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The Factories Act, 1948: Health, Safety, and Welfare Essentials

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ABSTRACT

The Health, Safety, and Welfare (HSW) provisions of the Factories Act, 1948, are fundamentally important to workers, directly impacting their well-being, dignity, and productivity. These legislative mandates are crucial for mitigating the inherent risks of industrial environments and establishing a protective framework for the workforce. The health provisions of the act ensure a hygienic and healthy workplace by stipulating requirements for cleanliness, proper ventilation, temperature control, and the management of dust and fumes. These measures directly combat occupational diseases like respiratory ailments and skin conditions. Furthermore, access to wholesome drinking water and adequate sanitary facilities prevents the spread of illness and upholds basic human dignity. Without these provisions, workers would face environments detrimental to their long-term health and general well-being. The safety sections of the act are vital for protecting workers from immediate physical harm and preventing accidents. Mandates such as the fencing of machinery, regulations for hoists and lifts, and precautions against dangerous substances like fumes or explosive dust are designed to minimize severe injuries, disabilities, and fatalities. These provisions ensure that workers can perform their duties with reduced risk of amputations, crushing injuries, burns, or other life-threatening incidents. The requirement for personal protective equipment further reinforces individual safety, creating a more secure working environment. Lastly, the welfare provisions significantly enhance the overall quality of life for workers. Facilities like washing areas, canteens, rest rooms, and crèches address fundamental human needs and provide essential respite during long shifts. These measures acknowledge that a worker's well-being extends beyond mere physical safety, contributing to improved morale, reduced fatigue, and a sense of being valued. This holistic approach to welfare ultimately boosts productivity and reduces absenteeism. The incorporation of these HSW standards into the Factories Act, 1948, ensures they are not optional but legally binding obligations for employers. The Act delineates clear responsibilities, sets specific benchmarks, and establishes an enforcement mechanism through factory inspectorates, backed by penalties for non-compliance. This statutory embedding transforms HSW from discretionary employer practices into fundamental rights for every factory worker, thereby fostering a more just, humane, and protective industrial landscape across India.

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I. INTRODUCTION

The main object of the Factories Act, 1948 is to consolidate and amend the law regulating labour in factories² and it's enacted to protect human beings from being subject to unduly long hours of bodily strain or manual labour. It also provides that employees should work in healthy and sanitary conditions so far as the manufacturing process will allow and that precautions should be taken for their safety and for the prevention of accidents. The act extends to the whole of India and applies to all establishments that come under the definition of "factory"³. The main purpose of codification of the Factory legislation has been to ameliorate working conditions in factories and to provide effective and proper measure for maintenance of health, safety and welfare of the working community it was held in *Ravi Shankar Sharma v. State of Rajasthan (1993)*. The act specifically provides the provisions relating to Health, safety, and welfare starting from **Chapter III – V [Section 11-50]**.

II. IMPORTANT DEFINITIONS

Sec 2(cb) "Hazardous process" has been defined any process or activity in relation to an industry specified in the First Schedule where, unless special care is taken, raw materials used therein or the intermediate or finished products, bye-products, wastes or effluents thereof would—

- (i) cause material impairment to the health of the persons engaged in or connected therewith, or
- (ii) results in the pollution or the general environment:

Provided that the State Government may, by notification in the Official Gazette, amend the first schedule by way of addition, omission or variation of any industry specified in the said Schedule.

Sec 2(l) "Worker"

A "worker" is someone who does any of the following tasks related to a manufacturing process:

- Works directly in manufacturing (e.g., assembling, producing, processing goods).
- Cleans machinery or the factory premises used for manufacturing.

² The Factories Act, 1948 Act No. 63 of 1948, preamble.

³ The Factories Act, 1948, Act No. 63 of 1948, sec 2(m).

- Performs any other work that supports or is linked to the manufacturing process or the product being manufactured.

Includes,

- Persons hired directly by the employer.
- Persons hired through an agency (like a contractor), even if the main employer doesn't know about it.
- Persons who are paid, and even those who are not paid for their work.

This definition specifically **excludes**,

- Members of the armed forces.

Sec 2(k) Manufacturing Process means “any process for

- i. making, altering, repairing, ornamenting, finishing, packing, oiling, washing, cleaning, breaking up, demolishing, or otherwise treating or adapting any article or substance with a view to its use, sale, transport, delivery or disposal,
- ii. pumping oil, water, sewage or any other substance; or
- iii. generating, transforming or transmitting power; or
- iv. composing types for printing, printing by letter press, lithography, photogravure or other similar process or book binding; or
- v. constructing, reconstructing, repairing, refitting, finishing or breaking up ships or vessels; or
- vi. preserving or storing any article in cold storage”

Sec 2(m) “Factory” In simple terms, a "factory" refers to any premises (including its surrounding area) where manufacturing occurs. However, there are specific conditions related to the number of workers and the use of power:

- **With Power:** If a manufacturing process is carried on with the aid of power, the premises are considered a factory if 10 or more workers are currently working, or worked on any day in the past 12 months⁴.
- **Without Power:** If a manufacturing process is carried on without the aid of power, the premises are considered a factory if 20 or more workers are currently working, or worked on any day in the past 12 months⁵.

⁴ The Factories Act, 1948, Act No. 63 of 1948, sec 2(m)(i).

But **does not include**, mine subject to the operation of [the Mines Act, 1952 (35 of 1952)], or [a mobile unit belonging to the armed forces of the Union, railway running shed or a hotel), restaurant or eating place].

Sec.2 (n) “Occupier” of a factory means “the person who has ultimate control over the affairs of the factory; and

- i. In the case of a **firm or other association of individuals**, any one of the **individual partners or members** thereof shall be deemed to be the occupier;
- ii. In the case of a **company**, any one of the **directors** shall be deemed to be the occupier;
- iii. In the case of a **factory** owned or controlled by the Central Government or any State Government, or any local authority, the **person or persons appointed to manage the affairs of the factory** shall be deemed to be the occupier”.

III. PROVISIONS RELATING TO HEALTH

The effective working process requires sound health of the persons engaged in work. Unless these workers are physically and mentally healthy, they cannot perform their duties effectively, properly and smoothly. For protecting the health of workers, the Act lays down that every factory shall be kept clean and all necessary precautions shall be taken in this regard. The factories should have proper drainage system, adequate lighting, ventilation, temperature etc⁶.

Chapter III of the Factories Act, 1948 deals with health-related provisions of workers. This chapter consist nearly 10 sections **sec 11 to sec 20**. Detailed information of the sections is provided as under:

(i) Cleanliness⁷ (Sec 11)

Every factory must be kept clean and free from bad smells originating from drains, privies, or other nuisances. Specifically,

- **Daily Cleaning:** Dirt and refuse must be removed daily from floors, workbenches, staircases, and passages by sweeping or other effective methods, and disposed of properly.
- **Weekly Floor Cleaning:** The floor of every workroom must be cleaned at least once a week by washing, using disinfectant where necessary.

⁵ The Factories Act, 1948, Act No. 63 of 1948, sec 2(m)(ii).

⁶ Comprehensive complete Guide to the Factories Act for Compliance and Safety, <https://sankhlaco.com/the-factories-act-1948/>, (last visited May 5, 2025).

⁷ The Factories Act, 1948, Act No. 63 of 1948, sec 11.

- **Drainage for Wet Floors:** If a floor regularly gets wet during a manufacturing process to an extent that it can be drained, effective drainage systems must be provided and maintained.

Wall, Ceiling, and Staircase Maintenance⁸:

- Surfaces painted with non-washable paint or varnished must be repainted or revarnished at least every **5 years**.
- Surfaces painted with washable water-paint must be repainted with at least one coat every three years and washed at least every **6 months**.
- Smooth impervious surfaces (like tiles) must be cleaned at least every **14 months** by a prescribed method.
- All other surfaces must be whitewashed or color washed at least every **14 months**.
- **Doors and Window Frames:** All wooden or metallic doors, window frames, and shutters must be painted or varnished at least every **5 years**.
- **Record Keeping:** The dates of these maintenance processes must be recorded in a prescribed register.

If, due to the nature of operations, a factory or a class of factories (or any part thereof) cannot comply with all or any of these provisions, the State Government may grant an **exemption⁹** and specify alternative cleaning methods.

(ii) Disposal of wastes and effluents (Sec 12)

Every occupier of a factory shall make effective arrangements for the treatment of wastes and effluents¹⁰ due to the manufacturing process carried on in the factory so as to render them innocuous and for their disposal.

(iii) Ventilation and temperature (Sec 13)

Every factory must make effective and suitable provisions to ensure and maintain adequate ventilation with fresh air in every workroom. The temperature must also be kept at a level that provides reasonable comfort for workers and prevents health injuries. Specifically,

- Walls and roofs should be made of materials and designed in a way that prevents the temperature from exceeding a comfortable level, aiming to keep it as low as practicable.

⁸ The Factories Act, 1948, Act No. 63 of 1948, sec 11(1)(d).

⁹ The Factories Act, 1948, Act No. 63 of 1948, sec 11(2).

¹⁰ The Factories Act, 1948, Act No. 63 of 1948, sec 12.

- If the work naturally produces very high temperatures, practical measures must be taken to protect workers. This can involve separating the hot processes from the workroom, insulating hot parts, or using other effective methods.

The **State Government** can set standards for adequate ventilation and reasonable temperature¹¹ for any factory or part of a factory. They can also require that proper measuring instruments be provided and maintained at specified locations, and that relevant records be kept.

Furthermore, if the **Chief Inspector** believes that excessively high temperatures in a factory can be lowered by adopting suitable measures, they can issue a written order to the occupier. This order will specify the measures to be taken and set a deadline for their implementation, even if these measures are not already part of existing rules¹².

(iv) Dust and fume (Sec 14)

In factories where manufacturing creates harmful dust, fumes, or other impurities that could hurt or bother workers, or if there's a lot of dust, the factory must take strong steps to stop workers from breathing them in and prevent them from building up in the work areas. If special exhaust fans are needed, they should be placed as close as possible to where the dust or fumes are made, and that area should be enclosed as much as possible¹³.

Also, any stationary engines that burn fuel (like diesel engines) must have their exhaust pipes leading outside. Other types of fuel-burning engines used indoors must have ways to stop harmful fumes from building up and hurting workers¹⁴.

In *Gregson vs Hick Hargreaves and co. ltd*¹⁵, Gregson was employed in iron foundry as a moulder in defendant's company. During the process of moulding some dust was given out. The company took all measures to prevent the workers. The plaintiff was certified as suffering from silicosis and he sued for damages for the breach of statutory duty. The defendant argues that until Gregson was suffering no one knows that the dust contain silica and that causes disease. The court held that defendant is not liable and not in breach of duty.

(v) Artificial humidification (Sec 15)

For factories that artificially increase the humidity of the air, the **State Government** has the

¹¹ The Factories Act, 1948, Act No. 63 of 1948, sec 12(2).

¹² The Factories Act, 1948, Act No. 63 of 1948, sec 12(3).

¹³ The Factories Act, 1948, Act No. 63 of 1948, sec 14(1).

¹⁴ The Factories Act, 1948 Act No. 63 of 1948, www.labour.gov.in/sites/default/files/factories_act_1948.pdf

¹⁵ *Gregson v Hick Hargreaves & Co Ltd*, (1955) 3 All ER 507

power to create rules covering¹⁶,

- Standards for humidification.
- Methods to be used for artificially increasing humidity.
- Requirements for correctly carrying out and recording prescribed tests to determine air humidity.
- Methods for ensuring adequate ventilation and cooling of the air in workrooms.

Crucially, any water used for artificial humidification must come from a public supply or a source of drinking water, or be effectively purified before use¹⁷. If an **Inspector** believes the water used for humidification isn't effectively purified as required, they can issue a written order to the factory manager. This order will specify the measures to be taken and set a deadline for their implementation¹⁸.

(vi) Over-crowding (Sec 16)

- The overcrowding affects the workmen not only in the discharge of duties but also their health.
- The working space should be **9.9 cubic meters**¹⁹ of space per worker in every workroom before the commencement of this Act.
- A factory shall be at least **14.2 cubic metres** of space for every worker employed.
- The Chief Inspector shall also specify the maximum number of workers to be in the room.

(vii) Lighting (Sec 17)

- There shall be provided and maintained sufficient and suitable lighting, natural or artificial or both.
- In every factory all glazed windows and skylights used for the lighting of the workroom shall be kept clean on both inner and outer surfaces²⁰.
- In every factory effective provision shall, so far as is practicable, be made for the prevention of glare, either directly from a source of light or by reflection from a smooth or polished surface²¹.

¹⁶ The Factories Act, 1948, Act No. 63 of 1948, sec 15(1).

¹⁷ The Factories Act, 1948, Act No. 63 of 1948, sec 15(2).

¹⁸ The Factories Act, 1948, Act No. 63 of 1948, sec 15(3).

¹⁹ The Factories Act, 1948, Act No. 63 of 1948, sec 16(2).

²⁰ The Factories Act, 1948, Act No. 63 of 1948, sec 17(2).

(viii) Drinking water (Sec 18)

- Drinking water must be placed at least **six metres**²² away from restrooms, urinals, and washing areas.
- “Drinking water” must be written in bold and legible to all.
- In every factory wherein **more than 250 workers**²³ are ordinarily employed provision shall be made for cool drinking water during hot weather by effective means.

(ix) Latrines and urinals (Sec 19)

- Sufficient latrine and urinal accommodation of prescribed types shall be provided and conveniently situated to make them accessible to workers at all times while they are at the factory.
- Separate for male and female be provided
- It should be adequately lighted, ventilated.
- Latrines and urinals must be kept in a clean and sanitary condition.
- Sweepers are employed to clean latrines, urinals and washing places at least once in seven days with suitable detergents or disinfectants.
- When there are **more than 250 workers**²⁴ are ordinarily employed, the floor and internal walls to be the **height of 90 cm**²⁵ of the latrines, urinals and sanitary blocks.
- The floors, portion of walls, blocks be washed and cleaned at least **once in 7 days** with detergents or disinfectants or with both.

(x) Spittoons (Sec 20)

- There should be sufficient number of spittoons in convenient place.
- It must be maintained in a clean and hygienic condition.
- No persons shall spit expect in the spittoons.²⁶
- The Act expressly provides that whoever spits in contravention Section 20, shall be punishable with **fine** not exceeding **five rupees**.

²¹ The Factories Act, 1948, Act No. 63 of 1948, sec 17(3).

²² The Factories Act, 1948, Act No. 63 of 1948, sec 18(2).

²³ The Factories Act, 1948, Act No. 63 of 1948, sec 18(3).

²⁴ The Factories Act, 1948, Act No. 63 of 1948, sec 19(2).

²⁵ The Factories Act, 1948, Act No. 63 of 1948, sec 19(2)(b).

²⁶ P.L. Malik, *Factories Act, 1948*, (Eastern Book Company; 2000 Edition).

In *Fertility Limited v. Union of India*²⁷ a factory in Bihar, faced an issue where its workers were **spitting** indiscriminately throughout the factory premises, despite the provision of spittoons. This behaviour led to the deterioration of the factory area. To address the problem, the factory management imposed fines ranging from **₹50 to ₹3,000** on workers who spat outside the designated spittoons. However, the workers challenged this disciplinary action by filing a case against the factory. The court reviewed the matter and ruled that the fine imposed by the factory was **excessive**. It stated that the fine should adhere to the provisions of **Sec 20**, which stipulated a maximum fine of **₹5**. Therefore, the court sided with the workers, limiting the permissible fine amount.

IV. PROVISIONS RELATING TO SAFETY

In order to provide safety to the workers, the Act provides that the machinery should be fenced, no young person shall work at any dangerous machine, in confined spaces, there should be provision for manholes of adequate size so that in case of emergency the workers can escape.

Chapter IV deals with the Safety provisions for workers, from **section 21- 41**.

(i) Fencing of machinery (Sec 21)

In every factory, certain parts of machinery must be **securely fenced** with substantial safeguards that are constantly maintained and kept in position while the machinery is in motion or in use. These parts include:²⁸

- All moving parts of a prime mover and any flywheel connected to it.
- The headrace and tailrace of water-wheels and water turbines.
- Any part of a stock-bar projecting beyond a lathe's head stock.
- Electric generators, motors, rotary converters, transmission machinery, and any other dangerous parts of machinery, unless their position or construction inherently makes them as safe as if they were securely fenced.

The requirement for secure fencing (or inherent safety) **does not apply** during specific situations when it's necessary to,

- Examine a part of the machinery while it's in motion, or perform lubrication or other adjustments as a result of such examination, provided these operations *must* be done while the machinery is moving.

²⁷ *Fertility Limited v. Union of India*, 1997.

²⁸ The Factories Act, 1948, Act No. 63 of 1948, sec 21(1).

- In the case of transmission machinery used in certain continuous processes (where stopping would significantly interfere), examine the machinery while it's in motion, or perform belt mounting/shipping, lubrication, or other adjustments as a result of such examination, while the machinery is in motion.

The **State Government**²⁹ has the authority to make rules prescribing further necessary precautions for particular machinery or parts. They can also, under prescribed conditions to ensure worker safety, **exempt** specific machinery or parts from the provisions of this section.

It was held in *Caroll v. Andrew Barely and Sons Ltd*³⁰, it was determined that the obligations outlined in Sec 21 extend beyond merely protecting employees from immediate hazards. The ruling clarified that this duty also encompasses the enclosure or containment of machinery itself. This means machinery must be secured in such a way that if it breaks or malfunctions, its components cannot “fly out” and injure workers.

In *Sohan Lal v. the State of Rajasthan*³¹, established a crucial interpretation of Sec 21 regarding machinery safety. The court ruled that prime movers and flywheels must be properly fenced, regardless of whether they are in motion or stationery. Furthermore, the judgment emphasized that such fencing must be constructed from suitable materials and installed in a manner that does not obstruct the machinery’s operation. This stipulation is paramount to ensuring the effective safety of workers.

In *Mitchell v. North British Rubber Co., Ltd*³², provided an important clarification on what constitutes a “dangerous” machine. The court held that a machine is to be considered dangerous if, under normal circumstances, its use without fencing could reasonably be expected to cause harm. This definition of danger extends beyond just the prudent or alert worker. It specifically includes the careless or inattentive worker, acknowledging that their inadvertent actions could expose them to a risk of injury from an unguarded part of the machinery. This ruling broadened the scope of employer responsibility for machine guarding.

In *State of Gujarat v. Jethelal Ghelabhai Patel*³³, the court ruled on the responsibility of occupiers and managers regarding safety safeguards. It was held that an occupier or manager cannot automatically use as a defense the mere fact that someone else removed safety safeguards. This applies even if the removal occurred without their direct knowledge, consent,

²⁹ The Factories Act, 1948, Act No. 63 of 1948, sec 21(2).

³⁰ *Caroll v. Andrew Barely and Sons Ltd*, (1950) 1 FJR 1.

³¹ *Sohan Lal v. the State of Rajasthan*, 1962 (1) LLJ 607.

³² *Mitchell v. North British Rubber Co., Ltd* 1954 SCJ 73.

³³ *State of Gujarat v. Jethalal Ghelabhai Patel*, AIR 1964 SC 779.

or involvement. The implication is that a higher degree of oversight and responsibility is expected from those in charge to ensure safety measures remain in place.

(ii) Work on or near machinery in motion (Sec 22)

When it becomes necessary to examine, lubricate, or adjust machinery while it's in motion (as per Section 21's proviso regarding fencing), only a specially trained adult male worker is permitted to do so. This worker must wear tight-fitting clothing (supplied by the factory occupier), have their name recorded in a register, and possess a certificate of appointment.

While engaged in such work, this worker must adhere to specific precautions when handling belts at a moving pulley:³⁴

- The belt must be no more than 15 cm wide.
- The pulley must be a drive pulley, not just a flywheel or balance wheel.
- The belt joint must be laced or flush.
- The belt, joint, and pulley rim must be in good repair.
- There must be reasonable clearance between the pulley and any fixed structures.
- The operator must have secure foothold and handhold.
- Any ladder used must be securely fixed, lashed, or firmly held by another person.

Additionally, all set screws, bolts, keys on revolving shafts, and all gearing with which the worker might come into contact must be securely fenced to prevent contact, regardless of other fencing requirements.

No woman or young person³⁵ is allowed to clean, lubricate, or adjust any part of a prime mover or transmission machinery while it's in motion. They are also prohibited from cleaning, lubricating, or adjusting any machine part if doing so would expose them to a risk of injury from any moving part of that machine or adjacent machinery.

The **State Government³⁶** can officially prohibit by notification, in any specific factory or class of factories, the cleaning, lubricating, or adjusting of specified parts of machinery by any person when those parts are in motion.

(iii) Employment of young persons on dangerous machines (Sec 23)

No young person is permitted to operate dangerous machines unless,

³⁴ The Factories Act, 1948, Act No. 63 of 1948, sec 22(1).

³⁵ The Factories Act, 1948, Act No. 63 of 1948, sec 22(2).

³⁶ The Factories Act, 1948, Act No. 63 of 1948, sec 22(3).

- he has been adequately instructed the hazards associated with the machine and the measures to be taken, and
- has received suitable training in working at the machine or
- adequate supervision by a person who has complete knowledge and experience of the equipment³⁷.

(iv) Striking gear and devices for cutting off power (Sec 24)

In every factory, essential safety measures must be in place for power transmission and emergency cutoffs. This includes providing and maintaining suitable striking gear or other mechanical appliances to safely move driving belts on and off pulleys, ensuring these devices prevent the belt from slipping back onto the fast pulley. Additionally, when not in use, driving belts should never be left resting or riding on moving shafting³⁸.

Every workroom must be equipped with emergency power cutoff devices³⁹ for running machinery, a requirement that applies to workrooms using electricity as power in factories operating before the Act's commencement. Furthermore, if a power cutoff device can accidentally switch from "off" to "on" ⁴⁰ arrangements must be made to lock it in a safe position to prevent any accidental starting of machinery.

In *M/s. Jayanthi Lal Dhanj and co., oil mills v. Employees state insurance corporation*, an incident occurred involving an unskilled worker at an oil mill. After completing his task of feeding groundnuts into crushing machinery, the worker attempted to kick the belt of a moving pulley. As a result, his leg became entangled between the pulley and the belt, causing him to be pulled up approximately six feet before falling to his death. The court ruled that the employer was liable for the worker's death. This liability stemmed from the employer's negligence in failing to comply with the safety provisions mandated by the relevant act. The judgment implies that even if an employee's action contributed to the accident, the employer's failure to ensure proper safety measures and compliance with regulations made them responsible.

(v) Self-acting machines (Sec 25)

In any factory, if a **self-acting machine's moving part** (or the material it carries) travels through an area where people might pass, it **cannot come within 45 cm (about 1.5 feet) of**

³⁷ The Factories Act, 1948, Act No. 63 of 1948, sec 23(1)(b).

³⁸ The Factories Act, 1948, Act No. 63 of 1948, sec 24(1).

³⁹ The Factories Act, 1948, Act No. 63 of 1948, sec 24(2).

⁴⁰ The Factories Act, 1948, Act No. 63 of 1948, sec 24(3).

any fixed structure⁴¹ that isn't part of the machine itself. This applies during both its outward and inward movement.

However, the **Chief Inspector can allow older machines** (installed before this rule came into effect) to continue operating even if they don't meet this distance requirement, provided they impose conditions to ensure safety.

(vi) Casing of new machinery (Sec 26)

Any power-driven machinery installed in a factory after the commencement of this Act must meet specific safety requirements. This means,⁴²

- **Revolving Parts:** Every set screw, bolt, or key on any revolving shaft, spindle, wheel, or pinion must be sunk, encased, or otherwise effectively guarded to prevent danger.
- **Gearing:** All spur, worm, and other toothed or friction gearing that doesn't need frequent adjustment while moving must be completely encased. This encasing isn't necessary if the gearing's location makes it as safe as if it were fully encased.

Non-compliance with these rules is punishable:⁴³ Anyone who sells, lets on hire, or acts as an agent to sell or let on hire, for use in a factory, any power-driven machinery that doesn't meet these casing requirements (or any related rules) imprisonment up to **3 months**, a fine up to **500 rupees**, or both.

The **State Government** can make additional rules to specify further safeguards for any other dangerous parts of particular machines or types of machines⁴⁴.

(vii) Prohibition of employment of women and children near cotton-openers (Sec 27)

Women and children are prohibited from being employed in any part of a cotton pressing factory where a cotton opener is in operation.

However, there's an exception⁴⁵:

If the feed-end of the cotton opener is in a separate room from the delivery end, with a partition extending to the roof (or a height specified by the Inspector), then women and children may be employed on the side of the partition where the feed-end is located.

(viii) Hoists and lifts (Sec 28)

Every hoist and lift in a factory must adhere to strict safety standards. They must be of **good**

⁴¹ The Factories Act, 1948, Act No. 63 of 1948, sec 25.

⁴² The Factories Act, 1948, Act No. 63 of 1948, sec 26(1).

⁴³ The Factories Act, 1948, Act No. 63 of 1948, sec 26(2).

⁴⁴ The Factories Act, 1948, Act No. 63 of 1948, sec 26(3).

⁴⁵ The Factories Act, 1948, Act No. 63 of 1948, sec 27.

mechanical construction, sound material, and adequate strength, properly maintained, and thoroughly examined by a competent person at least every 6 months, with a record kept in a register⁴⁶.

Hoist ways and lift ways need to be **sufficiently protected by gated enclosures**, designed to prevent anyone or anything from being trapped between the hoist/lift and fixed/moving parts. The **maximum safe working load** must be clearly marked, and this limit must not be exceeded. Hoists and lifts used for carrying persons must have a gate on each side leading to a landing, and all such gates must have **interlocking devices** ensuring they can only open when the cage is at the landing and the cage cannot move unless the gate is closed⁴⁷.

For hoists and lifts carrying persons, installed or reconstructed after the Act's commencement, additional requirements apply,⁴⁸

- If supported by ropes or chains, there must be at least two separate ropes/chains, each capable of carrying the full weight of the cage plus its maximum load.
- Efficient devices must be provided to support the cage and its maximum load if ropes/chains break.
- An efficient automatic device must prevent the cage from over-running.

The Chief Inspector⁴⁹ can permit the continued use of older hoists/lifts that don't fully comply with sub-section (1), provided safety conditions are met. The State Government can also exempt certain classes of hoists or lifts from specific requirements, if enforcement is deemed unreasonable⁵⁰.

(ix) Lifting machines, chains, ropes and lifting tackles (Sec 29)

In factories, all lifting machines (excluding hoists and lifts), and all chains, ropes, and lifting tackles used for raising or lowering people, goods, or materials, must comply with specific provisions,⁵¹

- (i) Construction and Maintenance:** All parts (fixed or movable) must be of good construction, sound material, adequate strength, defect-free, and properly maintained.

⁴⁶ The Factories Act, 1948, Act No. 63 of 1948, sec 27(1).

⁴⁷ The Factories Act, 1948, Act No. 63 of 1948, sec 28(1).

⁴⁸ The Factories Act, 1948, Act No. 63 of 1948, sec 28(2).

⁴⁹ The Factories Act, 1948, Act No. 63 of 1948, sec 28(3).

⁵⁰ The Factories Act, 1948, Act No. 63 of 1948, sec 28(4).

⁵¹ The Factories Act, 1948, Act No. 63 of 1948, sec 29(1).

(ii) **Regular Examination:** They must be thoroughly examined by a competent person at least once every **12 months**, or at intervals specified by the Chief Inspector. A register must be kept detailing these examinations.

(iii) **Safe Working Load:** No equipment shall be loaded beyond its safe working load, which must be clearly marked along with an identification mark and registered. If marking is impractical, a table of safe working loads for different types and sizes of equipment must be prominently displayed.

(iv) **Crane Safety:** When workers are near a travelling crane's wheel track in a position where they could be struck, effective measures must ensure the crane does not approach within **6 meters** of that area.

The State Government can make rules to,⁵²

- Prescribe additional requirements beyond those listed.
- Provide exemptions from these requirements if compliance is deemed unnecessary or impractical.

A "thorough examination" is defined as a careful visual inspection, supplemented by other means or dismantling parts, if necessary, to reliably assess the safety of the examined parts.

Definitions,⁵³

- **Lifting machine:** Includes cranes, crabs, winches, pulley blocks, transporters, etc.
- **Lifting tackle:** Includes chain slings, rope slings, hooks, shackles, clamps, trays, and similar appliances used for raising or lowering persons or loads with lifting machines.

(x) Revolving machinery (Sec 30)

In factories where grinding is performed, each grinding machine must have a permanent notice indicating the maximum safe working peripheral speed of the grindstone/abrasive wheel, the speed of its shaft/spindle, and the necessary pulley diameter to achieve that safe speed⁵⁴. The speeds indicated on these notices must not be exceeded⁵⁵.

Furthermore, all factories must take effective measures to ensure that the safe working peripheral speed of any power-driven revolving vessel, cage, basket, flywheel, pulley, disc, or

⁵² The Factories Act, 1948, Act No. 63 of 1948, sec 29(2).

⁵³ The Factories Act, 1948, Act No. 63 of 1948, sec 29(3).

⁵⁴ The Factories Act, 1948 Act No. 63 of 1948, sec 30.

⁵⁵ The Factories Act, 1948 Act No. 63 of 1948, sec 30(2).

similar appliance is not exceeded⁵⁶.

(xi) Pressure plant (Sec 31)

In a factory, any plant or machinery or any part thereof is operated at a pressure above atmospheric pressure⁵⁷, effective measures shall be taken to ensure that the safe working pressure of such plant or machinery or part is not exceeded. The State Government may make rules providing for the examination and testing plant or machinery.

(xii) Floors, stairs and means of access (Sec 32)

In every factory, all floors, steps, stairs, passages, and gangways must be of sound construction, properly maintained, and kept free from obstructions and slippery substances. Where necessary for safety, they must also have substantial handrails⁵⁸. Additionally, safe means of access must be provided and maintained, as far as reasonably practicable, to every workstation. Finally, when workers are required to work at a height where there's a risk of falling, reasonably practicable measures, such as fencing or other means, must be provided to ensure their safety⁵⁹.

It was held that in *Davies Vs Havill and Aircraft co., Ltd*⁶⁰ no breach of statutory duty imposed under this section is occasioned if an injury is caused by accumulation of rain water in little depression in the concrete of the passage⁶¹.

(xiii) Pits, sumps openings in floors, etc (Sec 33)

In every factory, any fixed vessel, sump, tank, pit, or opening in the ground or floor that poses a danger due to its depth, location, construction, or contents must be either **securely covered or securely fenced**. The State Government, however, has the authority to **exempt certain factories** or types of factories from complying with this provision for specific vessels, sumps, tanks, pits, or openings, provided certain prescribed conditions are met⁶².

(xiv) Excessive weights (Sec 34)

No person in a factory is allowed to lift, carry, or move any load that is heavy enough to likely cause them injury. The State Government has the authority to create rules setting the **maximum weights** that can be lifted, carried, or moved by adult men, adult women,

⁵⁶ The Factories Act, 1948 Act No. 63 of 1948, sec 30(3).

⁵⁷ The Factories Act, 1948, Act No. 63 of 1948, sec 31(1).

⁵⁸ The Factories Act, 1948, Act No. 63 of 1948, sec 32(a).

⁵⁹ The Factories Act, 1948, Act No. 63 of 1948, sec 32.

⁶⁰ *Davis Vs Havill and Aircraft co., Ltd*, 1950 2 All ER 582.

⁶¹ S.N. Mishra, "Labour and Industrial Laws", (Central Law Publications, 30th edn, 2024).

⁶² The Factories Act, 1948, Act No. 63 of 1948, sec 33(1).

adolescents, and children employed in factories, or in specific types of factories or processes⁶³.

(xv) Protection of eyes (Sec 35)

For specific manufacturing processes in factories that are prescribed by the State Government, and which involve a **risk of eye injury** from thrown particles or fragments, or a risk to eyes due to excessive light, the State Government can mandate, through rules, the provision of **effective screens or suitable goggles** to protect workers engaged in or near that process⁶⁴.

In *Finch v. Telegraph Construction and Maintenance Co. Ltd.*,⁶⁵ it was held that hanging of goggles in the office room is not enough, but the workers must be informed of their whereabouts, only then the requirements of Sec 35 can be said to have been complied with⁶⁶.

(xvi) Precautions against dangerous fumes, gases, etc. (Sec 36)

No one is allowed to enter confined spaces in a factory (like chambers, tanks, pits) where dangerous levels of gas, fume, vapor, or dust are likely to be present, **unless** the space has an adequately sized manhole or other effective means of exit⁶⁷.

Furthermore, before anyone enters such a confined space, all practical measures must be taken to remove any dangerous substances to permissible levels and prevent their re-entry. Entry is then only permitted if ⁶⁸,

- A competent person provides a written certificate confirming, based on their own test, that the space is reasonably free from dangerous substances; or
- The person entering is wearing suitable breathing apparatus and a safety belt securely attached to a rope, with the free end held by someone outside the confined space.

No person shall be required or permitted to enter any chamber, tank, vat, pit, pipe, flue, or other confined space in any factory where any gas, fume, vapour, or dust is present to such a degree as to involve risk to persons being overcome, unless such chamber, tank, vat, pit, pipe, flue, or other confined space is provided with an adequate manhole or other effective means of egress⁶⁹.

⁶³ The Factories Act, 1948, Act No. 63 of 1948, sec 34(1).

⁶⁴ The Factories Act, 1948, Act No. 63 of 1948, sec 35(b).

⁶⁵ *Finch v. Telegraph Construction and Maintenance Co. Ltd.*, (1949) All ER 452.

⁶⁶ S.N. Mishra, "Labour and Industrial Laws", (Central Law Publications, 30th edn, 2024).

⁶⁷ The Factories Act, 1948, Act No. 63 of 1948, sec 36(1).

⁶⁸ The Factories Act, 1948, Act No. 63 of 1948, sec 36(2).

⁶⁹ The Factories Act, 1948, Act No. 63 of 1948, sec 36(1).

(xvii) Precautions regarding the use of portable electric light (Sec 36A)

This section provides that no portable electric light or any other electric appliance of voltage exceeding **24 volts** shall be permitted for use inside any chamber, tank, vat, pit, pipe, flue or other confined space⁷⁰.

(xviii) Explosive or inflammable dust, gas, etc. (Sec 37)

Any factory involved in manufacturing processes that produce dust, gas, fume, or vapour of a nature that could explode on ignition must take all reasonably practicable precautions to prevent any explosion through,⁷¹

- a. Effective enclosure of the plant or machinery.
- b. Removal or prevention of the accumulation of such dust, gas, fume, or vapour, etc., or
- c. By exclusion or effective enclosure of all possible ignition sources.

If the plant or machinery is not built to withstand explosion pressure, measures like **chokes, baffles, or vents** must be installed to limit the explosion's spread and effects⁷².

When opening any part of plant or machinery containing explosive or inflammable gas/vapour under pressure (greater than atmospheric), specific steps must be followed:⁷³

- **Stop the flow** of gas/vapour into the part before loosening any fastenings.
- **Reduce the pressure** of the gas/vapour to atmospheric pressure before removing fastenings.
- **Prevent re-entry** of explosive/inflammable gas/vapour until fastenings are secured.

This rule does not apply to outdoor plant/machinery.

Additionally, no welding, brazing, soldering, or cutting operations involving heat should be performed on any plant, tank, or vessel that contains or has contained explosive or inflammable substances, unless these substances and their fumes have been adequately removed or rendered non-explosive/non-inflammable⁷⁴. After such operations, no explosive/inflammable substance should be allowed to re-enter until the metal has cooled sufficiently to prevent ignition risk.

⁷⁰ The Factories Act, 1948 Act No. 63 of 1948, sec 36A.

⁷¹ The Factories Act, 1948, Act No. 63 of 1948, sec 37(1).

⁷² The Factories Act, 1948, Act No. 63 of 1948, sec 37(2).

⁷³ The Factories Act, 1948, Act No. 63 of 1948, sec 37(3).

⁷⁴ The Factories Act, 1948, Act No. 63 of 1948, sec 37(4).

The State Government can **exempt certain factories** or classes of factories from these provisions under prescribed conditions⁷⁵.

(xix) Precautions in case of fire (Sec 38)

- In order to protect and maintain safety to allow people to escape in the case of fire, all factories should have precautionary measures in place to avoid the breakout and spread of fire, both internally and externally⁷⁶. The required tools and facilities for extinguishing the fire must also be made accessible.
- All factory employees must be made to be familiar with fire escape routes and have received sufficient training on the procedure to be followed in such circumstances must have access to appropriate measures.
- The **State Government has the authority to create rules** specifying the measures to be taken to implement these fire prevention and escape provisions for any factory or class of factories⁷⁷.
- Furthermore, if the **Chief Inspector** believes that the existing fire safety measures for escape routes or worker training are inadequate, considering factors like the nature of work, factory construction, or special risks, they can issue a written order. This order will require the factory to implement **additional reasonable and necessary measures** by a specified date, even if those measures are not already prescribed by rules.

(xx) Power to require specifications of defective parts or tests of stability (Sec 39)

If an **Inspector** believes that any part of a factory, including its building, pathways, machinery, or plant, is in a condition that poses a danger to human life or safety, they can issue a written order to the **occupier or manager (or both)**. This order will require them, by a specified date, to either⁷⁸:

- (a) Provide necessary drawings, specifications, and other details to determine if the dangerous element can be used safely, or
- (b) Conduct specific tests as outlined in the order and report the results to the Inspector

⁷⁵ The Factories Act, 1948, Act No. 63 of 1948, sec 37(5).

⁷⁶ The Factories Act, 1948, Act No. 63 of 1948, sec 38.

⁷⁷ The Factories Act, 1948, Act No. 63 of 1948, sec 38(3).

⁷⁸ The Factories Act, 1948, Act No. 63 of 1948, sec 39.

(xxi) Safety of buildings and machinery (Sec 40)

In the opinion of the Inspector⁷⁹ 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 or
- an order in writing **prohibiting** its use until it has been properly repaired or altered

(xxii) Maintenance of buildings (Sec 40A)

If an **Inspector** observes that a factory building or part of it is in a state of disrepair that could negatively affect the health and welfare of workers, they can issue a written order. This order will be served to the occupier or manager (or both) of the factory, detailing the necessary measures to be taken and setting a deadline for their completion⁸⁰.

(xxiii) Safety officers (Sec 40B)

Factories are required to employ Safety Officers under two conditions,

- a) if they ordinarily employ **1000** or more workers⁸¹, or
- b) if the State Government deems a manufacturing process or operation within the factory to involve risks of bodily injury, poisoning, disease, or other health hazards. In such cases, the factory occupier must employ the number of Safety Officers specified by the State Government via official notification.
- c) The duties, qualifications, and conditions of service for these Safety Officers will be prescribed by the State Government⁸².

In *Verma L.K. v. H.M.T. Ltd. And another*⁸³, The case involved Verma L.K., a welfare officer at H.M.T. Ltd., who was dismissed from service after being accused of using indecent language. Although the Labour Commissioner initially sided with Verma by allowing his appeal against suspension, H.M.T. Ltd. successfully challenged this in a writ petition. Verma then appealed to the Supreme Court, which ultimately dismissed his appeal. The Supreme Court found no evidence of malice in the disciplinary proceedings, affirmed that the initial

⁷⁹ The Factories Act, 1948, Act No. 63 of 1948, sec 40.

⁸⁰ The Factories Act, 1948, Act No. 63 of 1948, sec 40 A.

⁸¹ The Factories Act, 1948, Act No. 63 of 1948, sec 40B (1)(i).

⁸² The Factories Act, 1948, Act No. 63 of 1948, sec 40B (2).

⁸³ *Verma L.K. v. H.M.T. Ltd. And another*, 2006 1 LLJ 1074 (SC)

suspension was not a penalty, and ruled that the availability of an alternative legal remedy did not prevent H.M.T. Ltd.'s writ petition from being valid.

In *BHEL and another v. B.K. Vijay and others*⁸⁴, concerned the classification and remuneration of a safety officer. The respondent, B.K. Vijay, was appointed as Assistant Foreman (Safety) in 1985 and was designated as the safety officer for the appellant factory under the Factories Act, 1948. A complaint was filed against BHEL under Section 92 of the Factories Act, 1948, alleging a violation of Section 40-B of the Act. In that proceeding, the Chief Judicial Magistrate opined that B.K. Vijay had not been granted the status of a departmental head or senior executive. Subsequently, B.K. Vijay filed a writ petition seeking a direction for him to be granted the pay scale of a Senior Executive (E6 Level) retrospectively from 1985. The High Court allowed this writ petition. BHEL, the employer company, then appealed to the Supreme Court. The Supreme Court observed that despite the finding in the criminal case (by the Chief Judicial Magistrate), it was still open to BHEL to argue that the respondent was not entitled to the remuneration payable to a senior executive officer. This suggests that a finding in one legal proceeding does not automatically bind the outcome of a separate civil or service-related claim, especially regarding pay scale and status.

(xxiv) Power to make rules to supplement this Chapter (Sec 41)

The State Government has the authority to create rules mandating the provision of additional safety devices and measures in any factory or specific types of factories, as deemed necessary for the safety of employees⁸⁵.

V. PROVISIONS RELATING TO WELFARE

For the welfare of the workers, the Act provides that in every factory adequate and suitable facilities for washing should be provided and maintained for the use of workers. Facilities for storing and drying clothing, facilities for sitting, first-aid appliances, shelters, rest rooms and lunch rooms, crèches, should be there⁸⁶.

According to the Factories Act, 1948 welfare related provisions are under **Chapter V** and that contains **sections 42-50**.

(i) Washing facilities (Sec 42)

In every factory, adequate and suitable washing facilities must be provided and maintained for the use of the workers. Separate and adequately screened facilities are required for male and

⁸⁴ *BHEL and another v. B.K. Vijay and others*, 2006 1 LLJ 1102 (SC).

⁸⁵ The Factories Act, 1948, Act No. 63 of 1948, sec 41.

⁸⁶ The Factories Act, 1948, Act No. 63 of 1948, chapter v.

female workers. These facilities should be easily accessible and kept clean. The State Government may also prescribe standards for what constitutes adequate and suitable washing facilities in different factories or manufacturing processes.

(ii) Facilities for storing and drying clothing (Sec 43)

The State Government is empowered to create rules requiring factories, or specific types of factories, to provide suitable places for storing clothing that is not worn during working hours and for drying wet clothing⁸⁷.

(iii) Facilities for sitting (Sec 44)

- All factories should provide and maintain seating arrangements in appropriate areas for all workers who are required to work in a standing position in order to take advantage of any chances for rest that may arise throughout the course of the job.
- According to the chief inspector⁸⁸, workers in any factory involved in a certain manufacturing process or working in a specific room are able to perform their work effectively while seated.

(iv) First-aid appliances (Sec 45)

- All factories must have first aid kit, appliances, or cupboards stocked with the required supplies during all working hours, and they must be easily accessible for all manufacturing employees to access. Accordingly, there must be more first aid boxes or cupboards than the usual ratio of one for **every 150 industrial employees**⁸⁹, which must be fewer than that.
- The first aid box or cupboard should only include the recommended supplies.
- Where there are **more than 500 workers**, an **ambulance room**⁹⁰ be provided with such medical and nursing staffs.

(v) Canteens (Sec 46)

- A canteen must be provided and kept up by the occupier for the benefit of the workers in any specified factory where **more than 250 people**⁹¹ are usually employed, according to rules that the state government may set.

⁸⁷ The Factories Act, 1948, Act No. 63 of 1948, sec 43.

⁸⁸ The Factories Act, 1948, Act No. 63 of 1948, sec 44(2).

⁸⁹ The Factories Act, 1948, Act No. 63 of 1948, sec 45(1).

⁹⁰ The Factories Act, 1948, Act No. 63 of 1948, sec 45(4).

⁹¹ The Factories Act, 1948, Act No. 63 of 1948, sec 46(1).

- Food must be served, and prices must be established for it. The price of the food stuffs must not be included with the expenditure incurred for running the canteen.

In *Hindalco industries Ltd Vs Association of engineering workers*, the respondent union lodged a complaint of unfair labour practices against Hindalco Industries Ltd. before the Industrial Court, citing the Maharashtra Recognition of Trade Union and Prevention of Unfair Labour Act, 1971. The core dispute revolved around the canteen workers' eligibility for wages and other benefits comparable to the company's other employees. Hindalco Industries Ltd. contested this, arguing that the canteen was exclusively operated and managed by a contractor, implying that the canteen staff were not their direct employees. However, the Industrial Court ruled in favour of the workers. The court determined that the canteen workers should indeed be considered as employees of Hindalco Industries Ltd. and, consequently, were eligible for benefits akin to those of the company's permanent workers.

It was held by the Madras High Court, *Elangovan M. and Others v. Matras Refineries Ltd.*,⁹² the Madras High Court delivered a specific ruling regarding the status of canteen employees. The court held that employees working in a canteen established to fulfil a statutory duty (likely under the Factories Act, 1948) are considered "workmen" of the establishment running the canteen solely for the purposes of the Factories Act, 1948. Crucially, the ruling clarified that this designation does not extend to all purposes, implying that their status as "workmen" under the Factories Act does not automatically confer upon them all the rights, benefits, or employment conditions of regular, permanent employees of the main establishment for all other legal or employment contexts.

(vi) Shelters, rest rooms and lunch rooms (Sec 47)

- Every factory with **more than 150 employees** must have appropriate and suitable restrooms or shelters and a lunchroom with drinking water where employees can eat food they have brought with them and that is kept for their use. If a lunchroom is available, employees should stop eating in the work area⁹³.
- The shelters or restrooms need to be well-lighted, ventilated, kept clean, cool, and in good condition.
- The state government sets the standards.

⁹² *Elangovan M. and Others v. Matras Refineries Ltd.*, (2005) II LJ 653 (Mad).

⁹³ The Factories Act, 1948, Act No. 63 of 1948, sec 47(1).

(vii) Creches (Sec 48)

- Every factory with **more than 30 female employees** must have a suitable room for the use of **children under the age of six** of such women⁹⁴.
- Such rooms must be well furnished, well-lighted, and ventilated, and they must be kept clean and hygienic. They must also be under the care of women who have received training in child and infant care.

The **State Government** has the authority to create rules regarding,⁹⁵

- The location, construction standards, accommodation, furniture, and equipment for these creches.
- The provision of additional facilities like washing and changing areas for children's clothing.
- The supply of free milk or refreshments for the children.
- Allowing mothers to feed their children at necessary intervals.

(viii) Welfare Officers (Sec 49)

- Where **500 or more workers** are ordinarily employed in any factory, the occupier shall employ the welfare officers⁹⁶.
- The state government shall prescribe the qualification and duties and conditions of service to the persons employed as the welfare officer.

In *Employers Association of Northern India v. Secretary of labour*⁹⁷, the court provided an interpretation of the term “qualification” as used in Section 49(2) of the relevant act. The court held that the word “qualification” is broad enough to encompass not only the eligibility criteria but also the actual “procedure for recruitment and appointment” of individuals. Furthermore, the ruling affirmed that, based on this interpretation, the state government possesses the authority to create rules and regulations pertaining to these recruitment and appointment procedures. This decision effectively broadened the scope of the state government's power in regulating employment practices.

(ix) Power to make rules to supplement this Chapter (Sec 50)

The **state government** shall make rules in exempting any factories.

⁹⁴ The Factories Act, 1948, Act No. 63 of 1948, sec 48(1).

⁹⁵ The Factories Act, 1948, Act No. 63 of 1948, sec 48(3).

⁹⁶ The Factories Act, 1948, Act No. 63 of 1948, sec 49(1).

⁹⁷ *Employers Association of Northern India v. Secretary of labour*, AIR 1952 ALL 109.

VI. CONCLUSION

The main object of the Act was to protect human beings from being subject to unduly long hours bodily strain or manual labour. It also ensures that workers should work in healthy and sanitary conditions as far as possible and it ensures safety of workers from accidents. It makes provision for appointment of Inspectors and welfare officers to look after the proper enforcement of the provisions of the Act. In spite of these many provisions, there are violations and the workers are not provided the measures as said under the act. Mere provisions alone will no longer help the workers the main aspect which is necessary is that the provisions be regulated by proper mechanisms.
