

THE FACTORIES AND OTHER PLACES OF WORK ACT
(Cap 514)

IN EXERCISE of the powers conferred by section 41 2(k) of the Factories and other places of Work Act, the Minister for Labour and Human Resource Development makes the following rules–

THE FACTORIES AND OTHER PLACES OF WORK (FIRE RISK REDUCTION)
RULES, 2007

Citation.

1. These Rules may be cited as the Factories and other places of work (Fire Risk Reduction) Rules 2007.

Interpretation.

2. In these Rules unless the context otherwise requires–

“Class A fire” means a fire involving ordinary combustible material such as paper, wood cloth, rubber or plastic material;

“Class B fire” means a fire involving flammable or combustible liquid, flammable gases, greases or similar material, rubber or plastic material;

“Class C fire” means a fire involving energized electrical equipment where safety to the worker requires the use of electrically non conductive extinguishing media;

“Class D fire” means a fire involving combustible metal 1 such as magnesium, zirconium, sodium, lithium or potassium;

“competent person” in relation to a duty or function, means a person who has had adequate training, relevant qualifications and experience to enable him to perform that duty or function;

“designated area” means an area designated or zoned by Local Authority for use;

“Director” means the Director of Occupational health and Safety Services;

“emergency exit” means a window, door or other exit affording means of escape or giving access to other than the means of exit in ordinary use, in case of a fire;

“fire detection” includes any action to check or sense fire by use of an instrument or by human action;

“fire drill” means an exercise carried out to prepare people on precautions to be taken in event of a real fire breaking out;

“fire extinguishes” means a portable container of pressurized or gas cartridge propelled extinguishers that can be discharged in a jet or spray to put out the fire;

“fire fighting” means the process of extinguishing fire;

“fire-fighting team” means a team appointed in accordance with Rule 20;

“fire-hose” means a high pressure tube attached to either a fire engine or a fire hydrant, used for extinguishing a fire;

“fire safety auditor” means a competent person authorized by the Director in writing to undertake a fire safety audit in accordance with these Rules;

“highly flammable substance” means a liquid, liquid solution, emulsion, suspension or gas that gives off a flammable vapour at a temperature of less than 32°C;

“risk assessment” means a systematic examination conducted to determine and evaluate the degree of risk involved in terms of severity, frequency and cost of the potential claim in the case of fire;

“risk management” means measures undertaken or put in place to control a risk.

Application

3. These rules shall apply to every workplace, process and operations to which the provisions of the Act apply

Location of large Installations for highly flammable substances.

4. A person wishing to set up or operate a facility for the use on or storage of highly flammable substance shall ensure that such facility is located in the designated area.

Construction material

5. (1) Every owner and occupier of a workplace shall ensure that every workroom where flammable substances are used, manufactured or manipulated, is constructed with fire resistant material.

(2) Fire resistant material shall include–

- (a) concrete block, brick work or stone of not less than 115mm thickness;
- (b) concrete slab of not less than 76mm thickness;
- (c) iron or steel of not less than 16 Imperial Standard Gauge;
- (d) glass of not less than 64mm thickness in the center of

which a wire mesh shall be embedded on;

- (e) teak or oak or other wood for doors of not less than 45mm thickness; and
- (f) any other material as the Director may approve.

Storage of highly flammable substances.

6.(1) Every occupier shall ensure that highly flammable substances are stored—

- (a) in suitable fixed storage tanks in safe positions, or
- (b) in suitable closed vessels kept in a safe positions in the open air, and where necessary, protected against direct sunlight; or
- (c) in a suitable closed vessel kept in a storeroom which is either in a safe position or in a fire resisting structure; or
- (d) in the case of a workroom where the aggregate quantity of highly flammable substances does not exceed 50 liters, in suitable closed vessels kept in a suitably placed cupboard or bin which is a fire resisting structure.

Provided that no such store shall be so situated as to endanger the means of escape from a work place or any part thereof in the event of a fire occurring in the store.

(2) Noting in this Rule shall apply to—

- (a) highly flammable substances in the fuel tanks of vehicles or engines for the purpose of operating the vehicle or engines; or
- (b) any suitable, small closed vessel containing not more than 500c.c. of flammable substances.

(3) Where the highly flammable substance is stored in a storeroom, every occupier shall ensure that a gap of at least 80 cm is maintained from the nearest fixed wall, ceiling or roof of such room.

(4) Every occupier shall ensure that any highly flammable substance capable of reacting and producing heat when mixed is identified and kept in separate storerooms or compartments.

(5) Every occupier shall ensure that any highly flammable substance that is self-combustible, is kept in separate stores away from

other substances or material.

(6) A person who contravenes the provisions of this Rule commits an offence.

Marking and labeling

7.(1) Every occupier shall ensure that every store room, cupboard, bin, tank or container used for storing highly flammable substances is clearly and boldly marked “Highly Flammable” in English or Kiswahili or otherwise with an appropriate indication of flammability.

(2) Where it is impracticable to mark any storeroom, cupboard, bin, tank or container, the words ‘Highly Flammable’ in English or Kiswahili shall be clearly and boldly displayed as near to it as possible.

(3) Every occupier shall ensure that every container holding the highly flammable substance is labeled with the contents of the container and the type of fire extinguisher to be used in the event of a fire.

(4) In labeling a container, every occupier shall refer to the material safety data sheet.

(5) Nothing in this Rule shall apply to—

- (a) any fuel tanks of vehicles or engines which contain highly flammable substances for the purpose of operating the vehicle or engines; or
- (b) any suitable small closed vessel containing not more than 500 cc of highly flammable substance.

(6) A person who contravenes the provisions of this Rule commits an offence.

Handling of flammable substances.

8.(1) Every occupier shall ensure that the quantity of any highly flammable substance present at any one time in a workplace, shall be as small as is reasonably practical, having regard to the processes or operations being carried on.

(2) Every occupier shall ensure that where highly flammable substances are to be conveyed within a workplace, the substances shall be conveyed through a totally enclosed system incorporating pipelines and pumps of similar appliances, but where conveyance of the substances within a work place through a totally enclosed system is not reasonably practical, the substance shall be conveyed in vessels that are so designed and constructed as to avoid spilling of the substance.

(3) Every occupier shall ensure that where in the process or operation, any highly flammable substance liable to be spilled or leaked all reasonable practical steps have been taken to ensure that the substance is contained or

immediately drained off to a suitable container or to a safe place or otherwise treated to make it safe.

(4) A person who contravenes the provisions of this Rule commits an offence.

Flammable vapours.

9. (1) Every occupier shall ensure that no means likely to ignite vapour from any highly flammable substances, are present where a dangerous concentration of vapour from flammable substances may reasonably be expected to be present.

(2) Every occupier shall ensure that where in any work place, a dangerous concentration of vapour from highly flammable substances may reasonably be expected to be present, any cotton or other textile waste or other material in that place—

(a) which has been used in such a manner as to render the cotton waste or other material liable to spontaneous combustion; or

(b) which is contaminated with any highly flammable substance, shall be deposited without delay in a metal container with a suitable cover or be removed without delay to a safe place, and separate self-closing receptacles shall be provided in workrooms for oil-soaked waste, rags or other material, subject to spontaneous combustion.

(3) A person who contravenes the provisions of this Rule commits an offence.

Monitoring of flammable substances.

10. (1) Every occupier shall continuously monitor the work place with a view to making an assessment of any possible fire risks and mitigate against them.

(2) A person who contravenes the provisions of this Rule commits an offence.

Ventilation.

11.(1) Every occupier shall provide in every workroom, facilities for free flow of fresh air, including windows, doors, vents, louvers or any other suitable ventilation facility to ensure that flammable fumes, vapour, gases or dust do not accumulate in the workroom.

(2) In the case of an enclosed room, every occupier shall ensure that exhaust ventilation systems or mechanical ventilation facilities are provided.

(3) A person who contravenes the provisions of this Rule commits an offence.

Hot processes or operations.

12. (1) Every occupier shall ensure that all necessary steps are taken to remove gases or vapours in a workplace or render the gases or vapours non-flammable where the operations or processes involve the application of heat.

(2) A person who contravenes the provisions of this Rule commits an offence.

House keeping.

13. (1) Every occupier shall ensure that a workplace is kept in a clean state and that—

- (a) dirt and refuse shall be removed at least once a day;
- (b) the dirt and refuse removed are kept in a receptacle;
- (c) every store shall have a marked gangway of at least one metre wide for the movement of persons; and
- (d) where mobile equipment for transportation of material is in a store, a marked gangway shall be provided to accommodate the size of the equipment and for the use of persons working therein.

(2) A person who contravenes the provisions of this Rule commits an offence.

Removal of products and waste.

14. (1) Every occupier shall ensure that finished products, by-products and any waste products are removed immediately they are produced so as to avoid accumulation of products or waste products.

(2) A person who contravenes the provisions of this Rule commits an offence.

Machinery layout.

15. (1) Every occupier shall ensure that a distance of at least one metre between any two machines or from any machine and a fixed structure is provided, so as to ensure easy movement and access of persons.

(2) A person who contravenes the provisions of this Rule commits an offence.

Electrical equipment

16. (1) Every occupier shall ensure that all electrical machines, equipment and hand tools in a workplace are properly earthed or double insulated.

(2) Every occupier shall ensure that all electrical motors, fittings, attachments and switches shall be spark proof in the workplaces where

flammable liquids, vapours, dusts and gases are likely to be present.

(3) Every occupier shall ensure that all electrical equipment and the related attachments are inspected in every period of six months by a competent person and a record of the inspection kept.

(4) Every occupier shall take adequate measures are to ensure that electrostatic charges do not built up where flammable substances are present.

(5) A person who contravenes the provisions of this Rule commits an offence.

Fire escape exits.

17.(1) Every occupier shall ensure that every work room is fitted with an emergency exit of at least 90 cm wide, situated as far away as possible from the ordinary exit, and located in a manner that the exit will not lead any person to a trap in the work place in the event of a fire breaking out.

(2) Every occupier shall ensure that an external staircase or ramp affording a means of escape in case of a fire is adequately aerated, well lit and of at least one metre width, provided that a spiral staircase shall not be considered as a suitable emergency exit.

(3) Every occupier shall ensure that the fire exit door, gangway and exit staircases are free of obstruction.

(4) Every occupier shall ensure that every emergency exit is distinctively and conspicuously marked in green letters of at least 15 cm in height.

(5) Every occupier shall ensure that every emergency exit route is clearly marked in writing or by signs indicating the direction of exit and that a drawing or map showing evacuation routes shall be posted in prominent positions in the work place.

(6) A person who contravenes the provisions of this Rule commits an offence.

Control of spread of smoke.

18. (1) Every occupier shall ensure that any door of any store where flammable substances are stored are constructed in a manner that the door shall be self closing, opening outwards or sliding and capable of containing smoke from within the work room, in event of a fire.

(2) A person who contravenes the provisions of this Rule commits an offence.

Means of evacuation.

19. (1) Where a work place is a storeyed building, every

occupier shall ensure that a work place is constructed in such a manner as to enable workers have access to other suitable outlet or exit for evacuation other than the emergency exits.

(2) A person who contravenes the provisions of this Rule commits an offence.

Formation of fighting teams.

20. (1) Every occupier shall establish a fire fighting team that shall consist of–

- (a) at least two persons, where the number of workers is not more than ten;
- (b) at least three persons, where the number of workers is between eleven and twenty five;
- (c) at least five persons, where the number of workers is more than twenty five.

(2) A person who contravenes the provisions of this Rule commits an offence.

Training in fire safety

21. (1) Every occupier shall ensure that all workers are instructed in the safe use of fire fighting appliances.

(2) The Minister may, on the advice of the Director, prescribe a basic training course on fire safety to be undertaken by every member of the fire fighting team.

(3) The Minister may, on the advice of the Director, publish once every year, in the Gazette, a list of approved institutions for the training of the fire fighting team.

(4) Every occupier shall ensure that every member of the fighting team undertakes the basic fire safety training course within three months from the date of appointment into the fire fighting team.

Functions of fire fighting team.

22. A fire fighting team shall carry out the following functions–

- (a) ensure that all fire fighting appliances, fire detection systems, fire alarm and any other facility for fire safety are in place and are regularly serviced;
- (b) conduct fire drills at the workplace;
- (c) investigate fire incidences at the workplace and recommend corrective measures;
- (d) regularly inspect the workplace for purposes of identifying potential fire risks and recommend remedial measures;
- (e) train other workers in the safe use of fire fighting appliances;

- (f) co-ordinate the evacuation of other workers in the event of a fire; and
- (g) undertake any other functions as may be directed by the occupier.

Fire drills.

23. (1) Every occupier shall ensure that fire-drills are conducted at least once in every period of twelve months and a record of such drills kept available for inspection.

(2) A person who contravenes the provisions of this Rule commits an offence.

Assembly point.

24. (1) Every occupier shall identify a location in the workplace where every worker shall assemble in the event of a fire.

(2) A person who contravenes the provisions of this Rule commits an offence.

First aid.

25. (1) Every occupier shall make necessary arrangements to provide first aid to any person injured in a fire and in addition, arrange for the transportation of the injured person to the nearest health facility.

(2) A person who contravenes the provisions of this Rule commits an offence.

Means of communication.

26.(1) Every occupier shall provide suitable means of alerting persons in the workplace, in the event of a fire, and such means shall be made known to all workers.

(2) A person who contravenes the provisions of this Rule commits an offence.

Notices.

27. (1) No person shall smoke, light or carry matches, lighters or other flame producing articles or smoking materials, in any place where highly flammable or highly combustible substances are manufactured, used, handled or stored.

(2) A person who contravenes the provisions of this Rule commits an offence.

(3) Every occupier shall take all reasonably practicable steps to ensure compliance with the provisions of subsection (1) including such steps as—

(a) displaying at or as near as possible to every work place, a clear and bold notice indicating that smoking is prohibited in that place; and

(b) except in places where smoking is permitted,

displaying throughout the work place at every entrance of the workplace, a clear and bold notice indicating that smoking is prohibited.

- (4) A person who contravenes the provisions of this Rule commits an offence.

Fire detection system.

28.(1) Every occupier shall provide and maintain fire detection appliances.

(2) Every occupier shall ensure that fire detection appliances are located in the appropriate places for immediate activation of an alarm or automatic fire extinguishing systems.

(3) Every occupier shall ensure that—

(a) fire detection appliances are connected to audible and visual flashing devices to provide a warning to the workers for emergency response; and

(b) fire detection appliances are regularly maintained and that they are inspected at least once every twelve months by a competent person.

- (4) A person who contravenes the provisions of this Rule commits an offence.

Fire fighting appliances.

29. (1) Every occupier shall provide means of extinguishing fire at the work place.

(2) Every occupier shall ensure that the position of the means in subsection (1) shall be distinctively and conspicuously marked.

(3) Every occupier shall ensure that any portable fire extinguisher is mounted at an easily accessible height of not less than 60 cm from the floor.

(4) Where fire hose reels are provided, every occupier shall ensure that there is at least one fire hose reel within a radius of 30 metres.

(5) A person who contravenes the provisions of this Rule commits an offence

Maintenance inspection & testing of cylinders.

30. (1) Every occupier shall ensure that all means of extinguishing fire are properly maintained.

(2) The occupier shall-

(a) causing inspection and testing of all fire fighting

appliances in the work place to be carried out by a competent person at least once every twelve months;

- (b) Keep a record indicating the date of inspection and tests including the name of persons carrying out the inspection and test; and
- (c) ensure that all cylinders for fire fighting appliances are examined and tested at least once every five years and such tests shall include hydraulic pressure test.

(3) Every occupier shall ensure that any portable fire extinguisher is examined and tested whenever there is-

- (a) evidence of corrosion or mechanical damage;
- (b) repairs on a cylinder by soldering, welding, brazing or use of patching compounds;
- (c) change of cylinder or shell threads; or
- (d) corrosion that has caused pitting or corrosion under removable name plate assemblies.

Selection and distribution of fire extinguishers.

31. (1) Every occupier shall ensure that, in selecting and distributing fire extinguishers in the workplace, the distribution and selection is based on the classes of fires anticipated and based on the size and degree of hazard caused by a fire.

(2) Where a fire extinguisher is for the use of extinguishing class A fires, every occupier shall ensure that the fire extinguisher is located as near as possible and not more than 10 metres from the hazard area.

(3) Where a fire extinguisher is for the use of extinguishing class B fires, every occupier shall ensure that the fire extinguisher is located as near as possible and not more than 5 meters from the hazard area.

(4) Where a fire extinguisher is for the use of extinguishing class C fires, every occupier shall ensure that the fire extinguisher is located as near as possible to all electrically energized equipment and not more than 10 meters from the hazard area.

(5) Where a fire extinguisher is for the use of extinguishing class D fires, every occupier shall ensure that the fire extinguisher is located as near as possible and not more than 10 metres from the hazard area.

(6) A person who contravenes the provisions of this Rule commits an offence

Colour coding of pipes.

32. (1) Every occupier shall ensure that all pipes conveying various substances shall be colour-coded for the purpose of identification.

(2) Every occupier shall ensure that pipes carrying water for fire fighting shall be painted in red.

(3) Every occupier shall ensure that fire fighting appliances are coded in the following manner-

<i>Extinguishing agent</i>	<i>Extinguisher body colour</i>
Water	Red
Foam	Cream
Powder (all types)	Blue
Carbon dioxide	Black

(4) A person who contravenes the provisions of this Rule commits an offence

Water storage.

33. (1) Every occupier shall ensure that—

(a) the work place has access to water and water storage facility capable of storing at least 10,000 liters of water;

(b) the water storage facility is kept full at all times, for use in event of fire;

(c) the water pressure in the fire fighting system is capable of raising water to the highest point of the workplace in the event of a fire;

(d) where hose reels are used, and the storage water reservoir is at ground level or underground, an isolated water pump shall be provided.

(2) A person who contravenes the provisions of this Rule commits an offence

Fire safety policy.

34. (1) Every occupier shall establish and implement a written fire safety policy, outlining the organization and arrangements for carrying out the policy.

(2) every occupier shall ensure that all workers are informed on the contents of the policy which shall include—

(a) evacuation procedures;

(b) provision for maintenance and inspection of fire fighting appliances and fire detection systems;

(c) training of workers on fire extinguishing techniques;

- (d) assignment of responsibility to individual persons within the organization for fire prevention and control;
- (e) planning and organization of fire drills; and
- (f) Identification of assembly points.

Notification of fire occurrence

35. (1) Every occupier shall notify any fire occurring in the workplace to the nearest occupational safety and health area office within 24 hours of its occurrence and send a written report in the prescribed form within 7 days to the director.

(2) A person who contravenes the provisions of this Rule commits an offence

Fire safety audit.

36. (1) Every occupier shall cause a fire safety audit of the work place to be taken at least once every twelve months by an approved fire auditor.

(2) The cost in connection with such audits shall be paid by the occupier.

(3) The occupier shall keep the report of the fire safety audit for the purposes of these rules and the fire safety auditor shall submit a copy of the same to the Director within fourteen days from the date of the audit.

(4) A person who contravenes the provisions of this Rule commits an offence

Approval of the fire safety auditors

37. (1) The director may invite applications by competent persons for approval to serve as fire safety auditors.

(2) The Director shall consider all applications received and approve persons to serve as fire safety auditors for the purpose of these Rules.

(3) The Director may develop written criteria for approval of fire safety auditors.

(4) The Minister may, on the advice of the Director, by a notice in the Gazette notify appointment made under paragraph (2) and maintain a register of all persons appointed there under.

(5) Every fire safety auditor shall be issued with a certificate by the Director, upon payment of the prescribed fee.

Duties of fire safety auditors

38. The fire safety auditor shall-

(a) carry out a fire safety audit of the workplace at the request of the occupier;

(b) Advise the occupier and members of the safety and health

committees on fire matters arising from the audit report

(c) submit a copy of the audit report to the Director within 14 days from the date of the audit.

Offences.

39. An occupier or owner who contravenes any of the provisions of these Rules commits an offence and is liable, on conviction to penalties provided under the Act.

Dated the 16th April 2007

NEWTON KULUNDU,
Minister for Labour and Human Resource Development.