

- confined space in order to assist or remove any person or persons from the confined space, if necessary; and
- (d) effective self-contained breathing apparatus and resuscitation of a type approved by the Minister is available immediately outside the confined space.

(4) An employer or user 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 shall further take steps to ensure that such a confined space is entered only if—

- (a) the concentration of 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 any other work is performed nearby the confined space.

(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.**

10. 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.**

11. 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 harness and rope;

- (b) at least one other person who has been properly instructed to recognize engulfment hazards and precautions, is and remains in attendance outside such place to keep the person therein under continuous observation in order to render assistance in case of emergency; and
- (c) the precautions prescribed by regulation 9 of these regulations are taken if dangerous gas, fumes, dust, vapour or oxygen deficiency atmosphere may be present in such a place.

### **Stacking of articles.**

12.(1) No employer shall require or permit the building of stacks which consist of successive tiers, one on top of the other, 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 a 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 or equipment 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 or palletized materials consisting of sacks, cases, cartons, tins, drums or similar containers—

- (a) are secured by laying up articles in a header and stretcher fashion and that the 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 and from falling, while elevated, from the stacking machinery.

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

13.(1) No employer or user 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 and 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 shall require or permit welding or flame cutting operations to be undertaken in a confined space, unless—

- (a) effective ventilation is provided and maintained;
- (b) masks or hoods maintaining a supply of safe air for breathing are provided and used by the persons performing such operations; or
- (c) effective measures are taken to reduce flammable gasses, vapours or similar materials to concentration levels below 25% of their lower flammable limit.

(3) No employer or user 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 subregulation shall not apply to a welding process where the maximum voltage to earth does not exceed 50 volts.

(4) No employer or user 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.**

14.(1) An employer or user 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 of tramway trucks.

(2) An employer or 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.

(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 as the case may be.

(4) An employer or user shall not, except as provided for in subregulation (5), authorize 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 kilometers 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.

**Ladders.**

15. (1) An employer 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; and
- (ii) has rungs which have not been properly let into the stiles: Provided that in the case of welded ladders or ladders of which the rungs are bolted or riveted to the stiles, the rungs need not be let into the stiles; or
- (b) has any damaged stiles, damaged or missing rungs, or defective spreaders or defective non-skid devices, where provided.

(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 available standard length extension or freestanding ladders.

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

- (a) are constructed of straight grained wood, free from defects, and with the grain running the length of the stiles and rungs; and
- (b) are not painted or covered in any manner:

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 metre in length and is attached to a vertical structure with an inclination to the horizontal level of 75 degree 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 metre 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 safely rest on, are provided.

### Ramps.

16. (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 degree 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, but in every case where the inclination is more than 14 degree 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 wheelbarrows; and
- (b) which is higher than 2m and is provided on both sides with—

- (i) substantial guard rails which are at least 900 mm and not exceeding 1000 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.

#### **Offences and penalties.**

17. Any person who contravenes or fails to comply with any provision of regulation 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 and 16 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.**

18. The following are hereby repealed:
- (a) General Safety Regulations and Annexure published under Government Notice 1031 of 30 May 1986, as substituted by Government Notice No. R. 2245 of 1992, amended by Government Notice No. R. 928 of 25 June 2003; and
  - (b) Incorporation of Safety Standards by Government Notice No. R. 283 of 28 March 1991.

#### **Short title.**

19. These regulations shall be called the General Health and Safety Regulations, 2004.

**ANNEXURE 1****(Regulation 7)****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 (100 ml).
- Item 2: swabs for cleaning wounds.
- Item 3: wool for padding (100 g).
- Item 4: sterile gauze (minimum quantity 10).
- Item 5: 1 pair forceps (for splinters).
- Item 6: 1 pair scissors (minimum size 100 mm);
- Item 7: 1 set safety pins.
- Item 8: 4 triangular bandages.
- Item 9: 4 roller bandages (75 mm x 5 m).
- Item 10: 4 roller bandages (100 mm x 5 m).
- Item 11: 1 roll elastic adhesive (25 mm x 3 m).
- Item 12: 1 Non-allergic adhesive strip (25mm x 3m).
- Item 13: 1 packet adhesive dressing strips (minimum quantity, 10, assorted sizes).
- Item 14: 4 First aid dressings (75 mm x 100 mm).
- Item 15: 4 First aid dressings (150 mm x 200 mm).
- 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.
- Item 19: An adequate supply of absorbent material for the absorption of blood and other body fluids spilled
- Item 20: Disinfectant to disinfect the area after cleaning up blood and other body fluids spilled.
- Item 21: 2 Pairs large and 2 pairs medium disposable rubber household gloves.
- Item 22: A suitable sized impervious bag for the safe disposal of blood and other body fluid contaminated biohazard materials.

Under the powers vested in me by 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 incorporate in the General Health and Safety Regulations, 2004, the health and safety standards specified in the Schedule.

MMS MDLADLANA  
Minister of Labour

## SCHEDULE

### 1. Regulation 2

The South African Bureau of Standards Code of Practice SABS 0338-1999 entitled:

"Homologation of Respiratory equipments"

### 2. Regulation 9

The South African Bureau of Standards Code of Practice SABS 0177: Part II-1981 entitled:

"Fire Resistance Test for Building Elements"

### 3. Regulation 13

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".

#### **4 . Regulation 13**

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 111: "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".

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