(2) portions of blades underneath the table or benches of slitting machines shall be covered by guards.

Sl.no. 4. **Index cutters and Vertical Paper Slitters**: Index cutters and other machines for cutting strips from the end of books, and for similar operations, shall be provided with fixed guards so arranged that the fingers of the operators cannot come between the blades and the tables.

Sl.no. 5. Corner Cutters: Corner Cutters, used in the manufacture of paper boxes, shall be equipped with:—

(a) suitable guard, fastened to the machines in front of the knives and provided with slots or perforations to afford visibility of the operations; or

(b) other guard equally efficient for the protection of the fingers of the workers.

Sl.no. 6. **Band Knives**: Band wheels or band knives, and all portions of the blades except the working side between the sliding guide and the table on the vertical machines or between the wheel guards on horizontal machines, shall be completely enclosed with hinged guards of sheet metal not less than 1 mm (0.04in.) in thickness or of other material of equal strength.

# SCHEDULE VIII

## Hoist or lift

Class or description of Hoist or lift	Requirement which shall not apply			
(1)	(2)			
Hoists or lifts mainly used for raising	Sub-section 1(b) in so far as it requires a			
materials for charging blast furnaces or	gate at the bottom landing;			
lime kilns. —	Sub-section 1(d); Sub-section 1(e)			
Hoist not connected with mechanical	Sub-section 1(b) in so far as it			
power and which are not used for	requires the hoistway or liftway			
carrying persons. —	enclosure to be so constructed so as to			
	prevent any person or thing from being			
	trapped between any part of the hoist or			
	lift and any fixed structure or moving			
	part; Sub-section 1(e).			

(1) No lifting machine and no chain, rope or lifting tackle, except a fibre rope or fibre rope ling, shall be taken in to 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) 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.

(3) A table showing the safe working load 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 in which the chains, ropes or lifting tackles are kept, and in prominent positions on the premises, and no chain, rope or lifting tackle not shown in the table shall be used;

Provided that this Sub-rule 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.

(4) The Register in **Form No. 57** to be maintained under clause (a) (iii) of Sub-section (1) of Section 80 of the Code shall contain the following particulars and shall be kept readily available for inspection:—

(a) Name of Occupier of the factory:

(b) Address of the factory:

(c) Distinguishing number or mark, if any, and description sufficient to identify the lifting machine, chain, rope or the lifting tackle.

(d) Date when the lifting machine, chain, rope or lifting tackle was first taken into use in the factory:

(e) Date and number of the certificate relating to any test and examination made under Sub-Rules (1) and (9) together with the name and address of the person who issued the certificate.

(f) Date of each periodical thorough examination made under clause(a)(iii) of Sub-section(1) of Section 80 of the Code and Sub-rule (8) and by whom it was carried out:

(g) Date of annealing or other heat treatment of the chain or other lifting tackle made under Sub-rule(7) and by whom it was carried out:

(h) 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:

(5) 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.

(6) To provide access to rail tracks of overhead travelling cranes suitable passageways of at least 50 centimeters width with toe boards and double hand rails 90cm high shall be provided alongside, and clear of, the rail tracks of overhead travelling cranes, such that no moving part of the crane can strike persons on the ways, and the passageway shall be at a lower level than the crane track itself. Safe access ladders shall be provided at suitable intervals to afford access to these passage-ways, and from passage-ways to the rail tracks;

Provided that the Chief Inspectorcum facilitator may, for reasons to be specified in writing, exempt any factory in respect of any overhead travelling crane from the operation of any provision of this Sub-rule subject to such conditions as he may specify.

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

(a) all chains, slings, rings, hooks, shackles and swivels used in connection with molten metal or molten slag or when they are made of 12.5 mm bar or smaller, once at least in every six months;

(b) all other chains, rings, hooks, shackles and swivels in general use, once at least in every twelve months;

Provided that chains and lifting tackles not in frequent use shall, subject to the Chief Inspector's approval, be annealed only when necessary. Particular of such annealing shall be entered in a Register prescribed under Sub-rule(4).

(8) Nothing in the foregoing Sub-rule(7) shall apply to the following classes of chains and lifting tackles:—

(a) chains made of malleable cast iron;

(b) plate link chains;

(c) chains, rings, hooks, shackles and swivels made of steel or of any non-ferrous metal;

(d) pitched chains, working on sprocket or pocketed wheels;

(e) rings, hooks, shackles and swivels permanently attached to pitched chains, pulley blocks or weighing machines;

(f) hooks and swivels having screw threaded parts or ball bearing or other case hardened parts;

(g) socket shackles secured to wire ropes by white metal capping;

(h) bordeaux connections;

Provided that such chains and lifting tackles 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 (4).

(9) All lifting machines, ropes, chains and lifting tackles, except a fibre rope or fibre sling, which have been lengthened, altered or repaired by welding or otherwise, shall, before being again taken into use, be adequately re-tested and re-examined by a competent person and certificate of such test and examination be obtained, and particulars entered in the Register kept in accordance with Sub-rule (4).

(10) No person under 18 years of age and no person who is not sufficiently competent 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.

(11) Where the Chief Inspector-cum- Facilitator of Factories is satisfied that in a factory due to shut down or for any other reasons it is not practicable to maintain a

minimum distance of 6 metres between the person employed or working on or near the wheel track of a travelling crane and the crane, he may on the request of the Manager reduce the distance to such extent as he may consider necessary and also prescribe further precautions indicating appointment of suitable number of supervisors to ensure the safety of the persons while they are employed or working on or near the track.

## Pressure vessels or plant

(1) In this rule:—

(a) "Design pressure" means the maximum pressure that a pressure vessel or plant is designed to withstand safely when operating normally;

(b)"Maximum permissible working pressure" means the maximum pressure at which a pressure vessel or plant is permitted to be operated or used under this rule and is determined by the technical requirements of the process;

(c) "Plant" means a system of piping that is connected to a pressure vessel and is used to contain a gas, vapour or liquid under pressure greater than the atmospheric pressure, and includes the pressure vessel;

(d) "Pressure vessel" means a vessel that may be used for containing, storing, distributing, transferring, distilling, proessing or otherwise handling any gas, vapour or liquid under pressure greater than the atmospheric pressure and includes any pipeline fitting or other equipment attached thereto or used in connection therewith; and

(e) "Competent person" means a person whois, in the opinion of the Chief Inspector cum facilitator, capable by virtue of his qualifications, training and experience, of conducting a thorough examination and pressure test, as required, on a pressure vessel or plant, and of making a full report on its condition.

(2) Exceptions: Nothing in this rule shall apply to:—

(a) vessels made of ferrous materials having an internal operating pressure not exceeding 1Kg/cm<sup>2</sup>;

(b) steam boilers, steam and feed pipes and their fittings coming under the purview of the Indian Boilers Act,1923.

(c) metal bottles or cylinders used for storage or transport of compressed gases or liquified or dissolved gases under pressure covered by the Gas Cylinder Rules,1940 framed under the Indian Explosive Act,1884;

(d) vessels in which internal pressure is due solely to the static head of liquid;

(e) vessels with a nominal water capacity not exceeding 500 litres connected in a water-pumping system containing air that is compressed to serve as a cushion;

(f) vessels for nuclear energy application;

(g) refrigeration plant having a capacity of 3 tons or less of refrigeration in 24 hours; and

(h) working cylinders of steam engines or prime movers, feed pumps and steam traps, turbine casing, compressor cylinder, steam separators or driers, steam strainers, steam de-superheaters, oil separators, air receivers for fire sprinkler installations; air receivers of monotype machines, provided the maximum working pressure of the air receiver does not exceed 1.33 Kg/cm<sup>2</sup> and the capacity 85 Litres;

air receivers of electrical circuit breakers; air receivers of electrical relays; air vessels on pumps; pipe coils, accessories of instruments and appliances such as cylinders and piston assemblies used for operating relays and interlocking type of guards; vessels with liquids subjected to static head only; and hydraulically operated cylinders other than any cylinder communicating with an air loaded accumulator.

(3) Design and construction: Every pressure vessel or plant used in a factory—

(a) shall be properly designed on sound engineering practice;

(b) shall be of good construction, sound material, adequate strength and free from any patent defects; and

(c) shall be properly maintained in a safe condition;

Provided that the pressure vessel or plant in respect of the design and construction of which there is an Indian Standard or a Standard of the country of manufacture or any other Law or Regulation in force, shall be designed and constructed in accordance with the said Standard, Law or Regulation, as the case may be, and a certificate thereof shall be obtained from the manufacturer or from the competent person which shall be kept and produced on demand by an Inspector. (4) Safety devices: Every pressure vessel shall be fitted with—

(a) a suitable safety valve or other effective pressure relieving device of adequate capacity to ensure that the maximum permissible working pressure of the pressure vessel shall not be exceeded. It shall be set to operate at a pressure not exceeding the maximum permissible working pressure and when more than one protective device is provided, only one of the devices need be set to operate at the maximum permissible working pressure and the additional device shall be set to discharge at a pressure not more than 5 percent in excess of the maximum permissible working pressure;

(b) a suitable pressure gauge with a dial range not less than 1.5 times the maximum permissible working pressure, easily visible and designed to show at all times the correct internal pressure and marked with a prominent red mark at the maximum permissible working pressure of the pressure vessel;

(c) a suitable nipple and glove valve connected for the exclusive purpose of attaching a test pressure gauge for checking the accuracy of the pressure gauge referred to in clause (b) of this sub-rule;

(d) a suitable stop valve or valves by which the pressure vessel may be isolated from other pressure vessels or plant or source of supply of pressure. Such a stop valve or valves shall be located as close to the pressure vessel as possible and shall be easily accessible; and

(e) a suitable drain cock or valve at the lowest part of the pressure vessel for the discharge of the liquid or other substances that may collect in the pressure vessel;

Provided that it shall be sufficient for the purpose of this sub-rule if the safety valve or pressure relieving device, the pressure gauge and the stop valve are mounted on a pipe line immediately adjacent to the pressure vessel and where there is a range of two or more similar pressure vessels served by the same pressure lead, only one set of such mountings need be fitted on the pressure lead immediately adjacent to the range of pressure vessels, provided they cannot be isolated.

(5) Pressure reducing devices: (a) Every pressure vessel which is designed for a working pressure less than the pressure at the source of supply, or less than the pressure which can be obtained in the pipe connecting the pressure vessel with any other source of supply, shall be fitted with a suitable pressure reducing valve or other suitable automatic device to prevent the maximum permissible working pressure of the pressure vessel being exceeded.

(b) To further protect the pressure vessel in the event of failure of the reducing valve or device, at least one safety valve having a capacity sufficient to release all the steam, vapour or gas without undue pressure rise as determined by the pressure at the source of supply, and the size of the pipe connecting the source of supply, shall be fitted on the low pressure side of the reducing valve.

(6) Pressure vessel or plant being taken into use: (a) No new pressure vessel or plant shall be taken into use in a factory after coming into force of this rule unless it has been hydrostatically tested by a competent person at a presure at least 1.3 times the design pressure, and no pressure vessel or plant which has been previously used or has remained isolated or idle for a period exceeding two months or which has undergone alterations or repairs shall be taken into use in a factory unless it has been thoroughly examined by a competent person externally and internally, if practicable and has been hydrostatically tested by the competent person at a pressure which shall be 1.5 times the maximum permissible working pressure;

Provided, however, that the pressure vessel or plant which is so designed and constructed that it cannot safely filled with water or liquid or is used in service when even some traces of water cannot be tolerated, shall be pneumatically tested at a pressure not less than the design pressure or the maximum permissible working pressure, as the case may be;

Provided further that the pressure vessel or plant which is lined with glass shall be tested hydrostatically or pneumatically as required at a pressure not less than the design pressure or maximum permissible working pressure as the case may be.

Design pressure shall be not less than the maximum permissible working pressure and shall take into account the possible fluctuations of pressure during actual operation.

(b) No pressure vessel or plant shall be used in a factory unless there has been obtained from the maker of the pressure vessel or plant or from the competent person a certificate specifying the design pressure or maximum permissible working pressure thereof, and stating the nature of tests to which the pressure vessel or plant and its fittings (if any) have been subjected and every pressure vessel or plant so used in a factory shall be marked so as to enable it to be identified as to be the pressure vessel or plant to which the certificate relates and the certificate shall be kept available for perusal by the Inspector.

(c) No pressure vessel or plant shall be permitted to be operated or used at pressure higher than its design pressure, or the maximum permissible working pressure as shown in the certificate.

(7) In-service test and examination: (a) Every pressure vessel or plant in service shall be thoroughly examined by a Competent Person—

(i) externally, once in every period of six months;

(ii) internally, once in every period of twelve months;

Provided that if by the reason of the construction of a pressure vessel or plant, a thorough internal examination is not possible this examination may be replaced by a hydrostatic test which shall be carried out in every period of two years;

Provided further that for a pressure vessel or plant in continuous process which cannot be frequently opened, the period of internal examination may be extended to four years; and

(iii) hydrostatically tested once in every period of four years;

Provided that in respect of a pressure vessel or plant with thin walls, such as sizing cylinder made of copper or any other non-ferrous metal, periodic hydrostatic test may be dispensed with subject to the condition that the requirements laid down in sub-rule (8) are fulfilled;

Provided further that when it is impracticable to carry out thorough external examination of any pressure vessel or plant every six months as required in sub-clause (i) of this clause or if owing to its construction and use a pressure vessel or plant cannot be hydrostatically tested as required in sub-clauses (ii) and (iii) of this clause, a thorough external examination of the pressure vessel or plant shall be carried out at least once in every period of two years, and at least once in every period of four years a thorough systematic non-destructive test like ultrasonic test for metal thickness or other defects of all parts the failure of which might lead to eventual rupture of the pressure vessel or plant, shall be carried out.

(b) The pressure for the hydrostatic test to be carried out for the purpose of this sub-rule shall be 1.25 times the design pressure or 1.5 times the maximum permissible working pressure, whichever is less.

(8) Thin walled pressure vessel or plant: (a) In respect of any pressure vessel or plant of thin walls such as sizing cylinder made of copper or any other non-ferrous metal, the maximum permissible working pressure shall be reduced at the rate of 5 percent of the original maximum permissible working pressure for every year of its use after the first five years and no such cylinder shall be allowed to continue to be used for more than twenty years after it was first taken into use.

(b) If any information as to the date of construction, thickness of walls or maximum permissible working pressure is not available, the age of such pressure vessel or plant shall be determined by the Competent Person in consultation with the Chief Inspector cum- Facilitator from the other particulars available with the Manager.

(c) Every new and second hand pressure vessel or plant of thin walls to which repairs likely to affect its strength or safety have been carried out, shall be tested before use to at least 1.5 times its maximum permissible working pressure.

(9) Report by Competent Person: (a) If during any examination any doubt arises as to the ability of the pressure vessel or plant to work safely until the next prescribed examination, the Competent Person shall enter in the prescribed Register his observations and conclusions with other relevant remarks with reasons and may authorise the pressure vessel or plant to be used and kept in operation subject to a lowering of maximum permissible working pressure, or to more frequent or special examination, test or subject to both these conditions.

(b) A report of every examination or test carried out shall be completed in **Form 58** and shall be signed by the person making the examination or test and shall be kept available for perusal by the Inspector at all hours when the factory or any part thereof is working.

(c) When the report of any examination under this rule specified any condition for securing the safe working of any pressure vessel or plant, the pressure vessel or plant shall not be used unless the specified condition is fulfilled.

(d) The Competent Person making 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 pressure vessel or plant or any part thereof cannot continue to be used with safety unless certain repairs are carried out or unless any other safety measure is taken.

(10) Application of other laws: (a) The requirements of this rule shall be in addition to and without any prejudice to and not in derogation of the requirements of any other law in force.

(b)Certificates or reports of any examination or test of any pressure vessel or plant to which sub-rule (7) to (9) do not apply, conducted or required to be conducted under any other law in force and other relevant record relating to such pressure vessel or plant, shall be properly maintained as required under the said law and shall be produced on demand by the Inspector.

#### Water-sealed gasholder:

(1) The expression 'Gasholder' means a water sealed gasholder which has a storage capacity of not less than 141.5 cubic metres.

(2) Every gasholder shall be of adequate material and strength, sound construction and properly maintained.

(3) Where there is more than one gasholder in a factory, every gasholder shall be marked in a conspicuous position with a distinguishing number or letter.

(4) Every gasholder shall be thoroughly examined externally by a Competent Person at least once in a period of 12 months.

(5) In the case of gasholder of which any lift has been in use for more than 10 years, the internal state of the sheeting shall, within one year of the coming into operation of these rules and thereafter at least once in every period of four years, be examined by a Competent Person by means of electronic or other accurate devices;

Provided that if the Chief Inspector- cum- Facilitator is satisfied that such electronic or other accurate devices are not available, he may permit the cutting of samples from the crown and the sides of the holder;

Provided further that if the above examination raises a doubt, an internal visual examination shall be made.

(6) All possible steps shall be taken to prevent or minimise ingress of impurities in the gasholder

(7) No gasholder shall be repaired or demolished except under the direct supervision of a person who, by his training, experience and knowledge of the necessary precautions against risks of explosion and of persons being overcome by gas is competent to supervise such work.

(8) (a) All sample discs cut under sub-rule (5) above shall be kept readily available for inspection.

(b) A permanent Register in **Form 59** duly signed by the Occupier or Manager shall be maintained.

(c) The results of examinations by the Competent Person carried out as required under sub-rules (4) and (5) shall be recorded in **Form 60**.

(d) A copy of the report in **Form 60** shall be kept in the Register in Form 12 and both the Register and the Report shall be readily available for inspection.

(9) The Inspector- cum- Facilitator of Factories shall inspect the gasholder at least once in a period of 12 months.

Persons.	Maximum weight of material, article, tool or appliance.
(a) Adult male	55 Kilograms
(b) Adult Female	30 Kilograms
(c) Adolescent male	30 Kilograms
(d) Adolscent female	20 Kilograms
(e) Male child	16 Kilograms
(f) Female child	14 Kilograms

#### SCHEDULE

(b) No woman or young person shall engage, 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 persons engaged.

#### **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)The process specified in Schedule I annexed hereto, being processes which involve risk of injury to eyes from particles or fragments thrown off in the course of the processes.

(b)The processes specified in Schedule II annexed hereto being processes which involve risk of injury to eyes by reason of exposure to excessive light or infra-red or ultra-violet radiations.

## **SCHEDULE I**

1. Breaking, cutting, dressing or curving of bricks, stone, concrete slag or similar materials by means of a hammer, chisel, pick or similar hand tool, or by means of a portable tool driven by mechanical power, and the dry grinding of surfaces of any such material by means of wheel or disc driven by mechanical power where in any of the foregoing cases, particles or fragments are liable to be thrown off towards the face of the operator in the course of the process.

2. Dry grinding of surfaces of metal by applying them by hand to a wheel, disc or hand driven by mechanical power, and of surfaces of metal by means of a portable tool driven by mechanical power.

3. Dividing into separate parts of metal, bricks, stone, concrete or similar materials by means of a high speed saw driven by mechanical power or by means of an abrasive cutting-off wheel or disc driven by mechanical power.

4. Turning of metals or articles of metal, where particles or fragments are liable to be thrown off towards the face of the operator in the course of the process.

5. Drilling by means of portable tools, where the particles or fragments are liable to be thrown off towards the face of the operator in the course of the process.

6. Welding and cutting of metals by means of an electric, oxy-acetylene or similar process.

7. Hot fettling of steel castings by means of a flux-injected burner or air torch and deseaming of metal.

8. Fettling of metal castings involving the removal of metal including runners, gates and risers; and removal of any other material during the course of such fettling.

9. Chipping of metal; and chipping, knocking out, cutting out or cutting off of cold rivets, bolts, nuts, lugs, pins, collars or similar articles from any structure or plant, or from part of any structure or plant, by means of a hammer, chisel, punch or similar hand tool, or by means of a portable tool driven by mechanical power.

10. Chipping or scurfing of paint, scale, slag, rust or other corrosion from the surface of metal and other hard materials by means of a hand tool or by a portable tool driven by mechanical power.

11. Breaking of scrap metal by means of a hammer or by means of a tool driven by mechanical power.

12. Routing of metal, where particles or fragments are liable to be thrown off towards the face of the operator in the course of the process.

13. Work with drop hammers and power hammers used in either case for the manufacture of forgings, and work by any person not working with such hammers, whose work is carried on in such circumstances and in such a position that particles or fragments are liable to be thrown off towards his face during work with drop hammers or power hammers.

14. Work at a furnace where there is risk to the eye from molten metal.

15. Pouring or skimming of molten metal.

16. Work involving risk to the eyes from hot sand being thrown off.

17. Truing or dressing of an abrasive wheel.

18. Handling in open vessels or manipulation of strong acids or dangerous corrosive liquids or materials; and operation, maintenance or dismantling of plant or any part of plant, being plant or part of plant which contains or has contained such acids, liquids or materials, unless the plant or part of plant has been so prepared (by isolation, reduction of pressure or otherwise) treated or designed and constructed as to prevent risk of injury.

19. Any other process wherein there is a risk of injury to eyes from particles or fragments thrown off during the course of the process.

#### **SCHEDULE II**

1. Welding or cutting of metals by means of an electrical, oxy-acetylene or similar process.

2. All work on furnaces where there is risk of exposure to excessive light or infra-red radiations.

3. Process such as rolling, casting or forging of metals where there is risk of exposure to excessive light or infra-red radiations.

4. Any other process wherein there is risk of injury to eyes from exposure to excessive light or infra-red or ultra-violet radiations.

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 provide with a manhole which may be rectangular, oval or circular in shape; and which shall—

(a) In the case of a rectangular or oval shape, be not less than 40 cm long and 30 cm wide; and

(b) in the case of a circular shape, be not less than 40 cm in diameter.

Exemptions under

Exemption: The requirements of Sub-Section (4) of Section 37 shall not apply to the Sub-section (5) of following processes carried on in any factory:—Section 37. (a) the operation of repairing a water sealed gas holder by the electric welding process, subject to the following conditions:—

(i)the gas holder 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 gas holder containing acetylene or mixture of gases to which acetylene has been added intentionally; and

(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 by 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 or 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 two 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 flammable 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 only oil contained in the tank shall have a flash point of not less than 65.5 degrees centigrade (close test) and a certificate to the 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 flammable quantities and (b)which is not less than 30 centimetres below the nearest part of the surface of the oil within the tank; and

(iv) welding shall be done only by the electric welding and shall be carried out by experienced operatives under the constant supervision of a competent person.

#### **Fire Protection**

(1) **Processes, equipment, plant etc.** - Involving serious explosion and serious fire hazards: (a)All processes, storages, equipments, plants etc. involving serious explosion and flash fire hazard shall be located in segregated buildings where the equipment shall be so arranged that only a minimum number of employees are exposed to such hazards at any one time.

(b)All industrial processes involving serious fire hazard shall be located in building or work places separated from one another by walls of fire-resistant construction.

(c) Equipment and plant involving serious fire or flash fire hazard shall wherever possible, be so constructed and installed that in case of fire, they can be easily isolated.

(d) Ventilation ducts, pneumatic conveyors and similar equipments involving a serious fire risk should be provided with flame-arresting or automatic fire extinguishing appliances or fire resisting dampers electrically interlocked with heat sensitive smoke detectors and the air-conditioning plant system.

(e) In all work places having serious fire or flash fire hazards, passages between machines, installations or piles of material should be at least 90 cm. wide. For storage piles, the clearance between the ceiling and the top of the piles should not be less than 2 m.

(2) Access for fire fighting: (a) Buildings and plants shall be so laid out and roads, passage ways etc., so maintained as to permit unobstructed access for fire fighting.

(b) Doors and window openings shall be located in suitable positions on all external walls of the building to provide easy access to the entire area within the building for fire fighting.

(3) Protection against lightning: Protection from lightning shall be provided for—

(a) buildings in which explosive or highly flammable substances are manufactured, used, handled or stored;

(b) storage tanks containing oils, paints or other flammable liquids;

(c) grain elevators;

(d) buildings, tall chimneys or stacks where flammable gases, fumes, dust or lint are likely to be present; and

(e) sub-station buildings and out-door transformers and switch yard.

(4) **Precaution against ignition**: Wherever there is danger of fire or explosion from accumulation of flammable or explosive substances in air—

(a) all electrical apparatus shall either be excluded from the area of risk or they shall be of such construction and so installed and maintained as to prevent the danger of their being a source of ignition;

(b) effective measures shall be adopted for prevention of accumulation of static charges to a dangerous extent;

(c)workers shall wear shoes without iron or steel nails or any other exposed ferrous materials which is likely to cause spark by friction;

(d)smoking, lighting or carrying of matches, lighters or smoking materials shall be prohibited;

(e)transmission belts with iron fasteners shall not be used; and

(f)all other precautions, as are reasonably practicable, shall be taken to prevent initiation of ignition from all other possible sources such as open flames, frictional sparks, overheated surfaces of machinery or , plant, chemical or physical-chemical reaction and radiant heat.

(5) **Spontaneous ignition**: Where materials are likely to induce spontaneous ignition, care shall be taken to avoid formation of air pocket and to ensure adequate ventilation. The material susceptible to spontaneous ignition should be stored in dry condition and should be in heaps of such capacity and separated by such passage which will prevent fire. The material susceptible to ignition and stored in the open shall be at a distance not less than 10 metres away from process or storage buildings.

(6) Cylinders containing compressed gas: Cylinders containing compressed gas may only be stored in open if they are protected against excessive variation of temperature, direct rays of sun or continuous dampness. Such cylinders shall never be stored near highly flammable substances, furnaces or hot processes. The room where such cylinders are stored shall have adequate ventilation.

(7) Storage of flammable liquids: (a) The quantity of flammable liquids in any work room shall be the minimum required for the process or processes carried on in such room. Flammable liquids shall be stored in suitable containers with close fitting covers;

Provided that not more than 20 litres of flammable liquids having a flash point of 21°C or less shall be kept or stored in any work room.

(b) Flammable liquids shall be stored in closed containers and in limited quantities in well ventilated rooms of fire-resisting construction which are isolated from the remainder of the building by fire walls and self closing fire doors.

(c) Large quantities of such liquid shall be stored in isolated adequately ventilated building of fire resisting construction or in storage tanks, preferably under ground and at a distance from any building required in the Petroleum Rules, 1976.

(d) Effective steps shall be taken to prevent leakage of such liquids into basements, sumps or drains and to confine in any escaping liquid within safe limits.
(8) Accumulation of flammable dust, gas, fume or vapour in air or flammable waste material on the floors: (a) Effective steps shall be taken for removal or prevention of the accumulation in the air of flammable dust, gas, fume or vapour to an extent which is likely to be dangerous.

(b) No waste material of a flammable nature shall be permitted to accumulate on the floors and shall be removed at least once in a day or shift, and more often, when possible. Such materials shall be placed in suitable metal containers with covers wherever possible.

(9) Fire exits: (a) In this rule—

(i) "Horizontal exit" means an arrangement which allows alternative agress from a floor area to another floor at or near the same level in an adjoining building or an adjoining part of the same building with adequate separation; and

(ii) "Travel distance" means the distance an occupant has to travel to reach an exit.

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

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

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

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

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

(g) Iron rung ladders or spiral staircases shall not be used as exit stair cases.

(h)Fire resisting doors or roller shutters shall be provided at appropriate places along the escape routs to prevent spread of fire and smoke particularly at the entrance of lifts or stairs where funnel or flue effect may be created inducing an upward spread of fire. (i) All exits shall provide continuous means of egress to the exterior of a building or to an exterior open space leading to a street.

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

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

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

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

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

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

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

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

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

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

(t)No exit doorway shall be less than 100 cm. in width. Doorways shall be not less than 200 cm. in height.

(u)Exit doorways shall open outwards, that is away from the room but shall not obstruct the travel along any exit. No door when opened, shall reduce the required width of stairway or landing to less than 90 cm.overhead or sliding doors shall not be installed for this purpose.

(v)An exit door shall not open immediately upon a flight of stairs. A landing of at least  $1.5mx \ 1.5m$  size shall be provided in the stairway at each doorway. The level of landing shall be the same as that of the floor which it serves.

(w)The exit doorway shall be openable from the side which they serve without the use of key.

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

(y)Where stairways discharge through corridors and passageways, the height of the corridors and passageways shall not be less than 2.4 metres.

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

(bb) Hollow combustible construction shall not be permitted.

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

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

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

(ff) Hand rail shall be provided with a minimum height of 100cm. and shall be firmly supported.

(gg) The use of spiral staircase shall be limited to low occupant load and to a building of height of 9 metres, unless they are connected to platforms such as balconies and terraces to allow escapees to pause. A spiral staircase shall be not less than 300 cm. in diameter and have adequate head room.

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

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

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

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

(ll) Doors in horizontal exits shall be openable at all times.

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

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

(10) First-aid fire fighting arrangements: (a) In every factory there shall be provided and maintained adequate and suitable firefighting equipment for fighting fire

in the early stages, those being referred to as first-aid firefighting equipment in this rule.

(b) The type of first-aid fire fighting equipment to be provided shall be determined by considering the different types of fire risks which are classified as follows:—

(i) Class A fire: Fire due to combustible materials such as wood, textiles, paper, rubbish and the like.

1. "Light hazard": Occupancies like offices, assembly halls, canteens, rest-rooms, ambulance rooms and the like.

2. "Ordinary hazard": Occupancies like saw mills, carpentry shop, small timber yards, book binding shops, engineering workshop and the like.

3. "Extra hazard": Occupancies like large timber yards, godown storing fibrous materials, flour mills, cotton mills, jute mills, large wood working factories and the like.

(ii) Class B fire: Fire in flammable liquids like oil, petroleum products, solvents, grease, paints etc.

(iii) Class C fire: Fire arising out of gaseous substances.

(iv) Class D fire: Fire from reactive chemicals, active metals and the like.

(v) Class E fire: Fire involving electrical equipment and delicate machinery and the like.

(c) The number and types of first of first-aid fire fighting equipment to be provided for 'light hazard' occupancy shall be as given in Schedule I. For 'ordinary hazard or extra hazard' occupancies equipment as given in paragraph 12 shall be provided in addition to that given in Schedule I.

(d) The first-aid fire fighting equipment shall conform to the relevant Indian Standards.

(e) As far as possible the first-aid fire fighting equipment shall all be similar in shape and appearance and shall have the same method of operation.

(f) all first-aid fire fighting equipment shall be placed in a conspicuous position and shall be readily and easily accessible for immediate use. Generally, these equipments shall be placed as near as possible to the exits or stair landing or normal routes of escape.

(g) All water buckets and bucket pump type extinguishers shall be filled with clean water. All sand buckets shall be filled with clean, dry and fine sand.

(h) All other extinguishers shall be charged appropriately in accordance with the instructions of the manufacturer.

(i) Each first-aid fire fighting equipment shall be alloted a serial number by which it shall be referred to in the records. The following details shall be painted with white paint on the body of each equipment:—

1. Serial number;

2.Date of last refilling; and

3.Date of last inspection.

(j) First-aid fire fighting equipment shall be placed on the platforms or in cabinets in such a way that their bottom is 750 mm above the floor level. Fire buckets shall be

placed on hooks attached to a suitable stand or wall in such a way that their bottom is 750 mm above the floor level. Such equipment if placed outside the building shall be under sheds or covers.

(k) All extinguishers shall be thoroughly cleaned and re-charged immediately after discharge. Sufficient refill material shall be kept readily available for this purpose at all times.

(1) All first-aid fire fighting equipment shall be subjected to routine maintenance, inspection and testing to be carried out by properly trained persons. Periodicity of the routine maintenance, inspection and test shall conform to the relevant Indian Standards.

(11) Other fire-fighting arrangements: (a) In every factory adequate provision of water supply for fire fighting shall be made and where the amount of water required in litres per minute, as calculated from the formula A+B+C+D divided by 20 is 550 or more, power driven trailer pumps of adequate capacity to meet the requirement of water as calculated above shall be provided and maintained. In the above formula:—

A= The total area in  $m^2$  (square metres) of all floors including gallaries in all buildings of the factory;

B= The total area in m<sup>2</sup> of all floors and gallaries including open spaces in which combustible materials are handled or stored;

C= The total area in  $m^2$  of all floors over 15 metres above ground floor level; and D= The total area in  $m^2$  of all floors of all buildings other than those of fire resisting construction.

Provided in areas where the fire risk involved does not require use of water, such areas under B, C or D may, for the purpose of calculation, be halved.

Provide further that where the areas under B, C or D are protected by permanent automatic fire-fighting installations approved by any fire association or fire insurance company, such areas may, for the purpose of calculation, be halved.

Provided also that where the factory is situated at not more than 3 Kilometres from an established city or town fire service, the pumping capacity based on the amount of water arrived at by the formula above may be reduced by 25%;but no account shall be taken of this reduction in calculating water supply required under clause(a).

(b) Each trailer pump shall be provided with equipment as per Schedule II appended to this rule. Such equipment shall conform to the relevant Indian Standards.

(c) Trailer pumps shall be housed in a separate shed or sheds which shall be sited closed to a principal source of water supplies in the vicinity of the main risks of the factory.

(d) In factories where the area is such as cannot be reached by man-hauling of trailer pumps within reasonable time vehicles with towing attachment shall be provided at the scale of one for every four trailer pumps with a minimum of one such vehicle kept available at all times.

(e) Water supply shall be provided to give flow of water as required under clause (a) for at least 100 minutes. At least 50% of this water supply or 450,000 litres whichever

is less, shall be in the form of static tanks of adequate capacities (not less than 450,000 litres each) distributed round the factory, with due regard to the potential fire risks in the factory. (Where piped supply is provided, the size of the main shall not be less than 15 centimetres diameter and it shall be capable of supplying a minimum of 4,500 litres per minute at a pressure of not less than 7 Kilograms per square centimetre)

(f) All trailer pumps including the equipment provided with them and the vehicles for towing them shall be maintained in good condition and subjected to periodical inspection and testing as required.

## (12) Personnel in charge of equipment and for fire-fighting, fire drills etc.:—

(a) The first-aid and other fire fighting equipment to be provided as required in sub-rules (10) and (11) shall be in charge of a trained responsible person.

(b) Sufficient number of persons shall be trained in the proper handling of firefighting equipment as referred to in clause (a) and their use against the types of fire for which they are intended to ensure that adequate number of persons are available for fire fighting both by means of first-aid fire fighting equipment and others. Such persons shall be provided with clothing and equipment including helmets, belts and boots, preferably gumboots. Wherever vehicles with towing attachments are to be provided as required in clause (d) of sub-rule (11), sufficient number

of persons shall be trained in driving these vehicles to ensure that trained persons are available for driving them whenever the need arises.

(c) Fire-fighting drills shall be held as often as necessary and at least once in every period of two months.

(13) Automatic sprinklers and fire hydrants shall be in addition and not in substitution of the requirements in sub-rules (10) and (11).

(14) If the Chief Inspector cum- Facilitator is satisfied in respect of any factory or any part of the factory that owing to the exceptional circumstances such as inadequacy of water supply or infrequency of the manufacturing process or for any other reason, to be recorded in writing, all or any of the requirements of the rules are impracticable or are not necessary for the protection of workers, he may by an order in writing (which he may at his discretion revoke) exempt such factory or part of the factory from all or any of the provisions of the rules subject to conditions as he may by such order prescribe.

## **SCHEDULE I**

First-aid fire fightingequipments

(1)The different types of first-aid fire fighting equipment suitable for use on them are as follows:—

Class of fire	Suitable type of appliances	
A Fires in ordinary combustibles (Wood,	Chemical Extinguishers of Soda-acid,	
vegetable fibres, paper and the like)	gas-expelled water and anti-freeze types	
	and water buckets.	
B Fires in flammable liquids, paints,	Chemical Extinguishers of	

grease, Solvents and the like.	foam,carbondioxide and dry powder
	types and sand buckets
C Fires in gaseous substances under	Chemical Extinguishers of carbon
pressure.	dioxide and dry powder types
D Fires in reactive chemicals, active	Special types of dry powder
metals and the like.	Extinguishers and sand buckets
E Fires in electrical equipments	Chemical Extinguishers of carbon
	dioxide and dry powder type and sand
	buckets.

(2) One 9 litre bucket shall be provided for every 100 sq.m. of the floor area or part thereof and one 9 litres water type Extinguisher shall be provided to six buckets or part thereof with a minimum of one Extinguisher and two buckets per compartment of the building. Buckets may be dispensed with, provided supply of Extinguishers is double that indicated above.

(3)Acceptable replacements for water buckets and water type extinguishers in occupancies where Class B fires are anticipated, are as under:-

Acceptable Replacements	Buckets of water	Water type Extinguishers
For one bucket	For three buckets	For each 9litres(2
		gallons)Extinguisher
Dry sand 1 bucket	3 buckets	
Carbondioxide 3 Kg.(7lbs)	9 Kg(20 lbs)	9Kg(20lbs)
Extinguishers	[In not less than 2	
	extinguishers]	
Dry powder extinguishers	5 Kg (11 lbs)	5Kg (11 lbs)
2 Kg (5 lbs)	[In one or more	
	extinguishers]	
Foam extinguishers	9litres (2 gallons)	9 litres (2 gallons)
9litres (2 gallons)		

(4) The following provisions shall be complied with where Class E fires are anticipated:

(a) For rooms containing electrical transformers, switchgears, motors and/ or other electrical apparatus only, not less than two 2-Kg. Dry powder or Carbon Dioxide type extinguishers shall be provided within 15 m. of apparatus.

(b) Where motors and/ or other electrical equipments are installed in rooms other than those containing such equipment only, one 5kg. Dry powder or Carbon Dioxide Extinguisher shall be installed within 15 m. Of such equipment in addition to the requirements as mentioned at (2) and (3) above. For this purpose the same

extinguisher may be deemed to afford protection to all apparatus within 15 m. thereof.

(c) Where electrical motors are installed on platform, one 2-kg. Dry Powder or Carbon Dioxide type extinguisher shall be provided on or below each platform. In case of a long platform with a number of motors, one extinguisher shall be acceptable as adequate for every 3 motors on the common platform. The above requirements will be in addition to the requirements mentioned at items (2) and (3) above.

(5) The first-aid fire fightingequipments shall be so distributed over the entire floor area that a person has to travel not more than 15 m. to reach the nearest equipment.

(6) Selection of sites for the installation of first-aid fire fightingequipments:-

(a) While selecting sites for first-aid fire fightingequipments, due consideration shall be given to the nature of the risk to be covered. The equipments shall be placed in conspicuous position and shall be readily accessible for immediate use in all parts of the occupancy. It should always be borne in mind while selecting sites that first-aid fire fightingequipments are intended only for use on incipient fires and their value may be negligible if the fire is not extinguished or brought under control in the early stages.

(b) Buckets and extinguishers shall be placed at convenient and easily accessible locations either on hangers or on stands in such a way that their bottom is 750 mm above the floor level.

(7) The operating instructions of the extinguishers shall not be defaced or obliterated. In case the operating instructions are obliterated or have become illegible due to passage of time, fresh transfers of the same shall be obtained from the manufacturers of the equipments and affixed to the extinguishers.

# SCHEDULE II Equipments to be provided with Trailer Pump

For light trailer pump of a capacity of 680 litres/minute:-

No.	Description	No.	Description
1-	Armoured suction hose of 9	1-	Fire hook (Preventor) with cutting
	metres length, with wrenches		edge.
		1-	25 mm manila rope of 30 metres
			length.
1-	Metal suction strainer.		
1-	Basket strainer.	1-	Extension ladder of 9 metreslenght
			(Where necessary)
1-	Two-way suction collecting head	1-	Heavy axe.
1-	Suction adapter	1-	Spade.
10-	Unlined or rubber-lined 70 mm	1-	Pick axe
	delivery hose of 25 metres		
	length complete with quick-		
	release couplings		
1-	Dividing breaching-piece	1-	Crowbar.

2-	1Branch-piece with 15 mm nozzles	1-	Saw.
1-	Diffuser nozzle	1-	Hurricane lamp
1-	Stand pipe with blank cap	1-	Electric torch.
1-	Hydrant key.	1-	Pair Rubber gloves
4-	Collapsible canvas buckets		

For large trailer pump of capacity of 1800 litres/minute.

1 -	Armoured suction hose of 9		Coiling hook (preventor)with cutting
1 -		1 -	
	metres length with wrenches.		edge.
1 -	Metal strainer.	1 -	50mm manila rope of 30 m length
1 -	Basket strainer.	1 -	Extension ladder of 9m length (where
			necessary)
1 -	Three-way suction collecting	1 -	Heavy axe
	head.		
1 -	Suction adaptor.	1 -	Spade
14 -	Unlined or rubber-lined 70 mm	1 -	Pick axe.
	delivery hose of 25 m length		
	complete with quick-release		
	couplings		
1 -	Dividing breathing-piece	1 -	Crowbar.
1 -	Collecting breathing piece	1 -	Saw.
4 -	Branch pipes with one 25	1 -	Hurricane lamp.
	mm,two 20 mm and one		
	diffuser nozzles		
2 -	Stand pipe with blank caps.	1 -	Electric torch.
2 -	Hydrant keys	1 -	Pair rubber gloves
6 -	Collapsible canvas buckets.		

Note: If it appears to the Chief Inspector- cum- Facilitator of Factories that in any factory the provision of breathing apparatus is necessary, he/she may, by order in writing require the occupier to provide suitable breathing apparatus in addition to the equipment for light trailer pump or large trailer pump, as the case may be.

## PART-VI PLANTATION

**105.** <u>Housing accommodation for workers under sub-section (1) of Section 92</u>.-Every employer shall provide for worker and his family residing in a plantation, housing accommodation as possible to the place of work.

**106.** <u>Standard and specification of housing accommodation under Section 92</u>.-All housingaccommodation for workers in a plantation shall conform to such standardsand specifications as may be approved by the State Government on therecommendation of the Board constituted under Section 17. **107.** <u>Sites for housing accommodationunder Section 92</u>.- (1) The housing accommodationshall be provided on dry well-drained land which is consistent with therequirement regarding distance from the plantation, has supplies of wholesomedrinking water within a reasonable distance.

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

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

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

(5) Adequate facilities of toilets with sewage disposal shall be ensured by the employer.

**108.** <u>Maintenance of houses under Section 92</u>.- (1) The employer shall, at his own expenses, maintain all houses provided for accommodation of workers in a fit and safecondition and execute annual and such other repairs as may be necessary from time to time.

(2) A worker occupying a house may, and an Inspector-cum-Facilitatorappointed under the Code shall, bring to the notice of the employer any defectin the condition of a house which makes it dangerous to the health and safetyof the worker. It shall be the duty of the employer to rectify the same at theearliest.

(3) The employer shall get all the houses lime-washed at least once every yearand all the doors, windows and other wooden structure varnished or paintedonce in three years. A record of dates on which lime-washing or painting wascarried out shall be maintained in a register.

(4) If any employer fails to comply with the requirements of sub -rules (1), (2)or (3), the Chief Inspector-cum-Facilitator may cause repairs to be done and realise the cost thereof from the employer as arrears of land revenue.

**109.** <u>Accommodation to be rent free under Section 92</u>.- No rent shall be charged by anemployer for the housing accommodation provided to workers and their familiesresiding in his plantation.

**110.** Occupation of accommodation after termination of employment under Section 92.-(1) When a worker dies in the service of the employer, or retires, or goes ontransfer, or resigns or goes on leave or when his services are terminated, he orhis family may retain the house up to the period as detail below—

(i) in the case of death, transfer, termination of service, retirement orresignation, a period not exceeding two months;

(ii) in the case of leave, for the period of leave; and

(iii) in the case where the discharge of a worker is disputed and thematter has been taken to an Industrial Tribunal or Court, for so longas the case is not finally disposed off.

(2) If a worker fails to vacate the house on the expiry of the periodmentioned above and continues to occupy the same when no member of his family is working, he shall

be liable to pay to the employer suchrent at a rate not exceeding ten percent of his wages as may be fixed by the Chief Inspector-cum-Facilitator.

#### 111. Benefit of sickness under Section 92.-

(1) Every worker shall be entitled to obtain sicknessallowance from his employer for each day of certified sickness for a totalperiod of fourteen days in a year at the rate of wages paid normally;

Provided however, that where under existing provisions under anylaw the sickness allowance is higher, workers shall not, by the dint of this rule, be deprived of such higher allowance.

(2) Sickness allowance specified in sub-rule (1) shall be paid at the option of the worker either at the time of payment of weekly advances on account of wages or along with the first installment of wages payable to the worker after he resumes his work on recovery from certified sickness.

(3) The certificate of sickness shall be issued by the Medical Officer orqualified medical practitioner appointed by the employer to every workerentitled to obtain sickness allowance.

(4) No sickness allowance shall be paid to a worker if he attends to work onany day for which he has been granted sickness allowance.

**112.** <u>Crèche for Plantation Workers under Section 92</u>.- (1) In every plantation wherein fiftyor more workers are employed or were employed on any day of the precedingtwelve months, the employer shall provide and maintain creche for the use of the children who are between the age of 2 and 6 years.

(2) Every crèche shall be conveniently accessible to the parents of the childrenaccommodated therein.

(3) There shall be not less than fifteen square feet of floor area for each childto be accommodated in a crèche.

(4) The building in which the crèche is situated shall be of sound construction with a good plinth.

(5) The plan of the crèche building shall be in accordance with the standardplan or plans laid down by the Chief Inspector-cum-Facilitator.

(6) The crèche shall be furnished with suitable furniture such as cots to liedown, benches to sit, a hammock for each child below the age of two years, etc., and provided with toys and other play things as may be specified by the Chief Inspector-cum-Facilitator with the prior approval of the State Government.

(7) A suitably fenced and shady open air play-ground shall be provided for thechildren.

(8) The employer shall appoint a woman as Crèche-in-charge to look afterchildren during the absence of their parents, who shall possess such qualifications and training as may be approved by the State Government.

## 113. Educational facilities for worker's children under Section 92.-

(1) Every employer shall, if the number of workers children between the ages of six and twelve in hisplantation exceeds twenty five, provide and maintain a Primary School forimparting Primary education to the children; Provided that an employer may not provide and maintain a PrimarySchool if there is one under the direct management of the State Governmentor of any local body for imparting free education to the children up to theprimary or higher standard, with enough seats to admit the children between the ages of six and twelve of the workers in his plantation or within a distance of one kilometer from the place where workers reside in his plantation.

(2) Equipment in school.- The employer or employers, as the case may be shall provide for every Primary School maintained under sub-rule (1) such educational and other equipment as may be considered necessary by the StateEducation Department.

**114.** <u>Fee to be charged under Section 92</u>.- No fees shall be charged from the workers' childrenattending the Primary School.

**115.** <u>Recreational facilities under Section 92</u>.- (1) Every employer shall provide and maintain,-

(i) recreation centre to the scale of one for every one hundred and seventyfivefamilies of resident workers or part thereof with provision for a televisionwith dish connection and indoor games for workers and their families and suchother facilities, as may be specified by the Chief Inspector-cum-Facilitator, with prior approval of the State Government; and

(ii) a playground or playgrounds for workers and their families with necessarysports equipment for out-door games:

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

**116.** <u>Safeguards for women and adolescent in using or handlinghazardous</u> <u>substances under sub-section(2) of Section 93</u>.- No pregnant woman or adolescent shall be allowed to handle any hazardous substance.

**117.** <u>**Qualifications to supervise the use, handling, storage andtransportation of insecticides, chemicals and toxic substances in theplantation of the employerunder sub-section(2) of Section 93.** For the purposes of sub-section (3) of Section93, no person shall be appointed by an employer unless such person is,-</u>

(i) in possession of B.Sc. in Chemistry or Agriculture;

(ii) able to speak and understand the language of workers; and

(iii) having an experience of three years in such field.

**118.** <u>Safety measures and safe work practices under sub-section(4) of Section 93</u>.-The following safetymeasures and safe work practices with respect to the location, security and access to storage of insecticides, chemicals and toxic substances shall beensured by the employer, namely:-

(a) the store or storage area shall be separate from other buildings,dwellings, storage of foodstuffs;

(b) accidental or unauthorized access to the storage area shall beprevented;

(c) the store shall be kept locked and fitted with a child proof latch toprevent risks to children, visitors to the workplace, and members of the public who are not familiar with the hazards of insecticides, chemicals and toxic substances;

(d) adequate natural or mechanical ventilation shall be provided;

(e) impervious floors with drainage into a sump concrete door sillsconcrete or block walls to a sufficient height to contain spillsimpervious shelving;

(f) the walls (or bund) and door sill shall be high enough to contain aspillage of twenty five per cent of the total volume of packagedliquid pesticides;

(g) provision shall be made for drainage of spills and clean up waterinto a sump or pit that can contain the insecticides, chemicals andtoxic substances, clean up materials and the wash water;

(h) supply of wash water shall be made readily available;

(i) good natural cross-flow ventilation shall be provided with vents inopposite walls, above bund height;

(j) substances shall be stored at a cool temperature to prevent deterioration; and (k) the products shall be protected from moisture so that packaging and labelling does not deteriorate.

## 119. <u>Medical examination and health record of plantation workers under sub-</u> section (5) and (6) of Section 93.-

(1) Every worker employed in a plantation, who is exposed to insecticides, pesticides, chemicals and toxic substances shall be medically examined by aqualified medical practitioner in the following manner, namely:-

(i) once before employment, to ascertain physical fitness of the person to dothe particular job;

(ii) once in a period of twelve months, to ascertain the health status of all theworkers in respect of occupational health hazards to which they are exposed;and

(iii) the details of pre-employment and periodical medical examination carriedout as aforesaid shall be recorded in the health register in **Form-47**.

(2) No person shall be employed for the first time without a certificate of Fitness in **Form-48** granted by the qualified medical practitioner. If the qualified medical practitioner declares a person unfit for being employed, such a personshall have the right to appeal to the Inspector-cum-Facilitator who shall refer the matter to the Medical Officer whose opinion shall be final in this regard.

(3) Any finding of the qualified medical practitioner revealing any abnormalityor unsuitability of any person employed shall immediately be reported to theMedical Officer who shall in turn, examine the concerned worker and communicate his findings to the employer within thirty days. If the MedicalOfficer is of the opinion that the worker so examined is required to be takenaway from the employment for health protection, he will direct the employeraccordingly, who shall not employ the said worker in the same employment.

However, the worker so taken away shall be provided with alternate placementunless he is fully incapacitated in the opinion of the Medical Officer in whichcase the worker affected shall be suitably rehabilitated.

(4) The workers taken away from employment under sub-rule (3) may beemployed again in the same employment only after obtaining the FitnessCertificate from the Medical Officer and after making entries to that effect in the health register.

(5) A copy of the upto date health records including the record of worker's exposure to insecticides, pesticides, chemicals and toxic substances or, as the case may be, the medical records shall be supplied to the worker on receipt of an application from him. X-ray plates and other medical diagnostic reportsmay also be made available for reference to his qualified medical practitioner.

# 120. <u>Washing, bathing and cloak-room facilities to plantation workers under clause (a) of sub-section (7) of Section 93.</u>-

(1) There shall be provided and maintained in every plantation for the use of allthe workers taps for washing, at the rate of one for every fifteen personsincluding liquid soap in a container with tilting arrangements and nail brushesor other suitable means for effective cleaning. Such facilities shall be conveniently accessible and shall be kept in a clean and hygienic condition.

(2) If washing facilities as required above are provided for women, such facilitiesshall be separate for them and adequate privacy at all times shall be ensured insuch facilities.

(3) Every employer of a plantation where the workers engaged therein arehandling insecticides, pesticides, chemicals and toxic substances and fiftyworkers or more are employed, shall provide for all the workers working in a shift, mess room facilities which are well ventilated and provided with tablesand sitting facilities along with the provision of cold and hygienic drinking waterfacilities.

(4) The facilities mentioned in sub-rule (3) shall include suitable arrangements for cleaning and washing and shall be maintained in a clean and hygienic condition.

(5) Every employer of a plantation where the workers engaged therein arehandling insecticides, pesticides, chemicals and toxic shall provide for cloakroom facilities with lockers. Each worker shall be provided with two lockers, one for work clothing and another separately for personal clothing and thelockers should be such as to enable the keeping of the clothing in a hangingposition.

(6) The cloak room facilities provided under sub-rule (5) shall be located, asfar as possible, near to the facilities provided for washing under sub-rule (1). If is not possible to locate the washing facilities near to the cloakroom, then the cloakroom shall have adequate and suitable arrangements for cleaning and washing.

**121.** <u>Protective clothing and equipment to plantation workers under clause (b) of</u> <u>sub-section (7) of Section 93</u>.- Whenchoosing Personal Protective Equipments in accordance with the label, MaterialSafety Data Sheet and risk assessment, the following items shall be considered, namely:-

(a) cotton overalls buttoned to the neck and wrist;

(b) pesticide resistant water-proof aprons when mixing or pouringconcentrate;

(c) gloves (pesticide resistant), preferably gauntlets, to be worn whenhandling or using chemicals;

(d) a wide brim washable hat; if contaminated, the hat should beremoved immediately and washed before re-use;

(e) boots such as rubber or Polyvinyl chloride; waterproof leggingsproviding additional protection, leather boots which can absorb pesticide and prevent exposure during high volume applications;

(f) face shield or splash proof goggles when mixing or pouring;

(g) goggles and appropriate approved respirator, especially if exposure o spray drift is likely; and

(h) full face air -line respirator when working in enclosed spaces, depending on the label and Material Safety Data Sheet selfcontained breathing apparatus for entry into confined spaces.

**122.** <u>Precautionary notices in plantation under sub-section (9) of Section 93</u>.-Precautionary notice in the formspecified below and printed in the language of the majority of the workersemployed shall be affixed in a prominent place in the plantation where it can be asily and conveniently read by the workers.

#### **PRECAUTIONARY NOTICE**

1. Chemicals handled in this plantation are hazardous.

2. Smoking, chewing tobacco, eating food or drinking, in this area is prohibited.

3. No food stuff or drink shall be brought in this area.

4. Some of these chemicals may be absorbed through the skin and maycause poisoning.

5. A good wash shall be taken before meals.

6. Protective devices supplied shall be used while working in this area.

7. Spillage of the chemicals on any part of the body or on the floor shall beimmediately washed away with water.

8. All workers shall report for the prescribed medical tests regularly toprotect their own health.

#### Chapter IX OFFENCES AND PENALTIES

**123.** <u>Officer and manner for holding enquiry</u>.-(1) For the purpose of subsection (1) of Section 111, an officer not below the rank of Secretary to the Government of Meghalaya, Department of Labour, Employment & Skill Develoepment, Government of Meghalayashall be appointed for holding enquiry within his jurisdiction.

(2) The officer referred to in sub-rule (1), upon acquiring the knowledge of an offence under the Code, shall serve a notice, within seven days of such knowledge, on the person who is alleged to have committed an offence.

(3) The person on whom notice has been served under sub-rule (2) shall submit his reply within the period specified in the notice.

(4) The officer referred to in sub-rule (1), may call any person to appear before him along with any record or document required for the purpose of enquiry he is holding.

(5) The officer referred to in sub-rule (1), shall complete enquiry within sixty days from the start of such enquiry and pass a speaking order.

(6) The amount of penalty imposed and received under Section 111 shall be credited to the fund established under sub-section (1) of Section 115 and record of such receipt shall be maintained in **Form-51**.

**124.** <u>Appellate Authority and manner of appeal</u>.-(1) For the purpose of sub-section (3) of Section 111, an officer not below the rank of Commissioner & Secretary to the

Government of Meghalaya, Department of Labour, Employment & Skill Develoepment, Government of Meghalaya, shall be appointed as the Appellate Authority for hearing appeal within his jurisdiction.

(2) The aggrieved person may prefer an appeal to the officer referred to in sub-rule (1) in **Form-52** within the period specified in sub-section (3) of Section 111.

(3) A fee at the rate of two percent of penalty imposed under Rule 131 shall be accompanied by appeal which shall be paid on portal and shall be credited to the treasury in the head of the account as may be specified by the State Government from time to time.

125. Officer and manner of composition of certain offences under Section 114.-

(1) An officer as given below in the table shall be the officer for composition of certain offences, namely:-

Serial	Officer authorized to compound	Sections for which officer is
No.		authorized to compound
1	officer not below the rank of Secretary to the Government of Meghalaya, Department of Labour, Employment & Skill Develoepment, Government of	97, 100(1), 101, 102, 103(1), 104, 105, 106, 113(2), 114(3)
2	Meghalayaan officer not below the rank of Commissioner & Secretary to the Government of Meghalaya, Department of Labour, Employment & Skill Develoepment, Government of Meghalaya	12(3), 94, 95, 96, 98, 99,103(2), 106, 46, 47, 54, 55, 56,57, 100(1), 104, 106

(1) Any person seeking composition of penalty or offence as specified in sub-rule (1) shall file an application in **Form-53** to the concerned officer mentioned in sub-rule (1).

(2) The concerned officer mentioned in sub-rule (1) shall take decision within seven days from receipt of application under sub-rule (2).

(3) The concerned officer mentioned in sub-rule (1) may authorize any officer of factory wing of the Labour Department to submit copy of decision of composition before the officer who imposed penalty or the court where prosecution is instituted

(4) The amount of composition received during the month shall be credited to the fund mentioned in sub-section (1) of Section 115 for the unorganized workers, before the 7th day of the succeeding month.

(5) The amount of composition received and credited shall be recorded in a register to be maintained in **Form-54**.

## CHAPTER- X SOCIAL SECURITY FUND

**126.** <u>Social security fund under Section 115</u>.- (1) The Chief Inspector-cum-Facilitator shall maintain record of the social security fund, in Form-55.

(2) The social security fund administered shall be credited to the Meghalaya Unorganized Workers Social Security Board constituted under the Code on Social Security (Meghalaya) Rules, 2023.

(3) The social security fund may also be expended on welfare schemes of the Meghalaya Unorganized Workers Social Security Board.

(4) The other sources of social security fund shall be,-

(i) the grants and subsidies given by the Central or State Government;

(ii) all voluntary donations; and

(iii) ten rupees per worker to be paid by the employer of every establishment at the time of its registration.

(iv) or such other sources as may be notified by the State Government from time to time.

# CHAPTER-XI MISCELLANEOUS

**127.** <u>Common License for contractor, factories and to industrial premises, etc.</u> <u>under sub-section (2) of Section 119</u>.– (1) If a person desirous of obtaining common licence in respect of factories, industrial premises for beedi and cigar work or for supplying or engaging contract labour; or undertaking or executing the contract works or any combination thereof under sub-section (1) or sub-section (2) of Section 47 in more than one districts or for the whole State then he shall apply electronically on the designated portal of the State Government in **Form-34** for the purpose of licence in respect of industrial premises for beedi and cigar work or for supplying or engaging contract labour; or undertaking or executing the contract works.

For the purpose of licence of factories, the application shall be transferred to the Chief Inspector cum facilitator of Boilers & Factories, Meghalaya, who shall issue the licence to the applicant through the designated portal of the State Government.

(2) If a person or contractor desirous of obtaining common licence in respect of factories, industrial premises for beedi and cigar work or for supplying or engaging contract labour; or undertaking or executing the contract works or any combination thereof under sub-section (1) or sub-section (2) of Section 47 limited to a single jurisdiction, then he shall apply electronically on the designated portal of the State Government in **Form-34** to the licensing authority appointed by the State Government by notification in this behalf under sub- section (1) of Section 119 of this code.

For the purpose of licence of such factory, the application shall be transferred to the Chief Inspector cum facilitator of Boilers &Factories, Meghalaya, who shall issue the licence to the applicant through the designated portal of the State Government. (3) License issued under this rule shall be valid for three years.

**128.** <u>Actions, manner of taking actions and inquiry under sub-section (3) of</u> <u>Section 119</u>.– Where the Authority referred to in sub section (3) of Section 119 is satisfied that the common licence may be issued in respect of factory, industrial premises and for construction establishment engaging contract worker or any combination thereof, a single licence for any one of them under these rules shall be issued in **Form–34** electronically within 45 days of the receipt of the said application. In case the Authority rejects the application, he shall assign the reasons for such rejection and communicate to the party within the above mentioned period electronically.

**129.** <u>The form of appeal, the fee to be accompanied there with and the appellate</u> <u>authority under sub-section (6) of Section 119</u>.– (1) Any person aggrieved by an order passed under this section by the licensing authority referred to Rule 133, shall prefer an appeal before the Principal Secretary, Labour and ESI Department, Government of Meghalaya.

(2) Any person aggrieved by an order passed under this section by the licensing authority referred to Rule 133, shall prefer an appeal before the Labour Commissioner, Meghalaya or the Chief Inspector cum facilitator of Boilers &Factories, Meghalaya, as the case may be.

(3) The Application for the appeal shall be accompanied with the rejection order of the licensing authority and fee receipt of Rs. 1000/- to be deposited in the official account of the Appellate Authority.

**130.** <u>The manner of survey under sub-section (2) of Section 121.</u> The State Government may appoint a committee and prescribe the manner to undertake a survey as referred under sub section (2) of Section 121 by way of notification from time to time.

**131.** <u>Grievance redressal mechanism for contract labour</u>.-(1) The contract labour may submit his grievance(s) relating to health, working conditions and wages, at the level of principal employer, who shall look into the matter and redress grievance(s) if any.

(2)A committee may be constituted consisting of a chairman, who shall be the authorized representative of the principal employer. The committee shall have representatives of principal employer and contractors. The aforesaid committee shall hear and dispose of the grievance(s) of the contract labour within a period of one month.

(3)In case, the grievance(s) is not redressed within one month of raising of such grievance(s), the principal employer shall forward the grievance(s) to the concerned Inspector-cum-Facilitator electronically or through registered post or speed post.

**132.** <u>Annual increment of regular worker of a contractor</u>.-A worker who is regularly employed by the contractor for any activity and his employment is governed by mutually accepted standards of the condition of employment shall be such that he gets an annual increment of not less than two percent of his wages.

**133.** <u>Any other matter which is required to be, or may be, prescribed under this</u> <u>code.</u> The State Government may at any time after publication of these rules make such amendments and insertions as it deem proper by way of notification for carrying out any of the provisions under this code.

**134.** <u>Adoption of procedure prescribed by Central Government</u>.-Notwithstanding anything contained in these Rules, wherein the State Government is the appropriate Government, but the Central Government has been empowered to prescribe any procedure under the Code, the State Government shall adopt the same procedure as prescribed by the Central Government.

## 135. Repeal and savings.-

(i) The Meghalaya Factories Rules, 1980.

(ii) The Meghalaya Control of Industrial Major Accident Hazards Rules, 1994.

(iii) The Contract Labour (Regulation and Abolition) Assam Rules, 1971 (adapted from Assam) vide The State of Meghalaya Adaption of Laws Order (No1), 1974.

(iv) The Assam Motor Transport Workers Rules, 1962 (Adapted from Assam) vide The State of Meghalaya Adaption of Laws Order (No1), 1974.

(v) The Assam Beedi and Cigars Workers (Condition of Employment) Rules, 1968, (Adapted from Assam) vide The State of Meghalaya Adaption of Laws Order (No1), 1974.

(vi) The Inter-State Migrant Workmen (Regulation of Employment and Conditions of Service) Meghalaya Rules, 1985.

(vii) The Assam Plantation of Labour Rules, 1956 (Adapted from Assam)vide The State of Meghalaya Adaption of Laws Order (No1), 1974.

(viii) The Meghalaya Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Rules, 2008 are hereby repealed:

Provided that, the said repeal shall not affect, -

(a) The previous operation of the said Rules or anything duly done or suffered there under, or

(b) Affect any right, liability or obligation acquired, occurred or incurred under the said Rules.

## SCHEDULE-C [See rule 2(zm)] [Part-I]

(a) **Toxic Chemicals**: Chemical having the following values of acute toxicity and which owing to their physical and chemical properties, are capable of producing major accident hazards:

S.No.	Toxicity	Oral Toxicity LD50 (mg/Kg)	Dermal Toxicity LD <sub>50</sub> (mg/Kg)	Inhalation Toxicity LD <sub>50</sub> (mg/Kg)
1	Extremely	>5	<40	< 0.5
	toxic			
2	Highly toxic	>5-50	>40-200	<0.5-2.0
3	Toxic	>50-200	>200-1000	>2-10

#### (b) Flammable Chemicals:

(i) *flammable gases*: Gases which at 20<sub>o</sub>C and at standard pressure of 101.3KPa are :- (a) ignitable when in a mixture of 13 percent or less by volume with air, or ;

(b) have a flammable range with air of at least 12 percentage points regardless of the lower flammable limits.

**Note** : The flammability shall be determined by tests or by calculation in accordance with methods adopted by International Standards Organization ISO Number 10156 of 1990 or by Bureau of Indian Standard ISI Number 1446 of 1985.

(ii) *extremely flammable liquids* : chemicals which have flash pointlower than or equal to  $23_{\circ}$ C and boiling point less than  $35^{\circ}$ C.

(iii) *very highly flammable liquids* : chemicals which have a flash pointlower than or equal to  $23_{\circ}$ C and initial boiling point higher than  $35^{\circ}$ C.

(iv) *highly flammable liquids* : chemicals which have a flash point lower than or equal to  $60^{\circ}$ C but higher than  $23^{\circ}$ C.

(v) *flammable liquids* : chemicals which have a flash point higher than  $60^{\circ}$ C but lower than  $90^{\circ}$ C.

(c) *Explosives* : explosives mean a solid or liquid or pyrotechnic substance (or a mixture of substances) or an article.

(a) which is in itself capable by chemical reaction of producing gas at such a temperature and pressure and at such a speed as to cause damage to the surroundings ;

(b) which is designed to produce an effect by heat, light, sound, gas or smoke or a combination of these as the result of non-detonative self sustaining exothermic chemical reaction.

Sl.	Name of the Chemical
1	Acetaldehyde
2	Acetic acid
3	Acetic anhydride
4	Acetone
5	Acetone Cyanohydrine
6	Acetone thiosemicarbazide
Sl.	Name of the Chemical

[PART II] List of Hazardous and Toxic Chemicals

7	Acrylontirle
8	Acetic acid
9	Acetic anhydride
10	Acetone
10	
	Acetone Cyanohydrine
12	Acetone thiosemicarbazide
13	Acetylene Chloride
14	Acetlone (Ethyne)
15	Arcolein (2-Propenal)
16	Aldicarb
17	Sldrine
18	Alkyl Phthaiate
19	Allyl Alcohol Acid and Salts.
20	Allyiamine
21	Aipha Naphthyl Thiourea (Antu)
22	4-Aminodiphenyl Asbestos
23	2-Aminophenol
24	Amiton
25	Ammonia
26	Ammonium Nitrate
27	Ammonium Nitrate in Fertilizers
28	Ammonium Sulfamate
29	Anabasine
30	Aniline
31	P-Anisidine
32	Antimony & Compounds
33	Antimony Hydride (Stibine)
34	Arsenic Hydrice (Arisine)
35	Arsenic Pentoxide, Arsenic (v)
36	Arsenic Trioxide, Arsenious (III)
37	Acid and Salts
38	Azinphos-Ethyl
39	Azinphos-Methyl
40	Barium Azide
41	Benzene
42	Benzidine
43	Benzidine Salts
44	Benzoquinone
45	Benzoyl Chloride
46	Benzoyl Peroxide
47	Benzyle Chloride
48	Benzyl Canide
49	Beryllium (Powders, Compounds)
50	Biphenyl
51	Bis (2-Chloromethyl) Ketone
52	Bis (2, 4, 6-Trinitrophenyl) Amine
53	Bis (2-Chloroethyl) Sulphide
54	Bis (Chloromethyl) Ether
55	2, 2-Bis (Tert-Butyiperoxy) Butane
56	1, 1 -Bis (Tert-Butyperoky) Cyclonexane
57	Bis-1,2 (Tribromophenoxy) Ethane
58	Bisphenol
<b>Sl.</b>	Name of the Chemical
51.	Ivame of the Unennical

107	Chloroform
107	Chlorofluorocarbons
105	Chloroethyl Chloroformate
101	Chloroethanol
103	Chloroepoxypropane
102	Chlorodiphenyl
101	Chlorobenzene
100	4-Chloroaniline
100	2-Chloroaniline
99	Chloroacetaldehyde
98	Chloroacetal Chloride
90	Chlormequate Chloride
95	Chlorine Trifluoride
95	Chlorine Dioxide
93	Chlorine Dioxide
93	Chlorine
92	Chlorinated Benzenes
91	Chlorfenvinphos
90	Chlordane
89	Chlorates (use in explosives)
88	Cellulose (use in explsovies)
80	Carbophenothion
85	Carbon Tetrachloride
85	Carbon Monoxide
84	Carbon Disulphide
83	Cabofuran
82	Carbaryl (Sevin)
81	Captofol
80	Captan
79	Calcium Cyanide
78	Cadmium Oxide (Fumes)
77	Cadmium and Compounds
76	C9-Aromatic Hydrocarbon Fraction
75	Butyamine
74	Butyl Vinyl Ether Acids and Salts
73	Tert-Butyl Peroxypivalate
72	Tert-Butyl Peroxymalte
71	Tert-Butyl Peroxyisopropyl Carbonate
70	Tert-Butyl Petroxyisobutyrate
69	Tert-ButyiPeroxacetate
68	Butyl Glycidal Ether
67	Butoxy Ethanol
66	2-Butanone
65	N-Butanethiol
64	Butane
63	1, 3-Butadiene
62	Bromoform
61	Bromine Pentafluoride
60	Bromine
59	Boron and Compounds

SI.	Name of the Chemical

109	4-(Chloroformy) Morpholine
110	Chloromethane
111	Chloromethyl Ether
112	ChloronitTobenzene
113	Chloroprene
114	Chlorosulphuric Acid
115	Chloroprinitroobenzene
116	Chloroxuron
117	Chromium and Compounds
118	Coboit and Compounds
119	Copper and Compounds
120	Coumafuryl
121	Coumaphos
122	Coumatetralyl
123	Crimidine
124	Crimidine
125	Cumene
126	Cyanophos
127	Cyanotheate
128	Cyanuric Fluoride
129	Cyclehexane
130	Cyclohexanol
131	Cyclohexanone
132	Cyclphexamide
133	Cyclopentadiene
134	Cyclopentane
135	CyclotetranethylentErranitramine
136	Cyclototimethylenetrinitra
137	DDT
138	Decabromodiphenyl Oxide
139	Demeton
140	Di-Isobutyryl Peroxide
141	Di-n-Propyl Peroxydicarbonate
142	Di-sec-Butyl Peroxydicarbonate
143	Dialifos
144	Diazedinitrophenol
145	Diazomethane
146	DibenzylPeroxydicarbonate
147	Dichloroacetylene
148	O-Dichlorobenzene
149	P-Dichlorobenzene
150	Dichloroethane
151	Dischloroethyl Ether
152	2, 4-Dichlorophenol
153	DiprophyleneGlycolmethylether
154	2, 4 Dichlorophenoxy Acetic Acid(2,4-D)
155	1, 2-Dichlorosalicylic Acid
156	3, 5-Dichlorosalicylic Acid
157	Dichlorovos (DDVP)
158	Dicrotophos
SI	Name of the Chemical

SI.	Name of the Chemical

159	Dieldrin
160	Diepoxybutane
161	Diethyl Peroxydicarbonate
162	Diethylene Glycol Dinitrate
163	DiethyleneTriamine
164	Diethyleneglycol Butyl 1 Ether/ Diethyleneglycol Butyl Acetate
165	Diethylenetrlamine (Deta)
166	Diglycidyl Ether
167	2, 2-Dihydroperoxypropone
168	Disobutryl Peroxide
169	Dimefox
170	Dimethoate
171	Dimethyl Phosphoramidosyanidic Acid
172	Dimethyl Phthaiate
173	Dimethylcarbomoyl Chloride
174	Dimethylinitrosomine
175	Dinitrophenol Salts
176	Dinitrotoluene
177	Diitro-o-Cresol
178	Dioxane
179	Dioxathion
180	Dioxolane
181	Diphacinone
182	Diphosphoramie Octamethyl
183	Disulfoton
184	Formaldehyde
185	Endosulfan
186	Endrin
187	Epichlorophydrine
188	EPN
189	1, 2-Epoxypropane
190	Ethion
191	Ethyl Carbamate
192	Ethyl Either
193	Ethyl Haxanol
194	Ethyl Mercaptan
195	Ethyl Methacrylate
196	Ethyl Nitrate
197	Ethylene
198	Ethylene Chlorophydrine
199	Ethylene Diamine
200	Ethylene Dibromide
201	Ethylene Cichloride
202	Ethylene Glycol Dinitrate
203	Ethylene Oxide
204	Ethylene Limine
205	Fluenetil
206	Pensulphothion
207	Flenetil
208	4-Fluoro, 2-Hodroxybutyric Acid and Salts, Esters, Amides,
Sl.	Name of the Chemical

ĺ	SI.	Name of the Chemical

209	Fluoroacetic Acid and Salts, Esters, Amides
210	Fluorobutyric Acid and Salts, Esters, Amides
210	4 Fluorochrotonic Acid and Salts, Esters, Amides
211	Glyconitrile (Hydroxyacetonitrile)
212	1, Guanyl-4 Nitrosamiaoguanyl 1-Tetrazene
213	Heptachlor
214	Hexachloro Cyclopentadiene
215	HexachlorocyClohexane
210	HexachlorecyClomethane
218	1, 2, 3, 7, 8, 9-Hexachloroda-benzyo Dioxine.
219	Hexafluopropene
220	Hexamethylphosphoramide
220	3, 3, 6, 6, 7, 8, Hexamethyl 1, 2, 4, 5, Tetroxacy, Clononane
222	Hexamethylenediamine
223	Hexane
223	2, 2, 4, 4, 6, 6-Hexanitrostilbene
225	Hexavalent Chromium
226	Hydrazine
227	Hydrizine Nitrate
228	Hydrochloric Acid
229	Hydrogen
230	Hydrogen Bromide (Hydrobromic Acid)
231	Hydrogen Chloride (Liquefied gas)
232	Hydrogen Cyanide
233	Hydrogen Fluoride
234	Hydrogen Scienide
235	Hydrogen Sulphide
236	Hydroquinone
237	Iodine
238	Isobenzan
239	Isodrin
240	IsophoroneDisocyanate
241	Isopropyl Eather
242	Juglone (5-Hydroxynaphthalene 1,4-Dione)
243	Lead (Inorganic fumes and dusts)
244	Lead 2, 4, 6-Trinitroreso-crinoxide (Lead Styphnate)
245	Lead Azide
246	Leptophos
247	Lindand
248	Liquefied Petroleum Gas (LPG)
249	Maleic Anhydride
250	Manganese and Compounds Manganese Lange this and the second secon
251	MercaptoBenzothiazole
252 253	Mercury Alkyl Mercury Eucliminate
253	Mercury Fuslminate Mercury Methyl
254	Mercury Methyl Methacrylic Anhydride
255	Methacrylonitrile
250	Methacryloyl Chloride
257	Methacryloyl Chloride
258	MethanesuphonylFluride
237	international phony in turbuc

Sl.	Name of the Chemical
260	Methanethiol
261	Methoxy Ethanol (2-Methyl Cellosolve)
262	MethoxyEthylmercuric Acetate
263	Methyl Acrylate
264	Methyl Alcohol
265	Methyl Bromide (Bromomethane)
266	Methyl Chloride
267	Methyl Chloroform
268	Nitrogen Trifluoride
269	Methyl Cyclohexene
270	Methyl Ethyl Ketone Peroxide
271	Methyl Hydrazine
272	Methyl Isobutyl Ketone
273	Methyl Isobutyl Ketone Peroxide
274	Methyl Isocyanate
275	Methyl Isothiocyanate
276	Methyl Marcaptan
277	Methyl Methacryiate
278	Methyl Parathion
279	Methyl Phosphoric Dichloride
280	N-Methyl, 2, 4, 6-Tetranitroaniline
281	Methylene Chloride
282	4,4-Methylenebis (2 Chloroaniline)
283	Methyltrihlorosilane
284	Mevinphos
285	Moiybdenum and compounds
286	N-Methyl-N, 2, 4, 6-N-Tetranitro-aniline
287	Nephtha (Coal Tar)
288	2-Naphthylamine
289	Nickel and Compounds
290	Nickel Tetracarbonyl
291	O-Nitroaniline
292	P-Nitroaniline
293	Nitrobenzene D Nitro ablanchampena
294	P-Nitrochlorobenzene
295	Nitrocyclohexane Nitroethane
296 297	Nitroetnane Nitrogen Dioxide
297	Pentachloroethane
298	Nitroglycerine
300	P-Nitrophenol
301	1-Nitropropate
302	2-Nitropropate
303	Nitrosodi, ethyliamine
303	Nitrololune
305	Octabromophenyl Oxide
305	Oleum
307	Oleylamine
308	oo-Diethyl S-Ethylsulphinyi methyl Phosphorothioate
309	oo-Diethyl S-EthylsulphonyImethylPhosphorothioate
509	oo Diemyi o-Dinyisuiphonyinteuryit nosphorounoate

SI.	Name of the Chemical
310	oo-Diethyl S-EthylthiomethylPhosphorothioate
311	oo-Diethyl S-IsopropylthiomethylPhosphordithioate
312	oo-Diethyl S-PropylthiomethylPhosphorodithioate
313	Oxyamyl
314	Oxy-lisulfoton
315	Oxygen (Liquid)
316	Oxygen Difluoride
317	Ozone
318	Paraoxon (Diethyl 4-Nitrophenyl Phosphate)
319	Paraquat
320	Parathion Methyl
321	Paris Green (BisAceto Hex-ametraarsenitoterta Copper)
322	Pentaborane
323	Pentabromodiphenyl Oxide
324	Pentabromophenol
325	Pentachlorophenol
326	PentacrythrifolTetranitrate
327	Pentane
328	Peracetic Acid
329	Perchloroethylene
330	PerchloromethylMercaptan
331	2-Pentanone, 4-Methyl
332	Penol
333	Phenyl Glycidal Ether
334	Phenylene P-Diamine
335	Phenylmercury Acetate
336	Phorate
337	Phosacetim
338	Phosacetim
339	Phosfolan
340	Phosgene (Carbonyl Chloride)
341	Phosmet
342	Phosphamiden
343	Phosphine (Hydrogen Phosphide)
344	Phosphoric Acid and Esters
345	Phosphoric Acid, BromoethylBromo (2, 2-Dimethyl Propyl) Bromoethyl Ester
346	Phosphoric Acid, BromoethylBromo (2, 2-Dimethylpropyl) Chloroethyl Ester
347	Phosphoric Acid, ChloroethyiBromo (2, 2-Dimethoxycpropyl) Chloroethyl
240	Ester
348	Phosphorous and Compounds
349	Phostalan
350	Picric Acid (2, 4, 6-Trinitro-Phenol)
351	Pentachoro Naphthalene
352	Potassium Arsenite
353	Potassium Chlorate
354	Promurit (3, 4-Dichlorophenyl 3-Triazenethiocarboxamide)
355	1, 3-Propanesultone
SI.	Name of the Chemical

356	1 Propen-2-Omoro 1, 3-Diol-diacetate
357	Propylene Dichloride
358	Propylene Oxide
359	Propylenelimine
360	Pyrazoxon
361	Selenium Nexmuoride
362	SemicarbazideHydrochlorde
363	Sodium Arseun
364	Sodium Azice
365	Sodium Chlorate
366	Sodium Cyanide
367	Sodium Cyande Sodium Picramate
368	Sodium Fleramate Sodium Selenite
369	Styrene, 11, 2, 2-Terachloroethane
309	Sulfotep
370	Sulphur Dichloride
371	Sulphur Dichionde Sulphur Dioxide
372	Sulphur Dioxide Sulphur Trioxide
373	Sulphur Moxide Sulphuric Acid
374	Sulphoxide, 3-Chloropropyioctyl
375	Tellurium
370	Tellurium Hexafluoride
377	TEPP
378	Terbufos
379	Alpha-Terabromobisphenol
380	2, 2, 5, 6-Tetrachloro-2, 5-Cyclohexadiene-1, 4-Dione
381	2, 3, 7, 8-Tetrachlorodibezo-p Diosin (CDD)
383	Tetrafluoroethane
384	Tetramethylene Diulphotetramine.
385	Tetramethyl Lead
386	Tetranitromethane
387	Thallium and Compounds
388	Thionazin
389	Thionyl Chloride
390	Tirpate
391	Toluene
392	Tolune-2-4-Diisocyanate
393	0-Toluidine
394	Toluene 2, 6-Diisocyanate
395	Trans-1, 4 Chlorobutene
396	1-TRI, (Cyclohexyl) StannyMH 1, 2, 4 Triazole
397	1, 2, 4 Triazole
398	2, 5 Triamino 2, 4, 5, Trinitrobenzene
399	2, 4, 6-Tribromophenol
400	Trichloro Acetyl Chloride
401	Trichloro Ethane
402	TrichloroNapethalene
403	TrichloroChloromethylsilane
404	TrichloroDichlorophenylsilane
405	1, 1-Trichloroethane
SI	Name of the Chemical

SI.	Name of the Chemical
	•

406	TrichloroethylSillane
407	Trichloroethylene
408	Trichloromethanesulphenyl
409	2, 4, 5-Trichlorophenol
410	Triethylamine
411	Triethylenemelamine
412	Trimethylchlorosilane
413	TrimethylopropanePhosphite
414	Trinitroaniline
415	2, 4, 6 Trinitroanisole
416	Trinitrobenzene
417	Trinitrobenzoic Acid
418	2, 4, 6-Trinitroresorcinol (Styphnic Acid)
419	Trinitrotoluene
420	Tricrthocresyl Phosphate
421	Triphenylin Chloride
422	Terpentine
423	Uranium and Compounds
424	Venadium and Compunds
425	Vinyl Chloride
426	Vinyl Fluoride Chloride
427	Warfarin
428	Xylene
429	Xylidine
430	Zinc and Compounds
431	Zironium and Compounds.

#### FORM-01 [See Rule 3 (6)] Application for grant of competency to a person

1. Name

2. Date of birth

3. Name of the organization ( if self-employed)

4. Educational qualifications (copies of testimonials to be attached)

5. Details of professional experience

Sr. No.	Name of the Organization	Period of service	designation	Area of Responsibility
(1)	(2)	(3)	(4)	(5)

6. Memberships, if any, of professional bodies

7. (i) Details of facilities (examination, testing etc.)

(ii) Arrangements of calibrating and maintaining the accuracy of these facilities)

8. purpose for which competency certificate sought (specify the section of the Rules)

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

10. any other relevant information

I\_\_\_\_\_\_ hereby declare that the information furnished above is true.

I undertake

(a) That in the event of any change in facilities at my disposal (either addition or deletion) I will promptly inform the Chief Inspector-cum-Facilitator.

(b) to maintain the facilities in good working order calibrating periodically as per manufacturer's instructions or as per National standards; and

(c) to fulfill and abide by all conditions stipulated in the certificate of competency and instructions issued by Chief Inspector-cum-Facilitator from time to time.

Place signature Date

#### [See Rule 3 (6)]

#### Application for grant of competency to an institution

1. Name and full address of the organization.

2. Organization's status (specify whether Individual, Government, autonomous, cooperative, corporate or private)

3. Purpose for which competency certificate sought (specify the section of the Rules)

4. Whether the organization has been declared as a competent person under any other statute (if so furnish details)

5. Particulars of persons employed and possessing qualification and Experience

Sr. No.	Name of the designation	Qualification	Experience	Section(s)/rule(s) Under which person's competency sought
(1)	(2)	(3)	(4)	(5)

6. Details of facilities and arrangements made for their maintenance and calibration periodically.

7. Any other relevant information

8. Undertaking

I \_\_\_\_\_ certify that shri./Smt.

whose details are furnished above, is in our employment and nominate on the behalf of organization for the purpose of being declared as competent person under the Code; I also undertake that I will-

(a) Notify to the Chief Inspector-cum-Facilitator in case the competent person leaves our institution.

(b) To maintain the facilities in good working order calibrating periodically as per manufacturer's instructions or as per National standards;

(c) notify to Chief Inspector-cum-Facilitator any change in facilities(either addition or deletion)

(d) to fulfill and abide by all conditions stipulated in the certificate of competency and instructions issued by Chief Inspector of Factories from time to time

I \_\_\_\_\_\_ hereby declare that the information furnished above are correct to the best of my knowledge

Signature Head of Institution

Moblie number

Date

Place

Email

## [See Rule 3 (8)]

#### Certificate of competency issued to a person or an institution

I \_\_\_\_\_\_\_ in exercise the power conferred on me under section 2(*l*) of The Occupational Safety, Health And Working Conditions Code 2020 and the rules made there under, here by recognize shri.\_\_\_\_\_\_ (if employed in Name of institution) ------- to be Competent person for the purpose of carrying tests, examinations, inspections and certification for such *buildings, dangerous machinery, lifts, tackles,pressure plants, confined space, ventilation or plant and equipment asthe case may be* in an establishment located in state of Meghalaya under section \_\_\_\_\_\_ of the Code and the rules made there under. This certificate is valid from \_\_\_\_\_\_ to \_\_\_\_\_

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

1. tests, examinations, inspections and shall be carried out in accordance with the provisions of Code and the rules made there under.

2. tests, examinations, inspections and shall be carried out under the direct supervision of competent person

3. the certificate of competency shall stand cancelled if the person declared competent leaves the institution.

4. Competent person or institution shall submit reports as per provisions of the Code.

5. Any other condition Chief Inspector-cum-Facilitator may think fit.

Place Official seal signature Date Chief Inspector-cum-Facilitator of Factories, Meghalaya.

Note: A seperate certificate should be issued under each relevant Section. A person or an institution may be recognised as competent person for the purpose of more than one Section of the Rule.

#### [See Rule-4]

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

#### A. Establishment Details.

- 1. Retrieve details of Establishment through LIN:
- 2. Name of Establishment:
- 3. Location and Address of the Establishment:
- 4. Others details of Establishment:
- a. Total Number of employees engaged directly in the establishment:
- b. Total Number of the contract employees engaged:
- c. Total Number of Inter-State Migrant workers employed:

#### **5** (a) For factories:

Details of the manufacturing process	Full postal address and situation of the factory along with plan approval details	Name and address of the occupier and manager	Maximum number of workers to be employed on any day
(1)	(2)	(3)	(4)

6. Ownership Type/Sector:

7. Activity as per National Industrial Classification:

8. Details of Selected NIC Code:

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

#### representative:

#### **B.** Details of Employer:-

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

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

#### C. Manager/ Agent Details

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

- 2. Address of Manager/ Agent:
- 3. Email Address, Telephone& Mobile No:

#### **D.** Contractor Details:

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

#### E. Others Details:-

Signature/ E-sign/digital sign of employer

Dated:-Place:-

# FORM-05 [See Rule 4 (1)(iii)]

# Details of inter-state migrants employed/to be employed in an establishment

- 1. Name of establishment:
- 2. Address of establishment:
- 3. Name and address of employer:

# 4. Details of inter-state migrant workers

S.	Name	Father/Husband`s	Permanent	address			Aadhar	Mobile
No.		name	Town/	Tehsil	District	State	number	number
			Village	/ Sub-				
				divisi				
				on				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)

Signature/ E-sign/digital sign of employer

#### [See Rule-4(2)(i)] Certificate of Registration of Establishment

Registration No.

Date

A Certificate of registration containing the following particulars is hereby granted under sub section (2) of section 3 of the Occupational Safety, Health and Working Conditions Code, 2020 (37 of 2020) and Rule 4 of Occupational Safety, Health and Working Conditions (Meghalaya) Rules, 2023

to...... (Name of the establishment)

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

(a) Factory

(c) Dock work

(b) Mining(d) Contract Work

(f) any other work (not covered

(e) Building and Other Construction Works above)

2. Details of the establishment:

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

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

c. Total Number of Contractors and their details:

c. Number of inter-state migrant workers engaged:

#### 3 (a) For factories

Details of the manufacturing process	Full postal address and situation of the factory along with plan approval details	Name and address of the occupier and manager	Maximum number of workers to be employed on any day
(1)	(2)	(3)	(4)

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

5. Remarks of registering officers

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

Place:

Date:

#### **Conditions of Registration**

(1) Every certificate of registration issued under Rule 4 shall be subject to the following conditions, namely:

(a) The certificate of registration shall be non-transferable;

(b) The number of workers employed in an establishment directly and contract employees shall not, on any day, exceed the maximum number specified in the certificate of registration; and

(c) Same as provided in these rules, the fees paid for the grant of registration certificate shall be nonrefundable.

(2) The employer shall intimate the change, if any, in the number of workers or the conditions of work to the registering officer within 30 days

(3) The employer shall, within thirty days of the commencement and completion of any work, intimate to the Inspector-cum-Facilitator, having jurisdiction in the area where the proposed establishment or as the case may be work is to be executed, intimating the actual date of the commencement or, as the case may be, completion of establishment such work in **Form -08** annexed to these rules electronically.

(4) A copy of the certificate of registration shall be displayed at the conspicuous places at the premises where the work is being carried on.

# FORM-07 [See Rule-4(6)] Register of Establishment

Sr.No	Nature	Registration	Name and	Name,	Total	Total	Remarks
	of work	No. and	Address,	Address	number	number	
		Date	location of	And	of Workers	of	
			the	Contact	and Total	contract	
			establishment	Details of	Horsepower	Workers	
			registered	Employer	(if any)		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)

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

Place: Date:

# FORM-08 [See Rule-4(7) and Rule- 5]

## Notice of Commencement / cessation of Establishment:

1. Registration No:

2. Name and Address of Establishment:-

3. Name & Designation of employer/ Port authority (who has ultimate control over the affairs of the establishment :-

4. Full address to which communication relating to the establishment to be sent:-

5. Nature of work of the establishment:-

6. In case of the notice is for commencement of work the approximate duration of work:-

7. in case of cessation, the date of cessation:

#### In case of cessation of work:

I/we hereby certify that the payment of all dues to the workers employed in the establishment have been made and the premises are kept free from storage of hazardous chemicals and substances.

Signature of the Employer

To, The Inspector-cum-Facilitator

		<b>FORM-09</b>		
		[See Rule 6]		
		<b>Health Register</b>		
Sr. No.	Name of Employee	Date of Employment	Age	Gender
(1)	(2)	(3)	(4)	(5)
Nature of Job	Date of Medical Examination	Results of Medical examination	Signature of the qualified medical	Signature of Employer
(6)	(7)	(8)	Practitioner (9)	(10)

Signature of Medical Officer

Signature of Employer

Place: Date:

# [See Rule-6] The medical examination shall be conducted by a qualified medical practitioner as per following proforma:

A. Demographics:				
Angewan	Remarks			
Answer	Remarks			
Yes/No				
Yes/No				
1.				
Answer	Remarks			
listory: Diagnosed previo	ously or currently under treatment			
Answer (Yes/No)	Remarks			
	Answer Yes/No Yes/No Answer			

<b>**</b> 1 1	
Hydrocele	
Varicose Vein	
Haemorrhoids	
History of	
amputation/fracture/dislocation	
injury during	
work (If Yes, please specify)	
Dermatitis (If Yes, specify	
Site)	
Hearing Impairment	
Visual Impairment	
Any Major Illness requiring	
hospitalization in last 1 year	
(If Yes, Name of the Disease)	
Occupational Injury in Last 1	
year: if yes Specify the	
Location of injury and	
frequency	

#### **D.** Current Symptoms-Diseases Module

Question	Answer (Yes/No)	Remarks
Smoking habit		
Chewing Tobacco or Pan		
Masala or Gutkha:		
Alcohol Addiction		
Dermatosis (Irritant Contact		
Dermatitis /Eczema		
/Chloracne /Allergic Contact		
Dermatitis):		
Mucosal Irritation of eyes/		
Nose/ Throat with response		
to		
chemical agent or biological		
agent:		
Symptoms like Respiratory		
Difficulty/ Chest Tightness/		
Dry Cough at beginning of		
shift:		
Currently suffering from TB:		
Jaundice or Hepatitis:		
Currently suffering from		
Low Back Pain		
Currently suffering from Pain		
in hand or Elbow:		
Currently suffering from		
Visual Problems		
Currently suffering from		
Hearing Problems		
Any current injury		
(amputation/ fracture/		
dislocation)		
Any current musculoskeletal		
sprains/ strains		

E. Physical Examination

#### **Date of Examination:**

Question	Answer (Yes/No) or as appropriate	Remarks
General Skin Condition: (If Any Dermatitis, please mention its location)		
Weight (in Kg):		
Height (in Meter)		

Temperature ( <sup>0</sup> F):	
BP:	
Pulse:	
SpO2:	
Respiratory Rate:	
Examination of Breast of	
female-employee	

# F. Investigation Report

#### Routine Blood Investigation: Attach the photocopy of the report Blood Grouping & Rh Typing and HB Electrophoresis Once in a lifetime

Parameter	Answer	Value
	(Normal/Increase/Decrease)	
Hb%:		
Total WBC Count and		
Differential Count:		
Platelet Count:		
ESR:		
FBS:		
PPBS:		
HBA1C level		
BUN:		
Creatinine:		
Total Protein		
Albumin		
Globulin		
SGOT		
SGPT		
Bilirubin		
Urine RE		
Urine ME		
Prostate Specific Antigen		
(PSA)		

# G. Standard Chest X Ray (PA) View: attach the photocopy of the report

# Date:

Parameter	Answer (Normal/Increase/ Decrease)	Value ( if any importance)
Report		

Report:

# **H.** Spirometry: attach the photocopy of the report (For mine employee) Date:

 
 Parameter
 Answer (Normal/Increase/Decrease)
 Value

 PEFR:

FEV1:	
Observed:	
Predicted:	
FVC:	
Observed:	
Predicted:	
FEV1/FVC:	
Final Report: Normal /	
Obstructive Lung Disease/	
Restrictive Lung Disease/	
Mixed Lung Diseases	

# I. Audiometry (Pure Tone / BERA): attach the photocopy of the report (For Mine Employee)

Date:

Parameter	Value/Result/Interpretation
Visual inspection of Eye for any abnormality	
like wax in external ear, infection etc	
Right Ear Hearing Threshold:	
Left Ear Hearing Threshold:	
Final Report preferable based on BERA:	
Right Ear:	
Left Ear:	

# J. Eye Examination: attach the photocopy of the report

Date:

Parameter	Value/Result/Interpretation
Visual inspection of Eye for any abnormality	
like corneal opacity/scaring, cataract etc.	
Visual Acuity: Right	
Visual Acuity: Left	
Colour Vision	
Field of Vision	
Binocularity	
Lateral Phoria	
Vertical Phoria	
Stereoscopic Vision and Depth Perception	
Testing	
Fundus (Retina) examination	

#### K. 12 lead ECG and Echocardiography:

Final Report:

# L. MEDICAL FITNESS TESTS FOR PERSONS WORKING AT HEIGHT (as may be applicable):

1. Detailed Medical History and in-Depth General Medical Examination including tests for Vision, Hearing, Musculoskeletal System, Respiratory System, Cardiovascular System etc. As applicable to all employees

2. Special Examination

a) Cardiovascular

Uncontrolled hypertension or ischemic heart disease will be a contraindication. In the presence of hypertension and

abnormal ECG findings, the employee should be referred to a Cardiologist for fitness. b) Tests for Labyrinthine functions and for sense of position Eye Examination for Bilateral

Nystagmus, Romberg sign.

The presence of bilateral nystagmus and a positive Romberg sign will be an absolute contraindication. c) Neurological examination Evaluate seizure disorders: CT Scan of Brain and E.E.G if indicated

d) Assessment of Diabetic Control Status:

(in case of employees suffering from Diabetes Mellitus)

e) Assessment of Phobia (Acrophobia) and any other Mental Health Disorder like Anxiety or Depression

d) Evaluation for Vertigo and Dizziness

#### For use of Industrial Safety Section:

Walking freely over a horizontal bar at 1 ft. height: PASS / FAIL

Wearing a safety belt and tying the rope knot: PASS/ FAIL

Walking over a horizontal structure at 9 ft. height wearing a belt: PASS/ FAIL

General physique (O.K./NOT O.K): PASS/ FAIL

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

Signature of the qualified medical practitioner

Place: Date:

#### [See Rule-8]

#### Notice of Accident or Dangerous Occurrence

E.S.I.C. Employer's Code number : E.S.I.C. Insurance Number of the injured person :

1. Name of employer:

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

3. Nature of industry and LIN of the establishment

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

5. Name and address of the injured person :

6. (a) Sex :

(b) Age (at the last birthday) :

(c) Occupation of the injured person :

7. Local E.S.I.C. Office to which the injured person is attached :

8. Date, shift and hour of accident or dangerous occurrence :

9. (a) Hour at which the injured person started work on the day of accident or dangerous occurrence :

(b) whether wages in full or part are payable to him for the day of the accident or dangerous occurrence :

10. (a) Cause or nature of accident or dangerous occurrence :

(b) If caused by machinery-

(i) Give the name of machine and the part causing the accident or dangerous occurrence :

(ii) state whether it was moved by mechanical power at the time of accident or dangerous occurrence :

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

(d) In your opinion, was the injured person at the time of accident or dangerous occurrence -

(i) acting in contravention of provisions of any law applicable to him; or

(ii) acting in contravention of any orders given by or on behalf of his employer; or (iii) acting without instructions from his employer?

(e) In case reply to (d) (i), (ii) or (iii) is in the affirmative , state whether the act was done for the purpose of and in connection with the employer's trade or business. : 11. In case the accident or dangerous occurrence took place while travelling in the employer's transport, state whether -

(a) the injured person was travelling as a passenger to or from his place of works; :(b) the injured person was travelling with the express or implied permission of his employer; :

(c) the transport is being operated by or on behalf of the employer or some other person by whom it is provided in pursuance of arrangements made with the employer; and :

(d) the vehicle is being/not being operated in the ordinary course of public transport service :

12. In case the accident or dangerous occurrence took place while meeting emergency, state- (a) its nature ; and

(b) whether the injured person at the time of accident or dangerous occurrence was employed for the purpose of his employer's trade or business in or about the premises at which the accident or dangerous occurrence took place. :

13. Describe briefly how the accident or dangerous occurrence took place :

14. Names and addresses of witnesses : (1)

(2)

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

(b) Location of injury (e.g. right leg, left hand, left eye, etc.)

16. (a) If the accident or dangerous occurrence was not fatal, state whether the injured person was disabled for more than 48 hours :

(b) date and hour of return of work :

17. (a) Physician, dispensary or hospital from whom or which the injured person received or is receiving treatment :

(b) Name of dispensary/panel doctor elected by the injured person :

18. (a) Has the injured person died ? :

(b) If so, date of death :

I certify that to the best of my knowledge and belief the above particulars are correct in every respect.

Signature and Name and Designation of owner/ employer /manager/agent Date of dispatch of report : Place:

						17 <b>1</b>							
_	Register of Compensatory Holidays												
Serial	Serial No. in Name Group Number Year Weekly rest days lost due to the												
No.	the		or	and date		exempting order in							
	register		relay	of		January April July to October							
	of		number	exempting		to to September to							
workers order March June D									December				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)				

#### FORM-12 [See Rule-29(4)] Register of Compensatory Holidays

D	ate of compensato	Lost rest days	Remarks		
January to	April to June	July to	October to	carried to the	
March		next year			
(11)	(12)	(13)	(14)	(15)	(16)

#### FORM-13 [See Rule-33] NOTICE OF PERIODS OF WORK

# Name of the Establishment......District.....

• • • • • •																									
Peri Me	en											W	ome	en										Descri	Rem
ods																								ption	arks
of																								of	
wor																								Groups	
k																									
Gro																								Nature	
ups,																								of	
Rela																								work	
ys																								worm	
	otal n	10. C	of m	nen (	emp	love	ed					Τc	tal	no. (	of	f won	ien e	emp	love	d					
А			В			Ć			D			Е			-	F		Ġ			Н				
1	2	3	1	2	3	1	2	3	1	2	3	1	2	3		1 2	3	1	2	3	1	2	3		

On working days From .. To .. From .. To .. From .. To .. On partial Working days From .. To .. From .. To .. From .. To ..

Signature of manager or agent :

Date :

# FORM 14 [See rule 34(1)] REGISTER OF EMPLOYMENT

Name and Address of establishment:

Sr. No.	Name and Gender	Aadhar No.	Address	Mobile Number	Email
(1)	(2)	(3)	(4)	(5)	(6)

Qualification	Experience	Date of joining	Designation	Date of leaving	Number and date of fitness certificate
(7)	(8)	(9)	(10)	(11)	(12)

# **FORM 15**

## [See Rule 34(1)] REGISTER OF MUSTER ROLL

Name and Address of establishment:

Periods of work and rest period (time and coding):

Sr. No.	Name Gender	Gender	Adult/Adolescent register entry number
(1)	(2)	(3)	(4)

Whether local or Inter-State Migrant	Social Security number (UAN/ ESI)	Over Time Hours	Weekly- off
(5)	(6)	(3)	(4)

# FORM 15A [See Rule 34(1)] REGISTER OF ATTENDANCE

Month:

- 1 Name and address of the establishment:
- 2 Name of the worker:
- 3 Father`s name :
- 4 Serial number in Workers Register.:
- 5 Designation:

Period of Work:		
Date	From	То

## **FORM 16**

## [See Rule 34(1)] REGISTER OF WAGES, OVERTIME, FINE, DEDUCTION FOR DAMAGE AND LOSS

Name of the Establishment: Name of the Owner: Name of the Employer: PAN/TAN of the Employer:

Labour Identification Number (LIN):

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

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

# FORM 17 [See Rule 34(2)] WAGE SLIP

Name of the Establishment Address: Period:. **1.** Name of the Employee: 2. Father's/Spouse's Name: 3. Designation: 4. UAN: 5. Bank Account Number: 6. Wage period: 7. Rate of wages payable a) Basic: b) D.A. : c) other allowances : 8.Total attendance/unit of work done: 9. Overtime wages : 10. Gross wages payable: 11. Total deductions a) PF : b) ESI : c) Others : 12. Net wages paid :

Date:

Signature of employer

#### **FORM 18**

#### [See Rule 36] ANNUAL RETURN UNIFIED ANNUAL RETURN FORM FOR THE YEAR ENDING......

Single Integrated Return to be filed On-line under the Occupational Safety, Health and Working Conditions Code, 2020, the Code on Industrial Relations, 2020, the Code on Social Security , 2020, and the Code on Wages, 2019

Instructions to fill up the Annual Return

(1) This return is to be filled-up and furnished on or before  $28^{th}$  or  $29^{th}$  February every year.

(2) The return has two parts i.e. Part-I to be filled up by all establishments.

(3) Part-II to be filled-up by the establishments who are a Mine only in addition to Part-I.

(4) The terms Establishment and Mines shall have the same meaning as under the Occupational Safety, Health and Working Conditions Code, 2020.

(5) This return is to be filled-up in case of Contractor or manpower supplier who have engaged more than 50 workers and in case of Mines even if there is one worker employed in the relevant period.

# Applicable to All Establishments - Part-I

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

C. Details o	of Manpowe	er Deployed							
Details		Directly employed				Employed through Contractor			Gran d Total
Skill Category	Highly Skilled	Skilled	Semi- Skilled	Un- Skilled	Highly Skilled	Skilled	Semi- Skilled	Un- Skilled	
(i) Maximum No. of employees employed in the establishme nt in any day during the year	Male- Female- Transgend er- Total-								
(ii) Average No. of employees employed in the establishme nt during the year	Male- Female- Transgend er- Total-								
(iii) Migrant Worker out of (ii)	Male- Female- Transgend er- Total-								

above									
(iv)Number	Male-								
of fixed	Female-								
term	Transgend								
employee	er-								
engaged	Total-								

D. Details	D. Details of contractors engaged in the Establishment:							
Sl. No.	Name with LIN of the Contractor	No. of Contract Labour Engaged						

	uls of various Health and Welfare An	nenities provided.	
Sl.No.	Nature of various welfare amenities provided	Statutory (specify the statute)	Instructions for filling
1	Whether facility of Canteen provided (as per section 24(v) of OSH Code, 2020)	Yes/No	Applicable to all establishments where in hundred or more worker including contract labour were ordinarily employed
2	Crèches (as per section 67 of Code on Social Security Code, 2020 and Section 24 of the OSH Code 2020)	Yes/No	Applicable to all establishments where fifty or more workers are employed
3	Ambulance Room (as per section 24(2)(i) of OSH Code, 2020)	Yes/No	Applicable to mine, building and other construction work wherein more than five hundred workers are ordinarily employed
4	Safety Committee (as per Section 22(1) of OSH Code, 2020.	Yes/No	Applicable to establishments and factories employing 500 workers or more, factory carrying on hazardous process and BoCW employing 250 workers or more, and mines employing 100 or more workers.
5	Safety Officer (as per section 22(2) of OSH Code, 2020)	No. of safety officers appointed	In case of mine 100 or more workers and in case of BoCW 250 or more workers are ordinarily employed.
6	Qualified Medical Practitioner (as per Section 12 (2) of OSH Code 2020.	No. of Qualified Medical Practitioner appointed.	There is no specification for minimum number of Qualified Medical Practitioner employed in establishment. However, this detail is required to have data on occupational health.

F. Th	e Industrial <b>F</b>	Relations:					Instructions for filling
1.		e Works Committee has been functioning. ion 3 of IR Code, 2020)			Yes	'No	Industrial establishment in which 100 or more workers are employed
(a)	Date of its c	onstitution					
2.	Whether the Grievance Redressal Committee constituted (section 4 of IR Code, 2020)			Yes	No	Industrial establishment employing 20 or more workers are employed	
3.	Number of U	Jnions in the e	stablishments.				
4.	2	her any negotiation union exist (Section IR Code, 2020)			Yes	'No	
5.	-	negotiating co of IR Code, 20		ituted	Yes	'No	
6.		vorkers dischar e terminated d			ched o	r whose	
Disch		Dismissed	Retrenched	Termin or Remov		Grand Total	
7.	Man-days l	ost during the	year on acco	unt of			
Sl. No.	Reasons	Reasons Period / No. of man- Date days lost			Loss mon	s in term of ey	
(a)	Strike		-				
(b)	Lockout						

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

G. Details pertaini	G. Details pertaining to maternity benefit:									
No. of female employees	No. of female employees availed maternity leave	No. of female employees paid medical bonus	No. of deduction of wages, if any made from female employees							

H. Details	H. Details of payment of bonus:							
Sl.No.	No. of employees covered under the Bonus provision	Total amount of bonus actually paid	Date on which the Bonus paid					

J.Mandays and Production Lost due to accidents / dangerous occurrence						
Sl.No.	Accident/Dangerous	Mandays lost	Production Lost			
	Occurrence					

Certified that the tables in prescribed format are duly filled in and information and/ figures given in all the tables are correct to the best of my knowledge.

Signature of Owner/Agent/Manager with seal

Place: Dated:

# FORM 18 A

#### [See Rule 36]

# (Half Yearly Return (January to June / July to December) to be submitted by Contractor)

1. Name and address of the contractor:

- 2. Name and address of the principal employer and LIN:
- 3. LIN of the contractor:
- 4. License number of the contractor (if applicable):
- 5. Name of the contract work with location/station:
- 5. Details of the number of Contract Workers, Wages Paid etc.:

Sl. No.	Months	Number of Contract Labour employed	Total amount of wages paid in a month	Over time
(1)	(2)	(3)	(4)	(5)

Bonus	Date and amount of Wage bill received by	ECR number of ESIC	ECR number of EPF	Wages paid by 7th of the month or due date as	Remark
	contractor from Principal Employer			applicable Yes/No	
(6)	(7)	(8)	(9)	(10)	(11)

Date:

Signature of the contractor:

# FORM-19 [See Rule-37] REGISTER OF ACCIDENTS AND DANGEROUS OCCURRENCES

Name of	Date of	Date of report	Nature of	Date of return	Number of
Injured person (if any)	Accident or dangerous occurrence	To Inspector- cum- Facilitator	accident or dangerous occurrence	of injured Person to work	days the injured Person was absent from work
1	2	3	4	5	6

#### FORM-20 [See Rule-38] REGISTER FOR LEAVE WITH WAGES

Part I - A	Part I - Adults										
Part II - A	Adol	escents									
Establish	men	t:							Name	e of worker :	
Departme	ent :			Father's Name:							
SI. SI.no. in the Date of Entry Interruptions											
	regist of wo		into se	rvice	and	ckness Authorized Lock d Leave Out or cidents Legal Strike		Involuntary unemployment	Others		
(1)	(2)		(3)		(4)	(4) (5) (6)		(7)	(8)		
Leave Whether due leave not with desired effect during the from next 12			Date from which the worker is allowed leave	-	Wages for Leave Paid in		Da	scharged work ite of scharge	er Date & amount of payment made in lieu of leave due	Remarks	
(9)		months (10)		(11)		(12)		(1	3)	(14)	(15)

 (9)
 (10)
 (11)
 (12)
 (13)
 (14)

 Note:-Separate page shall be allotted to each worker.

# **FORM 21**

#### [See Rule 44(2)] NOTICE OF INTENTION TO HAVE SAMPLE ANALYSED

Number:			date:
То			
•••••			
	•••••		
Take notice	that it is int	ended to have	analysed the sample ofwhich has
been	taken	today,	theday
of	20	fron	n

(Name of the Inspector-cum\_Facilitator who orders sampling).

(Seal) Date .....

# FORM 22 [See Rule 44(7)] REPORT BY LABORATORY

rt No		••••			
		••••			
			Ι	Analyst workin	g
	duly	received	on	theday of	••
fr	om			a sample of	••
nalysis.					
sample was	s in a condition	on fit for	anal	lysis as reported below.	
her certify	that I have a	nalysed t	he a	aforementioned sample onand	d
re that the	result of the	analysis t	o be	e as follows:	
•••••			•••••		•
			•••••		
condition o	of seals, faster	ning of sa	mpl	les on receipt was as follows:	
ed this		day o	of		
ess					
	••••				
ature					
oratory An	alyst)				
	hereby fr nalysis. sample was her certify are that the condition o ed this ress	hereby certify duly	duly received duly received 	hereby certify that I duly received on from nalysis. sample was in a condition fit for ana her certify that I have analysed the a are that the result of the analysis to b condition of seals, fastening of samp ed this	hereby certify that IAnalyst working duly received on theday ofday of fromday of

## FORM 23

# [See Rule-45] IMPROVEMENT NOTICE AND PROHIBITION ORDER PART I PROHIBITION ORDER

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

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

An inspection of the above named establishment, lifting appliances, loose gears, lifting devices, transport equipment, ladders and staging was made on \_\_\_\_\_.

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

#### CONTRAVENTIONS

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

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

Dated at \_\_\_\_\_ this \_\_\_\_\_ day of 20 \_\_\_\_\_

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

#### REQUIREMENTS

No.

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

## Sir/Madam,

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

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

То

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

# PART - II

#### **Improvement Notice**

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

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

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

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

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

Contraventions No. \_\_\_\_\_Dated \_\_\_\_\_this \_\_\_\_\_ day of \_\_\_\_\_20\_\_\_

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

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

# Sir/Madam,

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

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

# То

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

#### FORM 24

#### (See Rules 56(1), 57(1))

#### Application for issue and grant, renewal of license for a contractor

(i) Whether the application is for: (a) renewal of license (b) work-specific license(ii) Name and address of the contractor (including his father's name in case of individuals)

(iii) Father`s name

(iv) Particulars of establishment where contract labour is to be employed:

(a) Name and address of the establishment:

(b) Type of business, trade, industry, manufacture or occupation carried on in the establishment.

(c) Number & date of Certificate of license of the establishment under the code.

(d) Name and address of the Principal Employer:

(iv) Particulars of the Contract Labour:

(a) Nature of work in which contract labour is employed or to be employed in the establishment:

(b) Duration of proposed contract work (give particular of proposed date of commencing & ending)

(c) Name and address of the authorised person of Contractor at establishment

(d) Maximum number of contract labour proposed to be employed in the establishment on any date

(e) No. of inter-state migrant workers to be employed: Fill details in Form no. 5 as mentioned in Rule 4

(v) Amount and particulars of License fee deposited:

(vi) Amount and particulars of security deposit, if any, or requested to be adjusted:

Signature of the Applicant-Contractor

#### [See Rules 56(4), 57(2) and 58] License to contractor Government of Meghalaya Office of Designated Authority under the Occupational Safety, Health And Working Conditions Code 2020

Licence No: ..... Date: .....

Fee paid: .....

Security deposited.....

Licence is hereby granted to.....

For the premises known as...... Situated at ..... for use as a establishment within the limits stated herein after, subject to provisions of the Occupational Safety, Health And Working Conditions Code 2020 and the rules made there under.

The number of workmen employed, as contract labour in the establishment shall not, on any day, exceed.....

This licence shall remain in force till 31.12.20...

**Issuing Authority** 

Place : Date :

#### (See Rule 58)

#### Application for amendment of license for a contractor

(i) Name and address of the contractor

(ii) License number:

(iii) Particulars of amendment:

(a) Name

(b) address :

(c) Number of contractor labour to be employed/supplied

(d) No. of inter-state migrant workers to be employed : Fill details in Form no. 5 as mentioned in Rule 4  $\,$ 

(e) Nature of work for contractor labour to be employed/supplied

(iv) Amount of additional License fee deposited:

(vi) Amount of additional security:

Signature of the Applicant-Contractor

	FORM 27 (See Rule 61)				
		Register of Co	ntractors		
Sr.No.	Licence Number and Date	Name and Address of contractors	Nature activity to be under taken by the contractor	Maximum workers to be employed on any day	
(1)	(2)	(3)	(4)	(5)	

Probable date of commencement	Date of cessation	Details of amendment, if any	Renewed upto
(6)	(7)	(8)	(9)

#### (See Rule 62)

#### Notice of intimation of work-order by contractor

I ...... Shri of M/s..... having license Number...... hereby intimate that work order to supply labour/execute work (Name of work) from the establishment.

(Name and address ) has been issued and work shall commence from......

Signature of the Contractor

	Register of Security Deposit/Refund/Release							
S. No.	Name and	Amount	Date of	Amount	Reference	Remarks		
	Address	of	security	released	of order			
	of the	security	deposit	from	of			
	contractor	deposited		security	authority			
		_		deposit	for			
				for	release of			
				payment	payment			
					from			
					security			
					deposit			
(1)	(2)	(3)	(4)	(5)	(6)	(7)		

FORM 29 (See Rules 64 and 67) Register of Security Deposit/Refund/Release

#### FORM-30 [See Rule 69(1)] **Application under section 57(2)**

- a. Name of aggrieved party:b. Address of communication:
- c. Details of grievance:
- d. Reasons of claim:
- e. Details of documents attached:

Signature of aggrieved party

## FORM 31 (See Rule 70)

### REGISTER OF JOURNEY ALLOWANCE

Name and Address of establishment:

Establishment registration number:

S.No.	Name of	Entry in adult/	Permanent	Period of
	inter-state	adolescent	address of inter-	journey
	worker	worker register	state worker	
(1)	(2)	(3)	(4)	(5)

Number of family	Mode of journey	Amount paid	Signature of inter-
members			state worker
(6)	(7)	(8)	(9)

#### (See Rule 74)

#### Format of agreement

..... son/daughter/wife of Shri ..... residing at ..... (hereinafter referred to as the "Audio Visual Worker") on the second part. The terms 'Producer' and 'Audio Visual Worker' shall include their heirs, successors, administrators and legal representatives:

Whereas the Producer is engaged in the audio visaul production as defined in section 2(e) of The Occupational Safety, Health And Other Working Conditions Code 2020.

Whereas the said producer is desirous to engage the Audio Visual Worker in the capacity of a ..... in the aforesaid Audio Visual production and the Audio Visual Worker accepts the same :

Now, therefore this agreement is made as follows:

1. That both the parties agree that the duration of this agreement shall be form the date hereof till the completion of the Audio Visual production and this period shall not exceed......consecutive months.

2. That the Audio Visual worker agrees to attend studio, location or work place, as the case may be, subject to the requirement of his previous engagement and on his confirmation, to his respective job punctually as and when he shall be required by a written intimation by the Producer or the person duly authorized by him in writing.

3. That inconsideration of the Audio Visual Workers' services, as aforesaid, the Producer agrees to pay and the Audio Visual Worker agrees to receive a sum of Rs.

4. That in the event of the Audio Visual production being not complete within the stipulated period and the Producer still needing the services of the Audio Visual Worker to complete the film, the producer agrees to pay and the Audio Visual Worker agrees to receive additional remuneration on pro-rata basis, payable in the same manner as stated in Clause 3 above, till the completion of the Audio Visual production.

5. That in case the assignment of the Audio Visual worker is completed earlier that the period stipulated in Clauses 1 and 4 above, the producer shall settle the account of the Audio Visual Worker and pay the remaining balance of the agreement amount in full before the commencement of re-recording work/censor of the Audio Visual production, whichever is earlier.

6. It is agreed by the Producer that for the purposes of this agreement,

(a) a working day shall mean a period not exceeding eight consecutive hours (to include one hours' break for rest and refreshments);

(b) a working week shall mean a six-day week from Monday to Saturday, both inclusive, and the Audio Visual Worker is not liable to work on Sundays and Public Holidays :

(c) the Audio Visual worker shall not be required to work for more than five consecutive hours without a break ; and

(d) a period of not less than twelve hours shall elapse between the Audio Visual Worker's release from the studio/location/work-place and the next succeeding call.

7. That the Audio Visual Worker shall, if so required,-

(a) attend the studios, location or work-place, as the case may be, earlier than the a scheduled time of the shift, for preparatory work, and in that case, he/she shall be paid by the Producer extra wages at the rate of Rs. .....per hour or part thereof for such early attendance.

(b) continue to work beyond the working day, with one hour break and in that case, he/she shall be paid by the Producer extra wages at the rate of Rs. ..... for the work during the extended hours and refreshments, and transport facilities.

 8. That the Producer shall provide transport and food or pay travelling allowances to and fro to report to duty and food allowance while on duty as are customary or fixed by bilateral arrangements between the Producer's and Audio Visual Worker's representative organisations.
 9. That the Producer shall also pay for all travelling and accommodation expenses, fares, cost of food and such other allowances as are customary when the Audio Visual Worker is required to work on location outdoors.

10. That the Producer shall get the Audio Visual Worker insured for any injury or damage to his/her person including death caused by accident arising out of or in the course of his/her employment and/or during the period of his/ her assignment under this agreement.

11. That where the Producer is prevented from proceeding with the production of the Audio Visual by reason of fire, riot, natural calamity, order of the public authority or any other reason beyond his control :-

(a) he shall be entitled to suspend the operation of this agreement during the period of suspension of production in case the production is suspended. The producer shall serve notice in writing of such suspension on the Audio Visual Worker and shall pay all his/her dues up to the date of service of such notice.

Upon resumption of work on the film, this agreement shall revive and shall remain valid for the period stipulated in Clause I excluding the period of suspension therefrom ; or

(b) he shall be entitled to terminate this agreement as from the cessation of production, in case the production ceases completely. The producer shall serve a notice in writing of such cessation on the Audio Visual Worker and make payment of all the amount due to the Audio Visual Worker at the time of termination.

12. That in case if the Producer desires to terminate this agreement before the expiry of its term for reasons other than misconduct in relation to performance of the Audio Visual Worker's duties or of his/her unwillingness to perform the services required under this agreement, the producer shall be entitled to do so only upon payment of the balance of the stipulated amount of the agreement.

Only after such payment to the Audio Visual Worker, the Producer shall be titled to employ another Audio Visual Worker in his/her place.

13. That the Producer shall have the right to terminate this agreement on ground of misconduct on the part of the Audio Visual worker in relation to performance of his/her duties or his/her unwillingness to perform the service required under the agreement, upon payment to the Audio Visual worker of the amount due at the time of termination, calculated taking into consideration the Audio Visual worker's total work in the film and the work he/she has completed till the date of termination of this agreement. Termination under this clause shall not be made unless the charges of the Producer against the Audio Visual worker are proved before a forum comprising equal number of representatives of the Producers' Organisation and the Audio Visual workers' Organisation to which the Producer and the Audio Visual worker respectively may belong. The decision of the forum shall be binding on both the parties. The producer can engage another Audio Visual worker for the job towards this agreement only after the forum has given a decision in favour of such termination and the Audio Visual worker has been paid all his dues.

14. That in case of premature termination of this agreement, it shall be the option of the Producer whether or not to retain the work of the Audio Visual worker in the film and at the same time, it shall be option of the Audio Visual worker whether or not to allow his/her name to go on the credit titles of the Audio Visual production.

15. That the Producer shall have the right to decide the manner of representing the Audio Visual Worker's personality on the screen, his/her clothes, make-up and hair-style and the Audio Visual Worker shall fully and willingly comply with the direction of the Producer in this regard, provided that the requirements of the Producer in this respect have been notified to the Audio Visual Worker and accepted by him/her.

16. That the Audio Visual Worker agrees that he/she shall render his/her services to the best of his/her ability in such manner as the Producer or, at his instance, the Director of the Audio Visual production may direct and shall comply with all reasonable instructions that he may give for the production of the Audio Visual production.

17. That the Audio Visual -worker shall comply with all the regulations of the studio, location or work place as the case may be.

18. That the Producer shall not without the consent in writing of the Audio Visual Worker, assign or transfer the benefit of this agreement to any other person.

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

20. That the Producer shall not utilise the work of the Audio Visual worker in any from Audio Visual production, other than the Audio Visual production under this agreement, without prior permission of the Audio Visual worker.

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

1. Witness Name Address 2. Witness Name Address Producer

Audio Visual Worker

#### (see Rule 77, 79, 85(III))

## Application for grant/ renewal/ amendment/ transfer of license as a factory/industrial premises for beedi or cigar/engagement of contractor

1. Application for license –

(a) as a factory

(b) for engagement of contractor

(c) Industrial premises for beedi and cigar work

2. Full name and postal address of the establishment

3. Registration of establishment under the Code:

4. Details of person who will be occupier/principal employer

(a) Name

(b) Permanent address

(c) Local address

(d) Email

(e) Mobile number

5. Full name and address of the owner of the Premises or building (including the percents Thereof)

6. Core activity to be under taken along with details of hazardous substances as per section 2(za) of the Code.

Nature of manufacturing process/processes-

(a) carried on in the factory during the last twelve months (in the case of factories already in existence).....

(b) to be carried on in the factory during the next twelve months (in the case of all factories).....

(c). Names and values of principal products manufactured during the last twelve months.....

7. NIC code

8. (a) Total Number Workers to be employed in the period of license

(b) Total Number Workers were employed during last calendar year

(c) Maximum number of workers proposed to be employed on any one day during the year.....

(d) Minimum number of workers employed on any one day during the last twelve months.....

(e) Number of workers to be ordinarily employed in the factory......

9. Particulars of Contract Labour:

(a) Nature of work in which contract labour is employed or to be employed:

(b) Maximum number of contract labour to be Employed on any day :

(c) Number of Inter-State Migrants (Fill details in Form no. 5 as mentioned in Rule 6)

(d) Estimated date of commencement of each Contract work under each contractor:

(e) Estimated date of termination of employment of contract labour under each contractor:

10. Power:

Connected or proposed to be connected (in KW)

(i) Nature and total amount of power (H. P.) installed or proposed to be installed.....

(ii) Maximum amount of power (H. P.) proposed to be used.....

11. Furnish Reference:

(a) approval of plans

(b) stability certificate

(c) disposal of trade waste/effluents/hazardous waste/e-waste/ biomedical waste (which is applicable)

12. Full name and residential address of the person who shall be the Manager of the factory for the purposes of the Act.....

13. Full name and residential address of the occupier i.e.,-

(i) The proprietor of the factory in case of private firm/proprietary concern.....

(ii) Directors in case of public limited liability company/firm......

(iii) Where a Managing Agent has been appointed the name of Managing Agents and Directors thereof.....

(iv) Share-holders in case a private company where no Managing Agents have been appointed.....

(v) The Chief Administrative Head in case of a Government of local Fund factory......14. Full name and address of the owner of the premises or building (including the precincts thereof) referred to in Section 93.....

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

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

16. Details of fee

S.No Particular Amount Date

a Factory

b Engagement of contractor

c Industrial premises

Employer/Occupier

Date.....

Note-1. This Form should be completed in block letter or typed.

2. If the power is not used at the time of filling up this Form, but is introduced later the fact should be communicated to the Chief Inspector immediately.

3. If any of the persons named against item 8 is minor the fact should be clearly stated.

4. In the case of a factory, where under the proviso to Sub-sections (1) and (2) of Section 100, a person has been nominated as the occupier, information required in item 8 should be supplied only in respect of that person.

5. In the case of a factory where a Managing Agent or Agents have been appointed as occupiers under the Indian Companies Act, 1913 (VII of 1913), information required in item 8 should be supplied only in respect of that person or persons.

#### FORM 33 A [See Rule 85(VI)]

(Self declaration by the Occupier and Ma	inager for renewal of factory licence)
I / We	Son/Daughter of
resident	of
P.O/ PS	
State	
hereby declared as under .	
1. That, I Shri / Smt	am the occupier
of the factory M/s.	
situated at	
, PS	
, Pin	
2. That, Shri / Smt	
of the factory.	
3. That, the factory license for the preceeding	year is
is in force for	KW and manpower of
4. That, there is no change in manpower and 5. That, there is no change in factory layout a and alteration made with reference to plan ap dt Further, we undertake that, we will be held li furnished above are found to be false at any s	nd manufacturing process, no addition proved in letter No. of the able for penal action, if the information

Signature of Occupier

Signature of Manager

DSC of Employer/Occupier

#### (See Rules 77, 85(IV))

#### Common LicencseFor Factory/Beedi & Cigar Work/Engaging Contract Labour

Government of Meghalaya

Office of designated authority under section 119 of The Occupational

Safety, Health and Working Conditions Code 2020

License number: Date of issue: A license is granted to Shree......(Name of Occupier) of establishment M/S\_\_\_\_\_\_ registered under the section-3 of the code having registration number\_\_\_\_\_\_ as below; A. To run as a factory in which manufacturing process \_\_\_\_\_\_\_ shall be carried by employing not more than\_\_\_\_\_ workers and power not more than\_\_\_\_\_ KW for the purpose of The Occupational Safety,Health And Working Conditions Code 2020 and rules made there under and whose plans are approved by Chief Inspector-cum-Facilitator vide number\_\_\_\_\_ date .

This license will remain in force from\_\_\_\_\_ till\_\_\_\_\_

Fee\_\_\_\_ Date of deposit\_\_\_

B. Engagement of contract labour subject to the conditions annexed to this license as given below;

Fee ..... Date of deposit.....

1 Maximum number of workers to be employed as contractor labour-

2 Nature of activity for which contractor labour shall be engaged-

C. To use as a industrial premises to carry work of beedi or cigar by employing not more than\_\_\_\_\_ workers for the purpose of The Occupational Safety, Health And Working Conditions Code 2020 and rules made there under and whose plans are approved by Chief Inspector-cum-Facilitator vide number\_\_\_\_\_ date .

This license will remain in force from\_\_\_\_\_ till\_\_\_\_\_

Fee\_\_\_\_\_ date of deposit\_\_\_\_\_

Name And DSC of designated authority

#### (see Rule 82)

#### **Monthly Return**

- 1. Name of industrial premises and full postal address .....
- 2. No. and date of licence .....
- 3. Month to which the return relates .....
- 4. Name of the employer .....
- 5. Name of the principal employer if the employer is working as contractor for the Principal Employer .....
- 6. Quantity of beedi and/ or cigar tobacco released by the Central Excise Department
- 7. Quantity of beedi and/ or cigar tobacco supplied by the Principal Employer
- 8. Number of beedis and/ or cigars manufactured by the employer in an industrial establishment .....
- 9. No. of beedis and/ or cigars manufactured by the employer in places other than industrial establishment i.e. workers working in their homes .....

10. Number of beedis and/ or cigars sold and to whom .....

Dated .....

Signature of the Employer

#### (see Rule 82)

#### **Annual Return**

- 1. Name and address of the industrial premises .....
- 2. Number and date of licence .....
- 3. Name of the employer .....
- 4. Name of the principal Employer, if the employer is working as contractor for a Principal Employer .....
- 5. Average number\* of employed daily in the industrial premises .....

Man

Women

Young persons

Male

Female

- 6. Average monthly number of home-workers employed (i.e. who work at their homes)\*\* .....
- 7. Normal hours worked per week in the industrial premises .....
- 8. Number of days worked in the year in the industrial premises .....
- 9. Number of employees who were granted leave during the Calendar year
  - ..... young persons
  - (a) employed in the industrial premises .....
  - (b) employed in homes .....
- Other than young persons
  - (a) employed in the industrial premises .....
  - (b) employed in homes .....

10. Number of female employees who were given maternity benefit during the year

#### .....

(a) employed in the industrial premises .....

(b) employed in homes .....

Certified that the information furnished above is correct to the best of my knowledge and belief.

Date

#### Signature

Note. – Partial attendance for less than half a shift or working day shall be neglected and attendance for half a shift or more shall be treated as full attendance.

\*The average daily number shall be calculated by dividing the aggregate numbers of attendance of working days by the number of the working days in the year. Attendance on separate shifts, e.g, night and day shifts shall be counted separately.

\*\*The average shall be calculated by dividing the aggregate number of workers on the Home- workers Employment Register during each of the preceding 12 months by twelve.

#### FORM 37 (see Rule 82)

#### Home Workers' Log Book

- 1. Name of home worker .....
- 2. Address of the home where the manufacturing process is carried on .....
- 3. Month .....

#### Account of Work Done at Home

Date	Raw Material supplied to the			Signature or thumb	No. of beedis received by
		worker		impression of the	the employer
			worker		
	Tendu	Tobacco	Thread		
	patta				
(1)	(2)	(3)	(4)	(5)	(6)
				L	

Ν	o. standard	Number of substandard	Wages pay	able to worker	Wages paid
	of beedis	or chat beedis			to the worker
			For standard	For sub-standard	
			beedis	or chhat beedis	
	(7)	(8)	(9)	(10)	(11)

Date	Amount of wages to date in	Signature or thumb impression	Signature of the
	arrears	of the worker	Employer
(12)	(13)	(14)	(15)

#### FORM 38 (See Rule 89)

#### Home-Workers' Employment Register

#### Month ending ...... year

Beedis manufactured should be shown in respect of each home worker below the

#### appropriate date

Name of	Address of	Wage	Date
worker	Home	paid	
			1 2 3 4 5 6 7 8 9 10 to 31
		•	

#### FORM-39 (See Rule-90) Record of Outside Work Number and date of Government's Order permitting work outside the industrial

Date	Place or places where outside work	Nature of	Nature of	Remarks
	was permitted	work	employee	
(1)	(2)	(3)	(4)	(5)

#### premises .....

#### FORM-40 (See Rule-90)

#### HOME WORKERS' LOG BOOK

1. Name of home worker .....

2. Address of the home where the manufacturing process is carried on .....

3. Month .....

#### Account of Work Done at Home

Date	Raw M	Material supplier		Signature	No. of beedis received by the employer
	to	to the worker		or thumb	
	Tendu	Tobacc	Trre	impression	
	patta	0	ad	of the	
				worker	
(1)	(3)	(3)	(4)	(5)	(6)

No.	Number of	Wages p	ayable to	Wages paid to the worker
standards	sub-	WO	rker	
of beedis	standard or	For	For sub-	
	chhat beedis	standard	standard	
		beedis	or chhat	
			beedis	
(7)	(8)	(9)	(10	(11)

Date	Amount of wages to date in arrears	Signature or thumb impression of	Signature of the Employer
		the worker	
(12)	(13)	(14)	(15)

#### [See Rule 85(2)] Application for permission to construct/extend or take into use any building / premises as a factory

1. Applicant's Name

Age Father's Name Permanent address-Village/Plot No./Street/Lane P.O. P.S. Town/City/District State PIN Contact No. Email-2. Full name and postal address of the factory 3. Address for correspondence 4. Location of the Factory – State District Sub-division P.S. : Near of village or town, nearest Rly. Station 5. Particulars of plants to be installed (Separate sheet where necessary be annexed) 6. (a) Number of persons proposed to be engaged Men Women (In case of extension, increase of number of persons due to extension and No. of persons engaged in existing portion be mentioned separately) (b) Amount of power proposed to be installed (The list of machines with K.W. rating of their prime movers be annexed. In case of extension, such list for existing portions and for extension be mentioned separately). 7. Proposed date of commencement of construction 8. Particulars of no objection Certificate/Consent letter of Orissa State Pollution Control Board, Bhubaneswar/Local Authority. (Attested copy to be enclosed)

9. Amount of fee paid...... Challan No...... Date...... Treasury/Bank name......

Date.....

Place.....

(Signature of applicant)

Note - This application shall be accompanied by the following documents (a) A flow chart of the manufacturing process supplemented by a brief description of the process in its various stages.

(b) Plans, in duplicate, drawn to scale, showing

(i) the site of the factory and immediate surroundings including adjacent building and other structures, roads, drains, etc; and

(ii) the Plan elevation and necessary cross Sections of the various buildings, indicating all relevant details relating to natural lighting, ventilation and means of

escape in case of fire. The plans shall also clearly indicate the position of the plant and machinery, aisles and passage way; and (b) Such other particulars as the Chief Inspector may require.)

#### FORM 42 (See Rule 85(7)) Particulars of rooms in the factory

Name/Number			Dimensions in fe	eet	
Of room in	Length	Breadth		Height	
factory			Maximum	Minimum	Average
(1)	(2)	(3)	(4)	(5)	(6)
Total area in square feet	Floor area occupied by machinery in the room	Breathing space (contents in cubic feet).	Total volume of air in the room	Number and size of doors	
(7)	(8)	(9)	(10)	(11)	(12)
Number and size of windows openings	Ventilation Number and size of skylight openings	Total area in squar e feet	Maximum capacity of the room	Maximum number of persons intended to be employed in the rooms	Whether the room is to be used as a workroom of for storage only
(13)	(14)	(15)	(16)	(17)	(18)

Date of construction	Remarks
(19)	(20)

Signature of the Occupier..... Signature of the Manager.....

#### Questionnaire Annexed to Form No. 42.

Careful attention to the questionnaire will assist in drawing up the plans in accordance with the law, and thus prevent delay in dealing with the plans.

1. Plans—

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

(b) If there is a system of underground sewage within 100 ft. of the factory, has its position been shown in the site plan ?

(c) Have the direction i.e., north, south, east and west been shown on the site-plans as well as on the detailed plans ?

(d) Have the municipal nos. or the field nos. of the premises and the surrounding areas been shown on the site-plan ?

(e) Have the factory premises been clearly demarcated in the site-plan in distinctive colour ?

(f) Have the detailed plans of the factory indicating all relevant details " relating to doors, windows, ventilators, fire escapes, etc., been submitted in triplicate ?

(g) Are all new buildings, parts of buildings (if extensions) or alterations in existing buildings shown by boundaries duly marked in a distinctive colour ?

(h) Are all rooms, sheds, enclosures, etc., serially numbered inside a circle on the plans, corresponding to the serial entry in Form Column No. 1 ?

(i) Are the outlines of all rooms, sheds, enclosures, etc., shown in the site-plan and allotted the same number as in Item 1 above?

(j) Is the sectional elevation of such a room or shed, etc., shown separately ?

(k) Is the minimum and 'maximum height of every room, shed, etc., shown clearly in the sectional elevation ?

(1) Is the material of which the roof is constructed indicated the sectional elevation ?

(m) Are the heights of all the workrooms in accordance with the provisions of Rule 91 as under :

(i) Is the minimum height 20 ft. with C. I. sheet roofing ?

(ii) Is the minimum height 14 ft. with A. C. sheet roofing or R.B./R. C. C. roofing ?

(iii) Has an inner ceiling of a heat resisting material with an air gap of at least 4" been provided at a minimum height of 14 ft. and the name of the heat resisting material given?

(iv) Has an exemption been sought for a height of up to 12 ft. R.B/R. G. C. roofing ?

(v) Has an exemption been sought for on the assurance of not employing more than 50 employees in the factory on any day ?

(n) Is the minimum distance of the nearest building from latrines and urinals shown on the plans ?(o) Is the minimum distance of the nearest well, hand-pump or other drinking water centres shown in the drawing ?

(p) Are water centres shown on the plans ?

(q) Are the sizes of all the doors and ventilators shown on the plans along with their existing position ?

(r) Are all the drains, pipes and sewers for carrying sullage sewage water effluent and waste products running within the factory premises constructed and shown in the plans ?

(s) Are the positions of various machines fitted or proposed to be fitted shown in the drawings together with their names ?

2. Form No. 41

(a) Is Form No. 41 submitted with duly filled information for all workrooms, godowns, etc. which are proposed to be constructed or extended ?

(b) Have the internal dimensions only been entered in all the columns of Form No. 41 ?

(c) Is the breathing space of workroom, shed, etc., calculated as shown below:

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

(d) Is the maximum capacity entered in Column No. 15 of Form No. 1 the maximum number of persons shown as the lower value of the two calculations shown below :

(i) Floor area of a room less area occupied by machinery in the room divided by 36 [Rule 91].

(ii) Breathing space [as in (c) above] divided by 500.

(e) Have the maximum number of persons as worked out above (lower value) been also shown on the plans for each workroom corresponding to Form No. 15 ?

(f) Is the window, ventilator and skylight area provided at the minimum rate of 1 sq. ft. to every 15 sq. ft. of floor area of the room ?

(g) Can the windows and skylights all be opened for ventilation ?

It is recommended that windows and skylights may be provided one opposite to another so as to provide cross ventilation.

(h) Has a flow chart of the manufacturing PROCESS supplemented by its brief description in various stages been submitted ?

3. Doors and ventilators.—(a) Is every work room provided with at-least two doors or exits ?

(b) Is the minimum size of every door or exit 6'-6''x3'

(c) Have any doors of ventilators in common with two adjacent rooms been counted in both ?

(d) Are all the doors opening outwards?

(e) Do the windows and skylights entered Form No. 41 Actually serve thepurpose of ventilation ?4. Fire Escapes.—(In case of buildings of more than one story

(a) Are two fire escapes provided on either side of the building ?

(b) Are the fire escapes accessible from every room in the upper floor in the buildings ?

(c) Is the material used in construction of the fire escapes non-combustible ?

(d) Are the windows, doors giving access to an external stair-case arranged to open immediately from

inside.

(e) Is any fire escape or stair-way constructed at an angle greater than 450 ft. with the horizontal?

(f) Is any fire escape or stair way less than 45' un width ?

(g) Is any part of the factory building further (along the line of travel) than 150 ft. from the fire escape stair ?

(h) Have the particulars given against Items 4(e), (f) and (g) above been also clearly shown in the various drawings being submitted ?

(i) Is the setback area of the factory and its premises uncovered and free from obstruction ?

5. Latrines and urinals.—(a) Are the latrines and urinals provided separately for men and women ? (b) Are these sufficient to meet the requirements?

(c) Is the surrounding ground up to a distance of 4 ft. all round of impermeable material?

(d) Is the surrounding ground raised to at least 6" above the ground level ?

(e) Is any latrines, ventilator or opening in the proximity of any opening of the main building ?

(f) Do any latrines or urinals communicate with any work room without any intervening space open to

the sky ?

(g) Are the latrines of the flush type ?

(h) Are all the drains, pipes and sewers for carrying sullage, sewage water effluent and waste products running within the factory premises constructed of impermeable material ?

(i) Are the drains of flush type latrines connected to the drainage system of the local Boards ?

(j) Is an efficient system of septic tanks provided if no drainage system exists ?

(k) Are the latrines provided with roofing ?

6. Drinking water.—(a) Is the drinking water provided from a source provided by the local Board.(b) Is any well constructed in the premises of the factory for drinking water or humidification purposes ?

(c) Is the cylinder of the well pucca and impervious to water throughout and up to a depth not less than the lowest level of sub-soil water ?

(d) Are the positions of water centres including wells, hand pumps situated at least 20 ft. away from the washing place, latrines and urinals ?

7. Rest shelter, canteen and creches.—If the plans relate to any of these, the following questions should also be answered—

(i) Rest shelter:

(a) Does the building fully meet the requirements of Rules ?

(b) Is the roof of heat-resisting material?

(c) Is the height of every room in the rest shelter at least 12 ft. from the floor level to the lowest part of the roof ?

(ii) Canteen:

(a) Does the building fully meet the requirements of Rules.

(b) Are the canteen buildings situated not less than 50 yards from any latrines, urinals, boiler house, coals, stack coals dumps etc.?

(c) What is the minimum height of the buildings of the canteen measured from the floor level to the lowest part of the roof ?

(iii) Creche :

(a) Does the building of creche meet fully the requirements of— Rules.

(b) Is the height of buildings not less than 12 ft. from floor level to the lowest part of roof?

We certify that the replies given to the questionnaire above are correct.

Signature of Manager. Signature of Occupier.

N. B.—(i) After showing the above details, the plans and site-plan this questionnaire and Form No. 41 should all be submitted to the Inspector of Factories of the Region concerned for the approval of the Chief Inspector of Factories.

(ii) A certificate of stability signed by a person having the qualifications laid down in Rule 91(II) shall be submitted on Form No. 43 before the manufacturing PROCESS with the aid of power is begin in the building.

#### FORM 43 [See Rule 91(II)] Certificate of stability

- 1. Name of the factory.....
- 2. Village, town and district in which the factory is situated.....
- Full postal address of the factory......
   Name of the occupier of the factory......
- Nature of manufacturing process to be carried on in the factory......
- Number of floors on which workers will be employed......

I have inspected the premises of the factory on.....and examined the building/buildings and other structures. The details of the building / buildings and other structures are specified in the schedule appended. I certify that it is / they are found to be structurally sound and that its / their stability will not be endangered by its / their use as factory / part of factory.

Signature

Qualification:

Address of Association:

The Certificate of stability referred to in sub-rule(1) shall be signed by one of the following categories of persons, namely:—

(i) A member of the Associate Members of Institute of Civil Engineers.Or,

(ii) A member of the Institute of Structural Engineers. Or,

(iii) A full member or Associate Member of the Institute of Engineers (India). Or,

(iv) Civil Engineers of the Public Works, Electricity and Highways Department including retired Civil Engineers not below the rank of Executive Engineer.

#### FORM 44 (See Rule 91 (XII)) Notice of change Manager

1. Name of the factory with current licence number.....

- 2. Postal address.....
- 3. Name of the outgoing Manager.....
- 4. Name of the new Manager with postal address ......
- 5. His father's name with postal address.....
- 6. Date and time of transfer of charge (forenoon or afternoon)......

Signature of new Manager

Signature of Occupier

#### FORM 45 (See Rule 91 XIII ) Form of Certificate from Competent person

It is certified that I/We have examined the plan and details of Form 42 and the design and map of the proposed factory building. I/We further certify that the plan and details of Form 42 and design, map and other particulars given with Form 42 is in accordance with the Provisions of the Occupational Safety, health and Working Conditions Code, 2020 and Meghalaya Rules made thereunder

Date .....

Signature..... (Name and Designation) Seal ..... Empanelment number .....

#### FORM 46 [See Rule 91(XIV)] Notice of occupation

Notice of occupation
LICENCE NUMBER
For the year
01-Full name of the factory and its licence number,
02- (a) Address and situation of the factory including the police station, tehsil and
district
(b) Correspondence Address
(c) Contact Number and Email Address of Factory
03-Nature of manufacturing process/ processes carried on in the factory during the next
twelve months
04- Names and values of the principal products manufactured during the last twelve
months
05-(a) Maximum number of workers proposed to be employed on any one day during the
year
(b) Maximum number of workers employed in any day during the last twelve
months
(c) Actual number of workers employed in the Factory at present
06-(a) Nature and total amount of power (H.P.) installed
(b) Maximum amount of power (H.P.)
NOTE.—If power is not proposed to be used originally but is introduced later, the fact should
be immediately communicated to the Chief Inspector-cum-Facilitator.
07-In the case of a factory constructed or extended after the date of the commencement of the
rule
(i) Reference number and date of approval of the plans for site, whether for old or new
building and for construction or extension of factory, by the State Government/ Chief
Inspector
(ii) Reference number and date of approval of the arrangements, if any, made for the disposal
of trade waste and effluents and the name of the authority granting such approval
08-Full name, father's name and residential address of
(i) The person who shall be Manager of the factory for the purposes of the Code
(ii)The occupier of the factory
09- If the factory is covered by the provisions of Section 80 of the Code, full name, father's
name, and address of the owner of the premises or buildings in which the factory is situated
10- Return submitted
(Yes / No)
11- Date on which the Manager assumed charge
12- Date on which the occupier occupied the premises or will occupy the premises
I hereby declare that our factory is complying / will comply with all health and safety
provisions of The Code 2020 to the best of my knowledge.
Full signature of occupier
Full signature of manager

Date

#### FORM 47 (See Rule 94,104,126) Health Register

Sr.No.	N	lame	Seria	ıl	sex	ag	ge	Da	te of		Date of	Reason for
		of	numb	er				empl	oyment	le	aving or	leaving,
	W	orker	in adı	ılt				on p	resent	tr	ansferred	transfer or
			work	er				W	ork	1	to other	discharge
			regist	er							work	
(1)	(2)	)	(3)		(4)	(5)		(6)		(7)		(8)
Nature of	of	Dat	e of	R	Result of			If	Recertif	ied	If	Signature
job or		med	lical	1	nedical	s	susp	ended	fit to		certifying	with date
occupati	on	exami	nation	exa	aminatio	n	fror	n the	resum	e	of	of
		by me	edical			W	vork	, state	duty of	n	unfitness	medical
		off	icer			]	peri	od of	(with		or	officer
						S	uspe	ension	signatu	re	suspension	L
							W	ith	of medie	cal	issued to	
							deta	ailed	officer	)	worker	
							rea	sons				
(9)		(10)		(11	l)	(	12)		(13)		(14)	(15)

#### FORM 48 (See Rule 50, 94,104,126) CERTIFICATE OF FITNESS FOR HAZARDOUS PROCESS OR DANGEROUS OPERATIONS

1. Serial No.\_\_\_

2. I certify that I have Personally examined\_\_\_\_\_(Name of person examined) having serial Number \_\_\_\_\_(In Adult Worker Register) who is desirous of being employed in \_\_\_\_\_\_(hazardous process/ dangerous operation) in

factory\_\_\_\_

3. He is fit to be employed

4. He may be produced for further examination after a period of\_\_\_\_\_

5. He has gone undergone following tests/examinations:

S. No. Name of test/examination remarks

6. Remarks of medical officer:

Name and signature of medical officer

#### [See Rule 99] Notice of occupation

LICENCE NUMBER..... For the year.... 01-Full name of the factory and its licence number, ..... 02- (a) Address and situation of the factory including the police station, tehsil and district..... (b) Correspondence Address ..... (c) Contact Number and Email Address of Factory..... 03-Nature of manufacturing process/ processes carried on in the factory during the next twelve months..... 04- Names and values of the principal products manufactured during the last twelve months..... 05-(a) Maximum number of workers proposed to be employed on any one day during the year..... (b) Maximum number of workers employed in any day during the last twelve months..... (c) Actual number of workers employed in the Factory at present ..... 06-(a) Nature and total amount of power (H.P.) installed ..... (b) Maximum amount of power (H.P.) NOTE.—If power is not proposed to be used originally but is introduced later, the fact should be immediately communicated to the Chief Inspector-cum-Facilitator. 07-In the case of a factory constructed or extended after the date of the commencement of the rule (i) Reference number and date of approval of the plans for site, whether for old or new building and for construction or extension of factory, by the State Government/ Chief Inspector (ii) Reference number and date of approval of the arrangements, if any, made for the disposal of trade waste and effluents and the name of the authority granting such approval 08-Full name, father's name and residential address of .-(i) The person who shall be Manager of the factory for the purposes of the Code..... (ii)The occupier of the factory ..... 09- If the factory is covered by the provisions of Section 80 of the Code, full name, father's name, and address of the owner of the premises or buildings in which the factory is situated 10- Return submitted (Yes / No) 11- Date on which the Manager assumed charge..... 12- Date on which the occupier occupied the premises or will occupy the premises..... I hereby declare that our factory is complying / will comply with all health and safety provisions of The Code 2020 to the best of my knowledge. Full signature of occupier..... Full signature of manager.....

Date

# (See Rule 108) **Application to appropriate authority under section 90** a. Name of occupier or manager: b. Name and Address of factory: c. Details of grievance: d. Reasons of a<sup>1</sup>

- d. Reasons of claim:
- e. Details of documents attached:

Name and signature of occupier/ manager

#### FORM 51 (see Rule 131)

#### **Penalty Register**

Office of Chief Inspector of Boilers and Factories, Meghalaya For the Month of \_\_\_\_\_, Year\_\_\_\_

Sr.No.	Name and	Name and	Date and	Offences for
	address of	address of	number of	which penalty
	person on	establishment	reference of	imposed
	whom penalty	in relation to	imposing	
	imposed	person on	penalty	
		whom penalty		
		imposed		
(1)	(2)	(3)	(4)	(5)

Amount of penalty	Date of deposit	Whether appeal preferred	Signature of officer imposing penalty	remarks
(6)	(7)	(8)	(9)	(10)

Total penalty collected at the end of month Details of transfer of amount to fund:

- (i) Date:
- (ii) Amount:
- (iii) Bank details of transfer

Signature and Seal of Deputy Chief Inspector cum Facilitator of Boilers and Factories, Meghalaya.

#### (See Rule 132)

# **Performa for Appeal before the Appellate Authority against Order of Imposing Penalty** To,

Appellate Authority

[Under Section 111(2) of the Code]

Sir/Madam,

I undersigned with following details prefer an appeal against order of ----- (details of officer imposing penalty) under section 111(2) of The Occupational Safety, Health And Working Conditions Code 2020.

1. Name and address of the establishment.

2. Name of the person preferring appeal and address details

3. Amount of penalty imposed by the officer.

4. Ground for Appeal with supporting documents

Declaration

I/We hear by declare that the particulars given above are true to the best of my/our knowledge and belief and I/We hereby declare that nothing has been concealed or any fact has been mis-represented in the above calculation made by me/us.

Signature of person preferring appeal Name: Date: Place: Mobile Number: E-mail (if any)

#### [See Rule 133] APPLICATION UNDER SUB-SECTION (1) OF SECTION 114 FOR COMPOSITION OF OFFENCE

To, The authorised officer [under section 114(1)] 1. Name of applicant ..... 2. Father's / Husband's name of the applicant ..... 3. Address of the applicant ..... 4. Name and Address of establishment in relation to applicant..... ..... 5. Particulars of the offence ..... ..... 6. Section of the Code under which the offence is committed ..... 7. Maximum fine provided for the offence under the Code..... ..... 8. Whether prosecution against the applicant is pending or not ..... ..... 9. Whether the offence is first offence or the applicant had committed any other offence prior to the offence, if had committed, then, full detail of the offence ..... ..... 10. Any other information which the applicant desires to provide ..... ..... ..... Applicant (Name and signature) Dated

#### (See Rule 133) Compounding/ Composition Register Office of Chief Inspector cum Facilitator of Boilers and Factories, Meghalaya. For the month of \_\_\_\_\_ (name of month with year)

Sr.	Name and	Name and	Date and number	Offences for
No.	Address of	address of	of reference of	which
	person whom	establishment in	compounding /	compounded
	offence	relation to	composition	
	compounded	person on whom		
		offence		
		compounded		
(1)	(2)	(3)	(4)	(5)

Amount of penalty	Date of deposit	Whether appeal preferred	Signature of officer imposing penalty	Remarks
(6)	(7)	(8)	(9)	(10)

	Record of Social Security Fund								
Sr.No.	Amount received for fund	Source from received	Date of receive	Details of cre Unorganise		<b>U</b>			
				Amount	Date	Bank Details			

#### FORM 55 (See Rule 134) cord of Social Security Fu

#### FORM 56 (See Schedule V)

#### Report of examination and test of DUST EXTRACTION OR SUPPRESSION System

- 1. Description of system:
- 2. Hood:—(a) Serial number of hood:
- (b) Contaminant captured:

	Design value	Actual value
(c) Captured velocities (at points to be specified)		
(d) Volume exhausted at hood:		
(e) Hood static pressure:		

3. Total pressure drop at —

(a) Joints:

(b) Other points of system(To be specified):

4. Transport velocity in duct (at points along ducts to be specified):

5. Air cleaning device:—

(a) Type used	(b) Velocity at inlet	(c) Static pressure at inlet	(d) Velocity at outlet	(e)Static pressure at outlet

6.Fan—

(a) Type used	(b) Volume handled	(c) Static pressure	(d) pressure drop at outlet of fan

7. Fan Motor-

(a) Type	(b) Speed and power in kilowatts

8. Particulars of defects, if any, disclosed during test in any of the above components:

I certify that on (date).....the above dust extraction system was thoroughly cleaned and (so far as its construction permits) made accessible for thorough examination. I further certify that on the said date, I thoroughly examined the above dust extraction system including its components and fittings and that the above is a true report of my examination.

Address:

Signature:

Qualification:

Date:

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

#### FORM 57 Prescribed under Schedule VIII REPORT OF EXAMINATION OF HOISTS AND LIFTS

Occupier (or owner) of premises:

Address.....

1. (a) Type of hoist or lift and identification number or description:

(b) Date of construction or reconstruction

(if ascertainable):

2. Are all parts of the hoist of lift of good mechanical construction, :

sound material and adequate strength (so far as ascertainable)?

3. Arte the following parts of the hoist or lift properly maintained :

and in good working order? If not, state what defects have been found-

(a) Enclosure of hoistway or lift way:	(e) Cage and platform & fittings,guides,buffers,interior of the hoistway or lift way:	(i)Brakes:
(b)Landing gatesand cage gates:	(f) Overrunning devices:	(j) Worm or spur gearing:
(c) Interlocks and landing gates and cage gates:	(g) Suspension ropes or chain & their attachments:	(k) Other electrical equipment:
(d) Other gate fastenings:	(h) Safety gear <i>i.e.</i> ,arrangements for preventing fall of platform or cage brakes:	(1) Other parts:

4. What parts, if any, were inaccessible?

5. Repairs, renewal or alterations( if any) required and theperiod within which they should be executed?:

6. Maximum safe working load subject to repairs, renewals or alterations (if any) specified in item 5.:

7. Other particulars:

I/We certify that on (date).....I/We thoroughly examined this hoist or lift and that the above is a correct report of the result.

Signature:

Qualification:

Address:

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

#### Prescribed under Schedule VIII-Pressure Plant

:

#### **REPORT OF EXAMINATION OR TEST OF PRESSURE VESSEL OR PLANT**

- 1. Name of the Occupier (or factory):
- 2. Situation and address of factory
- 3. Name, description and distinctive number :

of pressure vessel or plant.

4. Name and address of manufacturer and :

Reference to their test certificate or certificate of competent person

5. Nature of process in which pressure

vessel or plant is used.

6. Particulars of pressure vessel or plant—

- (a) Date of construction:
- (b) Thickness of walls:
- (c) Date on which the pressure vessel or plant was first taken into use:
- (d) Maximum permissible working pressure recommended by the manufacturer:

:

- (e) Design pressure , if known
- (f) Brief history of the pressure vessel or plant, indicating
- whether the Examiner has seen the last previous report.
- 7. Date of last hydrostatic test (if any) and pressure applied:
- 8. Is the pressure vessel or plant in open or
  - otherwise exposed to weather or to damp?
- 9. What part (if any) were inaccessible?:
- 10 What examination and tests were made? :

(Specify pressure if hydrostatic test was carried out).

11. Condition of pressure vessel or plant (State any defects materially affecting the maximum permissible workingpressure or the safe working of the pressure vessel or plant):—

External:	Internal:

12. Are the required fittings and appliances provided in accordance with the rules?:

13. (a) Are all fittings and appliances properly : maintained and in good condition?

(b) Have the pressure settings been checked and corrected ? :

14. (a) Repairs(if any) required :

(b) Period within which the repairs should be executed :

(c) Any other condition which the person making the :

examination thinks it necessary for securing safe working.

15. Maximum permissible 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 (State minimum thickness of walls measured during the examination). 16. Where repairs affecting the maximum working ptressure are required, state the working pressure:—

(b) after the expiration of such period if the required repairs have not been completed:	

17. Other observations:

I certify that on (date).....the pressure vessel or plant 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 examination and that on the said date, I thoroughly examined this pressure vessel or plant, including its fittings and that the above is a true report of my examination.

Signature:

Qualification: Address:

#### Date:

If employed by a company or associatioon, name and address of the company or association:—

Distinguish-ing	Particulars of manufacture				
number or letter of gasholder	Maker's name	Date of manufacture	Number of lifts	Maximum capacity in cubic metres	Pressure thrown by gasholder when full of gas
(1)	(2)	(3)	(4)	(5)	(6)

#### FORM 59 REGISTER OF EXAMINATION OF GAS HOLDERS

Particulars of examination carried out					
Method of	Method of Date of examina- Name and				
examina-tion used	tion	designation of the			
		person making this			
		examination			
(7)	(8)	(9)			

Particulars of repairs			Remarks
Nature of repairs	Date of repairs and By whom repairs		
painting are carried out			
(10)	(11)	(12)	(13)

#### **FORM 60 REPORT OF EXAMINATION OF WATER-SEALED GASHOLDER**

:

1. Name of occupier (or factory)

2. Situation and address of factory

: 3. Name, description, distinguishing number or letter and type of gasholder

٠

4.Name and address of the manufacturer:

5.

6. Particulars of gas to be stored in the holder:

(a) Number of lifts	(b) Maximum capacity in cubic	(c) Pressure thrown by holder when
	meters	full of gas

7. Particulars as to the condition of:

(a)	(b) Side	(c) guiding mechanism (Roller	(d)	(e) Other structure, if
Crown	sheeting, including	carriages,rollers,pins,guiderails	Tank	any(columns,framing and
	grips and cups	or ropes)		bracing)

8. Particular as to the position of the lifts at the time of examination:

9. Particulars as to whether the tank and lift were found sufficiently level :

for safe working and if not, as to the steps taken to remedy the defect.

10. Date of examination and by whom it was carried out:

11. Condition of vessel— (a) External:

#### (b) Internal:

12.(a) Are all fittings and appliances properly maintained and in good condition?:

(b) Repairs, if any, required and period within which they should be executed:

(c) Any other conditions which the persons making the :

examination thinks it necessaary for securing safe working.

13. Other observations:

I certify that on (date) .....the gasholder described above was thoroughly examined and such of the tests as were necessary made on the same day and that the above is a true report of my examination.

Qualification;

Address:

Signature:

Date:

If employed by a company or association, nameand address of the company or association.: