

## DEPARTMENT OF LABOUR

Government Notice. R: 1031

30 May 1986

### General Safety Regulations, 1986

The Minister of Manpower has, in terms of section 35 of the Machinery and Occupational Safety Act, 1983 (Act 6 of 1983) made the regulations contained in the Schedule hereto.

#### SCHEDULE

##### Definitions

1. In these regulations "the Act" means the Machinery and Occupational Safety Act, 1983 (Act 6 of 1983), and any expression to which a meaning has been assigned in the Act shall have the meaning so assigned and, unless the context indicates otherwise -

"Boatswain's chair" means a suspended platform seat intended for supporting one person in an elevated position;

"building work" means building work as defined in the General Administrative Regulations published under Government Notice R206 of 5 October 1984;

"confined space" means an enclosed, restricted, or limited space in which, because of its construction, location or contents, or any work activity carried on therein, a hazardous substance may accumulate or an oxygen-deficient atmosphere may occur, and includes any chamber, tunnel, pipe, pit, sewer, container, valve, pump, sump, or similar construction, equipment, machinery or object in which a dangerous liquid or dangerous concentration of gas, vapour, dust or fumes may be present;

"fire resistance" means the minimum period for which a building element or component will comply with the requirements for stability, integrity, and insulation when tested in accordance with SABS 0177: Part II;

"flammable liquid" means any liquid which produces a vapour that forms an explosive mixture with air, and includes any liquid with a closed-cup flash-point of less than 55 degrees C;

"high-risk substance" means a substance listed in the Schedule to the General Administrative Regulations published under Government Notice R.2206 of 5 October 1984, as amended from time to time;

"putlog scaffold" means a scaffold supported by a single row of standards and the structure in connection with which it is being used;

“SABS 0177: Part II” means the South African Bureau of Standards’ code of practice entitled Fire Resistance Test For Building Elements, SABS 0177: Part II – 1981.

“scaffold” means any temporary elevated platform and supporting structure used for supporting workmen or materials or both;

“Suspended scaffold” means a working platform suspended from supports by means of one or more separate suspensions from each support;

“trestle scaffold” means a working platform supported on trestles, stepladders, tripods and the like.

## **Personal safety equipment and facilities**

2. (1) Subject to the provisions of paragraphs (f), (g), (h) and (i) of regulation 5 of the General Administrative Regulations published under Government Notice R. 2206 of 5 October 1984, every employer and every user of machinery shall make an evaluation of the risk attached to any condition or situation which may arise from the activities of such employer or user, as the case may be, and to which persons at a workplace or in the course of their employment or in connection with the use of machinery are exposed, and he shall take such steps as may under the circumstances be necessary to make such condition or situation safe. (Replaced by GAR, 1994 by Government Notice R. 17403 of 6 September, 1996.)

(2) Where it is not practicable to safeguard the condition or situation contemplated in subregulation (1), the employer or user of machinery, as the case may be, shall take steps to reduce the risk as much as is practicable, and shall provide free of charge and maintain in a good and clean condition such safety equipment and facilities as may be necessary to ensure that any person exposed to any such condition or situation at a workplace or in the course of his employment or on premises where machinery is used is rendered safe.

(3) Taking into account the nature of the hazard that is to be countered, and without derogating from the general duties imposed on employers and users of machinery by subregulations (1) and (2), the safety equipment and facilities contemplated in subregulation (2) shall include, as may be necessary --

(a) suitable goggles, spectacles, face shields, welding shields, visors, hard hats, protective helmets, caps, gloves, gauntlets, aprons, jackets, capes, sleeves, leggings, spats, gaiters, protective footwear, protective overalls, or any similar safety equipment or facility of a type that will effectively prevent bodily injury;

(b) waterproof clothing, high-visibility clothing, chemical-resistant clothing, low temperature clothing, chain mail garments, waders, fire retardant or flame-proof clothing, ice-jackets, or any similar safety equipment of a type that will effectively protect the wearer thereof against harm;

(c) belts, harnesses, nets, fall arresters, life lines, safety hooks, or any similar equipment of a type that will effectively protect persons against falls;

(d) mats, barriers, locking-out devices, safety signs, or any similar facility that will effectively prevent slipping, unsafe entry or unsafe conditions;

(e) protective ointments, ear-muffs, ear-plugs, respirators, breathing apparatus, masks; air lines, hoods, helmets, or any similar safety equipment or facility of a type that will effectively protect against harm;

(f) suitable insulating material underfoot where persons work on a floor made of metal stone, concrete or other similar material; and

(g) generally, such safety equipment or facilities as may be necessary to render the persons concerned safe.

(4) An employer or a user of machinery, as the case may be, shall take steps to ensure that no safety equipment or facility provided as required by this or any other regulation is removed from a workplace or from premises where machinery is used, except for purposes of cleaning, repair, maintenance, modification, mending or replacement, and no person shall remove any such safety equipment or facility from a workplace or premises where machinery is used, except for the aforesaid purposes.

(5) An employer shall instruct his employees in the proper use, maintenance and limitations of the safety equipment and facilities provided.

(6) An employer shall not require or permit any employee to work unless such an employee uses the required safety equipment or facility provided in terms of this or any other regulation.

(7) The provisions of this regulation shall not be construed as derogating from the provisions of any specific regulation prescribing specific safety equipment or facilities.

## **Intoxication**

2A.(1) Subject to the provisions of subregulation (3), an employer or a user, as the case may be, shall not permit any person who is or who appears to be under the influence of intoxicating liquor or drugs, to enter or remain at a workplace.

(2) Subject to the provisions of subregulation (3), no person at a workplace shall be under the influence of or have in his or her possession or partake of or offer any other person intoxicating liquor or drugs.

(3) An employer or a user, as the case may be, shall, in the case where a person is taking medicines, only allow such person to perform duties at the workplace if the side effects of such medicine do not constitute a threat to the health or safety of the person concerned or other persons at such workplace.

## **Display of substituted notices and signs**

2B. If the provisions of any regulation prescribe a particular notice or sign to be displayed by an employer or by a user at a workplace, the employer or user may, in lieu thereof, display a corresponding symbolic sign, as contained in a safety standard incorporated for this purpose into these regulations under section 44 of

the Act, in which case the employer or user shall be deemed to have complied with such provisions.

### **Admittance of persons**

2C.(1) Subject to section 8 of the Act, an employer or user, as the case may be, shall not permit a person to enter a workplace where the health or safety of such person is at risk or may be at risk, unless such person enters such workplace with the express or implied permission of and subject to the conditions laid down by such employer or user: Provided that such express or implied permission shall not apply in respect of a person entitled by law to enter such workplace or premises.

(2) An employer or a user, as the case may be, shall, if he deems it necessary in the interests of health and safety, post up a notice at every entrance to a workplace prohibiting the entry of unauthorised persons to such workplace and no person shall enter or remain at such workplace without the permission of the employer or user, as the case may be.

### **First aid, emergency equipment and procedures**

3. (1) An employer shall take all reasonable steps that are necessary under the circumstances, to ensure that persons at work receive prompt first aid treatment in case of injury or emergency.

(2) Where more than five employees are employed at a workplace, the employer of such employees shall provide a first aid box or boxes at or near the workplace which shall be available and accessible for the treatment of injured persons at that workplace.

(3) (a) Taking into account the type of injuries that are likely to occur at a workplace, the nature of the activities performed and the number of employees employed at such workplace, the employer shall make sure that the first aid box or boxes contemplated in sub-regulation (2) contain suitable first aid equipment which include at least the equipment listed in the Annexure hereto.

(b) Such an employer shall make sure that only articles and equipment contemplated in subregulation (a) or other similar equipment or medicine is kept in the first aid box or boxes.

(4) Where more than 10 employees are employed at a workplace, the employer of such employees shall take steps to ensure that for every group of up to 50 employees at that workplace, or in the case of a shop or an office as contemplated in the Basic Conditions of employment Act, 1983 (Act No. 3 of 1983), for every group of up to 100 employees, at least one person is readily available during normal working hours, who is in possession of a valid certificate of competency in first aid, issued by -

- (a) the SA Red Cross Society;
- (b) the St. John Ambulance;

- (c) the SA First Aid League; or
- (d) a person or organisation approved by the chief inspector for this purpose.

(5) An employer shall at a workplace where a high risk substance or toxic, corrosive or similar hazardous substances are used, handled, processed or manufactured, ensure that the first aid worker contemplated in subregulation (4) is trained in the first aid procedures that are necessary for the treatment of injuries that may result from such activities, including the acute detrimental effects of exposure to such substances, and in the emergency procedures which are necessary in the case of accidental leakage or dumping of such substances.

(6) An employer shall affix a prominent notice or sign in a conspicuous place at a workplace, indicating where the first aid box or boxes are kept as well as the name of the person in charge of such first aid box or boxes.

(7) An employee with an open wound, cut, sore or any similar injury, who works in a workplace where a substance contemplated in subregulation 5 is used, handled, processed or manufactured, shall report such injury to his employer forthwith. The employer may not permit such employee to continue working before the injury has been cleaned with soap and water or with a diluted disinfectant.

(8) Where an employee is exposed or can be exposed to a potential hazard of injury to the eye through contact with a biological or chemical substance, the employer concerned shall make sure that there is an eyewash fountain or any similar facilities, in the immediate vicinity of the workplace of such employee and that the employee is trained in the use thereof.

(9) Where an employee at a workplace is exposed or can be exposed to a potential hazard of injury to or absorption through the skin as a result of sudden contact with a large amount of toxic, corrosive, high risk or similar hazardous substance, the employer concerned shall make sure that there is a fast-reacting deluge-shower with clean water or a similar facility in the immediate vicinity of the workplace of such employee and that the employee is trained in the use thereof.

### **Use and storage of flammable liquids**

4. (1) No employer shall require or permit any person to work in a place where the vapour of any flammable liquid is generated to such an extent that it constitutes an actual or potential fire or explosion hazard or endangers the safety of any person, unless the provisions of subregulations (2) to (12) of this regulation are complied with.

(2) No employer shall require or permit a flammable liquid to be used or applied other than in a room, cabinet or other enclosure specially constructed for this purpose of fire-resisting material or in a place which, owing to its situation or construction or any other feature or circumstance, is of such a nature that-

- (a) no fire or explosion hazard is, can or may be created thereat;

(b) any vapour resulting from such use or application is efficiently dispersed and diluted into the atmosphere subject to the provisions of the Air Pollution Prevention Act, 1965 (Act 45 of 1965); and

(c) no other workplace can or may be contaminated by such vapour.

(3) An employer shall cause every room, cabinet or enclosure contemplated in subregulation (2) to be fitted with an efficient intake and exhaust ventilation system to remove any vapour therefrom and to prevent its recirculation in a manner which may lead to the contamination of any other workplace or the creation of a fire or explosion hazard: Provided that, notwithstanding any other provision of this regulation, an employer shall provide every employee doing spraying with a respirator, mask or breathing apparatus of a type approved by the chief inspector, and that any such employee shall while spraying use such apparatus provided to him.

(4) Where spraying is done in any room the employer concerned shall cause the ventilation system contemplated in subregulation (3) to conform to the following requirements:

(a) if the air supply and extraction is horizontal, the average air speed measured at a level of 1.5 meters above the floor, or at the level of the platform on which persons stand to work, shall not be less than 0.5 meters per second;

(b) if the air supply is vertical and the extraction thereof is done through slits or a grill along the side walls at floor level, the average air speed measured at a level of 1.5 meters above the floor, or at the level of the platform on which persons stand to work, shall not be less than 0.4 meters per second; or

(c) if the air supply is vertical and the extraction thereof is done through a grill over the whole of the floor area, the average air speed measured at a level of 1.5 meters above the floor, or at the level of the platform on which persons stand to work, shall not be less than 0.3 meters per second.

(5) Where spraying is done into any cabinet or enclosure as contemplated in subregulation (2), the employer concerned shall cause the ventilation system contemplated in subregulation (3) to comply with the following requirements:

(a) where the area of the open face of the cabinet is not more than one square metre, the average speed of air movement through the said face shall not be less than one metre per second;

(b) where the area of the open face is more than one square metre but less than two square meters, the average speed of air movement through the said face shall not be less than 0.75 meters per second; or

(c) where the area of the open face is equal to or exceeds two square meters, the average speed of air movement through the said face shall not be less than 0.5 meters per second.

(6) With regard to the ventilation system contemplated in subregulation (3) the employer shall cause --

(a) all ducts, trunks and enclosures of the system to be of fire resistant material with a smooth interior finish and to be constructed in such a manner as to facilitate the cleaning thereof;

(b) the system to be kept in operation during working hours as well as for at least the period of time thereafter that may be necessary to clear the vapour from the atmosphere of the room, cabinet or enclosure to below 25 per cent of the lower explosive limit of that vapour; and

(c) the work to be so organized that the flow of air towards the intake of such ventilation system is not obstructed and draws the spray or vapour of the flammable liquid away from any employee operating the equipment.

(7) With regard to any room contemplated in subregulation (2) the employer shall cause every such room --

(a) with a floor area exceeding 20 square meters to have at least two separate entrances at opposite ends of the room, which shall be fitted with doors openings outwards that cannot be locked; and

(b) to be fitted with an inspection window of strengthened and shatterproof glass that cannot be opened.

(8) (a) An employer shall not permit--

(i) any fire, flame or naked light or anything which may generate static electricity or any other thing which may ignite a flammable liquid or its vapour, to be used in or taken into any room, cabinet or enclosure contemplated in subregulation (2) in which any such flammable liquid is used, sprayed or stored, and shall affix a suitable and conspicuous sign prohibiting any such act at all the entrances to any such room, cabinet or enclosure;

(ii) any person to, and no person shall, smoke in any place in which flammable liquid is used or stored, and such employer shall affix a suitable and conspicuous notice prohibiting such smoking at all the entrances to any such place; and

(iii) any process capable of causing sparks or fire, or the application of any heat for the drying of sprayed or treated articles, to take place in any room, cabinet or enclosure used for spraying, before the space or atmosphere has been cleared of all vapour.

(b) No person shall contravene any prohibition made known as contemplated in subparagraph (i) or (ii) of paragraph (a).

(9) With respect to any room, cabinet or enclosure contemplated in subregulation (2), the employer concerned shall cause --

(a) discarded cotton waste, cleaning rags or similar material to be removed daily and safely disposed of;

(b) only that quantity of flammable liquid needed for work on one day to be taken into or kept in such room, cabinet or enclosure: Provided that partially consumed stock may be stored in a properly marked, fireproof wall cabinet inside the work place;

(c) all drums, cans, canisters or similar containers holding flammable liquids to be kept tightly closed when not in actual use and, after their contents have been used up, to be removed from the workplace and safely disposed of daily; and

(d) every such room, cabinet or enclosure to be kept clean and all fans, ducts, trunks and enclosures of the ventilation system contemplated in subregulation (3) to be kept clean and in good working order: Provided that any cleaning, scraping or scouring shall be done with implements that cannot cause sparking if the concentration of the vapour exceeds 25 per cent of the lower explosive limit of that vapour.

(10) An employer shall cause every flammable liquid store to be --

(a) separated by means of fire-resisting material with a fire-resistance of two hours from any room, cabinet or enclosure contemplated in subregulation (2);

(b) constructed of fire-resisting material with a fire-resistance of two hours;

(c) constructed in such a way that, in case of spillage, a volume of the flammable liquid in question equal to the quantity of flammable liquid ordinarily kept in store plus 10 per cent of that quantity, can be contained;

(d) ventilated to the open air in such a manner that vapour cannot accumulate inside the store; and

(e) clearly marked with a sign indicating that it is such a store and also indicating the amount of flammable liquid which may be stored therein.

(11) Taking into account the construction and location of the premises in question and the quantity and types of flammable liquids involved, an employer shall install an adequate amount of efficient fire-fighting equipment in suitable locations in and around every building in which such substances are used, handled or stored, or as may be recommended by the fire chief of the local authority concerned.

(12) The provisions of this regulation shall not be construed as applying to the use of flammable liquids in the course of or in connection with building work: Provided that every employer engaged in building work shall ensure that, where flammable liquids are used or applied at the workplace concerned, this is done in such a manner that no fire or explosion hazard is created, and that the workplace is effectively ventilated: Provided further that where the workplace cannot be ventilated effectively the employer shall provide every employee involved with a respirator, mask or breathing apparatus of a type approved by the chief inspector, and shall take steps to ensure that every such employee, while using or applying flammable liquid, uses the apparatus supplied to him.

### **Work in confined spaces**

5. (1) An employer or a user of machinery shall take steps to ensure that a confined space is entered by an employee or other person only after the air

therein has been tested and evaluated by a person who is competent to pronounce on the safety thereof, and who has certified in writing that the confined space is safe and will remain safe while any person is in the confined space, taking into account the nature and duration of the work to be performed therein.

(2) Where the provisions of subregulation (1) cannot be complied with the employer or user of machinery, as the case may be, shall take steps to ensure that any confined space in which there exists or is likely to exist a hazardous gas, vapour, dust or fumes, or which has or is likely to have, an oxygen content of less than 20 per cent by volume, is entered by an employee or other person only when--

(a) subject to the provisions of subregulation (3), the confined space is purged and ventilated to provide a safe atmosphere therein and measures necessary to maintain a safe atmosphere therein have been taken; and

(b) the confined space has been isolated from all pipes, ducts and other communicating openings by means of effective blanking other than the shutting or locking of a valve or a cock, or, if this is not practicable, only when all valves and cocks which are a potential source of danger have been locked and securely fastened by means of chains and padlocks.

(3) Where the provisions of subregulation (2)(a) cannot be complied with, the employer or user of machinery shall take steps to ensure that the confined space in question is entered only when the employee or person entering is using breathing apparatus of a type approved by the chief inspector and, further, that--

(a) the provisions of subregulation (2) (b) are complied with;

(b) any employee or person entering the confined space is using a safety harness or other similar equipment, to which a rope is securely attached which reaches beyond the access to the confined space, and the free end of which is attended to by a person referred to in paragraph (c);

(c) at least one other person trained in resuscitation is and remains in attendance immediately outside the entrance of the confined space in order to assist or remove any or persons from the confined space, if necessary; and

(d) effective apparatus for breathing and resuscitation of a type approved by the chief inspector is available immediately outside the confined space.

(4) An employer or user of machinery shall take steps to ensure that all persons vacate a confined space on completion of any work therein.

(5) Where the hazardous gas, vapour, dust or fumes contemplated in subregulation (2) are of an explosive or flammable nature, an employer or user of machinery shall further take steps to ensure that such a confined space is entered only if --

(a) the concentration of the gas, vapour, dust or fumes does not exceed 25 per cent of the lower explosive limit of the gas, vapour, dust or fumes concerned where the work to be performed is of such a nature that it does not create a source of ignition; or

(b) such concentration does not exceed 10 per cent of the lower explosive limit of the gas, vapour, dust or fumes where other work is performed.

(6) The provisions of this regulation shall mutatis mutandis also apply, in so far as they can be so applied, to any work which is performed in any place or space on the outside of and bordering on or in the immediate vicinity of, any confined space, and in which place or space, owing to its proximity to the confined space, any hazardous article, oxygen-deficient atmosphere or dangerous concentration of gas, vapour, dust or fumes may occur or be present.

### **Work in elevated positions**

6. No employer shall require or permit any person to work in an elevated position, and no person shall work in an elevated position, unless such work is performed safely from a ladder or scaffolding, or from a position where such person has been made as safe as if he were working from scaffolding.

### **Working in danger of engulfment**

7. No employer shall require or permit any person to, and no person shall, enter any place from or into which solid or particulate material is being discharged where a danger exists of a person being engulfed by such solid or particulate material, unless --

(a) such a person is provided with and properly uses a safety belt and rope;

(b) at least one other person who has been properly instructed, is and remains in attendance outside such place to keep the persons therein under continuous observation in order to render assistance in case of emergency; and

(c) the precautions prescribed by regulation 5 of these regulations are taken if dangerous gas, fumes, dust or vapour may be present in such a place.

### **Stacking of articles**

8. (1) No employer shall require or permit the building of stacks which consist of successive tiers, one on top of another, unless --

(a) the stacking operation is executed by or under the personal supervision of a person with specific knowledge and experience of this type of work;

(b) the base is level and capable of sustaining the weight exerted on it by the stack;

(c) the articles in the lower tiers are capable of sustaining the weight exerted on them by the articles stacked above them;

(d) all the articles which make up any single tier are consistently of the same size, shape and mass;

(e) pallets and containers are in good condition; and

(f) any support structure used for the stacking of articles is structurally sound and can support the articles to be stacked on it.

(2) An employer shall not permit --

(a) articles to be removed from a stack except from the topmost tier or part of that tier; and

(b) anybody to climb onto or from a stack, except if the stack is stable and the climbing is done with the aid of a ladder or other safe facility or means.

(3) An employer shall take steps to ensure that --

(a) persons engaged in stacking operations do not come within reach of machinery which may endanger their safety;

(b) stacks that are in danger of collapsing are dismantled immediately in a safe manner; and

(c) the stability of stacks is not endangered by vehicles or other machinery or persons moving past them.

(4) Unless a stack is otherwise supported an employer shall take steps to ensure that tiers of stacked material consisting of sacks, cases, cartons, tins or similar containers --

(a) are secured by laying up articles in a header and stretcher fashion and that corners are securely bonded; and

(b) are stepped back half the depth of a single container at least every fifth tier or that, alternatively, successive tiers are stepped back by a lesser amount: Provided that at least the same average angle of inclination to the vertical is achieved: Provided further that where the containers are of a regular shape and their nature and size are such that the stack will be stable, they may be stacked with the sides of the stack vertical if the total height of the stack does not exceed three times the smaller dimension of the underlying base of the stack.

(5) Notwithstanding the provisions of subregulation (4), free-standing stacks that are built with the aid of machinery may, with the approval of an inspector, be built to a height and in a manner permitted by the nature of the containers being stacked: Provided that --

(a) the stacks are stable and do not overhang; and

(b) the operator of the stacking machinery is rendered safe as regards falling articles.

### **Welding, flame cutting, soldering and similar operations**

9. (1) No employer or user of machinery shall require or permit welding or flame cutting operations to be undertaken, unless -

(a) the person operating the equipment has been fully instructed in the safe operation and use of such equipment and in the hazards which may arise from its use;

(b) effective protection is provided and used for the eyes and respiratory system and, where necessary, for the face, hands, feet, legs, body and clothing of persons performing such operations, as well as against heat, incandescent or flying particles or dangerous radiation;

(c) leads and electrode holders are effectively insulated; and

(d) the workplace is effectively partitioned off where practicable and where not practicable all other persons exposed to the hazards contemplated in paragraph (b) are warned and provided with suitable protective equipment.

(2) No employer or user of machinery shall require or permit welding or name cutting operations to be undertaken in a confined space, unless --

(a) effective ventilation is provided and maintained; or

(b) masks or hoods maintaining a supply of safe air for breathing are provided and used by the persons performing such operations.

(3) No employer or user of machinery shall require or permit electric welding to be undertaken in wet or damp places, inside metal vessels or in contact with large masses of metal, unless --

(a) the insulation of the electrical leads is in a sound condition;

(b) the electrode holder is completely insulated to prevent accidental contact with current-carrying parts;

(c) the welder is completely insulated by means of boots, gloves or rubber mats; and

(d) at least one other person who has been properly instructed to assist the welder in case of an emergency is and remains in attendance during operations: Provided that the provisions of this sub-regulation shall not apply to a welding process where the maximum voltage to earth does not exceed 50 volts.

(4) No employer or user of machinery shall require or permit welding, flame cutting, grinding, soldering or similar work to be undertaken in respect of any tube, tank, drum, vessel or similar object or container where such object or container --

(a) is completely closed, unless a rise in internal pressure cannot render it dangerous; or

(b) contains any substance which, under the action of heat, may --

(i) ignite or explode; or

(ii) react to form dangerous or poisonous substances,

unless a person who is competent to pronounce on the safety thereof has, after examination, certified in writing that any such danger has been removed by opening, ventilating or purging with water or steam, or by any other effective means.

(5) Where hot work involving welding, cutting, brazing or soldering operations is carried out at places, other than workplaces which have been specifically designated and equipped for such work, the employer shall take steps to ensure that proper and adequate fire precautions are taken.

## **Operating trains**

10. (1) An employer or a user of machinery who operates a train or a train of tramway-trucks, as the case may be, shall cause a signalman carrying a red flag or red light to be stationed at every level crossing where a railway line or tramway crosses or joins a railway or a road, or shall provide other adequate means at such crossing to warn -

(a) the driver of the train or the train of tramway-trucks of the approach of a train; and

(b) traffic on the road of the approach of the train or train of tramway-trucks.

(2) An employer or a user of machinery shall not permit a train or a train of tramway-trucks to be run over a level crossing contemplated in subregulation (1) at a speed in excess of 10 kilometers per hour, and the driver thereof shall not exceed such speed.

(3) No person shall drive or permit any other person to drive a locomotive, unless authorised to do so by his employer or the user of machinery, as the case may be.

(4) An employer or a user of machinery shall not, except as provided for in subregulation (5), authorise any person to drive a locomotive while it is being used for the conveyance of persons other than those required for the working of the locomotive or train, unless such person is the holder of a locomotive engine driver's certificate issued by the South African Transport Services or in terms of regulations made under the Mines and Works Act, 1956 (Act 27 of 1956).

(5) In the case of a locomotive other than a steam locomotive, having a design speed not exceeding 20 kilometres per hour, an employer or user of machinery, as the case may be, may authorize a person who has attained the age of 18 years to drive such a locomotive while it is being used for the conveyance of persons: Provided that --

(a) the employer or user of machinery is satisfied that the sight and hearing of any such person are not defective and that he does not suffer from any other physical or mental infirmity which is likely to interfere with the efficient and safe performance of his duties; and

(b) the person so authorised is competent to carry out the duties assigned to him.

(6) The provisions of this regulation shall not apply to trains operated by the South African Transport Services.

## **Supervision of building work**

11. (1) Every employer who performs building work shall charge a full-time employee, designated in writing by the employer, with the duty of supervising the

performance of such building work: Provided that if such employer himself has the experience contemplated in subregulation (2) and supervises the work himself, such charging and designation need not be done.

(2) An employee contemplated in subregulation (1) shall be a person who has had at least two years, experience in the type of building work for which he is to be designated.

(3) (a) An employer may designate one or more subordinate employees to assist the designated employee referred to in subregulation (1), and every such subordinate employee shall, to an extent which shall be clearly defined by the employer in his letter of designation, have the same duties as the first designated employee: Provided that the designation of any such subordinate employee shall not relieve the designated employee referred to in subregulation (1) of any personal accountability for failing in his supervisory duties contemplated in terms of this regulation.

(b) Where an employer has not designated any subordinate employee as contemplated in paragraph (a), or, in the opinion of an inspector, not a sufficient number of such subordinate employees, an inspector may require the employer to designate the number of subordinate employees indicated by him and the provisions of paragraph (a) shall apply in respect of such subordinate employees as if they were in the first instance designated under that paragraph.

## **Roof work**

12. Every employer shall provide, and cause to be used, suitable roof ladders or duck-boards or crawling-boards for persons required to work on any roof that has an unsafe pitch or surface, or that is covered or is to be covered with material through which a person could fall: Provided that suitable safety belts attached to the structure or any similar effective equipment may be used in place of roof-ladders, duck-boards or crawling boards on pitched roofs covered with non-fragile material.

## **Demolition and excavation**

13. Every employer who performs building work shall, with respect to any such work in connection with the demolition of a structure or the making of an excavation --

(a) with regard to a structure being demolished, take steps to ensure that --

(i) no floor, roof or other part of the structure is so overloaded with debris or material as to render it unsafe;

(ii) all practicable precautions are taken to avoid the danger of the structure collapsing when any part of the framing of a framed or partly framed building is removed, or when reinforced concrete is cut; and

(iii) precautions are taken in the form of adequate shoring or such other means as may be necessary to prevent the accidental collapse of any part of the structure or of any adjoining structure;

(b) not require or permit any person to, and no person shall, work under unsupported overhanging material or in an excavation which is more than 1.5 m deep and which has not been adequately shored or braced if there is a danger of the overhanging material or the sides of the excavation collapsing;

(c) take steps to ensure that any support, shoring or bracing contemplated in paragraph (b), is designed and constructed so that it is strong enough to support the overhanging material or the sides of the excavation in question;

(d) where the stability of an adjoining building, structure or road is likely to be affected by demolition work on a building or the making of an excavation, take such steps as may be necessary to ensure the stability of such building, structure or road and the safety of persons;

(e) ascertain as far as is practicable the location and nature of electricity, water, gas or other similar services which may in some way be affected by the work to be performed, and shall before the commencement of such work that may in this way affect any such service, take such steps as may be necessary under the circumstances to render all persons involved safe;

(f) cause convenient and safe means of access to be provided to every excavation in which persons are required to work and which is more than 1.5 m deep: Provided that, in the case of an excavation which is more than 50 m in length, a safe means of access shall be provided at intervals of not more than 50 m;

(g) cause every excavation which is more than 1.5 m deep, including all bracing and shoring, to be inspected by a person who is competent to pronounce on the safety thereof, at least once before every shift and before the commencement of work after rain, to ensure the safety of persons; and

(h) cause every excavation which is accessible to the public or which is adjacent to public roads or thoroughfares, or whereby the safety of persons may be endangered, to be--

(i) adequately protected by a barrier or fence at least one metre high and as close to the excavation as is practicable; and

(ii) provided with red warning lights or any other clearly visible boundary indicators at night or when visibility conditions are poor.

## **Ladders**

13A (1) An employee shall ensure that every ladder is constructed of sound material and is suitable for the purpose for which it is used, and -

(a) is fitted with non-skid devices at the bottom ends and hooks or similar devices at the upper ends of the stiles which shall ensure the stability of the ladder during normal use; or

(b) is so lashed, held or secured whilst being used as to ensure the stability of the ladder under all conditions and at all times.

(2) No employer shall use a ladder, or permit it to be used, if it -

(a) (i) has rungs fastened to the stiles only by means of nails, screws, spikes or in like manner; or

(ii) has rungs which have not been properly let into the stiles: Provided that in the case of welded ladder or ladders of which the rungs are bolted or riveted to the stiles, the rungs need not be let into the sides; or

(b) has damaged stiles, or damaged or missing rungs.

(3) No employer may permit that -

(a) a ladder which is required to be leaned against an object for support be used which is longer than 9 m; and

(b) except with the approval of an inspector, the reach of a ladder be extended by fastening together two or more ladders: Provided that the provisions of this subregulation shall not apply to extension of free-standing ladders.

(4) In the case of wooden ladders the employer shall ensure that -

(a) the ladders are constructed of straight grained wood, free from defects, and with the grain running in the length of the stiles and rungs; and

(b) the ladders are not painted or covered in any manner, unless it has been established that there are no cracks or other inherent weaknesses: Provided that ladders may be treated with oil or covered with clear varnish or wood preservative.

(5) When work is done from a ladder, the employer shall -

(a) take special precautionary measures to prevent articles from falling off; and

(b) provide suitable sheaths or receptacles in which hand tools shall be kept when not being used.

(6) An employer shall ensure that a fixed ladder which exceeds 5 m in length and is attached to a vertical structure with an inclination to the horizontal level of 75 or more -

(a) has its rungs at least 150 mm away from the structure to which the ladder is attached; and

(b) is provided with a cage which -

(i) extends from a point not exceeding 2.5 m from the lower level to a height of at least 900 mm above the top level served by the ladder; and

(ii) shall afford firm support along its whole length for the back of the person climbing the ladder, and for which purpose no part of the cage shall be more than 700 mm away from the level of the rungs:

Provided that the foregoing provisions of paragraph (b) shall not apply if platforms, which are spaced not more than 8 m apart and suitable for persons to rest on, are provided.

## **Ramps**

- 13B.(1) An employer shall ensure that every ramp -
- (a) is constructed in accordance with accepted technical standards;
  - (b) has a safety factor of at least two with respect to the load it is expected to carry: Provided that the design makes sufficient provision for the load on the ramp as a result of the turning, braking and acceleration of vehicles, if the ramp is used for vehicles; and
  - (c) has an inclination to the horizontal level of not more than 34° or one vertical to one and one half horizontal.
- (2) An employer shall ensure that every ramp -
- (a) the inclination of which renders additional foothold necessary, in every case where the inclination is more than 14° or one vertical to four horizontal, is provided with stepping laths which -
    - (i) are placed at suitable intervals; and
    - (ii) extend the full width of the ramp: Provided that the stepping laths may be interrupted over a width not exceeding 230 mm to facilitate the movement of barrows; and
  - (b) which is higher than 2 m and is provided on both sides with -
    - (i) substantial guard rails which are at least 900 mm and not exceeding 1 000 mm in height, and
    - (ii) toe-boards which are at least 150 mm high and so affixed that no open space exists between the toe-board and the ramp.

## **Boatswain's Chairs**

13C. An employer shall ensure that every boatswain's chair or similar device is securely suspended and is so constructed as to prevent any occupant from falling therefrom.

## **Scaffold framework**

- 13D.(1) An employer shall ensure that -
- (a) Scaffold standards are properly propped against displacement and are secured vertically on firm foundations: Provided that putlog scaffolds shall incline slightly towards the structure;
  - (b) (i) steel scaffold standards with 'heavy', 'medium', 'light', or 'very light', platform loadings which shall not exceed 320, 240, 160 and 80 kg/m<sup>2</sup> respectively, are spaced not more than 1.8 m, 2 m, 2.5 m and 3 m apart, respectively; and
    - (ii) wooden scaffold standards are spaced not more than 3 m apart;

- (c) ladders are spaced vertically not more than 2.1 m apart;
  - (d) putlogs or transoms --
    - (i) which do not support a platform, are spaced at the same distances as the distances prescribed in paragraph (b) in respect of scaffold standards.
    - (ii) which support a platform, are spaced not more than 1.25 m apart if the platform is constructed of solid timber boards; and
  - (e) every part of a wooden scaffold frame has a diameter of at least 75 mm or a section of similar strength.
- (2) No employer shall use a scaffold, or permit it to be used unless it -
- (a) is securely and effectively braced to ensure stability in all directions;
  - (b) is secured at suitable vertical and horizontal distances to the structure to which work is being done, unless it is designed to be completely free-standing;
  - (c) is so constructed that it has a throughout factor of safety of at least two; and
  - (d) is inspected at least once a week and every time after bad weather by a person who has adequate experience in the erection and maintenance of scaffolds, and all findings are recorded in a register or report book.
- (3) No employer shall require or permit that -
- (a) a scaffold with a supporting wooden framework exceeds a height of 10 m; and
  - (b) a scaffold is erected, altered or dismantled by or under the supervision of a person other than a person who has had the necessary training and experience of such work and who has been appointed by the employer in writing for this purpose.

### **Scaffold platforms**

- 13E.(1) An employer shall ensure that -
- (a) every plank of a solid wooden scaffold platform is at least 275 mm wide and 38 mm thick;
  - (b) every plank which forms part of a scaffold platform is supported at distances not exceeding 1.25 m, and its ends are projected not less than 70 mm and not more than 200 mm beyond the last prop;
  - (c) every plank of a scaffold platform is firmly secured to prevent its displacement; and
  - (d) every platform is so constructed as to prevent materials and tools from falling through.
- (2) An employer shall ensure that every scaffold platform-
- (a) with 'heavy' 'medium', 'light' or 'very light' platform loadings as referred to in regulation 13D (1) (b) (i) is not less than 1 125 mm and not more than 1 380 mm, not less than 1 125 mm and not more than 1 150 mm, not less than 900 mm and not more than 1 150 mm, and not less than 675 mm and not more than 1

150 mm, respectively, wide: Provided that where a platform is used only as a gangway, a platform width of 450 mm shall be sufficient;

(b) which is more than 2 m above the ground is on all sides, except the side facing the structure, provided with-

(i) substantial guard rails of at least 900 mm and not exceeding 1 000 mm in height; and

(ii) toe-boards which are at least 150 mm high from the level of the scaffold platform and so affixed that no open space exists between the toe-boards and the scaffold platform: Provided that if the toe-boards are constructed of timber, they shall be at least 25 mm thick;

(c) is not more than 75 mm from the structure: Provided that where workmen must sit to work, this distance may be increased to not more than 300 mm; and

(d) is kept free of waste, projecting nails or any other obstructions, and is kept in a non-slip state.

(3) No employer shall require or permit that a working platform which is higher than 600 mm be supported on a scaffold platform, and shall provide an additional guard rail of at least 900 mm and not exceeding 1000 mm in height above every such working platform.

(4) An employer shall ensure that convenient and safe access is provided to every scaffold platform, and where the access is a ladder, the ladder shall project at least 900 mm beyond the top of the platform.

### **Suspended scaffolds**

13F. (1) An employer shall ensure that the outriggers of each suspended scaffold -

(a) are constructed of steel or any other material of similar strength and have a factor of safety of at least four with respect to the load it is to carry;

(b) have an overhang of not more than 1.8 m beyond the edge of the structure and are of such length that the counteracting length can be anchored securely:

(c) are, otherwise than by means of weights at the inner-ends, properly propped, suitably spaced and firmly anchored: Provided that an inspector may grant permission that outriggers may be anchored by means of weights; and

(d) are provided with stop or other effective devices at the outer-ends to prevent the displacement of ropes.

(2) An employer shall ensure that the working platform of every suspended scaffold is suspended by:

(a) pulley-blocks, sheaves, winches or hoists of the correct size for the ropes being used;

(b) at least two independent steel wire ropes in the case of a working platform which is not wider than 912 mm, and at least four independent steel wire ropes in the case of a working platform which is 912 mm and wider; and

(c) steel wire ropes of which the factor of safety is at least ten with respect to the maximum load which each rope is to carry.

(3) An employer shall ensure that -

(a) the hand or power-driven machinery used for the lifting or lowering of the working platform of a suspended scaffold is so constructed and maintained that an uncontrolled movement of the working platform cannot occur;

(b) the machinery referred to in paragraph (a) is so situated that it is easily accessible for inspection;

(c) the rope connections to the outriggers are vertically above the connections to the working platform; and

(d) in the case of a working platform suspended by two ropes only, the connections of the ropes to the working platform are of such height above the level of the working platform as to ensure the stability of the working platform.

(4) An employer shall ensure that the working platform of every suspended scaffold -

(a) is at least 456 mm and not exceeding 1.8 m in width;

(b) is suspended as near as possible to the structure to which work is being done and, except when light work is being done, is secured at every working position to prevent horizontal movement between the working platform and the structure;

(c) is on all sides, except the side facing the structure, provided with substantial guard rails of at least 900 mm and not exceeding 1000 mm in height above the level of the working platform: Provided that in the case of a working platform suspended by two ropes only, the guard rails shall be on all sides; and

(d) is on all sides provided with toe-boards which are at least 150 mm high from the level of the working platform and so affixed that no open space exists between the toe-boards and the working platform: Provided that if the toe-boards are constructed of timber, they shall be at least 25 mm thick.

### **Trestle scaffolds**

13G.(1) No employer shall use a trestle scaffold, or permit it to be used, unless -

(a) it is soundly constructed of solid material, and

(b) all reasonable precautionary measures have been taken to prevent the unexpected spreading of its supporting legs when it is in use.

(2) No employer shall use a trestle scaffold or permit it to be used, if it -

(a) is higher than 3 m; or

(b) consists of more than two tiers.

## **Offences and penalties**

14. Any person who contravenes or fails to comply with any provision of regulation 2(1), 2(2), 2(4), 2(5), 2(6), 2A, 2C, 3, 4, 5, 6, 7, 8(1), 8(2), 8(3), 8(4), 9, 10(1), 10(2), 10(3), 10(4), 11(1), 12, 13A, 13B, 13C, 13D, 13E, 13F, or 13G shall be guilty of an offence and liable, on conviction to a fine or to imprisonment for a period not exceeding six months and, in the case of a continuous offence, to an additional fine of R200 for each day on which the offence continues, or to additional imprisonment of one day for each day on which the offence continues: Provided that the period of such additional imprisonment shall in no case exceed 90 days.

## **Withdrawal of Regulations**

15. The following regulations are hereby repealed:

(a) regulations B.6, B.12 and B.14, published under Government Notice R. 929 of 28 June 1963;

(b) regulations C. 14, C.16, C.17, C.20, C.47, C.48 and C.50, published under Government Notice R. 929 of 28 June 1963, as amended by Government Notices R. 3475 of 9 October 1969 and R. 109 of 26 January 1973;

(c) regulation C.13A, published under Government Notice R. 109 of 26 January 1973; and

(d) regulations D.3, D.5, D.13, D.14 and D.16, published under Government Notice R. 1934 of 13 December 1963, as amended by Government Notices R. 3475 of 9 October 1969, R. 1336 of 21 August 1970 and R. 109 of 26 January 1973.

## **Short title**

16. These regulations shall be called the General Safety Regulations.

## Annexure

Government Notice R.2245 of 7 August 1992

### Minimum contents of a First Aid Box

In the case of shops and offices, the quantities stated under items 1, 8, 9, 10, 14, 15, 17, and 18 may be reduced by half.

Item 1	Wound cleaner / antiseptic (100ml)
Item 2	Swabs for cleaning wounds
Item 3	Cotton wool for padding (100g)
Item 4	Sterile gauze (minimum quantity 10)
Item 5	1 pair of forceps (for splinters)
Item 6	1 pair of scissors (minimum size 100mm)
Item 7	1 set of safety pins
Item 8	4 triangular bandages
Item 9	4 roller bandages (75mm x 5m)
Item 10	4 roller bandages (100mm x 5m)
Item 11	1 roll of elastic adhesive (25mm x 3m)
Item 12	1 Non-allergenic adhesive strip (25mm x 3m)
Item 13	1 Packet of adhesive dressing strips (minimum quantity 10 assorted sizes)
Item 14	4 First aid dressing (75mm x 100mm)
Item 15	4 First aid dressings (150mm x 200mm)
Item 16	2 Straight splints
Item 17	2 Pairs large and 2 pairs medium disposable latex gloves
Item 18	2 CPR mouth pieces or similar devices

General Notice R.283 of 28 March 1988  
**Incorporation of Safety Standards**

Under the powers vested in me by section 36(1) of the Machinery and Occupational Safety Act, 1983 (Act 6 of 1983), I, Eli van der Merwe Louw, Minister of Manpower, hereby incorporate into the General Safety Regulations, 1986, as amended, the safety standards specified in the Schedule hereto.

E van der M. Louw  
Minister of Manpower

**SCHEDULE**

**1. Regulation 9(1)(e)**

British Standard specifications BS 6158 entitled "Specification for Safety Devices for Fuel Gases and Oxygen or Compressed Air for Welding, Cutting and Related Processes".

DIN Standard specifications DIN 8521 entitled "Safety Devices against Flashback Backflow in Welding, Cutting and Allied Processes - Safety Requirements, Testing".

International Standards Organisation specification ISO 5175 entitled "Equipment Used in Gas Welding, Cutting and Allied Processes - Safety Devices of Fuel Gases and Oxygen or Compressed Air- General Specifications, Requirements and Tests".

**2. Regulation 13B**

The South African Bureau of Standards Code of Practice SABS 085 entitled "The Design, Erection, Use and Inspection of Access Scaffolding".

**3. Regulation 13C**

The South African Bureau of Standards Code of Practice SABS 087 entitled "Handling, Storage and Distribution of Liquefied Petroleum Gas in Domestic, Commercial and Industrial Installations".

Part I: "Consumer Liquefied Petroleum Gas Cylinder Installations".

Part II: "Installations in Mobile Units and Small Non-Permanent Buildings".

Part III: "Bulk Liquefied Petroleum Gas Storage and Allied Facilities at Consumer's Premises".

Part IV: "Transportation of Liquefied Petroleum Gas in Bulk by Road".

Part V: "Liquefied Petroleum Gas as Engine Fuel".

Part VII: "Retail outlet and similar Liquefied Petroleum Gas Filling Sites for Small Containers".

Part VIII: "The Fuelling of Fork Lift Trucks and Other Liquefied Petroleum Gas Operated Vehicles".

Government Notice No. R.736 of 1 September 2001

**Withdrawal of Government Notice No. R. 1847 and incorporation of Health and Safety Standard: General Safety Regulations**

Under section 44 of the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993). I, Membathisi Mphumzi Shepherd Mdladlana, Minister of Labour, after consultation with the Advisory Council for Occupational Health and Safety, hereby-

- (1) Withdraw Government Notice No. R. 1847 as published on 16 September 1988;
- (2) Incorporate the South African Bureau of Standard's code of Practice SABS 0338:1999 entitled "Homologation of Respiratory Equipment" into the General Safety Regulation as amended by Government Notice No. R. 2245 of 7 August 1992; and
- (3) Require that as from 1 September 2001 all respiratory protective equipment shall be submitted to the South African Bureau of Standards, Pretoria, for homologation.