

# CITY OF JOHANNESBURG METROPOLITAN MUNICIPALITY

## EMERGENCY SERVICES BY-LAWS

(Published under Notice 826 In Gauteng Provincial Gazette Extraordinary No 179 dated 21 May 2004, as amended by Notice 1118 dated 31 August 2011 in Provincial Gazette No 194)

**The Municipal Manager of the City of Johannesburg Metropolitan Municipality hereby, in terms of section 13(a) of the Local Government Municipal Systems Act, 2000 (Act No. 32 of 2000), publishes the Emergency Services By-laws for the City of Johannesburg Metropolitan Municipality as approved by its Council, as set out hereunder.**

# CITY OF JOHANNESBURG METROPOLITAN MUNICIPALITY

## EMERGENCY SERVICES BY-LAWS

### TABLE OF CONTENTS

#### CHAPTER 1

#### APPLICATION AND INTERPRETATION OF BY-LAWS

1. Application of by-laws
2. Definitions and Interpretation

#### CHAPTER 2

#### FIRE PREVENTION AND FIRE PROTECTION

##### *Part 1 : Fire Prevention*

3. Certain fires prohibited
4. Storage and accumulation of combustible material prohibited
5. Electrical fittings, equipment and appliances
6. Flame-emitting devices
7. Safety fire-breaks required

##### *Part 2: Fire Protection*

8. Design and construction of buildings
9. Design and construction of dumping sites
10. Design and construction of other structures and sites
11. Requirements for sprinkler systems
12. Requirements for extractor fan systems
13. Requirements for emergency exits
14. Design, identification and access for fire-fighting and rescue purposes
15. Barricading of vacant buildings

### ***Part 3: Fire Fighting Equipment and Emergency Evacuation Plans***

16. Installation and maintenance of fire-fighting equipment
17. Chief Fire Officer may designate premises for emergency evacuation plans
18. Duties of owner or occupier of designated premises

### ***Part 4: Certificates of fitness for certain buildings***

19. Prohibition of public gatherings in certain circumstances
20. Application for certificate of fitness
21. Requirements for certificate of fitness
22. Form and content of certificate of fitness
23. Duties of holder of certificate of fitness
24. Cancellation of certificate of fitness

### ***Part 5: Water supply for fire-fighting purposes***

25. Township development water supply requirements
26. Township development fire-extinguishing stream requirements
27. Township development fire hydrant requirements
28. Fire risk categories
29. Connections to water reticulation system

## **CHAPTER 3**

### **CONTROL OF FIREWORKS**

30. Use of fireworks prohibited in certain circumstances
31. Fireworks displays prohibited unless authorised
32. Application to present fireworks display
33. Authority to present fireworks display
34. Dealing in fireworks

## **CHAPTER 4**

### **CERTIFICATE OF REGISTRATION FOR USE, HANDLING AND STORAGE OF FLAMMABLE SUBSTANCES**

35. Use, handling and storage of flammable substances prohibited in certain circumstances
36. Application for certificate of registration for flammable substances
37. Issue of certificate of registration
38. Availability of certificate of registration at premises
39. Fire-fighting equipment
40. Amendment to certificate of registration
41. Cancellation of certificate of registration
42. Renewal of certificate of registration
43. No authorisation required for certain motor vehicle fuel tanks
44. Record of certificates of registration

## **CHAPTER 5**

### **GENERAL PROVISIONS REGARDING THE USE, HANDLING AND STORAGE OF FLAMMABLE SUBSTANCES**

45. General prohibitions regarding use, handling and storage of flammable substances
46. Use, handling and storage of liquefied petroleum gas
47. Display of symbolic warning signs required
48. Duty to report fires, accidents and dumping

## **CHAPTER 6**

### **STORAGE OF FLAMMABLE SUBSTANCES**

49. Storage of flammable substances prohibited in certain circumstances
50. Symbolic safety signs must be displayed
51. Construction of flammable substance storerooms
52. Requirements for storeroom doors
53. Requirements for storeroom windows
54. Requirements for storeroom catch pits
55. Ventilation of storerooms
56. Electrical equipment in storerooms
57. Foam inlets required for certain storeroom
58. Shelving in storerooms
59. Unauthorised use and entry of storerooms prohibited
60. Mixing and decanting rooms
61. Temporary above ground storage of flammable substances
62. Hand tools must be intrinsically safe
63. Permanent above ground storage tanks for flammable liquids
64. Underground storage tanks for flammable liquids
65. Installing, erecting, removing and demolishing prohibited without prior notice
66. Repair and maintenance of access to storage tanks
67. Termination of storage and use of flammable substances
68. Container handling and storage

## **CHAPTER 7**

### **TRANSPORT, SUPPLY AND DELIVERY OF DANGEROUS GOODS**

69. Transport of dangerous goods prohibited without permit
70. Application for transport permit
71. Requirements of transport permit
72. Cancellation of transport permit
73. Exemption from transport permits
74. Design, construction, maintenance and repair of vehicle
75. Design, construction, maintenance and repair of dangerous goods vehicle containment area
76. General prohibitions regarding transport of dangerous goods
77. Supply of dangerous goods prohibited in certain circumstances
78. Records of transport permits

## **CHAPTER 8**

### **SPRAY PAINTING**

79. Spraying prohibited without spraying permit
80. Application for spraying permit
81. Cancellation of spraying permit
82. Duties of owner, occupier or person in charge of spraying room
83. Design and construction of spraying rooms
84. Water floors for spraying room
85. Electrical equipment in spraying rooms
86. Location of spraying rooms
87. Access to spraying rooms
88. Ventilation of spraying rooms
89. Fire dampers, protectors and alarms in spraying rooms
90. Design and positioning of ventilation outlets for spraying rooms
91. Display of signs on spraying rooms
92. Manifold installations in spraying rooms
93. General prohibitions regarding spraying rooms
94. Fire extinguishing equipment in spraying rooms

## **CHAPTER 9**

### **FIRE BRIGADE SERVICES**

95. Establishment and maintenance of Service
96. Objects of Service
97. Services to other persons
98. Instructions by members of Service
99. Pretending to be member of Service prohibited
100. Certificates to identify members of Service
101. Cost of analysis samples

## **CHAPTER 10**

### **MISCELLANEOUS**

102. Handling of animals during emergencies
103. Exemption from provisions of these by-laws
104. Approval, authorisation or permission under these by-laws
105. Cancellation of approval, authorisation or permission
106. By-laws bind State
107. Offences and penalties
108. Repeal of by-laws
109. Short title

**SCHEDULE 1**

**GUIDELINE FOR EMERGENCY EVACUATION PLANS**

**SCHEDULE 2**

**EXEMPTION FROM CERTIFICATE OF REGISTRATION**

**SCHEDULE 3**

**EXEMPTION FROM TRANSPORT PERMIT**

**SCHEDULE 4**

**SABS CODES OF PRACTICE AND SPECIFICATIONS**

**SCHEDULE 5**

**REPEALED BY-LAWS**

**CHAPTER 1**

**APPLICATION AND INTERPRETATION OF BY-LAWS**

**Application of By-laws**

1. (1) These by-laws apply -
  - (a) within the area of jurisdiction of the Council; and
  - (b) in addition to any applicable national or provincial law.

**Definitions and Interpretation**

2. (1) In these By-laws unless the context otherwise indicates -

“above ground storage tank” means a tank situated above ground for the storage of flammable substances as contemplated in SABS 0131 and SABS 089 Part 1 and SABS 087 Part 3;

“agricultural holding” means a portion of land not less than 0.8 hectares in extent used solely or mainly for the purpose of agriculture, horticulture or for breeding or keeping domesticated animals, poultry or bees;

“approved” means as approved by the Council;

“bund wall” means a containment wall surrounding an above ground storage tank, constructed of an impervious material and designed to contain 110% of the contents of the tank;

“certificate of fitness” means a certificate contemplated in section 20;

“certificate of registration” means a certificate contemplated in section 35;

“Chief Fire Officer” means the Chief Fire Officer appointed by the Council in terms of section 5 of the Fire Brigade Services Act and includes any person appointed as acting Chief Fire Officer;

“Chief Inspector of Explosives” means the Chief Inspector of Explosives appointed in terms of section 2 of the Explosives Act, 1956;

“Civil Aviation Authority” means the South African Civil Aviation Authority established in terms of section 2 of the South African Civil Aviation Authority Act, 1998 (Act No. 4 of 1998);

“class” means a class of petroleum product based on the following classification:

- (a) Class O: liquefied petroleum gasses;
- (b) Class I: liquids subdivided as follows:
  - (i) Class IA: liquids which have a closed-cap flash point below 23°C and a boiling point below 35°C; and
  - (ii) Class IB: liquids which have a closed-cap flash point below 23°C and a boiling point of 38°C or above;
  - (iii) Class IC: liquids which have a closed-cap flash point of 23°C or above but below 38°C;
- (c) Class II: liquids which have a closed-cap flash point of 38°C or above but below 60,5°C;
- (d) Class IIIA: liquids which have a closed-cap flash point of 60.5°C or above but below 93°C; and
- (e) Class IIIB: liquids which have a closed-cap flash point of 93°C or above;

“combustible liquid” means a liquid which has a close-cap flash point of 38°C or above;

“competent person” means a person who is qualified by virtue of his or her experience and training;

“Council” means –

- (a) the Metropolitan Municipality of the City of Johannesburg established by Provincial Notice No. 6766 of 2000 dated 1 October 2000, as amended, exercising its legislative and executive authority through its municipal Council; or
- (b) its successor in title; or
- (c) a structure or person exercising a delegated power or carrying out an instruction, where any power in these By-laws, has been delegated or sub-delegated or an instruction given as contemplated in, section 59 of the Local Government: Municipal Systems Act, 2000 (Act No. 32 of 2000); or
- (d) a service provider fulfilling a responsibility under these By-laws, assigned to it in terms of section 81(2) of the Local Government: Municipal Systems Act, 2000, or any other law, as the case may be;

“dangerous goods” means any flammable gas, flammable liquid or flammable solid as contemplated in SABS 0228;

“dwelling house” means a single dwelling unit situated on its own site, including any motor vehicle garage and other domestic outbuildings on that site;

“dump” means to abandon or discard any hazardous substance by depositing, discharging, spilling or releasing it;

“emergency” means any incident or eventuality which seriously endangers or may endanger any person or property;

“emergency evacuation plan” means an emergency evacuation plan contemplated in section 17;

“emergency route” means that part of any escape route which-

- (a) protects the occupiers of any building from fire; and
- (b) leads to an escape door;

"enclosed place" in respect of domestic animals means any kraal, cage, camp or similar enclosure where domestic animals are kept or exercised ;

“escape door” means any door at the end of an emergency route and includes any door providing entrance to, or exit from, a building;

“escape route” means the entire path of travel, measured from an escape door to the furthest point in any room in a building;

“explosives” means explosives as defined in section 1 of the Explosives Act, 1956;

“Explosives Act” means the Explosives Act, 1956 (Act No. 26 of 1956), and any regulations made under that Act;

“extinguishing stream” means the amount of water that the Service needs in order to extinguish a fire;

“feeder route” means that part of an escape route which allows travel in two different directions to the access doors of at least two emergency routes;

“Fire Brigade Services Act” means the Fire Brigade Services Act, 1987 (Act No. 99 of 1987), and any regulations made under that Act;

“fire damper” means an automatic damper, including its assembly, which complies with the requirements of SABS 193;

“fire-fighting equipment” means any portable or mobile fire extinguisher, hose reel or fire hydrant;

“fire installation” means any water installation which conveys water solely for the purposes of fire-fighting;

"fireworks" means any explosive device or substance which burns or explodes after ignition, including firecrackers, and which is regulated under the Explosives Act;

"fireworks display " means the use of fireworks for purposes of a public display;

“flammable gas” means a gas which at 20°C and a standard pressure of 101,3 kilopascals –

- (a) is ignitable when in a mixture of 13% or less (by volume) with air; or
- (b) has a flammable range with air of at least 12%, regardless of the lower flammable limit;

“flammable liquid” means a liquid or combustible liquid which has a closed-cap flash point of 93°C or below;

“flammable substance” means any flammable liquid, combustible liquid or flammable gas;

“Group I, II, III, V, VI, VIII and IX hazardous substances” means Group I, II, III, V, VI, VIII and IX hazardous substances, as the case may be, as contemplated in the Hazardous Substances Act;

“hazardous substance” means any hazardous substance contemplated in the Hazardous Substances Act;

“Hazardous Substances Act” means the Hazardous Substances Act, 1973 (Act No. 15 of 1973), and any regulations made under that Act;

“liquified petroleum gas” means a mixture of light hydrocarbons (predominantly propane, propene, butane, butene) that is gaseous under conditions of ambient temperature and pressure and that is maintained in a liquid state by an increase of pressure or lowering of temperature;

“member” means a member of the Service and includes the Chief Fire Officer;

“National Building Regulations and Building Standards Act” means the National Building Regulations and Building Standards Act, 1977 (Act No. 103 of 1977), and any regulations made under that Act;

“National Road Traffic Act” means the National Road Traffic Act, 1996 (Act No. 93 of 1996), and any regulations made under that Act;

“Occupational Health and Safety Act” means the Occupational Health and Safety Act, 1993 (Act No 85 of 1993);

“occupier” means any person who occupies or has control over any premises;

“owner” in relation to premises, means the registered owner of the premises and includes -

- (a) any person who receives rental or profit from the premises, whether on own account or as agent;
- (b) a body corporate in respect of any sectional title scheme contemplated under the Sectional Titles Act, 1986 (Act No. 95 of 1986); and
- (c) an executor or curator of any deceased or insolvent estate;

“premises” means any land, building, construction or structure or part thereof and includes any train, boat, aircraft or other vehicle;

“prescribed fee” means a fee determined by the Council by resolution in terms of section 10G(7)(a)(ii) of the Local Government Transition Act, 1993 (Act No. 209 of 1993), or any other applicable legislation;

“public gathering” includes any gathering by members of the public-

- (a) to view any theatrical or operatic performances, orchestral or choral recitals or cinematic-graphic screenings; or
- (b) to attend, practice or participate in any indoor sports activity, dance, physical activity or other recreational activity;

"public place" means any path, street, walk-way, side-walk, park, place of rest or other place to which the public has authorised or unimpeded access;

"pyrotechnist" means any appropriately qualified person responsible for the use of fireworks at a fireworks display;

“registered premises” means any premises in respect of which a certificate of registration has been issued;

“SABS” means the South African Bureau of Standards contemplated in section 2 of the Standards Act, No. 29 of 1993, and SABS followed by any number means a



reference to a SABS code of practice, specification or standard of the corresponding number;

“Service” means the Fire Brigade Service established and maintained by the Council as contemplated in section 95;

“service installation” means any automatic fire-extinguishing installation, fire pump connector, fire pump, emergency power or stand-by generator, fire detection, locating or alarm system, emergency lighting or evacuation communication system, mechanical ventilation system, pressure regulation system, smoke ventilation system, hoist, symbolic safety sign and smoke or fire door assembly;

“spray” means to spray, coat, plate or epoxy-coat with any hazardous substance and “spraying” has a corresponding meaning;

“spraying permit” means a permit contemplated in section 79;

“spraying room” means a room contemplated in section 83;

“storage vessel” means a pressure vessel as defined in the Regulations for Pressure Vessels made under the Occupational Health and Safety Act;

“store room” means a room for storage of flammable substances contemplated in section 49;

“underground tank” means any tank used or intended to be used for the storage of any flammable liquid and which is wholly sunk into and below the surface of the ground;

“use” in relation to fireworks means discharging, lighting or igniting;

“vegetation” includes grass, weeds, leaves, shrubs and trees; and

“vehicle” includes a trailer or semi-trailer which-

- (a) has at least 4 wheels with independent axles and suspension systems; and
- (b) can be hitched to a truck-tractor or any other motor vehicle contemplated in the National Road Traffic Act.

“water installation” means a water installation as defined in the Council’s Water Services By-laws.

- (2) If any provision in these by-laws vests or imposes any power, function or duty of the Council in or on an employee of the Council and such power, function or duty has in terms of section 81(2) of the Local Government: Municipal Systems Act, 2000 or any other law been assigned to a service provider, the reference in such provision to such employee must be read as a reference to the service provider or, where applicable, an employee of the service provider authorised by it.

## **CHAPTER 2**

### **FIRE PREVENTION AND FIRE PROTECTION**

#### ***Part 1: Fire Prevention***

##### **Certain fires prohibited**

- 3. (1) No person may make or allow any other person to make a fire that may endanger any person, animal or property.

- (2) No person may burn or allow any other person to burn any refuse or combustible material–
  - (a) without the prior written permission of the Chief Fire Officer; or
  - (b) unless the refuse or combustible material is burnt in an approved incinerating device.
- (3) Any person who makes a fire or allows any other person to make a fire, must take reasonable steps to ensure that the fire does not endanger any person, animal or property.
- (4) The prohibition in subsection (2) does not apply to any fire made–
  - (a) in an approved and purpose-made stove, fireplace or hearth that forms an integrated part of a building or structure;
  - (b) for the purpose of preparing food on private premises set aside for that purpose; or
  - (c) in any device for preparing food which –
    - (i) is heated by electricity or liquified petroleum gas; and
    - (ii) is so positioned that the fire does not endanger any person, animal or property.

**Storage and accumulation of combustible material prohibited**

- 4. (1) No person may store any combustible material or allow it to be stored, at any place or in any manner that may pose a fire hazard to any person, animal or property.
- (2) No person may allow the accumulation of dust at any place in quantities sufficient to pose a fire hazard to any person, animal or property.
- (3) No person may use or allow to be used any sawdust or similar combustible material to soak up any flammable liquid.
- (4) No person may allow soot or any other combustible material to accumulate in any chimney, flue or duct in such quantities or in any manner that may pose a fire hazard to any person or property.
- (5) No person may allow any vegetation to become overgrown at any place under that person's control that may pose a fire hazard to any person, animal or property.
- (6) If a fire hazard contemplated in subsection (5) arises, the owner or occupier of the property concerned must without delay eliminate the hazard or cause the hazard to be eliminated by -
  - (a) cutting any grass, leaves or weeds associated with the fire hazard to a maximum height of 150 millimetres;
  - (b) pruning, chopping down or sawing any shrub or tree; and
  - (c) removing any resulting combustible residue from the property.

**Electrical fittings, equipment and appliances**

- 5. No person may cause or allow –
  - (a) any electrical supply outlet to be overloaded; or
  - (b) any electrical appliance or extension lead to be used in any manner that may pose a fire hazard to any person or property.

### **Flame-emitting devices**

6. No person may use or cause or allow the use of any flame-emitting device, including but not limited to any candle, lantern or torch, in any manner that may pose a fire hazard to any person or property.

### **Safety fire-breaks required**

7. (1) Every owner or occupier of an agricultural holding or farm must clear and maintain a safety fire-break along every boundary of the agricultural holding or farm that–
  - (a) is at least 5 metres wide (when measured parallel from the boundary concerned); and
  - (b) contains no vegetation or combustible residue.
- (2) If an obstruction occurs within the boundaries of a safety fire-break, the owner or occupier concerned must clear and maintain a 5 metre-wide safety fire-break around that obstruction.
- (3) No person may clear or maintain a safety fire-break by burning without the prior written permission of the Chief Fire Officer.
- (4) Any person who intends to clear or maintain a safety fire-break by burning must–
  - (a) apply in writing to the Chief Fire Officer for permission, stipulating the property concerned and the proposed date and time of the burning; and
  - (b) unless the burning is to be performed by a person or body accredited for this purpose by the Council, request the Service to provide assistance at the burning against payment of the prescribed fee.

## ***Part 2: Fire Protection***

### **Design and construction of buildings**

8. (1) Subject to the provisions of subsection (3), every owner of a building, excluding a dwelling house, must ensure that it is designed and constructed in a manner that -
  - (a) provides for –
    - (i) the effective drainage of any water that may result from fire-extinguishing activities; and
    - (ii) the discharge of that water directly into a storm water drain;
  - (b) prevents any water that may result from fire-extinguishing activities from draining–
    - (i) down any stairway or lift shaft;
    - (ii) down any electrical shaft or telecommunications service shaft;
    - (iii) down any shaft that is connected to a basement level; or
    - (iv) along any approach to a building or any vehicle access ramp leading to or from a building;
  - (c) if any water resulting from fire-extinguishing activities should spill into a basement, that water is discharged directly into a storm water drain; and
  - (d) complies with the requirements of SABS 0400 (Parts A, K, M, O, T, V and W) insofar as it relates to fire protection.
- (2) Subject to the provisions of subsection (3), every owner of a building equipped with a transformer room must ensure that–

- (a) the transformer room is situated on the ground level;
  - (b) access to the transformer room is from outside the building; and
  - (c) there is adequate and ready access to the transformer room for fire-fighting and maintenance activities.
- (3) Subsections (1) and (2) do not apply in respect of any building which exists at the commencement of these By-laws.

**Design and construction of dumping sites**

9. (1) Every person who designs or constructs any dumping site, must ensure that it is designed and constructed in accordance with the instructions of–
- (a) the Department of Water Affairs and Forestry; and
  - (b) the Council.

**Design and construction of other structures and sites**

10. (1) Every person who designs, constructs or erects any of the following structures, must ensure that they comply with a rational design as contemplated by the National Building Regulations and Building Standards Act -
- (a) any grain silo;
  - (b) any atrium;
  - (c) any air traffic control tower;
  - (d) any tower for telecommunications or other uses;
  - (e) any thatched structure which is larger than 20 square metres and situated within 4.5 metres of any boundary line of the property concerned;
  - (f) any tent or other temporary structure for holding a public gathering; and
  - (g) any open-plan commercial or industrial premises with a covering distance that exceeds 45 metres measured from any point in the premises to any escape or exit door.
- (2) Every person who designs or constructs any aircraft hanger or helicopter pad, must ensure that it–
- (a) complies with a rational design as contemplated by the National Building Regulations and Building Standards Act;
  - (b) provides for the effective drainage of any liquid from the floor of the hanger or helicopter pad or any approach to the aircraft hanger or helicopter pad;
  - (c) provides for the effective channelling of any liquid from the floor of the hanger or helicopter pad to a drainage area connected to a separator well;
  - (d) prevents the spread of any liquid from the floor of the hanger or helicopter pad; and
  - (e) is equipped with effective earthing devices for the discharge of static electricity.

**Requirements for sprinkler systems**

11. (1) If a sprinkler system is required in any building in accordance with SABS 0400, SABS 087 (Part III) or SABS 089 (Part I) or if the Council so requires, the owner of the building must ensure that the building is equipped with a sprinkler system.
- (2) Every person who designs, constructs or installs a sprinkler system must ensure that it is designed, constructed and installed -
- (a) in accordance with SABS 0287; and
  - (b) in compliance with the requirements of SABS 0400 (Parts A, K, M, O, T, V and W) insofar as it relates to fire protection.

### **Requirements for extractor fan systems**

- 12.(1) Every person who designs, constructs or installs an extractor fan system, any related ducts or any similar chimney system and every owner of a building in which such a system is installed must ensure that—
- (a) it is designed, constructed and installed in a manner that provides for clearly demarcated, adequate and easy access for inspection, maintenance and repairs; and
  - (b) the conduit and outlet of any such system is installed in a manner that does not result in a fire hazard to any person or property.
- (2) Every owner of a building in which an extractor fan system, any related ducts or any similar chimney system has been installed, must ensure that every filter, damper, screen or conduit forming an integral part of the system is regularly inspected, cleaned and maintained to ensure that fatty residues or any other combustible residues do not accumulate.

### **Requirements for emergency exits**

13. (1) Every owner of a building must ensure that any escape door in that building—
- (a) is fitted with hinges that open in the direction of escape; and
  - (b) is equipped with a fail-safe locking device or devices that do not require a key in order to exit.
- (2) Every owner of a building must ensure that any door in a feeder route—
- (a) is a double swing-type door;
  - (b) is not equipped with any locking mechanism.
- (3) Notwithstanding the provisions of subsection (2), if it is necessary that a door, in a feeder route be locked for security reasons, the owner of the building must provide an alternative means of escape approved by the Chief Fire Officer.
- (4) No person may obstruct or allow the obstruction of any escape route from any premises that may prevent or hinder the escape of any person or animal from the premises in an emergency.

### **Design, identification and access for fire-fighting and rescue purposes**

14. (1) Subject to the requirements of any town planning scheme or the conditions of establishment of any township, every person who plans, designs or constructs a building, excluding a dwelling house, must ensure that the premises on which the building is situated, are planned, designed and constructed so that—
- (a) at least one elevation of the building fronts onto a street;
  - (b) if the premises do not front onto a street, an access road is provided with dimensions and carrying capacity approved in writing by the Chief Fire Officer;
  - (c) there is a climate-proof and weather-proof parking surface for parking and operating fire brigade machines and equipment in an emergency -
    - (i) of dimensions at least 10 metres wide;
    - (ii) that runs the full length of the side elevation of the building that borders the surface; and
    - (iii) with a carrying capacity of at least 70 metric tons; and

- (d) any entrance arch to the premises provides an opening with dimensions at least 4 metres wide x 4.2 metres high, unless there is an alternative and easy access route to the premises of at least the same dimensions.
- (2) For purposes of easy identification by any member of the Service in an emergency, every owner or occupier of premises must ensure that the correct street number of the premises—
- (a) is displayed clearly on the street boundary of the premises in numbers at least 75 millimetres high; and
  - (b) is visible from the street; and
  - (c) is maintained in a legible condition at all times.

**Barricading of vacant buildings**

15. Every owner or person in charge of a building or portion of a building that is vacant must, at his or her own cost and to the satisfaction of the Chief Fire Officer –
- (a) remove all combustible waste and refuse from the building; and
  - (b) block, barricade or otherwise secure all windows, doors and other openings in the building in a manner that will prevent the creation of any fire hazard caused by entering of the building by any unauthorised person.

***Part 3: Fire Fighting Equipment and Emergency Evacuation Plans***

**Installation and maintenance of fire-fighting equipment**

16. (1) Every owner of a building must ensure that—
- (a) all fire-fighting equipment and service installations on the premises are installed in a manner and condition ready for use in an emergency;
  - (b) all portable and mobile fire-extinguishers and all hose reels on the premises are serviced and maintained in accordance with SABS 0105 and SABS 1475;
  - (c) all fire-fighting equipment and service installations on the premises are -
    - (i) maintained in a good working condition by a competent person;
    - (ii) inspected and serviced in accordance with manufacturer specifications; and
    - (iii) are inspected by an appropriately registered and competent person at least once every 12 months; and
  - (d) a comprehensive service record of all fire-fighting equipment and service installations on the premises is maintained and furnished to the Chief Fire Officer every 12 months.
- (2) Every person who inspects, services or repairs any fire-fighting equipment or service installation must—
- (a) on completing the inspection, service or repairs, as the case may be –
    - (i) certify in writing that the equipment or installation concerned is fully functional; and
    - (ii) furnish that certificate to the owner of the premises; or
  - (b) if the equipment or installation cannot readily be repaired to a functional state, notify the Chief Fire Officer of this fact in writing without delay.
- (3) Except for purposes of inspection, service, repair or fire-fighting, no person may remove or interfere with any fire-fighting equipment or service installation at any premises.

- (4) No person may alter, damage, misuse or render ineffective any fire-fighting equipment or service installation at any premises.

#### **Chief Fire Officer may designate premises for emergency evacuation plans**

17. (1) The Chief Fire Officer may by written notice designate any premises as a premises requiring an emergency evacuation plan.
- (2) The notice contemplated in subsection (1), must be served on the premises concerned and addressed to the owner or occupier.

#### **Duties of owner or occupier of designated premises**

18. (1) The owner, or with the approval of the Chief Fire Officer, the occupier, of any premises designated in terms of section 17 must -
- (a) prepare a comprehensive emergency evacuation plan for the premises in accordance with the guideline contained in Schedule 1 and submit it to the Chief Fire Officer in triplicate within 30 days of service of the designation notice;
  - (b) establish a fire protection committee comprised of occupiers of the premises to assist the owner or occupier to organise a fire protection programme and regular and scheduled fire evacuation drills;
  - (c) ensure that the emergency evacuation plan is reviewed-
    - (i) at least every 12 months;
    - (ii) whenever the floor layout of the premises is changed; and
    - (iii) whenever the Chief Fire Officer requires revision of the plan;
  - (d) ensure that an up-to-date emergency evacuation plan, any fire protection programmes, evacuation drills and any related documents are kept, maintained and all times available in a control room on the premises for inspection by any member of the Service; and
  - (e) identify a place of safety off the designated premises, but in the immediate vicinity of the premises, where persons who reside or work on the premises may gather during an emergency for the purpose of compiling a list of survivors.
- (2) The Chief Fire Officer may in respect of premises designated in terms of section 17 -
- (a) require the review of any emergency evacuation plan by the owner or occupier and may provide directions in this regard;
  - (b) instruct the owner or occupier to implement a fire protection program that the Chief Fire Officer believes is necessary to ensure the safety of persons and property on the premises; and
  - (c) require the owner or occupier to provide the Chief Fire Officer with a certified copy of the emergency evacuation plan and any associated documents at a specified time and place.

#### **Prohibition of public gatherings in certain circumstances**

19. (1) No person may hold a public gathering or allow a public gathering to be held in any building or temporary structure unless a certificate of fitness has been issued by the Chief Fire Officer in respect of that building or temporary structure, unless a certificate of fitness previously issued in terms of this subsection, has not yet expired.
- (2) Subsection (1) does not apply in respect of a building or temporary structure which existed at the commencement of these By-laws, unless after that date –

- (a) the building or temporary structure is rebuilt, altered, extended or its floor layout is changed; or
- (b) ownership or control of the building or structure changes.

#### **Application for certificate of fitness**

20. (1) Every owner of a building or temporary structure intended for the holding of a public gathering must -
- (a) complete and submit to the Chief Fire Officer an application form for a certificate of fitness in the form and manner determined by the Council; and
  - (b) pay the prescribed fee.
- (2) An application contemplated in subsection (1) must be submitted at least 30 days before any intended public gathering.

#### **Requirements for certificate of fitness**

21. The Chief Fire Officer may not issue a certificate of fitness in respect of a building or temporary structure -
- (a) unless the Council is in possession of an up-to-date set of building plans for the premises;
  - (b) unless the building or temporary structure complies with the requirements of these By-laws; and
  - (c) for a period of validity exceeding 12 months.

#### **Form and content of certificate of fitness**

22. A certificate of fitness must be in the form determined by the Council and must at least record the following information, where applicable:
- (a) The trade name and street address of each occupier of the building or temporary structure;
  - (b) a description of the type of activity carried on by each occupier of the building or structure;
  - (c) the full names and addresses of the persons who serve on the governing or similar body of each occupier;
  - (d) the maximum permissible number of people who may be admitted to the useable floor area of the building or structure;
  - (e) the number of emergency exits and their dimensions; and
  - (f) the dates of issue and expiry of the certificate and its serial number.

#### **Duties of holder of certificate of fitness**

23. The holder of a certificate of fitness must -
- (a) comply with the provisions of the certificate of fitness;
  - (b) at all times –
    - (i) display the certificate prominently on the premises; and
    - (ii) maintain the certificate in a legible condition;
  - (c) immediately notify the Chief Fire Officer in writing of any change to the trade name, activity or governing or similar body of any occupier of the building or structure; and
  - (d) submit any application for renewal of the certificate of fitness at least 30 days before its expiry in the form and manner determined by the Council together with the prescribed fee.



### **Cancellation of certificate of fitness**

24. (1) The Chief Fire Officer may cancel any certificate of fitness in respect of a building or temporary structure if he or she has reason to believe that -
- (a) the owner or occupier concerned contravenes or fails to comply with any provision of these By-laws; or
  - (b) the building or structure contravenes or does not comply with the requirements of these By-laws.
- (2) Subject to subsection (3), before the Chief Fire Officer cancels a certificate of fitness as contemplated in subsection (1), he or she must -
- (a) give the owner or occupier concerned written notice of the intention to cancel the certificate of fitness and the reasons for such cancellation;
  - (b) give the owner or occupier concerned a period of at least 20 days to make written representations regarding the matter; and
  - (c) consider any representations received.
- (3) If the Chief Fire Officer has reason to believe that the failure to cancel a certificate of fitness within the period contemplated in subsection (2)(b), may endanger any person or property, he or she may cancel a certificate of fitness without prior notice to the owner or occupier concerned.
- (4) If the Chief Fire Officer cancels a certificate of fitness in terms of subsection (3), he or she must -
- (a) furnish the owner or occupier of the building or temporary structure concerned with written notice of the cancellation;
  - (b) provide the owner or occupier a period of at least 20 days to make written representations regarding the cancellation; and
  - (c) consider any representations received.
- (5) The Chief Fire Officer may, after considering the representations contemplated in subsection (4), reverse the decision to cancel the certificate of fitness.

### ***Part 5: Water supply for fire-fighting purposes***

#### **Township development water supply requirements**

25. (1) Every person who develops or redevelops a township must design and develop that township with a sufficient water supply for purposes of fire-fighting by members of the Service.
- (2) Every person who develops or redevelops a township must ensure that -
- (a) the storage capacity and rate of replenishment of the reservoirs supplying water to the township are sufficient for the fire-fighting purposes contemplated in these By-laws;
  - (b) the water supply from these reservoirs is reticulated in a manner that ensures that the water supply to any area in the township can be provided from at least two directions; and
  - (c) double supply mains are installed from the water supply source to the distribution reservoirs and double pumps are installed for the delivery of the water supply.
- (3) Subsection (2)(c) is deemed to be satisfied, if -
- (a) the water is supplied to the township from more than one reservoir;

- (b) each reservoir receives water from a separate supply main and pump; and
  - (c) the reservoirs are connected to each other.
- (4) Every person who develops or redevelops a township must ensure that -
- (a) the water distribution system is designed and equipped with control valves positioned so that it is not necessary to close off any branch or any portion of the distribution system for more than 150 metres in any high risk area or for more than 300 metres in any moderate or low risk area in the event that the system, excluding any of the branches, is damaged or requires repair; and
  - (b) if the redevelopment of any township alters the fire risk category of any area in the township as contemplated in section 28, the water reticulation system is adapted without delay so as to comply with the requirements of sections 26 and 27.

**Township development fire-extinguishing stream requirements**

26. Every person who develops or redevelops a township must ensure that the water supply provides a fire-extinguishing stream that is immediately available to members of the Service in an emergency, of the following volume and duration:

<b>Fire risk category</b>	<b>Minimum volume of extinguishing stream (litres per minute)</b>	<b>Minimum duration of extinguishing stream (hours)</b>
High risk	11 500	6
Moderate risk	5 750	4
Low risk	2 300	2

**Township development fire hydrant requirements**

27. (1) Every person who develops or redevelops a township must ensure that fire hydrants are plotted on a plan and installed in accordance with the following minimum delivery volumes and distance frequencies:

<b>Fire risk category</b>	<b>Minimum fire hydrant delivery volume measured at peak consumption (litres per minute)</b>	<b>Minimum distance between fire hydrants (metres)</b>
High risk	1980	120
Moderate risk	1 150	180
Low risk	900	240

- (2) Every person who develops or redevelops a township must ensure that the position of fire hydrants are plotted accurately on a plan that is furnished to the Chief Fire Officer for operational fire-fighting purposes.

**Fire risk categories**

28. (1) For purposes of sections 26 and 27, the following areas of a township must be regarded –
- (a) as high risk –
    - (i) any factory area, high density shopping area, warehouse or commercial building;
    - (ii) any plantation, timber yard or wooden building;
    - (iii) any building higher than 3 storeys;
    - (iv) any building in which hazardous substances are used, handled or stored or in which hazardous processes are conducted; and

- (v) any other area that has a high fire risk or high fire spread risk;
- (b) as moderate risk -
  - (i) any area in which –
    - (aa) factories, commercial buildings or residential buildings are generally detached from each other and do not exceed 3 storeys; and
    - (bb) the Chief Fire Officer has not declared the materials processed or stored in these buildings as highly dangerous;
  - (ii) any area where the fire risk and spread risk of fire is moderate; and
  - (iii) any other area that is not a high or low risk area; and
- (c) as low risk –
  - (i) any area that is mainly residential or semi-rural;
  - (ii) any area that has predominantly detached, duet, cluster or town house developments; and
  - (iii) any area where the fire risk or risk of spread of fire is slight or insignificant.

### **Connections to water reticulation system**

29. (1) No person may obtain a water connection to the water reticulation system of the Council unless the fire protection plans for the premises to be connected have been approved by the Chief Fire Officer.
- (2) Every person or owner of premises who requires a water connection to the water reticulation system of the Council must -
- (a) if the premises to be connected are protected by a sprinkler installation, ensure that –
    - (i) the connection is calculated and designed for each sprinkler installation in accordance with a rational design as contemplated in the National Building Regulations and Building Standards Act, and
    - (ii) the size, delivery pressure and flow of the water connection is calculated in advance by the responsible engineer;
  - (b) if the Chief Fire Officer requires a larger water connection for purposes of fire-fighting, provide the larger water connection;
  - (c) ensure that the size, work pressure and delivery flow, except in the case of a water connection to a sprinkler installation, is calculated and designed in accordance with SABS 0400 (Part W); and
  - (d) ensure that the water installation upon completion complies with the provisions of SABS-1:1994.

## **CHAPTER 3**

### **CONTROL OF FIREWORKS**

#### **Use of fireworks prohibited in certain circumstances**

30. (1) Unless so authorised in terms of section 33, no person may use fireworks –
- (a) within 500 metres of any explosives factory, explosives storage place, petrol depot or petrol station;
  - (b) inside any building;

- (c) on any agricultural holding;
  - (d) at any public place; or
  - (e) at any school, old age home or hospital.
- (2) No person may light or ignite fireworks in any place where animals are present.
- (3) Unless so authorised in terms of section 33, no person may light or ignite fireworks on any day or at any time except -
- (a) New Years Eve from 23h00 to 01h00;
  - (b) New Years Day from 19h00 to 22h00;
  - (c) Hindu New Year from 19h00 to 22h00;
  - (d) Lag b'omer from 19h00 to 22h00;
  - (e) Chinese New Year from 19h00 to 22h00;
  - (f) Human Rights Day from 19h00 to 22h00;
  - (g) Freedom Day from 19h00 to 22h00;
  - (h) Guy Fawkes Day from 19h00 to 22h00;
  - (i) Divali from 19h00 to 22h00;
  - (j) Christmas Eve from 19h00 to 22h00; and
  - (k) Day of Goodwill from 19h00 to 22h00.
- (4) No person may allow any minor under his or her control to use, light or ignite fireworks in contravention of subsection (1), (2) or (3).

#### **Fireworks displays prohibited unless authorised**

31. No person may present a fireworks display unless -
- (a) authorised to do so by the Council as contemplated in section 33;
  - (b) authorised to do so by the Civil Aviation Authority and the Chief Inspector of Explosives;
  - (c) the display is at all times under that person's supervision and control;
  - (d) the Service and a suitably qualified explosives expert from the South African Police Services are at all times in attendance at the display;
  - (e) that person has ensured that -
    - (i) an area with a radius of at least 50 metres is clearly demarcated for the launching of fireworks at the display; and
    - (ii) measures are in place to prevent any person who is not involved in the presentation of the display from entering this launching area; and
  - (f) a pyrotechnist is at all times present and responsible for the use of fireworks at the display.

#### **Application to present fireworks display**

32. (1) Any person who wishes to present a fireworks display must apply to the Chief Fire Officer for authorisation by completing and submitting an application in the form and manner determined by the Council together with the prescribed fee and the following documentation:
- (a) Proof of permission for the fireworks display from the Civil Aviation Authority;
  - (b) proof that an application for the fireworks display has been submitted to the Chief Inspector of Explosives;
  - (c) a letter of consent from the owner or person responsible for the property on which the fireworks display is proposed to be presented; and
  - (d) a sketch plan of the proposed venue for the fireworks display, including the demarcated area for the launching of the fireworks.

- (2) The application, prescribed fee and accompanying documentation must be submitted to the Chief Fire Officer at least 14 days before the date of the proposed fireworks display.

#### **Authority to present fireworks display**

33. (1) If the Council decides to approve an application to present a fireworks display, it must provide the applicant with written confirmation of its decision and any conditions that it may impose to safeguard persons and property.
- (2) The Council may require that the fireworks display be presented only on suitable premises designated by the Council and under the supervision and control of an official designated by the Council.

#### **Dealing in fireworks**

34. (1) No person may deal in fireworks unless -
  - (a) that person holds the required fireworks licence in terms of the Explosives Act; and
  - (b) has the written authority of the Chief Fire Officer.
- (2) Any person who wishes to obtain the written authority of the Chief Fire Officer to deal in fireworks as contemplated in subsection (1)(b), must -
  - (a) complete an application in the form and manner determined by the Council; and
  - (b) submit it to the Chief Fire Officer together with the prescribed fee at least 30 days before the authority is required by the applicant.
- (3) The Chief Fire Officer may cancel any written authority to deal in fireworks if the holder of the authority contravenes or fails to comply with any provision of these By-laws or any other applicable law.

### **CHAPTER 4**

#### **CERTIFICATE OF REGISTRATION FOR USE, HANDLING AND STORAGE OF FLAMMABLE SUBSTANCES**

##### **Use, handling and storage of flammable substances prohibited in certain circumstances**

35. (1) Subject to the provisions of subsection (3), no person may use, handle or store any flammable substance or allow such substance to be used, handled or stored on any premises unless that person is the holder of a certificate of registration issued by the Chief Fire Officer in respect of the flammable substance and the premises concerned.
- (2) A certificate of registration contemplated in subsection (1) is not required if the flammable substance concerned is of any class and does not exceed the quantity stipulated in Schedule 2.
- (3) No person may use, handle or store any flammable substance in respect of which no certificate of registration is required or allow such substance to be used, handled or stored on any premises, unless the flammable substance -
  - (a) is used, handled or stored in a manner that ensures that –
    - (i) no flammable substance nor any flammable substance fumes come into contact with any source of ignition that may cause the flammable substance or fumes to ignite;

- (ii) in the event of a fire or other emergency, the escape of any person or animal is not hindered or obstructed in any way; or
- (b) is used, handled or stored -
  - (i) in a naturally ventilated room that prevents the accumulation of fumes or gas;
  - (ii) in a suitable place outdoors that ensures the safe disposal of fumes or gas; or
- (c) the flammable substance is stored in strong, gas-tight and labelled containers.

**Application for certificate of registration for flammable substances**

36. An application for a certificate of registration contemplated in section 35(1) must be completed and submitted in the form and manner determined by the Council, together with the prescribed fee.

**Issue of certificate of registration**

37. (1) If the Chief Fire Officer issues a certificate of registration to any person, that Officer must endorse on the certificate -
- (a) the class and quantity of the flammable substance for which the premises have been registered;
  - (b) the number of storage tanks or storage facilities on the premises and their capacities;
  - (c) the number of flammable substance storerooms on the premises and their capacities;
  - (d) the number of liquified petroleum gas installations, types of installations and the combined capacity of all cylinders that may be stored on the premises;
  - (e) the number of storage facilities for any other flammable substance and the volume of each such facility;
  - (f) the period of validity and expiry date of the certificate; and
  - (g) the physical address of the premises and the name and postal address of the occupant.
- (2) A certificate of registration -
- (a) is not transferable between premises;
  - (b) may not be issued by the Chief Fire Officer for a period exceeding 12 months;
  - (c) may be transferred to the new owner of the premises in respect of which it was issued, only if an application for such transfer is approved by the Chief Fire Officer in writing.
- (3) A certificate of registration is valid only for -
- (a) the installation for which it was issued;
  - (b) the state of the premises at the time of issue; and
  - (c) for the quantities of flammable substance stated on the certificate.

**Availability of certificate of registration at premises**

38. The holder of a certificate of registration must ensure that the certificate is available on the premises concerned at all times for inspection by any member of the Service.

## Fire-fighting equipment

39. (1) Any person who holds a certificate of registration or other authorisation contemplated in these By-laws must ensure that the premises to which the authorisation applies, are equipped with –
- (a) subject to the provisions of subsection (6), portable fire extinguishers –
    - (i) as specified in SABS 1567 (carbon dioxide-type), SABS 810 (dry chemical-type), SABS 1573 (foam-type) and SABS 1571 (transportable-type);
    - (ii) in such numbers as is appropriate in each section of the premises in accordance with the SABS codes applicable to the flammable substance and risk concerned;
  - (b) if applicable, hose reels as specified in SABS 453 (hose reels), that are connected to a water supply –
    - (i) as contemplated in SABS 0400 (Part W); and
    - (ii) that enables each hose reel to maintain a minimum flow of 0,5 litres per second at a minimum work pressure of 300 kPa;
  - (c) if applicable, fire hydrants –
    - (i) with couplings as specified in SABS 1128 (Part II) (fire-fighting equipment- couplings); and
    - (ii) in a ratio of at 1 to every 1000 square metres or part thereof. and
  - (d) if applicable, in relation to any above-ground facility, a sprinkler system or delute system that –
    - (i) is approved by the Chief Fire Officer; and
    - (ii) with the exception of temporary storage facilities, is installed in a position indicated in the building plans for the premises.
- (2) Notwithstanding the provisions of subsection (1), if the Chief Fire Officer believes that there is any exceptional hazard or risk in respect of the premises concerned, he or she may -
- (a) specify the type of fire extinguisher to be installed;
  - (b) require that a greater number of fire extinguishers be installed; and
  - (c) require that a fire detection or warning system be installed.
- (3) The holder of any certificate of registration or other authorisation contemplated in these By-laws must ensure that all fire-fighting equipment contemplated in subsection (1) -
- (a) is inspected, maintained and serviced to the satisfaction of the Chief Fire Officer –
    - (i) by a competent, registered and appropriately qualified tradesman in accordance with the provisions of SABS 1015 and SABS 1475;
    - (ii) at least every 12 months;
  - (b) if installed outside the premises, is adequately protected from the weather; and
  - (c) is positioned prominently or where this is not possible, the position of the fire-fighting equipment is clearly indicated by a symbolic safety sign –
    - (i) in accordance with the specifications of SABS 1186; and
    - (ii) to the satisfaction of the Chief Fire Officer.

#### **Amendment to certificate of registration**

40. The Chief Fire Officer may amend any certificate of registration on application by the holder.

#### **Cancellation of certificate of registration**

41. The provisions of section 24, read with the necessary changes, apply to any cancellation by the Chief Fire Officer of a certificate of registration.

#### **Renewal of certificate of registration**

42. Any application for the renewal of a certificate of registration must be submitted to the Chief Fire Officer at least 30 days prior to the expiry date of the certificate.

#### **No authorisation required for certain motor vehicle fuel tanks**

43. No certificate of registration contemplated in section 35 or any other authorisation contemplated in these by-laws is required in respect of flammable liquids in a fuel tank -
- (a) of any motor vehicle; and
  - (b) of any stationery engine if the volume of the fuel tank does not exceed 1 000 litres.

#### **Record of certificates of registration**

44. The Chief Fire Officer must keep updated records of all premises in respect of which a certificate of registration has been issued, amended or renewed,

### **CHAPTER 5**

#### **GENERAL PROVISIONS REGARDING THE USE, HANDLING AND STORAGE OF FLAMMABLE SUBSTANCES**

##### **General prohibitions regarding use, handling and storage of flammable substances**

45. (1) No person who uses, handles or stores a flammable substance or allows them to be used, handled or stored on any premises may -
- (a) do anything or allow anything to be done that may result in or cause a fire or explosion;
  - (b) do anything or allow anything to be done that may obstruct the escape to safety of any person or animal during an emergency.
- (2) No person may -
- (a) dump or spill or allow the dumping or spilling of any flammable substance into any borehole, sewer, drain system or surface water;
  - (b) discard or allow the discarding of any flammable substance from any premises in any way other than by a competent person who is properly equipped and authorised to do in terms of these By-laws;
  - (c) make or bring any fire or device capable of producing an open flame or allow any other person to do so, within 5 metres of any place where a flammable substance is stored;
  - (d) use or allow to be used any device in connection with a flammable substance in any basement level of a building, other than a gas welding or cutting device, used for the sole purpose of maintenance of the building;
  - (e) while any person, except the driver or any other person responsible for a bus contemplated in the National Road Traffic Act, is in or on the bus -



- (i) fill or allow the filling of its fuel tank; or
  - (ii) transport or allow the transport of any flammable substance on the bus, except in its fuel tank; and
- (f) deliver or supply or allow to be delivered or supplied, any flammable substance to any premises unless the owner or person in charge of the premises is in possession of a valid certificate of registration.

#### **Use, handling and storage of liquefied petroleum gas**

46.(1) No person may use, handle or store liquefied petroleum gas in any quantity exceeding that stipulated in Schedule 2 unless –

- (a) the person is in possession of a certificate of registration contemplated in section 35; and
  - (b) the use, handling and storage of the liquefied petroleum gas complies with the requirements of SABS 087, Parts 1, 3, 7 and 10.
- (2) Liquid petroleum gas may only be used, handled or stored within property boundaries and in compliance with safety distances stipulated in SABS 087, Parts 1, 3, 7 and 10.
- (3) Any storage of liquid petroleum gas cylinders at any service station for retail purposes must comply with SABS 087, Part 7.
- (4) No liquid petroleum gas cylinder may be used, handled or stored at any public exhibition or demonstration without the prior written permission of the Chief Fire Officer.
- (5) An application for permission contemplated in subsection (4) must be made in writing at least 14 days before the event concerned .
- (6) The Chief Fire Officer may impose any reasonable condition on the use, handling and storage of liquid petroleum gas cylinders at a public exhibition or demonstration, including but not limited to, the number of cylinders, the manner of storage, safety distances and other safety requirements.
- (7) Any person using, handling or storing any liquid petroleum gas cylinder at any public exhibition or demonstration must comply with any condition imposed in terms of subsection (6).

#### **Display of symbolic warning signs required**

47. (1) The owner of any premises where any flammable or explosive substance is used, handled or stored must, in the affected area of the premises, display symbolic signs –
- (a) prohibiting smoking and open flames;
  - (b) of a size and number determined by the Chief Fire Officer; and
  - (c) prominently in places where the signs can be clearly observed.
- (2) No person may disregard or allow to be disregarded any prohibition on a symbolic sign displayed in terms of subsection (1).

#### **Duty to report fires, accidents and dumping**

48. If any fire, accident or dumping involving a flammable substance has caused damage to any person, animal, property or the environment on any premises, the owner or occupier of the premises must immediately report it to the Chief Fire Officer.

## CHAPTER 6

### STORAGE OF FLAMMABLE SUBSTANCES

#### Storage of flammable substances prohibited in certain circumstances

49. No person may store or allow the storage of any flammable substance in any storeroom unless –
- (a) that person has a certificate of registration contemplated in section 35; and
  - (b) the storeroom complies with the requirements of these By-laws and any other applicable law.

#### Symbolic safety signs must be displayed

50. The holder of a certificate of registration for a storeroom to be used for any flammable substance must ensure that-
- (a) symbolic safety signs prohibiting open flames and smoking are displayed in the storeroom –
    - (i) of a number determined by the Chief Fire Officer;
    - (ii) of dimensions at least 290 millimetres by 200 millimetres; and
    - (iii) manufactured in accordance with SABS 1186;
  - (b) the groups of flammable substances and their corresponding quantities which may be stored in the storeroom are indicated on the outside of every door to the storeroom in red letters at least 75 millimetres high, against a white background.

#### Construction of flammable substance storerooms

51. Every storeroom must be designed and constructed according to the following criteria:
- (a) The storeroom floor must consist of concrete;
  - (b) the storeroom walls must consist of material that has a fire resistance of at least 120 minutes;
  - (c) the storeroom roof must consist of –
    - (i) reinforced concrete with a fire resistance of at least 120 minutes; or
    - (ii) any other non-combustible material, if the storeroom -
      - (aa) boundary of the premises; or
      - (bb) adjoins a higher wall with no opening within 10 metres is not situated within 5 metres of any adjacent building or above and 5 metres on either side of the storeroom.

#### Requirements for storeroom doors

52. (1) Every storeroom must be equipped with a fire rated fire door that -
- (a) is manufactured and installed in accordance with SABS 1253;
  - (b) opens to the outside;
  - (c) is equipped with a lock or locks approved by the Chief Fire Officer; and
  - (d) is at all times capable of being opened from the inside of the storeroom without the use of a key.

- (2) A storeroom must be equipped with two or more fire doors if the distance to be covered from any part in that storeroom to a door is 4 metres or more, in which case, the fire doors must be installed as far from each other as is practicable in the circumstances.
- (3) Fire doors contemplated in subsections (1) and (2) must if installed on –
  - (a) external walls, be “B” class fire doors; and
  - (b) internal walls in communication within a building, be “D” class fire doors.

**Requirements for storeroom windows**

- 53. (1) Every storeroom window frame must -
  - (a) consist of steel;
  - (b) have window panels of dimensions not exceeding 450 millimetres x 450 millimetres; and
  - (c) be fitted with wire glass of a thickness not less than 8 millimetres.
- (2) No storeroom window must be capable of being opened.
- (3) Every storeroom window must be fitted to the external wall of a building.

**Requirements for storeroom catch pits**

- 54. (1) Every storeroom must be designed and constructed so that its floor is recessed below the level of the door sill to form a catch pit -
  - (a) with a holding capacity at least equal to the total volume of hazardous substances capable of being stored in the storeroom, plus 10 percent; and
  - (b) if required by the Chief Fire Officer –
    - (i) covered at door sill level by a strong, stable, non-combustible and oxidation free floor grill; and
    - (ii) equipped, at its lowest level, with a non-corrosive drainage valve for cleaning purposes and product recovery.
- (2) The floor grill contemplated in subsection (i) must contain a suitably positioned access hatch for cleaning purposes.

**Ventilation of storerooms**

- 55. (1) Every storeroom must be designed and constructed to ensure -
  - (a) the effective ventilation of flammable substance fumes;
  - (b) that fumes released from the storeroom into the open air will not come into contact with any source of ignition.
- (2) If the storeroom is designed and constructed for natural ventilation, the owner or person in charge of the storeroom must ventilate the storeroom at a minimum cycle of 30 air changes per hour by installing non-combustible airbricks –
  - (a) that are not less than 140 millimetres by 250 millimetres in extent, with non-corrosive gauze wire with a minimum opening diameter of 0.5 millimetres;
  - (b) that are provided in at least 3 external walls of the storeroom; and
  - (c) that are positioned 100 millimetres above the level of the sill and 100 millimetres below the level of the roof and not more than 450 millimetres apart.

- (3) If the storeroom is designed and constructed for mechanical ventilation, the owner or person in charge of the storeroom must equip it with a mechanical ventilation system –
- (a) designed and installed for this purpose;
  - (b) with a flow rate of 0,5 meters / second across the store;
  - (c) with vanes that consist of a static-free material;
  - (d) that discharges through a vertical metal duct into the open air –
    - (i) not situated within 5 metres of any opening of a building or erf boundary; and
    - (ii) terminating at least 1 metre above roof height or at least 3.6 metres above ground level, whichever is the greater;
  - (e) equipped with ventilators that are firmly attached to the inside of the walls of the storeroom and, in the case of bottom ventilators, as close as possible to the level of the sill;
  - (f) with all ventilation or air duct openings in the external wall opposite the mechanical ventilator installed 100 millimetres above the level of the sill to ensure effective cross-ventilation; and
  - (g) equipped with ducting material that –
    - (i) is as short as possible in the circumstances and does not have sharp bends; and
    - (ii) is fitted with a fire damper of at least 120 minutes fire resistance at any point where the ducting exits the storeroom, if ducting material is installed external to the storeroom in communication with the remainder of the building.

### **Electrical equipment in storerooms**

56. (1) The owner or person in charge of any storeroom must ensure that -
- (a) all electrical apparatus, fittings or switch gear used or installed in the storeroom are used or installed as contemplated in SABS 0108;
  - (b) no switch gear, distribution box, fuse or other electrical equipment, except electrical equipment as contemplated in SABS 0108, is situated –
    - (i) inside the storeroom; or
    - (ii) in any position where it may come into contact with any flammable substance fumes leaving the storeroom;
  - (c) any metal part, electrical fittings and device used in or in connection with the storeroom are earthed effectively to each other and to the ground;
  - (d) any mechanical ventilation system switch is situated outside the storeroom;
  - (e) any mechanical ventilation system is on at all times, except when the system is being repaired or replaced, in which case the system must be repaired or replaced without delay; and
  - (f) all electrical apparatus and fittings, except the mechanical ventilation system, are switched off when the storeroom is unattended.
- (2) Any electrical installation in a storeroom may be installed and certified only by an electrician who is qualified and competent by virtue of his or her training and experience.
- (3) The owner or person in charge of a storeroom must submit the certificate contemplated in subsection (2) to the Chief Fire Officer for record purposes immediately after installation contemplated in that subsection.

### **Foam inlets required for certain storerooms**

57. The owner or person in charge of a storeroom that is used or intended to be used for storing more than 5000 litres of flammable substance must ensure -
- (a) that the storeroom is provided with a foam inlet consisting of a 65 mm male instantaneous coupling and mild steel pipe work leading to the inside thereof; and
  - (b) that the foam inlet is identified by a sign in block letters at least 100 millimetres high, displaying the words "foam inlet".

### **Shelving in storerooms**

58. The owner or person in charge of a storeroom must ensure that any racking of shelving erected or installed in the storeroom is of non-combustible material.

### **Unauthorised use and entry of storerooms prohibited**

59. No person may –
- (a) without the authority of the owner or person in charge, enter or allow any other person to enter any storeroom;
  - (b) use any storeroom or allow it to be used for any purpose other than for the use, handling or storage of flammable substances;
  - (c) allow any person to work in a storeroom unless all the doors of the storeroom are wide open or the mechanical ventilation system is switched on; or
  - (d) place or allow to be placed any obstruction or hindrance in a passage of any storeroom or in front of any storeroom door.

### **Mixing and decanting rooms**

60. The owner or person in charge of any premises where quantities of flammable liquids exceeding those stipulated in Schedule 3 are decanted or mixed, must ensure that any room where decanting or mixing takes place complies with all requirements of this Chapter applicable to storerooms.

### **Temporary above ground storage of flammable substances**

61. (1) Any person who wishes to store any flammable substance on premises on a temporary basis, must apply to the Chief Fire Officer for a temporary certificate of registration.
- (2) A temporary certificate of registration may be issued by the Chief Fire Officer -
- (a) for a period not exceeding 12 months;
  - (b) if the flammable substance concerned is required -
    - (i) in respect of excavation work, construction work or road construction if the volume of the flammable substance does not exceed 9 000 litres;
    - (ii) in respect of small fleet maintenance or research purposes, if the volume of the flammable substance does not exceed 4 400 litres; and
    - (iii) the application complies with the requirements of SABS 0131 and this Chapter.
- (3) Every holder of a temporary certificate of registration contemplated in subsection (1) must ensure that –
- (a) a storage tank for the flammable substance is not erected within 3.5 metres of any erf boundary, building, excavation, road, driveway or any other flammable substances or combustible material;

- (b) adequate provision is made for rainwater run-off from retaining walls or embankments;
- (c) no source of ignition or potential source of ignition exists within 5 metres of a storage tank;
- (d) a symbolic sign of dimensions at least 300 millimetres by 300 millimetres prohibiting smoking and open flames is displayed on every side of a temporary storage tank; and
- (e) at least two 9 kilogram dry chemical fire extinguishers are installed and kept in good working condition, within 10 metres of a temporary storage tank.

**Hand tools must be intrinsically safe**

62. The owner or person in charge of any flammable substance storeroom must ensure that any hand tool used in the storeroom is intrinsically safe.

**Permanent above ground storage tanks for flammable liquids**

63. (1) In addition to any other requirement of this Chapter, the owner or person in charge of an above ground storage tank for flammable liquids must ensure –
- (a) that the tank is erected or installed –
    - (i) in accordance with SABS 0131 and SABS 089, Part I;
    - (ii) at least 3.5 metres from any erf boundary, building, excavation, road, driveway or any other flammable substance, combustible substance or combustible material;
  - (b) that the flammable liquid stored in the tank must be clearly identified by means of Hazchem placards contemplated in SABS 0232, Part 1.
- (2) Any electrical installation associated with the storage tank must comply with SABS 0108 and SABS 089, Part 2.

**Underground storage tanks for flammable liquids**

64. The owner or person in charge of any premises used or intended to be used for the underground storage of any flammable liquid must ensure that any underground storage tank, pump, dispenser and pipe work is erected or installed in accordance with SABS 0400, SABS 089, Part 3 and SABS 0131.

**Installing, erecting, removing and demolishing prohibited without prior notice**

65. (1) No person may, in respect of registered premises, erect, install, remove, demolish, extend or change any delivery pump, storage tank, storeroom, spraying room, gas installation, storage facility, fire protection arrangement or floor layout unless that person has given the Chief Fire Officer at least three working days prior written notice of the intention to do so, in the form and manner determined by the Council.
- (2) The notice in term of subsection (1) must include the intended commencement date and estimated completion date of the proposed work.
- (3) The provisions of subsection (1) do not apply to –
- (a) the temporary removal of equipment for purposes of carrying out necessary repairs;
  - (b) the necessary replacement of equipment or their parts; and
  - (c) the replacement of any storage tank with a tank of the same capacity.

### **Repair and maintenance of access to storage tanks**

66. No person may enter or allow any other person to enter any storage tank that has at any time contained a flammable substance -
- (a) until such tank has been de-aerated and made free of gas and fumes as contemplated in SABS 089 (Part I); or
  - (b) unless that person –
    - (i) is wearing an effective self-supporting breathing apparatus; and
    - (ii) is attached to a rescue rope under the control of a competent and responsible person.

### **Termination of storage and use of flammable substances**

67. (1) If an aboveground or underground tank installation, liquid petroleum gas installation or associated pipe work is no longer required for the storage or use of a flammable substance, the owner or person in charge of the premises on which the installation is located, must -
- (a) notify the Chief Fire Officer in writing within seven days of such storage or use ceasing;
  - (b) ensure that the flammable substance is removed from the installation and the premises are rendered safe within 30 days of the cessation;
  - (c) unless the Chief Fire Officer directs otherwise, remove the installation including any associated pipe work from the premises within 180 days of the cessation; and
  - (d) to the satisfaction of the Council, restore any public foot path or roadway that has been disturbed by the removal of the installation within a period of 7 days of completing such removal.
- (2) Notwithstanding the provisions of subsection (1) if the removal of any underground tank installation for the storage of a flammable substance will detrimentally affect the stability of the premises concerned, the owner or person in charge of the installation may, with the prior written permission of the Chief Fire Officer, fill the underground tank with liquid cement slurry.

### **Container handling and storage**

68. (1) Every flammable substance container must -
- (a) be kept closed when not in use;
  - (b) be declared gas- or vapour-free by a competent person before any modification or repairs are undertaken;
  - (c) be manufactured and maintained in such condition as to be reasonably safe from damage and to prevent leakage of any flammable substance or vapour from the container.
- (2) Every flammable liquid container must be labelled and marked with words and details indicating the flammable liquid contained in the container as well as any hazard associated with the flammable liquid.
- (3) No person may extract flammable liquid from a container of a capacity exceeding 200 litres, unless the container is fitted with an adequately sealed pump or tap.
- (4) Any empty flammable liquid container must be stored in a storeroom.
- (5) Notwithstanding the provisions of subsection (4) the Chief Fire Officer may permit the storage of any empty flammable liquid container in the open air if no storeroom is available and if he or she is satisfied that -

- (a) the storage area is in a position and of sufficient size that a fire hazard or other threatening danger will not be caused;
  - (b) the storage area is well ventilated and enclosed by a wire mesh fence;
  - (c) the fence supports are of steel or reinforced concrete;
  - (d) the storage area has an outward opening gate that is kept locked when not in use;
  - (e) when the floor area exceeds 10 m<sup>2</sup> an additional escape gate is installed and fitted with a sliding bolt or other similar locking device that can be opened from the inside without the use of a key; and
  - (f) the storage area is free of vegetation and has a non-combustible, firm and level base.
- (6) When the quantity of flammable and combustible liquids to be stored is more than 100 litres of class I and/ or more than 210 liters of class II and class III A combined, such flammable and combustible liquids must be stored in a store room.

## **CHAPTER 7**

### **TRANSPORT, SUPPLY AND DELIVERY OF DANGEROUS GOODS**

#### **Transport of dangerous goods prohibited without permits**

69. The owner of any vehicle used for transporting dangerous goods, must -
- (a) be in possession of a valid transport permit issued by the Chief Fire Officer in accordance with these by-laws; and
  - (b) ensure that the transport permit is available in the vehicle for inspection at all times.

(In Par. (a) amended: Notice 1118; 31/8/11 PG No 194)

#### **Application for transport permits**

70. An application for a transport permit must be completed and submitted to the Chief Fire Officer in the form and manner determined by the Council together with the prescribed fee.

#### **Requirements of transport permits**

71. A transport permit -
- (a) may not be issued by the Chief Fire Officer for a period longer than 12 months; and
  - (b) must –
    - (i) indicate the date of issue and expiry;
    - (ii) identify the issuing officer and bear that officer's signature;
    - (iii) contain a serial number;
    - (iv) indicate the group and quantity of dangerous goods that may be transported under the permit; and
    - (v) contain a description of the vehicle concerned, including its registration number.

5

#### **Cancellation of transport permit**

72. The provisions of section 24, read with the necessary changes, apply to any cancellation of a transport permit by the Chief Fire Officer.

#### **Exemption from transport permits**

73. A transport permit contemplated in section 69 is not required for the transportation of dangerous goods of the type and not exceeding the quantities stipulated in Schedule 3.



## **Design, construction, maintenance and repair of vehicle**

74. Every person who designs, constructs, maintains or repairs any vehicle for the transportation of dangerous goods must -
- (a) comply with the provisions of SABS 0228, SABS 0229, SABS 0233, SABS 087, SABS 089, SABS 0231 and SABS 1518, as the case may be; and
  - (b) ensure that the vehicle is labelled and identifiable in a manner that complies with the provisions of SABS 0232 and any applicable law.

(Heading, section 74 and Par (a) & (b) amended: Notice 1118; 31/8/11 PG No 194)

## **Design, construction, maintenance and repair of dangerous goods vehicle containment area**

75. Subject to the provisions of section 74(a) and section 74(b), every person who designs, constructs, maintains or repairs any containment area of the vehicle for the transportation of dangerous goods, must ensure that the vehicle –

(Heading and section 75 amended: Notice 1118; 31/8/11 PG No 194)

- (a) is designed and constructed –
  - (i) to safely transport the quantity and type of dangerous goods for which the vehicle is intended to be used; and
  - (ii) with at least two independent axle systems for vehicles exceeding 3500 kilograms, each with its own suspension system, excluding any trailer forming part of an articulated vehicle;

(Sub-par (ii) amended: Notice 1118; 31/8/11 PG No 194)

- (b) is equipped with –
  - (i) a safety edge or safety railing -
    - (aa) at least 1 metre high when measured from the surface of the body of the vehicle; and
    - (bb) capable of securing dangerous goods containers;
  - (ii) strong and durable straps -
    - (aa) capable of fastening dangerous goods containers securely to the body of the vehicle;
    - (bb) that are anchored firmly to the bodywork of the vehicle; and
    - (cc) that are fitted with a reversible cog winch mechanism that can be locked;
  - (iii) electrical wiring that complies with SABS 314;
  - (iv) at least 2 static-free wheel blocks;
  - (v) a double pole insulating switch, excluding the ignition switch, situated in close proximity to the vehicle battery and in a position readily accessible in any emergency; and
  - (vi) a spark-proof and static-free tank that is designed, constructed and equipped to protect any dangerous goods consignment from shock or ignition while in transit.

(Par (v) amended: Notice 1118; 31/8/11 PG No 194)

### **General prohibitions regarding transport of dangerous goods**

76. (1) No person may use or allow to be used, any vehicle to transport dangerous goods, unless –

- (a) the vehicle has a valid roadworthy certificate;
- (b) if not exempt in terms of section 73, the vehicle is equipped with at least two 9 kilogram dry chemical fire extinguishers -
  - (i) designed and manufactured in accordance with SABS 1910 and maintained in accordance with SABS 0105 and SABS 1475; and
  - (ii) positioned and installed so that there is at least one fire extinguisher on each side of the vehicle that can be reached quickly and easily in the event of a fire.

(Sub-par (i) amended: Notice 1118; 31/8/11 PG No 194)

- (c) the dangerous goods have been loaded and secured in accordance with SABS 0187 part 8 and SABS 0231;
- (d) the driver complies with any applicable laws and regulations; and
- (e) the dangerous goods are being transported in accordance with SABS 0231”.

(Sections (c) to (e) inserted: Notice 1118; 31/8/11 PG No 194)

(2) No person may use or allow to be used any vehicle to transport dangerous goods unless the vehicle cabin, body, cargo space, cargo tank, fuel tank, chassis and engine are effectively and permanently earthed with each other.

### **Supply of dangerous goods prohibited in certain circumstances**

77. (1) No person may deliver or supply or allow to be delivered or supplied any dangerous goods of a type and in a quantity exceeding that specified in Schedule 2 to any premises that are not registered as contemplated in section 35.

(2) No person may deliver or supply or allow to be delivered or supplied any dangerous goods to any premises in contravention of any conditions of the certificate of registration applicable to those premises.

(3) No person may handle or allow to be handled any container containing dangerous goods in a manner that may damage that container.

(4) Every person who delivers dangerous goods must ensure that -

- (a) a 9 kilogram dry chemical fire-extinguisher is available at all times during the delivery;
- (b) during any transfer of the dangerous goods, the delivery vehicle is physically earthed to the storage facility to which the dangerous goods are being transferred;
- (c) while delivering –
  - (i) the delivery vehicle is placed in such a position that it can be moved easily and quickly in the event of an emergency;
  - (ii) the delivery vehicle is not parked on or across a pavement or a road;
  - (iii) no delivery hose lies on or across a pavement, road or other premises;
- (d) no dangerous goods are transferred to a storage facility that does not comply with the requirements of Chapter 6 and the provisions of SABS 0263;
- (e) any device connected with, or used for, the delivery of the dangerous goods -

- (i) is designed for its purpose; and
  - (ii) is maintained in safe and good working condition; and
- (f) no dangerous goods are spilled during delivery.
- (5) No person may transfer or allow to be transferred any dangerous goods to any motor vehicle, aircraft, vessel, ship or boat while its power source is in operation.
- (6) No person may transfer any dangerous goods to any aircraft unless the aircraft is earthed to the transferral device by means of an earth cable.

**Records of transport permits**

78. The Chief Fire Officer must keep updated records of all vehicles in respect of which a transport permit has been issued, amended or renewed.

**CHAPTER 8**

**SPRAY PAINTING**

**Spraying prohibited without spraying permit**

79. (1) No person may spray, coat, plate or epoxy-coat any vehicle, article, object or building or part thereof or allow them to be sprayed, coated, plated or epoxy-coated with any flammable substance unless -
- (a) that person is in possession of a spraying permit contemplated in section 80;
  - (b) the spraying, coating, plating or epoxy-coating as the case may be is conducted in a spraying room approved by the Chief Fire Officer on premises registered for that purpose.

**Application for spraying permit**

80. Any person who wishes to obtain a spraying permit must -
- (a) complete and submit to the Chief Fire Officer an application form for such permit in the form and manner determined by the Council; and
  - (b) pay the prescribed fee.

**Cancellation of spraying permit**

81. The provisions of section 24, read with the necessary changes, apply to the cancellation by the Chief Fire Officer of any spraying permit.

**Duties of owner, occupier or person in charge of spraying room**

82. Every owner, occupier and person in charge of a spraying room must ensure that –
- (a) the spraying room complies with the requirements of this Chapter; and
  - (b) every other person on the premises complies with the provisions of this Chapter.

### **Design and construction of spraying rooms**

83. (1) Every spraying room must be designed and constructed according to the following criteria:
- (a) every window frame must consist of steel with window panels -
    - (i) that cannot be opened;
    - (ii) that do not exceed 450 millimetres x 450 millimetres in size; and
    - (iii) that are fitted with wire glass with a thickness not less than 8 millimetres;
  - (b) if based on a brick and concrete construction -
    - (i) the floor must consist of concrete;
    - (ii) the walls must consist of brick or concrete;
    - (iii) the roof must consist of reinforced concrete; and
    - (iv) every door must consist of a Class B-type fire doors as contemplated in SABS 1253; and
  - (c) if based on a metal structure –
    - (i) the framework of the structure, including door assemblies must consist of a sturdy steel profile with a minimum wall thickness of 2.5 millimetres;
    - (ii) the framework of the entire structure, including any door, must be clad on both sides with sheet metal with a minimum thickness of 1.3 millimetres;
    - (iii) the framework of the entire structure must be fume-proof, flame-proof and liquid-proof;
    - (iv) the floor must consist of concrete or metal;
    - (v) all material used must have a fire integrity grading of at least 60 minutes; and
    - (vi) the structure must be constructed, installed and finished so that all surfaces are smooth in order to prevent any furring which may hamper ventilation, washing or cleaning of the spraying room.

### **Water floors for spraying rooms**

84. Every spraying room which is designed and constructed with a sunken water floor must be designed and constructed so that -
- (a) the water is covered at the level of the sill by a sturdy, stable, non-combustible and corrosion-free floor grill capable of bearing the weight of every person and object in the spraying room; and
  - (b) the water in the sunken water floor is circulated through an effective non-combustible and cleanable filtering system by a closed circuit pump circulation system consisting of non-corrosive metal pipes of suitable diameter and wall thickness.

### **Electrical equipment in spraying rooms**

85. (1) Any electrical apparatus, light, fitting and switch gear installed or used in a spraying room must be installed and used in accordance with SABS 0108.
- (2) Any switch gear, distribution boxes, fuse and other electrical equipment, except equipment as contemplated in SABS 0108 must -
- (a) be located outside the spraying room; and
  - (b) be positioned so as not to come into contact with fumes from the spraying room.

- (3) Any switch for the mechanical ventilation system of a spraying room must be situated outside the spraying room.
- (4) Any metal part and electrical fitting and any other device used in, or in connection with, the spraying room, must be earthed effectively with each other and the ground.
- (5) Every electrical installation in a spraying room may be installed only by a suitably qualified electrician who must -
  - (a) certify in writing that the installation complies with all applicable legal requirements; and
  - (b) furnish the certificate to the owner or person responsible for the premises concerned.
- (6) The owner or person responsible for the premises on which the spraying room is located must submit the certificate contemplated in subsection (5) to the Chief Fire Officer without delay.

### **Location of spraying rooms**

- 86. (1) The owner, occupier and person in charge of a spraying room must ensure that there is an escape opening between the spraying room and any other activity, process or area on the premises concerned -
  - (a) of at least 1200 millimetres wide; and
  - (b) that must at all times be kept free of any obstruction, refuse or combustible material.
- (2) If any other activity or process which may pose a fire hazard is conducted adjacent to a spraying room on any premises, the escape opening contemplated in subsection (1), must be clearly identified by a fire partition wall –
  - (a) of a height at least 300 millimetres higher than the roof of the spraying room; and
  - (b) with a fire resistance of at least 60 minutes.
- (3) No more than two sides of a spraying room contemplated in section 83(1)(c), may border a fire partition wall.

### **Access to spraying rooms**

- 87. In addition to any door for the access of motor vehicles or other objects to any spraying room, every spraying room must have at least two hinged doors for escape purposes that –
  - (a) open to the outside of the spraying room;
  - (b) have dimensions of at least 800 millimetres wide x 2000 millimetres high;
  - (c) are positioned on opposite sides of the spraying room so that the distance to be covered to any door when any object is in the spraying room for spraying does not exceed 4 metres; and
  - (d) are fitted with a locking mechanism that is at all times capable of being opened from the inside of the spraying room without the use of a key.

### **Ventilation of spraying rooms**

- 88. Every spraying room must be equipped with a mechanical inlet and outlet ventilation system designed and installed -
  - (a) so that ventilation of at least 0.5 metres per second is provided across the spraying room;
  - (b) with vanes consisting of static-free material;

- (c) so that it releases fumes into the open air from outlets that are not located within 5 metres of any opening of a building or erf boundary;
- (d) with ventilators that are attached firmly to the inside walls of the spraying room with bottom ventilators affixed as close as possible to the level of the sill;
- (e) with ventilation and air duct openings installed in opposite walls, doors or the roof so as to ensure effective cross-ventilation; and
- (f) with ducting material that is fitted with a fire damper and covering of at least 120 minutes fire resistance where the ducting material exists the spraying room, if ducting material is installed external to the spraying room in communication with the remainder of the building concerned.

#### **Fire dampers, protectors and alarms in spraying rooms**

89. (1) A fire damper manufactured and installed in accordance with SABS 193, must be affixed in front of any air purification filter or part of such filter on the inside of any spraying room.
- (2) The fire damper must –
- (a) be capable of closing automatically by means of a suitably located sensor that is activated by a rise of more than 10°C in the predetermined working temperature inside the spraying room;
  - (b) be installed so that it will remain in position even if the air duct distorts during a fire; and
  - (c) be equipped with an overriding fusible link.
- (3) The ventilation system must be equipped with a sensor that -
- (a) is capable of turning off the ventilation system and any heating device used in connection with the spraying room, in the event of a fire or a rise of more than 10°C in the predetermined working temperature inside the spraying room; and
  - (b) activates a visual and audible alarm inside and outside the spraying room in an event contemplated in paragraph (a).

#### **Design and positioning of ventilation outlets for spraying rooms**

90. Every outlet opening from a spraying room must be designed and positioned to release fumes from the spraying room into the open air at least -
- (a) 1 metre above any roof on the premises;
  - (b) 4 metres above the ground level; and
  - (c) 5 metres from any opening of a building situated on or adjacent to the spraying room.

#### **Display of signs on spraying rooms**

91. (1) A symbolic sign prohibiting open flames and smoking must be affixed to the inside and the outside of every door of a spraying room.
- (2) Any symbolic sign contemplated in subsection (1), must be –
- (a) manufactured and installed in accordance with SABS 1186; and
  - (b) of dimensions at least 290 millimetres by 290 millimetres.

#### **Manifold installations in spraying rooms**

92. Every manifold installation of a Group II hazardous substance that forms an integral part of the heating system of any spraying room must -
- (a) comply with SABS 087 (Part 1); and
  - (b) the requirements of these By-laws.

### **General prohibitions regarding spraying rooms**

93. No person may –
- (a) use any spraying room or allow any spraying room to be used unless signs prohibiting open flames and smoking are affixed to the spraying room in compliance with section 91;
  - (b) enter a spraying room or allow any other person to enter a spraying room without the authority of the owner, occupier or person in control of the spraying room;
  - (c) use any spraying room or allow any spraying room to be used for any purpose other than spray painting or related activities;
  - (d) enter any spraying room or allow any other person to enter a spraying room unless the mechanical ventilation system is operating; or
  - (e) place any obstruction of hindrance or allow any obstruction or hindrance to be placed in any escape opening or in front of any door of a spraying room.

### **Fire extinguishing equipment in spraying rooms**

94. (1) Every spraying room must be equipped with -
- (a) at least one 9 kilogram dry chemical fire extinguisher installed on the inside of the spraying room; and
  - (b) at least one 9 kilogram dry chemical fire extinguisher installed on the outside of the spraying room.
- (2) Fire extinguishers contemplated in subsection (1) must be installed in positions approved by a member of the Service.
- (3) Every spraying room must be protected by at least one fire hose reel as specified in SABS 543 -
- (a) that is connected to a water supply as contemplated in SABS 0400 (Part W); and
  - (b) that enables the hose reel to maintain a flow of at least 0.5 litres per second at a work pressure of at least 300 kPa.

## **CHAPTER 9**

### **FIRE BRIGADE SERVICES**

#### **Establishment and maintenance of Service**

95. (1) The Council has established a Fire Brigade Service as contemplated in section 3 of the Fire Brigade Services Act.
- (2) The Council must maintain the Service, which includes -
- (a) appointing a Chief Fire Officer and the necessary members of the Service;
  - (b) ensuring that they are properly trained; and
  - (c) acquiring and maintaining the necessary vehicles, machinery, equipment, devices and accessories to ensure that the Service is effective and able to fulfil its objects.

#### **Objects of Service**

96. The objects of the Service are –
- (a) to prevent the outbreak and spread of fire;
  - (b) to fight and extinguish any fire that endangers any person or property;

- (c) to protect any person and property against any fire hazard or other danger contemplated in these By-laws; and
- (d) to rescue any person and property from any fire or other danger contemplated in these By-laws.

### **Services to other persons**

97. (1) The Service may, provide any service related to its objects to any other person against payment of the prescribed fee.
- (2) Any service contemplated in subsection (1), may be terminated without notice if the services, equipment or personnel involved in providing that service are required to deal with an emergency.

### **Instructions by members of Service**

98. (1) In addition to any powers under section 8 of the Fire Brigade Services Act, a member may give any instruction to any person in order to secure compliance with these By-laws or to ensure the safety of any person or property.
- (2) An instruction may be given orally or in writing and if the instruction is given orally, the member must confirm it in writing and give it to the person concerned at the earliest opportunity.
- (3) An instruction contemplated in subsection (1) may include, but is not limited to an instruction -
- (a) for the immediate evacuation of any premises;
  - (b) to close any premises until such time as any contravention of these By-laws has been rectified;
  - (c) to cease any activity;
  - (d) to remove any immediate threat to the safety of any person or property;
  - (e) to take specified steps to comply with these By-laws, either immediately or within a specified period; and
  - (f) if it is not reasonable for steps referred to in paragraph (e), to be taken immediately, for the owner or occupier of the premises concerned to provide the Chief Fire Officer with a written description of the steps to be taken and a time-table for the taking of these steps in order to ensure compliance with these By-laws.

### **Pretending to be member of Service prohibited**

99. (1) No person may pretend to be a member.
- (2) No person who is not a member may wear any official clothing, uniform, badge or insignia of the Service.

### **Certificates to identify members of Service**

100. (1) The Chief Fire Officer must provide each member with a certificate identifying that person as a member.
- (2) A member, while performing any function or exercising any power under these By-laws must –
- (a) keep the certificate provided in terms of subsection (1), on his or her person; and
  - (b) produce it for inspection on request by any person.



### **Cost of analysis samples**

101. (1) Any costs incurred by the Council in connection with the analysis of any sample taken from any premises for the purposes of these By-laws, and a report on such analysis by an institution accredited by the Chief Fire Officer for that purpose may be recovered from the owner or occupier of that premises if the owner or occupier of the premises is not in compliance with these By-laws regarding the substance concerned.

## **CHAPTER 10**

### **MISCELLANEOUS**

#### **Handling of animals during emergencies**

102. (1) The owner, occupier or person in charge of any zoological garden, feedlot, stable, research institution, veterinary practice or any place of veterinary science study, must ensure the professional handling of any animal on the premises concerned during an emergency.
- (2) Notwithstanding the provisions of subsection (1), the Chief Fire Officer may, in respect of any premises, authorise a suitably qualified person to handle or put down any animal during an emergency.
- (3) The Council may recover any costs incurred in relation to the professional handling or putting down of any animal during an emergency from the owner or occupier of the premises concerned.

#### **Exemption from provisions of these by-laws**

103. (1) Any person may make application to the Council in writing, for an exemption from any provision of these By-laws, specifying the reasons for exemption in such application.
- (2) The Council may grant an exemption –
- (a) in general or in particular;
  - (b) for any period; and
  - (c) subject to any condition that will provide the same overall fire prevention and protection that would result from the full application of these By-laws.
- (3) If an exemption is granted in terms of subsection (2), the Council must issue a certificate of exemption to the person concerned, specifying the scope and period of the exemption and any condition imposed.
- (4) The Council may amend or withdraw a certificate of exemption at any time.
- (5) The holder of a certificate of exemption must ensure that the certificate is available on the premises concerned at all times for inspection by any member.

#### **Approval, authorisation or permission under these by-laws**

104. Any person who requires any approval, authorisation or permission contemplated in these By-laws, in respect of which no application procedure is provided, must apply for that approval, authorisation or permission -
- (a) by completing and submitting an application in the form and manner determined by the Council; and
  - (b) by paying the prescribed fee.

### **Cancellation of approval, authorisation or permission**

105. The provisions of section 24, read with the necessary changes, apply to any approval, authorisation or permission contemplated in section 104.

### **By-laws bind State**

106. These By-laws bind the State and any person in the service of the State.

### **Offences and penalties**

107. Any person who –

- (a) contravenes or fails to comply with any provision of these by-laws;
- (b) fails to comply with any notice issued or displayed in terms of these By-laws;
- (c) fails to comply with any lawful instruction given in terms of these By-laws; or
- (d) obstructs or hinders, or improperly influences or attempts to do so, any authorised representative or employee of the Council in the execution of his or her duties or performance of his or her powers or functions under these By-laws;

is guilty of an offence and liable on conviction to a fine or in default of payment to imprisonment for a period not exceeding six months, and in the case of a continuing offence, to a further fine not exceeding R50, or in default of payment, to imprisonment not exceeding one day, for every day during the continuance of such offence, after a written notice has been issued by the Council, and served on the person concerned, requesting the discontinuance of such offence.

### **Repeal of by-laws**

108. The by-laws listed in Schedule 5 are hereby repealed.

### **Short title**

109. These By-laws are called the Emergency Services By-Laws, 2003.

## **SCHEDULE 1**

### **GUIDELINE FOR EMERGENCY EVACUATION PLANS**

#### **Content of emergency evacuation plans**

1. Every emergency evacuation plan contemplated in section 17 must contain at least the information under the headings below.
  - (1) Emergency telephone numbers

A list of all relevant emergency telephone numbers.
  - (2) General information
    - (a) the physical address of the premises;
    - (b) a description of the activities on the premises;
    - (c) the number of persons present on the premises at any time;
    - (d) an indication of any control room on the premises;
    - (e) an indication of any alarm system on the premises; and
    - (f) the particulars and contact details of every responsible person in the event of an emergency;

(3) Area study

An area study addressing the following:

- (a) a history of emergency incidents on the premises;
- (b) any important and relevant features or landmarks regarding the premises; and
- (c) any information regarding adjacent premises that may be relevant to evacuation in an emergency.

(4) Socio-economic or other threats

Any socio-economic or other threats and their potential impact on the premises.

(5) Details of available equipment

Particulars and details regarding the position of the following equipment:

- (a) Equipment in the control room;
- (b) fire fighting and first aid equipment on the premises; and
- (c) any other equipment which may be relevant in an emergency.

(6) The emergency team

Particulars and details regarding the identity of members of the emergency team, including -

- (a) its management;
- (b) the continuity officers;
- (c) the fire teams; and
- (d) the first aid teams.

(7) Duties of emergency team members

The duties and responsibilities of members of the emergency team.

(8) Action plans and emergency procedures

Details of the specific action plans and emergency procedures applicable to the premises.

(9) Building plans and maps

The building plans of the premises and any relevant topographical map must be included in the evacuation plan.

(10) Emergency plan register

The plan must include –

- (a) an updated register of the emergency evacuation plan;
- (b) an updated drill register for the emergency evacuation plan; and
- (c) a bomb threat questionnaire.

**Review of emergency evacuation plans**

2. (1) An emergency evacuation plan must be reviewed and updated by the owner or occupier of the premises concerned at least once each year and whenever a member of the management of the emergency team ceases to work at the premises.

- (2) Whenever an emergency evacuation plan is reviewed and updated, the owner or occupier of the premises concerned must ensure that all old plans on the premises or in the possession of the management of the emergency team are collected and destroyed in order to eliminate any confusion regarding the validity and accuracy of the evacuation plan.

### Emergency evacuation drills

3. (1) An emergency evacuation plan should be drilled at least twice each year and involve the participation of all persons who work or reside in the building concerned.
- (2) The owner or person in charge of a building should give all persons who are to be involved in an emergency evacuation drill at least 21 days' notice of the drill.

### Emergency evacuation awareness

4. Every person who works or resides on premises should be aware of the emergency evacuation plan for that premises.

### Training of persons

5. Every person who resides or works on premises with an emergency evacuation plan should be suitably trained in -
- (a) first aid or fire fighting;
  - (b) emergency aid;
  - (c) emergency evacuation procedures; and
  - (d) emergency management techniques.

## SCHEDULE 2

### EXEMPTION FROM CERTIFICATE OF REGISTRATION

A certificate of registration is in in terms of section 35(2) not required if the flammable substances concerned are of a type and do not exceed the quantity stipulated below.

<b>GASES</b>		
Class O	Liquefied petroleum gas	Flat- Total cylinder capacity may not exceed 9 kg per flat  Houses or commercial premises- Total maximum of 19 kg inside and total maximum of 100 kg on premises  Industrial premises- Maximum of 19 kg per 600 m <sup>3</sup> of building space with a total maximum of 100 kg
<b>FLAMMABLE LIQUIDS AND COMBUSTIBLE LIQUIDS</b>		
Class I	Liquids that have a closed-cap flash point of below 38°C	Total maximum of 40 litres
Class II	Liquids that have a closed-cap flash point of 38°C or above, but below 60.5°C	Total quantity of Class II and Class IIIA together may not exceed the maximum quantity of 210 litres
Class IIIA	Liquids that have a close-cap flash point of 60.5°C or above but below 93°C	

### SCHEDULE 3

#### EXEMPTION FROM TRANSPORT PERMIT

A transport permit is in terms of section 73 not required for the transport of dangerous goods of the type and not exceeding the quantity stipulated below.

GROUP	DESCRIPTION	QUANTITY
<b>II</b>	<b>GASES</b>	
	Flammable gases	Total cylinder capacity may not exceed 50 kilograms
	Non-flammable gases	Total cylinder capacity may not exceed 333 kilograms
<b>III</b>	<b>FLAMMABLE LIQUIDS</b>	
	With flash points $\leq 18^{\circ}\text{C}$	Total quantity may not exceed 100 litres
	With flash points $> 18^{\circ}\text{C}$ but $\leq 23^{\circ}\text{C}$	Total quantity may not exceed 420 litres
	With flash points $> 23^{\circ}\text{C}$ but $\leq 61^{\circ}\text{C}$	Total quantity may not exceed 1100 litres
	With flash points $> 61^{\circ}\text{C}$ but $\leq 100^{\circ}\text{C}$	Total quantity may not exceed 1 100 litres
<b>IV</b>	<b>FLAMMABLE SOLIDS</b>	
	Flammable solids	Total quantity may not exceed 250 kg
<b>V</b>	<b>OXIDISING AGENTS AND ORGANIC PEROXIDES</b>	
	Oxidising agents	Total quantity may not exceed 200 kilograms
	Group II organic peroxides in packets	Total quantity may not exceed 200 kilograms
<b>VI</b>	<b>TOXIC / INFECTIVE SUBSTANCES</b>	
	Group I toxic substances in packets	Total quantity may not exceed 5 kilograms
	Group II toxic substances in packets	Total quantity may not exceed 50 kilograms
	Group III toxic substances in packets	Total quantity may not exceed 500 kilograms
<b>VIII</b>	<b>CORROSIVE / CAUSTIC SUBSTANCES</b>	
	Group I acids in packets	Total quantity may not exceed 50 kilograms
	Group II acids in packets	Total quantity may not exceed 200 kilograms
	Group III acids in packets	Total quantity may not exceed 1000 kilograms
	Group I alkaline substances in packets	Total quantity may not exceed 50 kilograms
	Group II alkaline substances in packets	Total quantity may not exceed 200 kilograms

	Group III alkaline substances in packets	Total quantity may not exceed 1000 kilograms
<b>IX</b>	<b>MISCELLANEOUS SUBSTANCES</b>	
	Liquids	Total quantity may not exceed 210 litres
	Solids	Total quantity may not exceed 210 kilograms
	Multi Load	No Exception

(Group IX Miscellaneous Substances amended: Notice 1118; 31/8/11 PG No 194)

#### SCHEDULE 4

#### SABS CODES OF PRACTICE AND SPECIFICATIONS

The SABS codes of practice reflected in these by-laws and below are synonymous with the equivalent SANS (South african National Standards) codes of practice.

(Heading described: Notice 1118; 31/8/11 PG No 194)

<b>SABS Code</b>	<b>Title</b>
SABS 019	Portable metal containers for compressed gas - basic design, manufacture, use and maintenance.
SABS 087 : Part 1	The handling, storage and distribution of liquefied petroleum gas in domestic, commercial and industrial installations, Part 1: Liquefied petroleum gas installations involving gas storage containers of individual water capacity not exceeding 500/ and a combined water capacity not exceeding 3000/ per installation.
SABS 087 : Part 2	The handling, storage and distribution of liquefied petroleum gas in domestic, commercial and industrial installations, Part 2: installations in mobile units and small non-permanent buildings.  (SABS 087: Part 2 inserted Notice 1118; 31/8/11 PG No 194)
SABS 087 : Part 3	The handling, storage and distribution of liquefied petroleum gas in domestic, commercial and industrial installations, Part 3: Liquefied petroleum gas installations involving storage vessels of individual water capacity exceeding 5000/.
SABS 087 : Part 4	The handling, storage and distribution of liquefied petroleum gas in domestic, commercial and industrial installations, Part 4: Transportation of liquefied petroleum gas in bulk by road.
SABS 087 : Part 7	The handling, storage and distribution of liquefied petroleum gas in domestic, commercial and industrial installations, Part 7: Storage and filling sites for refillable liquefied petroleum gas (LPG) containers of capacity not exceeding 9 kg.
SABS 087 : Part 8	The handling, storage and distribution of liquefied petroleum gas in domestic, commercial and industrial installations, Part 8: The fuelling of fork lift trucks and other LP gas operated vehicles.  (SABS 087: Part 8 inserted: Notice 1118; 31/8/11 PG No 194)
SABS 087 : Part 10	The handling, storage and distribution of liquefied petroleum gas in domestic, commercial and industrial installations, Part 10: Mobile filling stations for refillable liquefied petroleum gas (LPG) containers of capacity not exceeding 9 kg.  (SABS 087: Part 10 inserted: Notice 1118; 31/8/11 PG No 194)

SABS 089 : Part 1	The petroleum industry, Part 1: Storage and distribution of petroleum products in above ground bulk installations.
SABS 089 : Part 2	The petroleum industry, Part 2: Electrical installations in the distribution and marketing sector.
SABS 0105 : Part 1	The classification, use and control of fire fighting equipment, Part 1: Portable fire extinguishers.
SABS 0108	The classification of hazardous locations and the selection of apparatus for use in such locations.
SABS 0131	The above ground storage of petroleum products.  (SABS 0131 Inserted: Notice 1118; 31/8/11 PG No 194)
SABS 0142	The wiring of premises.
SABS 0177 : Part 5	The testing of materials, components and elements used in buildings: Non-combustibility at 750°C of building materials.
SABS 193	Fire dampers.
SABS 0228	The identification and classification of dangerous substances and goods.
SABS 0229	Transport of dangerous goods – Packaging and large packaging for road and rail transport.  (SABS 0229 inserted: Notice 1118; 31/8/11 PG No 194)
SABS 0230	Transportation of dangerous goods: Inspection requirements of road vehicles.
SABS 0231	Transportation of dangerous goods: Operational requirements for road vehicles.  (SABS 0231 inserted: Notice 1118; 31/8/11 PG No 194)
SABS 0232 : Part 1	Transportation of dangerous goods - Emergency information systems, Part 1: Emergency information systems for road transportation.
SABS 0233	Transportation of dangerous goods – Intermediate bulk containers.  (SABS 0233 inserted: Notice 1118; 31/8/11 PG No 194)
SABS 0263	The warehousing of dangerous goods, enclosed storage and covered and uncovered outdoor storage yards.
SABS 0400	The application of the National Building Regulations.
SABS 1186 : Part 1	Symbolic safety signs, Part 1: Standard signs and general requirements.
SABS 1253	Fire doors and fire shutters.  (SABS 1398 and Title deleted: Notice 1118; 31/8/11 PG No 194)
SABS 1475 : Part 1	The production of reconditioned fire fighting equipment, Part 1: Portable rechargeable fire extinguishers.
SABS 1518	Transportation of dangerous goods - Design requirements for road tankers.
SABS 1571	Transportable rechargeable fire extinguishers.
SABS 1573	Portable rechargeable fire extinguishers - Foam type extinguishers.
SABS 0187: Part 8	Load securement on vehicles – Part 8: Dangerous goods.  (SABS 0187: Part 8 inserted : Notice 1118; 31/8/11 PG No 194)

## SCHEDULE 5

### REPEALED BY-LAWS

<b>Number and Year</b>	<b>Name of By-laws</b>	<b>Extent of Repeal</b>
Administrator's Notice 394 dated 27 May 1953	Johannesburg Municipality: Flammable Liquids and Substances By-laws (Chapter 13 of the By-laws and Regulations relating to Licences and Business Control – see Administrator's Notice 1034 dated 4 August 1982)	Whole
Administrator's Notice 616 dated April 1975	Sandton Municipality: By-laws relating to the storage, use and handling of Flammable Liquids and Substances	Whole
Administrator's Notice 709 dated 2 June 1976	Randburg Municipality: By-laws relating to the storage, use and handling of Flammable Liquids and Substances	Whole
Reference to Administrator's Notice unknown	Roodepoort Municipality: By-laws relating to the storage, use and handling of Flammable Liquids and Substances	Whole
Reference to Administrator's Notice unknown	Midrand Municipality: By-laws relating to the storage, use and handling of Flammable Liquids and Substances	Whole



Administrator's Notice 1385 dated 15 August 1984	Standard By-laws relating to Fire Brigade Services as applied in the dissolved Johannesburg Municipality	Whole
Administrator's Notice 1807 dated 26 October 1983	Standard By-laws relating to Fire Brigade Services as applied in the dissolved Sandton Municipality	Whole
Administrator's Notice 1186 dated 25 August 1982	Standard By-laws relating to Fire Brigade Services as applied in the dissolved Randburg Municipality	Whole
Administrator's Notice 1230 dated 1 September 1982	Standard By-laws relating to Fire Brigade Services as applied in the dissolved Roodepoort Municipality	Whole
Administrator's Notice 1771 dated 23 December 1981	Standard By-laws relating to Fire Brigade Services as applied in the dissolved Midrand Municipality	Whole
Local Authority Notice 2611 dated 28 October 1998	Control of Fireworks By-laws as applied in the municipality of the former Eastern Metropolitan Local Council of Greater Johannesburg	Whole
Local Authority Notice 2693 dated 4 November 1998	By-laws Regarding the Use Of Fireworks in Residential Areas as applied in the municipality of the former Northern Metropolitan Local Council of Greater Johannesburg	Whole
Notice 7627 dated 24 November 1999	Prohibition and Control over the Discharge of Fireworks by-laws as applied in the municipality of the former Western Metropolitan Local Council of Greater Johannesburg	Whole