

# **CHRIS HANI DISTRICT MUNICIPALITY**

## **FIRE AND EMERGENCY SERVICES**

**HEALTH AND COMMUNITY SERVICES DIRECTORATE**



**CHRIS HANI**  
**DISTRICT MUNICIPALITY**  

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**SUSTAINING GROWTH  
THROUGH OUR PEOPLE**

## **DRAFT COMMUNITY FIRE SAFETY BY-LAWS 2022**

**CHRIS HANI DISTRICT MUNICIPALITY**  
**COMMUNITY FIRE SAFETY BY-LAW 2022**

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## Chapter 1 Definitions

### 1.1 Definitions

In this by-law, words used in the masculine gender include the feminine, the singular includes the plural and *vice versa*, the English text prevails in the event of an inconsistency between the different texts and unless the context otherwise indicates –

**‘above ground storage tank’** means a tank situated above ground for the storage of flammable substances as contemplated in SANS 0131 and SANS 089 Part 1 and SANS 087 Part 3;

**“access door”** means any door that provides access to an emergency route;

**“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;

**"animal"** means any animal that is kept for domestic, breeding, research, agricultural, resale, veterinary treatment, or animal welfare purposes within the area of the controlling authority.

**“approved”** means as approved by the Council.

**“area” means** any residential area or any area within the boundaries of the municipality;

**“automatic releasing hold-open device”** means a device used to hold open a fire door and operates on the detection of a fire to close the fire door;

**“basement”** in relation to a building, means any part of the building which is below the level of the ground storey;

**“boundary”** means any lateral or street boundary of a site;

**“building”** means: -

(a) any structure, whether of a temporary or permanent nature and irrespective of the materials used in the construction thereof, erected or used for or in connection with:-

(i) the accommodation or convenience of human beings or animals;

(ii) the manufacture, processing, storage, display or sale of any goods;

(iii) the provision of any service;

(iv) the destruction or treatment of combustible refuse or combustible waste;

(v) the cultivation or growing of any plant or crop;

(b) any wall, swimming pool, reservoir or bridge or any other structure connected with it;

(c) any fuel pump or any tank used in connection therewith.

(d) any part of a building, including a building as defined in paragraph (a), (b) or

(e) any facilities or system, or part or portion thereof, within or outside but incidental to a building, for the provision of a water supply, drainage, sewerage, storm water disposal, electricity supply or other similar service in respect of the building;

**“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;

**“building regulations”** means the National Building Regulations made in terms of the National Building Regulations and Building Standards Act, 1977 (Act No. 103 of 1977), as amended;

**“Certificate of Compliance”** means a certificate contemplated in section 20 of these by-laws, which a certificate has been issued by the Service in terms of fire related requirements to authorizes a person to occupy designated premises (which are a public building) accordingly;

**“Certificate of Registration”** means a certificate issued by the Service in terms of section 24 of these by-laws which authorizes a person to occupy registered premises, or to use the premises for spray-painting activities or for the storage, handling or use of dangerous goods, by having complied to all fire related requirements;

**“Chris Hani District Municipality”** means the Chris Hani District Municipality established in terms of section 12 of the Municipal Structures Act, (Act 117 of 1998);

**“Category C municipality”** means a municipality within the area of jurisdiction of the Chris Hani District municipality as contemplated in section 155(1)(c) of the Constitution;

**“certificate of fitness”** means a certificate contemplated in section 41;

**“certificate of registration”** means a certificate contemplated in section 64;

**“Chief Fire Officer”** means the person appointed by the controlling authority in terms of section 5 (1) of the Fire Brigade Services Act, 1987 (Act 99 of 1987), and includes any member who exercises any power or performs any duty delegated by the Chief Fire Officer to the member under section 19 of the Act, and includes an Acting Chief Fire Officer appointed in terms of section 5 (3) of the Act, and Manager: Fire Services has a corresponding meaning.

**“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;

**“combustible material”** means combustible refuse, combustible waste or any other material capable of igniting;

**“combustible refuse”** means combustible rubbish, litter or material that is discarded, refused, rejected, or considered worthless;

**“combustible waste”** means combustible waste material which is salvageable, retained or collected for scrap or reprocessing and may include all combustible fibres, hay, straw, hair, feathers, down, wood shavings, turnings, all types of paper products, soiled cloth trimmings and cuttings, rubber trimmings and buffing, metal fines, and any mixture of the above items, or any other salvageable combustible waste material;

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

**“controlling authority”** means the District Municipality in control of the Service as defined in the Fire Brigade Services Act, 99 of 1987;

**“control room”** means a room on any premises which is equipped and used to co-ordinate and control an emergency situation in or on designated premises;

**“Constitution”** means the Constitution of the Republic of South Africa, 1996 (Act No. 108 of 1996);

**“Council”** means-

The Chris Hani District Municipality established by Provincial Notice No. 37 of 2000, dated 1 October 2000, as amended, constitution twelfth Amendment Act 2005, exercising its legislative and executive authority through its municipal council;

its successor in title;

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; or

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.

**“Criminal Procedure Act”** means the Criminal Procedure Act, 1077 (No, 51 of 1977);

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

**“designated area”** means a place designated as such in terms of section 60;

**"designated premises"** means any premises designated and registered as such by the municipality and which is required to have an emergency evacuation plan as contemplated in section 38 of this by-law;

**"Device"** means any vehicle, mechanical or electrical equipment, electrical motor, machine, instrument, apparatus, or other implement of which the whole or any part is used or is capable of being used for, in or in connection with the manufacture, treatment, provision, delivery, supply, packaging, labelling, storage, conveyance, loading and unloading, handling, preparation, serving or administering of any grouped dangerous good, and includes any delivery pump, filling device, spray-painting device and mechanical hoist;

**discharge** means the ignition or activation of any fireworks whatsoever;

**"district"** means the area of jurisdiction of the Chris Hani District Municipality and includes the area of jurisdiction of the Category C municipalities within such area;

**"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 38;

**"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 and the regulations promulgated thereunder;

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

**"explosive(s)"** means

(a) Gunpowder, nitro-glycerine, dynamite, gun cotton, blasting powders, fulminate of mercury or of other metals, colored fires, and every other metals, colored fires and every other substances,



whether similar to those herein mentioned or not, which is used or manufactured with a view to producing an practical effect by explosion or a pyrotechnic effect;

(b) Any fuse, rocket, detonator, cartridge, and every adaptation or preparation of an explosive;

(c) Any other substance, which the President may from time to time by proclamation in the Government Gazette, declares to be an explosive;

(d) A petrol bomb; and

(e) Any container, apparatus, instrument, or article which

(i) Contains any inflammable substances and can be used or adapted so that it can be used to cause an explosion or a fire; or

(ii) Was made or can be adapted to cause, in combination with or by means of any inflammable substance, an explosion or a fire;

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

**“facility”** means any storage tank, whether above ground or below ground, or any transportable or refillable container that can be used for the keeping of dangerous goods, and include the fuel tank of a motor vehicle, aircraft, vessel, ship or boat;

**“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 area”** means that jurisdiction of the controlling authority in which provision is made for fire protection as defined in SANS 10090;

**“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 SANS 193;

**“fire door”** means an automatic or self-closing door or shutter assembly especially constructed to prevent the passage of fire for a specific length of time;

**“fire extinguisher”** means a portable or mobile rechargeable container which has a fire extinguishing substance that is expelled by the action of internal pressure for the purposes of extinguishing a fire;

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

**“fire grading”** means, with regard to materials, components and elements used in the construction and finishing of buildings, those materials, components, and elements which have been tested and classified in accordance with SANS 10177, Parts 2 to 5, as amended;

**“fire hazard”** means any situation, process, material or condition which may cause a fire or explosion or provide a ready fuel supply to increase the spread or intensity of the fire or explosion and which poses a threat to life or property;

**“fire incident”** means a fire on any premises in the area;

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

**“fire protection installation”** means any device or system designed and installed to – (a) detect, control or extinguish a fire, or  
(b) alert occupants or the fire service, or both, to a fire; but excludes portable and mobile fire extinguishers;

**"fire risk category"** means the definition of the risk profile of any sub-area within the area of the controlling authority as provided for in SANS 10090 and includes:

**Category A:** Central business districts and extensive commercial and industrial areas normally found in cities and large towns (areas where the risk to life and property are likely to be high due to fire occurrence and spread).

**Category B:** Limited central business districts, smaller commercial or industrial areas normally associated with small towns and decentralised areas of cities and large towns (areas where the risk to life and property is likely to be moderate due to fire occurrence and spread).

**Category C:** Residential areas of conventional construction.

**Category D:** Rural risks of limited buildings and remote from urban areas.

**Category E:** Special risks. Individual risks requiring a pre-determined attendance over and above the predominant risk category in an area. Includes large shopping/entertainment centres, informal settlements, harbours, hospitals, prisons, large airport buildings, high-rise buildings, and petrochemical plants.

**NOTE:** High-rise buildings, as defined SANS 10400, are an integral part of central business districts and would therefore be included in Category A. Buildings with major fire safety or other risk implications may, however, be classed as special risks;

**"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 solid”** as contemplated in SANS 0228, means a solid that is easily ignited by external sources, such as sparks and flames, solids that are readily combustible, solids that are liable to

cause, or contribute to, a fire through friction or solids that are desensitised (wetted) explosives that can explode if not diluted sufficiently;

**“flammable store”** means a store that is used for the storage of flammable liquids and complies with the criteria set out in PART 8 of this by-law;

**“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;

**“grouped dangerous goods”** means a group of dangerous goods as contemplated in section 1 of the Dangerous Goods Act, 1973 (Act 15 of 1973);

**“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;

**“inspector”** means a member appointed as an inspector in terms of section 2 (25) of the Explosive Act, 1956, to control fireworks in so far as the storage, use and sale of fireworks are concerned.

**“Land Survey Act”** means the Land Survey Act, 1997 (Act No. 8 of 1997);

**“liquefied petroleum gas”** means a mixture of light hydrocarbons (predominantly propane, butane) 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 as contemplated in section 6 and 6A (5) of the Fire Brigade Services Act, 1987;

**“municipal manager”** means a person appointed in terms of section 82 of the Municipal Structures Act or his nominee;

**“municipality”** means the CHRIS HANI District Municipality, established in terms of Section 12 of the Municipal Structures Act, 117 of 1998, and includes any political structure, political office bearer, councillor, duly authorised agent or any employee acting in connection with this by-law by virtue of a power vested in the municipality and delegated or sub-delegated to such political structure, political office bearer, councillor, agent or employee;

**“Municipal Systems Act”** means the Local Government: Municipal Systems Act, 2000 (Act No. 32 of 2000);

**“National Archives and Record Service of South Africa Act”** means the National Archives and Record Service of South Africa Act, 1996 (Act 43 of 1996);

**“National Building Regulations”** 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'** has its common law meaning and includes-

owner in relation to land or premises, means the registered owner of the land or premises, and includes any person who receives the rental or profit from the land or premises from any tenant or occupier, whether for his/her own account or as an agent for a person who is entitled to the rental or profit or who has an interest therein, and, in relation to a sectional title scheme in terms of the Sectional Titles Act, 1986, (Act 95 of 1986), for the purpose of section 18 of the Fire Brigade Services Act, 1987, the body corporate as contemplated in the Section A Title Act 1986 and in the case of a deceased or insolvent estate, the executor or the curator respectively

- (a) a lessee or other person who controls the land in question in terms of a contract, testamentary document, law or order of a High Court;
- (b) in relation to land controlled by a community, the executive body of the community in terms of its constitution or any law or custom;
- (c) in relation to State land not controlled by a person contemplated in paragraph (a) or a community-
  - (i) the Minister of the Government department or the member of the executive council of the provincial administration exercising control over that State land; or
  - (ii) a person authorised by him or her; and
- (d) in relation to a municipality, the municipal manager of the municipality or a person authorised by him or her;

**“person in charge”** means:-

- (a) in relation to premises, either a natural or juristic person who is permanently or temporarily responsible for the management, maintenance or utilisation of the premises;
- (b) in relation to a building, either a natural or juristic person who is permanently or temporarily responsible for the management, maintenance or utilisation of the building;
- (c) in relation to an installation, either a natural or juristic person who is permanently or temporarily responsible for the management or utilisation of the installation; provided that such a person is not the person mentioned in (a); and
- (d) in the event of the chief fire officer being unable to determine the identity of a person mentioned in (a), (b) and (c), any person who is in the opinion of the chief fire officer deemed to be in charge of such premises, building or installation;

**“Promotion of Access to Information Act”** means the Promotion of Access to Information Act, 2000 (Act No. 2 of 2000);

**“prescribed”** means as determined by the municipality;

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

**“prescribed fee”** means a fee determined by the municipality 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 public place as defined in section 63 of the Local Government: (Ordinance 17 of 1939); any square, park, recreation ground, beach, sports ground, sanitary lane or open space which has –

- (a) been provided, reserved or set apart for use by the public or at any time been dedicated to the public;
- (b) been used by the public without interruption for a period of at least thirty years; or
- (c) at any time been declared or rendered such by the municipality or other competent authority;

**“pyrotechnics”** means any appropriately qualified person responsible for the use of fireworks at a fireworks display;

**“Rational design”** as defined in SANS 10400;

**“registered premises”** means premises in respect of which the Service has issued a certificate or permit for spray-painting activities and the storage, handling and use of dangerous goods, as well as a certificate or permit to occupy premises;

**“Retail dealer”** means a person or concern that, for the purposes of dealing in explosives, supplies such explosives to any other person for use by that person and not for resale;

**“SANS”** means the South African National Standards contemplated in section 2 of the Standards Act, 1993 (Act No. 29 of 1993), and SANS followed by any number means a reference to a SANS code of practice, specification or standard of the corresponding number;

**“service”** means the Fire Service established by the controlling authority as contemplated in section 1 of the Fire Brigade Services Act, 1987;

**“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 issued by the Service in terms of section 45 (1)(a) of these bylaws;

**“spraying room”** means any room, building or structure that is designed, build, equipped or erected solely for spraying or coating vehicles, or any other objects with Group III dangerous goods and/or combinations of Group III dangerous goods, or with any other substance, to form a decorative and/or corrosion resistant layer, or for any purpose incidental thereto, and **spraying booth** and **submersion tank** , as well as any related process involving electrolysis, have a corresponding meaning

**“State”** means: -

- (a) any department of state or administration in the national, provincial or local sphere of government, or
- (b) any other functionary or institution -
  - (i) exercising a power or performing a function in terms of the Constitution or a provincial constitution; or
  - (ii) exercising a public power or performing a public function in terms of any legislation, but does not include a court or judicial officer;

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

**“storeroom** means a room, which is constructed, equipped and maintained as contemplated in section 43 of these by-laws;

**“storey”** means that part of a building which is situated between the top of any floor and the top of the floor above it, or if there is no floor above it, that portion between such floor and the ceiling above it (any mezzanine floor, open work floor, catwalk or gallery is regarded as part of the storey in which it is situated): Provided that, in relation to a building-

- (a) The ground storey will be regarded as the storey in which there is an entrance to the building from the level of the adjoining ground or, if there is more than one such storey the lower or lowest
- (b) A basement will be regarded as any storey of the building which is below the level of the ground storey.
- (b) An upper storey will be regarded as any storey of the building which is above the level of the ground storey; and
- (c) The height, expressed in storeys, will be regarded as that number of storeys which includes all storeys other than a basement.

**“street”** means any street, road, cycle path, thoroughfare or any other place, including (a) the verge of any such road, street or thoroughfare;

- (b) any footpath, sidewalk or similar pedestrian portion of a road reserve;
- (c) any bridge, ferry or drift traversed by any such road, street or thoroughfare;

- (d) any other object belonging to such road, street or thoroughfare, which has at any time been –
- (i) dedicated to the public;
  - (ii) used without interruption by the public for a period of at least thirty years;
  - (iii) declared or rendered such by the municipality or other competent authority, or
  - (iv) constructed by a local authority, and
  - (v) any land, with or without buildings or structures thereon, which is shown as a street on –
    - (aa) any plan of subdivision or diagram approved by the municipality or other competent authority and acted upon, or
    - (bb) any general plan as defined in the Land Survey Act, 1997 registered or filed in a deeds registry or Surveyor General's office, unless such land is on such plan or diagram described as a private street;

**“temporary structure”** means any structure that is apparently temporary in nature;

**“this by-law”** includes the Schedules published in terms of this by-law;

**“summary abate”** means to immediately judge a condition to be a fire hazard or other threatening danger to life or property and to order immediate correction of such condition;

**“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, (Act 93 of 1996) as the case may be;

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

**“wheel blocks”** means wedge-shaped blocks, manufactured from material which, when scraped against the surface of any other object or material, does not produce sparks or generate static electricity;

**“Wholesale dealer”** means a person or concern that, for the purpose of trade, supplies explosives to any other dealer for resale.

**CHRIS HANI DISTRICT MUNICIPALITY  
COMMUNITY FIRE SAFETY BY-LAWS, 2022**

**1.2. Preamble**

**Chris Hani District Municipality** hereby promulgates the Fire and Emergency Services By-laws set out for its area of jurisdiction in terms of section 16 of Fire Brigade Services Act 99 of 1987, section 12 of the Local Government: Municipal Systems Act, 2000 (Act 32 of 2000), together with section 15 of the Local Government: Municipal Structures Act, 1998 (Act 117 of 1998) recognises:-

- that everyone has the constitutional right to an environment that is not harmful to their safety or well-being;
- that losses due to fire and the subsequent economic and social impact on people, property and infrastructure causes unnecessary hardship;
- that the protection of all sectors of the community against fire is an important aspect in the development and sustainability of the economy;
- that certain aspects of the daily existence need to be controlled in such a manner as to prevent and reduce the effects of fire on the community as a whole;
- that the community has a vital role to play in achieving the objectives of this By-law, and
- that the benefits of a fire-safe environment should be accessible to all.
- to promote the achievement of a fire-safe environment for the benefit of all persons within the area of jurisdiction.
- to provide for procedures, methods, and practices to regulate fire safety within the area of jurisdiction of Chris Hani District Municipality.



## **Chapter 2**

### **Application and purpose of By-Law**

#### **2. Application of By-laws**

##### **2.(1) These by-laws apply-**

- a) To all persons within the area of jurisdiction of the municipality and includes both formal and informal sectors of the community and economy.
- b) Notwithstanding the provisions in either the Hazardous Substances Act or the Occupational Health and Safety Act, and in addition to any other applicable national or provincial law, this by-law regulates flammable substances in jurisdiction of the municipality to prevent and reduce fire hazards or other threatening dangers.
- c) The municipality may, in terms of an agreement as contemplated in section 12 of the Fire Brigade Service Act, and the payment of tariffs in accordance with the municipality's tariff policy or as contemplated in this by-law, be employed outside the area of jurisdiction of the municipality.
- d) If any provision in this by-law vests or imposes any power, function or duty of the municipality in or on an employee of the municipality and such power, function or duty has in terms of section 81(2) of the Municipal Systems Act 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 municipality provider or, where applicable, an employee of the municipality provider authorized by it.

##### **2.(2) Purpose of by-law**

- (1) The purpose of this by-law is to establish and maintain a service for the area of jurisdiction of the municipality, to promote the achievement of a fire-safe environment for the benefit of all persons within the area of jurisdiction of Chris Hani District Municipality and to provide procedures, methods, and practices to regulate community fire safety within the area of jurisdiction of the municipality.

## **Chapter 3**

### **Administrative provisions**

#### **3. Administration and enforcement**

- (1) The chief fire officer is responsible for the administration and enforcement of this By-law. Where no chief fire officer has been appointed in terms of the Fire Brigade Services Act, the municipal manager is responsible for the administration and enforcement of this By-law. Where there is no service established in the area of jurisdiction of the Municipality, the municipal manager is responsible for the administration and enforcement of this By-law.

#### **4. Delegation**

- (1) A chief fire officer may delegate any power granted to him in terms of this By-law in accordance with section 19 of the Fire Brigade Services Act.
- (2) A municipal manager may delegate any power granted to him in terms of this By-law in accordance with the system of delegation of the Municipality developed in terms of section 59 of the Municipal Systems Act.

#### **5. Enforcement provisions**

- (1) A controlling authority may, whenever he regards it necessary or expedient to do so, enter any premises at any reasonable time to ensure compliance with this By-law.
- (2) A controlling authority has the authority to summarily abate any condition which is in violation of any provision of this By-law and which presents an immediate fire hazard or other threatening danger.
- (3) A controlling authority must remedy any violation mentioned in subsection (2), by performing any act, and may also:-
  - a. call for the immediate evacuation of the premises;
  - b. order the closure of the premises until such time as the violation has been rectified;
  - c. order the cessation of any activity, and
  - d. order the removal of the immediate threat.
- (4) Any costs of such action must be borne by the person deemed by a controlling authority to be responsible for the existence of such condition.

#### **6. Authority to investigate**

- (1) Notwithstanding anything to the contrary contained in any other law, a controlling authority has the authority to investigate the cause, origin and circumstances of any fire or other threatening danger.

#### **7. Failure to comply with provisions**

- (1) When a controlling authority finds that there is non-compliance with the provisions of this By-law, excluding the situation in section 5(2), a written notice may be issued and should include the following:—
  - a. confirmation of the findings;
  - b. provisions of this By-law that are being contravened;
  - c. the remedial action required, and

- d. set forth a time for compliance.
- (2) An order or notice issued under this By-law must be served either by personal delivery or registered mail upon a person who is in the opinion of the controlling authority, deemed to be the appropriate person.
- (3) For unattended or abandoned premises, a copy of such order or notice must be posted on the premises in a conspicuous place at or near the entrance to such premises and the order or notice must be mailed by registered mail, to the last known address of the owner, the person in charge of the premises or both.

## **8. Denial, suspension or revocation of an approval or a certificate**

- (1) A controlling authority may refuse, suspend or revoke an approval or a certificate required by this By-law for: —
  - a. failure to meet the provisions of this By-law for the issuance of the approval or certificate, or
  - b. non-compliance with the provisions of the approval or certificate

## **9. Records required**

- (1) The safekeeping of all relevant records and documents is the responsibility of the controlling authority.

## **10. Charges**

- (1) The Municipality may determine the fees payable by a person on whose behalf, the controlling authority rendered a service as contemplated in section 10 of the Fire Brigade Services Act.
- (2) The Municipality may charge a fee for the provision of an inspection, re-inspection or any other service as well as the issuing of permits, approvals or certificates in accordance with the applicable local government legislation regulating the charging of fees.

## **11. Reporting a fire hazard and other threatening danger**

- (1) An owner or the person in charge of the premises, upon discovering any evidence of a fire hazard or other threatening danger pertaining to this By-law, must immediately notify the controlling authority.

## Chapter 4 Establishment of a service

### 12. Establishment of Fire Brigade Service

- (1) The controlling authority may, subject to section 3 (1) of the Fire Brigade Services Act, 1987, as amended, read with section 156(1)(a) and Part B of Schedule 4 of the Constitution, establish, and maintain a Service within its area, which includes the appointment of personnel and the acquisition of vehicles, machinery, equipment, devices, and accessories that may be necessary to operate the Service efficiently.
- (2) The municipality must maintain the Service, which includes –
  - a. appointing a chief fire officer and the necessary members of the Service;
  - b. ensuring that such officer and members 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.

### 13. Duties of Traditional Leaders or Owners of Communal Land

- (1) The Traditional Leaders are the rightful owners of the Communal land and are therefore responsible to:-
  - (a) Provide or ensure that the availability of necessary equipment to prevent the spread and/or fight fires when they break out
  - (b) Nominate or appoint fire rangers to guard their land against unplanned fires
  - (c) Investigate all fires that have broken out in their land and persecute the transgressors in accordance with Common Laws/ by-laws or report the incidents to the Chief Fire Officer
- (2) Anyone who contravene subsection (a), (b) and (c) commits an offence and will be liable for an offence and maximum payment of fine or imprisonment.**

### 14. Joint Fire Services Committee

- (1) A Joint Fire Services Committee representing the fire services in the area of jurisdiction of the Chris Hani District Municipality and all Category B Municipalities in the area of jurisdiction of such municipality must be established.
- (2) The Joint Fire Services Committee as contemplated in subsection (1) must collaborate and liaise for the purposes of making recommendations with regard to –
  - (a) the planning and co-ordination of the services within the district;
  - (b) the co-ordination and standardisation of infrastructure, vehicles, equipment and procedures pertaining to the service;
  - (c) the training of members; and
  - (d) any other operational matters relating to the Service.
- (3) The chief fire officer/delegated member of each municipality within the district must be a member of the Joint Fire Services Committee.
- (4) The Joint Fire Services Committee must determine its rules of meeting procedures, terms of reference, provided that such procedures are not inconsistent with generally accepted municipal administrative practices, this by-law or any other legislation.

**Chapter 5**  
**Fire protection**  
***Fire protection for buildings***

**15. General provisions**

- (1) The controlling authority must in terms of sections 5(3) and 6(1) of this by-law abate a contravention of the National Building Regulations relating to fire and safety of buildings and premises.

**16. Access for emergency vehicles**

- (1) If, in the reasonable opinion of the controlling authority, premises are not readily accessible from public roads, then the premises must be provided with emergency vehicle access and, notwithstanding the provisions in the National Building Regulations [T1], may be required to comply with any or all of the following –
  - a) an access road must be constructed so that it is capable of supporting the mass of the heaviest emergency vehicle required to cater for the risk of the premises;
  - b) a motorised or electronically operated gate must be equipped in such a manner that access to the premises can be gained without the use of a motor or any other electronic device;
  - c) fire lanes must be provided for all premises which are set back more than 45m from a public road or which exceed 9m in height and are set back more than 15m from a public road;
  - d) fire lanes must be at least 4m in width, the position of which must be decided upon after consultation with the controlling authority, and the area from ground level to a clearance height of 4m above the fire lane must remain unobstructed; and
  - e) a *cul-de-sac* which is more than 90m in length must be provided with a minimum turning circle at the closed end of the road capable of accommodating the largest emergency vehicle which is required to cater for the risk of the premises.
- (2) The design, marking, use and maintenance of fire lanes not forming part of a public road must comply with the requirements of the controlling authority.
- (3) It is unlawful for any person to park a vehicle in or otherwise obstruct a fire lane.

**17. Division and occupancy separating elements**

- (1) An owner or person in charge of a building may not alter a division or occupancy separating element in any way that would render it less effective or to allow flame, heat, or combustion products from penetrating into the adjacent compartment or structure.

**18. Fire doors and assemblies**

- (1) Subject to the provisions of SABS 1253, a fire door and assembly must be maintained in such a manner that in the event of a fire it retains its integrity, insulation and stability for the time period required for that particular class of door.
- (2) A fire door may be kept open, only when it is equipped with an automatic releasing hold-open device approved by the Municipality.
- (3) A fire door and assembly may not be rendered less effective through the following actions: —

- a. altering the integrity, insulation or stability of a particular class of door;
- b. disconnecting the self-closing mechanism;
- c. wedging, blocking or obstructing the door so that it cannot close;
- d. painting the fusible link actuating mechanism of a door;
- e. disconnecting or rendering less effective an electric or electronic release mechanism, or
- f. any other action that renders a fire door or assembly less effective.

## 19. Escape routes

- (1) A component which forms part of an escape route such as the feeder routes, access doors, emergency routes and escape doors must not be obstructed or rendered less effective in any way, which could hinder or prevent the escape of any person from a building in the case of fire or any other emergency.
- (2) A locking device, which is fitted to an access or escape door in an escape route, must be of a type approved by Controlling Authority.
- (3) Where required by the controlling authority, an escape route must be clearly indicated with signage, which complies with SABS 1186, indicating the direction of travel in the event of fire or any other emergency.

## 20. Tents

- (1) Prior to the erection and usage of a tent as an occupancy contemplated in the National Building Regulations (A20), the owner or person in charge of a premises must:—
  - a. submit an application in terms of the National Building Regulations (A2) and (A23) to the Municipality for the approval to erect and use the tent, and
  - b. submit an application in terms of section 21 of this By-law to the controlling authority for a temporary population certificate.
- (2) The application submitted in terms of subsection (1)(a) must comply with the following:—
  - a. The safety distance between a tent and any building or boundary shall be determined in accordance with TT2 of the SABS 0400. The controlling authority may require that this distance be increased should the situation require it.
  - b. The tent must be erected at least 4,5 metres from any combustible material or dangerous goods.
  - c. Where tents are erected adjacent to one another, an unobstructed minimum distance of 4,5 metres must be provided between them and where applicable between the stakes and guidelines of the adjacent tents, in order to ensure emergency vehicle access.
  - d. The requirements set out in the National Building Regulations (T1) must be complied with in the following instances:—
    - (i) where the population of a tent exceeds 25 people;
    - (ii) where a tent is occupied during the hours of darkness;
    - (iii) for seating arrangements and aisle dimensions, and
    - (iv) for the provisions of fire extinguishers.
  - e. The population density of a tent must comply with the National Building Regulations (A21).
  - f. No cooking may be carried out in the tent occupied by the public and where cooking is required, it must be carried out in a separate tent or an area to which the public does not have access.

- g. No open fire is permitted in a tent and any other flame emitting device, such as a candle, lantern or torch but not limited thereto, is only permitted in a tent after approval by the controlling authority.
  - h. No open fire or flame is permitted within five metres of a tent, stake, or guideline of a tent.
  - i. Smoking is prohibited in a tent and a "No Smoking" sign must be prominently displayed at each entrance and must comply with SABS 1186: Part 1.
  - j. Lighting and wiring installed in a tent must comply with the requirements set out in SABS 0142 in such a manner that direct contact is not made with combustible material and the radiated heat does not pose an ignition hazard.
- (3) Notwithstanding the provisions in subsections (1) and (2), the controlling authority may request the applicant to fulfil additional requirements for the erection and usage of a tent.

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## **Chapter 6**

### **Public safety**

#### **21. Prevention and control of overcrowding**

- (1) Prior to the usage of the premises for entertainment or public assembly where the population including staff exceeds 50 people, the owner or person in charge of such premises must submit an application for a population certificate to the controlling authority, as prescribed in of this By-Laws.
- (2) The owner or person in charge of a premises for which a population certificate is required shall not utilise such premises if a population certificate has not been issued by the Controlling Authority.
- (3) The controlling authority may request additional information from the applicant.
- (4) Notwithstanding the provision in subsection (1), the controlling authority may instruct the owner or person in charge of the premises to apply for either a temporary or a permanent population certificate, should the premises be used in respect of any other occupancy contemplated in the National Building Regulations (A20).
- (5) A temporary population certificate is valid for a period not exceeding 30 calendar days.
- (6) The controlling authority must refuse to issue the temporary or permanent population certificate if the premises do not comply with the requirements of the National Building Regulations (T1), and where the controlling authority is of the opinion that the non-compliance of the premises can be remedied, he must instruct the owner or person in charge of the premises in writing, to take all reasonable steps to render the premises safe prior to the usage of the premises and the issuing of the temporary or permanent population certificate.
- (7) If at any time the controlling authority becomes aware that the usage of the premises is not in accordance with the temporary or permanent population certificate, he must act in terms of these By-laws.
- (8) The temporary and permanent population certificate is valid only for the premises or portion of the premises for which it was issued, and when changes of occupancy occur or alterations are made to the premises for which the certificate was issued, the owner or person in charge of the premises must reapply for the certificate in accordance with subsection (1). The temporary or permanent population certificate must be displayed in a clearly visible and conspicuous position in or on the premises for which the certificate was issued.
- (9) The owner or the person in charge of the premises must prevent overcrowding by limiting the maximum population to that which is specified on the temporary or permanent population certificate.
- (10) A person must vacate the premises that are overcrowded when instructed to do so by the controlling authority, the owner or person in charge of the premises.

#### **22. Attendance of a service**

- (1) When the controlling authority is of the opinion that a service is required to be in attendance during a function in a place used for entertainment or public assembly, he may provide, in the interest of public safety and subject to the exigencies of the service, one or more members, a vehicle or equipment of a service to be in attendance on the premises for the duration of the function or part thereof.



- (2) When the attendance of a service during a function in a place used for entertainment or public assembly involves costs, the costs incurred by the Municipality may be recovered from the person in charge of the function.

### **23. Formulation of an emergency evacuation plan**

- (1) The owner or person in charge of a school, hospital, residential institution, hotel, guest house, hostel or other similar occupancy which has a population in excess of 25 persons (including staff), must formulate an emergency evacuation plan detailing the appropriate action to be taken by the staff or the occupants in the event of a fire or other threatening danger.
- (2) The controlling authority may order the owner or person in charge of the premises, other than those contemplated in subsection (1), to formulate an emergency evacuation plan detailing the appropriate action to be taken by the staff or the occupants in the event of a fire or other threatening danger.
- (3) The plan mentioned in subsections (1) and (2) must be revised if an aspect thereof is no longer applicable or if the building for which the plan was designed has changed.
- (4) The emergency evacuation plan must be tested in its entirety at a maximum of six-monthly intervals or when the plan has been revised and a record of the testing must be kept in a register.
- (5) The register mentioned in subsection (4) must contain the following information:—
  - a. the date and time of the test;
  - b. the number of participants;
  - c. the outcome of the test and any corrective actions required, and
  - d. the name and signature of the person supervising the test.
- (6) The register, together with the emergency evacuation plan, must be available on the premises for inspection by the controlling authority.
- (7) The controlling authority may evaluate the formulation and implementation of the emergency evacuation plan and may officially communicate any recommendations or remedial actions to improve or rectify faults in the plan.

### **24. Combustible materials and refuse**

1. No person may store any combustible materials of whatever nature or have them stored or permit to be stored in such a manner and in such a position as to likely pose a fire hazard to any human being, animal, building or premises.
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 grass, weeds, reeds, shrubs, trees, or any like vegetation to become overgrown on premises to such an extent that it may pose a fire hazard or a portable fire hazard to any adjacent premises and/or any other person's 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 millimetre's
  - (b) pruning, chopping down and sawing any shrub or tree; and
  - (c) removing any resulting combustible residue from the property.
7. ***Any person who fails to comply with the provisions of this section is guilty of an offence.***

## **25. Fire protection for thatch roof structures**

- (1) Any thatch roof construction with a span not exceeding 6 metres and which is supported by structural walls must comply with the provisions of SANS 10407: 2004.
- (2) A rational design must be provided for any thatch roof construction with a span exceeding 6 metres or where such construction is not supported by structural walls.
- (3) Where a new or replacement thatch structure is to be constructed for any building, the following must be incorporated into the design and construction of such thatch roof:
  - (a) The thatch density should not be less than 35 to 50 kg/m<sup>2</sup> for a thickness of 175mm to 200mm;
  - (b) Sisal binding twine shall be used;
  - (c) Construction of any thatch roof must be sound, and all materials used therein must be of good quality;
  - (d) Where electrical wiring passes through the roof space of any thatch roof, all wiring shall be run in continuous conduit and all junction boxes shall be properly sealed;
  - (e) Where, in the opinion of the chief fire officer, the risk of lightning may pose a hazard, it may direct those certain occupancies, as he may determine, be protected by the installation of lightning conductors in accordance with SABS 03: 1985;
  - (f) All wooden components and all exposed surfaces of thatch must be treated with an approved fire retardant and the thatching must be rodent proofed.
  - (g) Upon completion of any thatch construction, the owner must provide the Chief Fire Officer with written certification of compliance with all of the provisions of regulation 25(3).
- (4) Where, in the opinion of the Chief Fire Officer, any fire in a thatched building will pose an unacceptable risk to any adjacent buildings or property or where its location will result in an increased risk from an external fire, the Chief Fire Officer may prescribe the installation of a sprinkler or drencher system, provided that such system may be manual or automatic in operation.
- (5) Any chimney passing through a thatch roof must be constructed so that:

- (a) only full 220mm bricks are used and laid so that the unexposed faces in contact
  - (b) all joints and spaces are properly filled with mortar;
  - (c) no wooden building component or decoration is built into or through any chimney
  - (d) the top of any chimney stack must extend at least 1 metre above the highest point of the roof;
  - (e) a spark arrestor comprising a stainless-steel wire mesh measuring 10 x10 x 1mm across the full width of the flue shall be fitted not less than 700mm from the top of the stack.
- (6) Any person who contravenes subsections (1) to (5) commits an offence.

## 26. Making Fires

- (1) No person may, subject to provision of the Veld and Forest Act and Environmental Management Act, within the area, make an open, uncontrollable, or unattended fire or permit a fire to be made in such a place and/or in such a manner as to pose a real or potentially real threat to any human being, animal, building, premises or other property: Provided that this prohibition is not applicable to-
- a) a fire in an approved, purpose made stove, fireplace, or heath, which is an integral part of a structure.
  - b) a fire for preparing food on private premises or premises set aside for that purpose; and
  - c) a device for preparing food, which device is heated by means of electricity or liquid petroleum gas and is positioned in such a way that the device poses no threat to life or property on any premises
  - d) No person may, without the written authority of the Service, burn any refuse, wood, straw, or other combustible materials within the area, or have them burnt or permit them to be burnt within the area, unless the refuse, wood, straw or other combustible materials are burnt inside an approved purpose-made incinerator or incinerating device, subject to the provisions of subsection (1).
- (2) Any person who fails to comply with the provisions of this section is guilty of an offence.**

## 27. Firebreaks

- (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 6 meters wide (when measured parallel from the boundary concerned);
  - b. and 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 6 metre-wide safety fire-break around that obstruction.
- (3) No person may clear or maintain a safety fire-break by burning without 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 controlling authority for permission, stipulating the property concerned and the proposed date and time of the burning;
  - b. be in possession of a fire permit issued by the controlling authority;
  - c. and 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
- (5) No burning will be approved by the Chief Fire Officer or Fire Protection Officer if the weather conditions and fire index rating is not favourable to allow burning of fire breaks.
- (6) Notwithstanding the above, the provisions of the National Veld and Forest Fire Act, 1998 (Act 101 of 1998), apply mutatis mutandis to the application of this section.
- (7) Any person who fails to comply with the provisions of this section is guilty of an offence.**

## 28. Inspection of properties and instructions to occupiers.

- 1) A fire officer may, in executing all powers delegated in terms of relevant and applicable legislation, enter any premises at any reasonable time to conduct inspections to determine whether there is any fire, dangerous goods, or other hazard on the premises.
- 2) An officer contemplated in subsection (1) may, arising from a condition referred to in subsection (1), serve on the occupier of the premises or any other premises a written instruction and fire protection directives and requirements that are necessary to rectify the condition on or in the premises in order to reduce the fire risk and/or to protect life and property, which instruction must determine a deadline for compliance with the directives and requirements
- 3) (a) Whenever a condition exists or is found in or on any premises, whether or not structural in nature, or anything else exists that may increase the fire risk or pose a threat to life or property, and the condition or anything else cannot be rectified immediately, or if costs need to be incurred to rectify it, the owner of the premises must, after receiving the rectification directives referred to in subsection (2), inform the Chief Fire Officer forthwith in writing about the measures which the owner intends taking to rectify the condition and must submit a programme with a deadline to the Service for approval.

- (b) The Chief Fire Officer may approve the proposed measure and deadline with or Without amendments and may give instruction for compliance with the measures.
- 4) Any person who fails to comply with a written instruction referred to in this section is guilty of an offence necessary; Enforcement of provision according to Act 99 of 1987 section 18 of said Act can be implemented.

## **29. Accessibility of fire-fighting equipment mitigating agents**

- (1) Fire-fighting equipment, mitigating agents and the appropriate service installations must be installed so as to be readily accessible at all times.
- (2) **Any person who, in whatever way, causes or permits fire-fighting equipment, mitigating agents and the appropriate service installations not to be readily accessible is guilty of an offence.**

## **30. Fire protection requirements for premises**

- (1) In addition to any other provisions contained in these bylaws, The Building Regulations, published under Government Notice R2484 of 26 October 1990, as amended, which are contained in Code of Practice SANS 10400 and called The Application of the National Building Regulations, and any additional building regulations published for application in the area, for the purpose of the enforcement of these by-laws in relation to fire protection requirements, applicable mutatis mutandis to premises in the area.
- (2) In any superfluous water unavoidably spills into or is collected in a basement for whatever reason during fire extinguishing activities, adequate means must be provided to convey the water spilled or collected to a storm water drain.
- (3) No high- and/or low-voltage transformer room(s) in any building may be situated on any level other than the ground level: Provided that-
  - (a) The access to the transformer room(s) is situated on the building; and
  - (b) Provision is made for adequate access to the transformer room(s) for firefighting activities and/or maintenance.
- (4) Whenever an approved sprinkler system is required in any building in accordance with the provisions of SANS 10400; SANS 10087, Part 3; and SANS 10089, Part 1, or if the Council so requires, the owner of the building must ensure that the sprinkler system must be planned, designed, and installed in accordance with the guidelines of SANS 0287 for automatic sprinkler installations and in consultation with the Service.

## **31. Electrical fittings, equipment and appliances**

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

### 32. Flame-emitting devices

- (1) 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.
- (2) **Any person who fails to comply with any of the provisions of subsection (2), (3), (4) and (5) or any provisions contained in Part A, Part K, Part M, Part O, Part T, Part V and Part W of SANS 10400, as amended, where the provisions related to fire protection matter, is guilty of an offence and the necessary; Enforcements of provision according to Act 99 of 1987 section 18 of said act can be implemented.**

### 33. Access for fire fighting and rescue purposes

- (1) All premises in the area must be planned, designed and constructed so as to ensure that-
  - i. The requirements of the Guidelines for the provision of Engineering Services and Amenities (Red Book) shall apply and;
  - ii. If a building does not front onto a street, an access road shall be provided, the dimensions and carrying capacity of which must be suitable for the fire engines used by the Service (dimensions obtained from statistics of the Service s fire engines), with specific reference to the length, width and tonnage of the fire engines: Provided that the dimensions must be equal to the largest fire engine that is likely to be used on premises in question; and
  - iii. Whenever any entrance arch spans a driveway to a group housing, cluster housing or townhouse complex or is constructed over an access to a shopping centre or office complex, the dimensions of the opening of the arch must be at least 3,5 m wide and 4,2 m high and there must be nothing causing an obstruction of the opening: Provided that if the dimensions of the entrance arch are less, another access or service gate to the premises must be provided, which access or gate is capable of being opened to 3,5m.
- (2)
  - (a) The appropriate street number of every built-up premise within the area must be displayed clearly on the street boundary of the premises in question. This number must be 75mm high and must be visible from the street.
  - (b) The owner or occupier of any premises must maintain the street number to ensure that it is legible at all times.
  - (c) **Any person who fails to comply with the provisions of this section is guilty of an offence.**

### 34. Upkeep maintenance of fire-fighting equipment and mitigating agents

- (1) The owner of any premises must ensure that-
  - (a) all fire-fighting equipment, mitigating agents or other appropriate service installations that have been provided or installed on or in connection with the premises are maintained in a good working condition by a competent person and/or firm approved by the SANS 101475 and registered in terms of SANS 101475;
  - (b) portable mobile fire extinguishers and hose reels are serviced and maintained in accordance with the provisions of SANS 0105 and SANS 101475;
  - (c) fire installations and any other relevant service installations are inspected and serviced in accordance with the specifications of the manufacturers of the installations; and
  - (d) Installations are inspected by a registered person at least every twelve calendar months.
- (2) Any person who checks, services, renews, replaces or works on any fixed service installation must-
  - a) on completing the work, certify that the service installation is fully functional and;
  - b) notify the Service immediately in writing if he/she finds that the service installation cannot, for whatever reason, be readily repaired to its functional state.
- (3) The owner or occupant responsible of any premises must keep a comprehensive service record of all firefighting equipment and any other appropriate service installations on his/her premises and submit the record to the Service upon request by the designated officer.
- (4) 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.
- (5) No person may alter, damage, misuse or render ineffective any fire-fighting equipment or service installation at any premises.
- (6) Any person who fails to comply with the provisions of this section is guilty of an offence.**

### 35. Extractor fan systems

- (1) Extractor fan systems and related ducts or similar chimney systems must be designed and installed in such a manner as to grant adequate access (that is clearly marked) for trouble-free inspection and maintenance of and repairs to the relevant mechanisms.
- (2) Every filter, damper, screen or conduit that forms an integral part of a system referred to in subsection (1) must be regularly cleaned, maintained and checked to ensure that fatty residues or any other combustible residues do not accumulate.

(3) The conduit and outlet of any system referred to in subsection (1) must be installed so as not to pose a fire hazard or probable fire hazard to any premises or property.

**(4) Any person who fails to comply with the provisions of this section is guilty of an offence.**

### **36. Rational designs**

(1) The construction, design and/or erection of-

- a) hangars;
- b) helipads;
- c) grain silos;
- d) atriums ;
- e) air traffic control towers;
- f) any other structure or building identified at the discretion of the Chief Fire Officer, of the controlling authority must comply with an acceptable design according T1 (2) (a) or (b), submitted to and approved by the Chief Fire Officer, which meets all the applicable requirements of Regulation T1 (1) of the National Building Regulations.

(2) Subject to the provisions of subsection (1), provision must also be made, in the case of hangars or helipads, for-

- (a) the drainage of any liquid from the floor of the hanger or helipad and/or approach to the hangar;
- (b) the channelling of any liquid to a drainage area, which is effectively connected to a separator well;
- (c) the prevention of any liquid from spreading from the floor of the hangar or helipad to any rooms, adjacent buildings or to the outside of the hangar; and
- (d) earthing devices for discharging static electricity.

**(3) Any person who fails to comply with the provisions of this section is guilty of an offence.**



### 37. Dumping sites

- 1) The design, layout, and construction of any dumping site of whatever nature must be done in conjunction with the instructions and requirements of the National Department of Water and Environment (DWAE), Eastern Cape Economic Development Environment and Tourism (ECDET), Department of Health & Social Development, and those of the Service.
- 2) **Any person who fails to comply with the provisions of this section is guilty of an offence.**

### 38. Emergency evacuation plans

- (1) The owner or occupier of designated premises must-
    - a) within 30 days after the premises have been designated by the Service, prepare a comprehensive emergency evacuation plan for the premises, in triplicate, and must have it ready for inspection and approval by controlling authority, this plan - must be in accordance with the guidelines prescribed in these by-laws.
    - b) constitute an internal emergency committee from among the internal staff and occupiers to assist with the planning and organization of a fire protection programme, this programme includes regular scheduled fire evacuation drills on the premises;
  - c) ensure that-
    - i. the emergency evacuation plan is revised and updated whenever the floor layout changes or whenever the Service requires revision or updating, but in any case at least every twelve months;
    - ii. updated records of revised emergency evacuation plans, fire protection programmes, evacuation drills and related documents are kept and maintained at all times; and
    - iii. the emergency evacuation plan and relevant documents are at all times available in control room for inspection by the controlling authority ; and
  - d) Identify a predetermined place of safety outside, but in the vicinity of the designated premises, where occupiers may gather during an emergency situation for the purpose of compiling a list of survivors.
  - e) An EEP (Emergency Evacuation Plan) box, as described in Annexure IV shall be installed in a prominent position at the main entrance of the premises.
- (11) The controlling authority may from time to time-
- a) provide directives for updating and/or amending an emergency evacuation plan;
  - b) instruct the owner or occupier of designated premises in writing to implement such fire protection programmes that, in the opinion of the Chief Fire Officer, are necessary to ensure the safety of the occupiers of the designated premises; and

- c) require the owner or occupier of designated premises to furnish the controlling authority with a certified copy of any emergency evacuation plan and/or relevant documents on such day and at such time and place as the controlling authority may determine.
- (12) The Chief Fire Officer may by written notice designate any premises as premises requiring an emergency evacuation plan.
- (13) **Any person who fails to comply with the provisions of this section is guilty of an offence.**

### **39. Certificate of compliance for all public buildings**

- 1) The owner of any public building, or of any temporary structure which is erected or intended for holding gatherings, must apply in writing to the Service for the issuing of a certificate of compliance for every type of gathering or for the proceedings envisaged in the premises or structure, and must pay the fees, as determined on fire tariff Annexures of these by-laws, when submitting the application form (the design guidelines appear in Annexures of these by-laws).
- 2) No certificate of compliance will be issued for public buildings unless the relevant provisions of these by-laws have been complied with
- 3) A certificate of compliance issued to the owner of a public building will be endorsed with the following information, where applicable:
  - a) The trade name and street address of each occupier.
  - b) The type of activity of each occupier.
  - c) The name of the persons on the executive.
  - d) The permissible number of people in proportion to the usable floor area.
  - e) The number of emergency exits and their widths and all related equipment regarding fire protection.
  - f) A cancellation clause in the event of any applicable provisions of these by-laws being disregarded.
  - g) An obligation on the part of the holder of the certificate to-
    - i. Always display the certificate prominently on the premises; and
    - ii. Always maintain the certificate in a legible condition
  - h) A date, year, and certificate/reference number.
  - i) The date of expiry of the certificate.
- 4) Subject to the provisions of these by-laws, a certificate of compliance is not required for a public building, which has been legally erected on commencement of these by-laws.
- 5) If the trade name of the public building changes, the holder of the certificate of compliance must ensure that the change is brought to the attention of the controlling authority immediately and in writing.
- 6) No certificate of compliance will be issued or renewed, as the case may be, unless and until the controlling authority-
  - a. is in possession of a set plans as per these by-laws and approved by the controlling authority; and

- 7) The holder of a certificate of compliance must ensure that he/she is at all times in possession of a valid certificate of compliance.
- 8) a. Any expansion or removal of or change in anything relating to or in connection  
b. with premises for which a certificate of compliance has been issued will result ipso facto in the cancellation of the certificate of compliance, including any other authorization granted in terms of these by-laws.  
c. The provisions of this subsection are not applicable to any action, which results in temporary removal of something for the purpose of effecting repairs or replacements in respect of the premises
- 9) a. The owner or the occupant must submit, on or before the first working day of month in which the permit expires of each year, together with the prescribed fees determined in Annexure I of these by-laws, an application for the renewal of the certificate of compliance to the controlling authority on the prescribed form: Provided that if the controlling authority for some reason requires a plan of the premises in question for the purpose of the renewal application, the plans must accompany the application  
b. The Service may send a reminder in respect of the renewal.  
c. Where a building is utilized and accordingly classified as a A-type occupancy, in terms of the National Building Regulations, the controlling authority may issue such certificate for a period of not exceeding one calendar year. All other erf, stands, or premises shall be issued with validity not exceeding five years.
- (10) Where so required by the Chief Fire Officer the attendance of the controlling authority shall be provided for.
- (11) **Any person who fails to comply with the provisions of this section or who alters or attempts to alter a certificate of compliance, or knowingly allows the certificate to be altered, is guilty of an offence.**

#### 40. Water supply for fire-fighting

- (1) In any township development, a township developer must provide as follows for water supply for fire-fighting purposes as provided for in SANS 1009 (Community Protection Against Fire) as well as SANS 11200 specifications. The Red Book Guidelines for the provision of Engineering Services and Amenities shall also be applicable.

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
- (2) Subsection (1) (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 separate supply main and pump; and
  - (c) the reservoirs are connected to each other.
- (3) 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 meters in any high risk area or for more than 300 meters 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 subsection 4, the water reticulation system is adapted without delay so as to comply with the requirements of subsections 4 and subsection 5.
- (4) The controlling authority must inspect fire hydrants at the intervals as provided for in SANS 10090, and a flow and pressure test must be conducted on the stream to determine whether the stream complies with 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

**41. Township development fire hydrant requirements**

- (5) 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 (meters)</b>
High Risk	1980	120
Moderate Risk	1150	180
Low Risk	900	240

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

#### **42. Fire risk categories**

- (7) For purposes of sections 21.5 and 21.6, 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.

#### **43. Connections to water reticulation system**

- (8) No person may obtain a water connection to the water reticulation system of the Council unless they submit a complete set of approved fire protection plans for the premises to the Services, as contemplated in Regulation A9 of the National Building Regulations, to determine the water connection of the controlling authority and the plans have been submitted and approved by the Chief Fire Officer/delegated members of the service.
- (9) 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 firefighting, 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 SANS 10400 (Part W); and
  - d. ensure that the water installation upon completion complies with the provisions of SABS-1:1994

#### **44. Registration applications for existing premises**

- (1) If an owner rebuilds, alters, extends, or changes the floor layout of an existing building that has been legally erected and used, or if ownership or control of the premises changes, no existing certificate of compliance, certificate of registration or spraying permit, as prescribed on these by-laws, will be renewed, unless and until all appropriate provisions of these by-laws regarding an original application have been complied with.
- (2) No additions or alterations may be made to any existing registered premises unless and until-
  - a. the owner of the premises has submitted to the Building Control Officer and the Chief Fire Officer a plan of the existing premises and of the proposed work, as required in terms of Regulation A2 of the National Building Regulations; and
  - b. The Building Control Officer and the Chief Fire Officer have approved the plan.
- (3) Any person who fails to comply with the provisions of this section is guilty of an offence**

## **Chapter 7**

### **Dangerous Goods**

#### **45. Application for approval of plans**

- (1) Subject to the provisions of the National Building Regulations and Building Standards Act, 1977 and the provisions of the Major Hazard Installation Regulations, every owner of premises on which there is a building in respect of which a floor layout change, addition, alteration, upgrading and/or renovation is envisaged, or the owner of premises on which bulk, aboveground and underground installations and any other structures are to be erected for the use, storage and handling of dangerous goods or erected in connection with such use, storage or handling, must submit plans in triplicate to the controlling authority on the prescribed form obtainable from the office of the Building Control Officer
- (2) The prescribed fees payable to the controlling authority for the approval of plans are determined in Annexures of these by-laws, but exclude the fees charged by the Building Control Officer for the approval of plans.
- (3) The Service will not accept any plan (except for a plan regarded by the Building Control Officer to be that of minor building work) unless the official certification of submission of the Building Control Officer appears on it.
- (4) No construction work may be started on any premises unless the building contractor is in possession of the relevant plans that have been officially certified as approved by the Fire Section of the controlling authority. For the duration of construction work on the premises the plans in question must be available for inspection by the controlling authority.
- (5) The provisions of section 23 of the National Building Regulations and Building Standards Act, 1977, are applicable to the approval of plans as regulated in this section.
- (6) An MSDS (Material Safety Data Sheet) box, as described in Annexure IV shall be installed in a prominent place at the main entrance of the premises.
- (7) Any owner of premises who fails to comply with the provisions of this section or any person who on behalf of the owner is involved in any activity contemplated in this section and fails to comply with the provisions of this section is guilty of an offence.

#### **46. Issuing of certificates of registration**

- (1) No person may on any premises use, handle or store quantities of dangerous goods in excess of the quantities referred to below or permit them to be used, handled or stored, unless and until the person is in possession of a certificate of registration as provided for in Annexure II of these by-laws and issued in respect of the specific quantities and appropriate devices on approved premises: Provided that if only one of the groupings referred to below is present on the premises and the applicable maximum permissible quantity is not exceeded, the provisions of this section are not applicable.

**Group I: Explosives**

Fireworks No exemption

**Group II: Gases**

2.1 Flammable gases Total cylinder capacity may not exceed 100kg

2.2 Non-flammable gases Total cylinder capacity may not exceed 333kg

2.3 Toxic gases No exemption

**Group III: Flammable liquids**

3.1 With flash points > 18°C Total quantity may not exceed 100L

3.2 With flash points > 18°C Total quantity may not exceed 420L  
But < 23°C

3.3 With flash points > 23°C Total quantity may not exceed 1100L  
But < 61°C

3.4 With flash points > 61°C Total quantity may not exceed 1100L  
But < 100°C

3.5 With flash points > 100°C Total quantity may not exceed 2100L

**Group IV: Flammable solids**

4.1 Flammable solids Total quantity may not exceed 250kg

4.2 Pyrophoric substances No exemption

4.3 Water-reactive substances No exemption

**Group V: Oxidising agents and organic peroxides**

5.1 Oxidising agents' Total quantity may not exceed 200kg

5.2 Group I organic peroxides in packets No exemption

5.3 Group II organic peroxides in packets Total quantity may not exceed 200kg



**Group VI: Toxic/infective substances**

6.1 Group I toxic substances in Packets	Total quantity may not exceed 5kg
6.2 Group II toxic substances in packets	Total quantity may not exceed 50kg
6.3 Group III toxic substances in packets	Total quantity may not exceed 500kg
6.4 Ineffective substances	No exemption

**Group VII: Radioactive materials** No exemption

**Group VIII: Corrosive/caustic substances**

8.1 Group I acids in packets	Total quantity may not exceed 50kg
8.2 Group II acids in packets	Total quantity may not exceed 200kg
8.3 Group III acids in packets	Total quantity may not exceed 1000kg
8.4 Group I alkaline substances in packets	Total quantity may not exceed 50kg
8.5 Group II alkaline substances in packets	Total quantity may not exceed 200kg
8.6 Group III alkaline substances in packets	Total quantity may not exceed 1000kg

**Group IX: Miscellaneous substances**

9.1 Liquids	Total quantity may not exceed 210L
9.2 Solids	Total quantity may not exceed 210kg

(2) No person may, on any unregistered premises, store, use or handle any of the dangerous goods referred to in subsection (1), or have them stored, used, or handled, or permit them to be stored, used, or handled in such place or in such manner as to ensure that-

- a. no dangerous goods or fumes of the substances come into contact or are likely to come into contact with any fire, flame, naked light or other source of ignition that may cause the dangerous good or fumes to catch fire; and

- b. the escape of human beings or animals is not hindered or obstructed in the event of a fire or an emergency situation.
- (3) No person may, on any unregistered premises, use or handle dangerous goods, or have them used or handled or permit them to be used or handled on the premises, except in a suitable place out of doors ensure that any fumes can escape freely, or in a properly and naturally ventilated room to ensure that any fumes or gas does not collect in the room but is effectively disposed of.
- (4) No certificate of registration will be issued in the respect of premises for the use handling or storage of dangerous goods, unless all the applicable provisions of these by-laws have been complied with and a written application for registration, on the prescribed form, has been submitted to the Service, together with the fees prescribed in Annexure of these by-laws.
- (5) When a certificate of registration is issued, the certificate must be endorsed with the following conditions, namely that the certificate-
  - a. must at all times be displayed in a weatherproof container in a conspicuous place on the premises designated by a member of the controlling authority;
  - b. must be maintained in a legible condition at all times;
  - c. must reflect the groups and the quantities of dangerous goods for which the premises have been registered;
  - d. must reflect the number of above-ground and/or underground storage tanks or storage facilities, and the capacity of each such storage tank or storage facility;
  - e. must reflect the number of storerooms and the total capacity of each storeroom;
  - f. must reflect the number of gas installations, the type of gas installation and the total volume and/or delivery capacity of each installation;
  - g. must specify the number of storage facilities for other dangerous goods and reflect the volumes intended for each facility;
  - h. must reflect a reference/certificate number;
  - i. must indicate whether the issue of such certificate is permanent or temporary;
  - j. must reflect the period of validity and the expiry date of the certificate: Provided that the period of validity will be only twelve calendar months, calculated from the date of issue, and written application for renewal of the certificate reaches the controlling authority at least one calendar month prior to the expiry date;
  - k. The controlling authority may cancel any certificate of compliance in respect of a building does not comply to these By-laws.

- l. Is not transferable from premises to premises;
  - m. must, subject to the provisions of section of these by-laws, be transferable from owner to owner and/or from control on the same premises: Provided that-
    - (a) application for such transfer is made to the service on the prescribed form; and
    - (b) if the trade name of the premises changes, the holder of the spraying permit and/or certificate of registration must ensure that the change is immediately brought to the attention of the controlling authority.
  - n. will not be issued unless the controlling authority is in possession of a set approved plans as required by section of these by-laws; and
  - o. will not issued or renewed unless the prescribed application form has been completed in full and has been submitted.
- (6) Any person who has a legal certificate of registration in his/her possession may
- a. apply in writing on the prescribed form to have the total quantity of dangerous goods, flammable liquids and number of underground tanks, storerooms, gas installations and other storage areas amended, according to need, and the form must be accompanied by the prescribed fee.
  - b. The controlling authority will approve an application only if the proposed amendments comply with the provisions of these by-laws.
  - c. If the application is approved, the applicant must submit his/her certificate of registration to the Service for amendment.
- (7) The controlling authority may send a holder of a certificate of registration a reminder for renewal of registration. A holder of a certificate who has not received a reminder is not indemnified from possible prosecution.
- (8) The holder of a certificate of registration must ensure that he/she is at all times in possession of a valid certificate of registration.
- (9) Any person who holds a certificate of registration or other authorization contemplated in these By-laws must ensure that the premises to which the authorization applies, are equipped with-
- a. subject to the provisions of subsection (6), portable fire extinguishers as specified in SABS 1567 (carbon dioxide-type), SABS 810 (dry chemical-type), SABS 1573 (foam-type) and SABS 1571 (transportable-type); 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 -
    - (v) as contemplated in SABS 0400 (Part W); and
    - (vi) 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 meters or part thereof, and
  - d. if applicable, in relation to any above-ground facility, a sprinkler system or deluge system that
    - (i) is approved by the controlling authority; and
    - (ii) with the exception of temporary storage facilities, is installed in a position indicated in the building plans for the premises.
- (10) Notwithstanding the provisions of subsection (9), if the controlling authority 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.
- (11) The holder of any certificate of registration or other authorization contemplated in these By-laws must ensure that all fire-fighting equipment contemplated in subsection (9)
- a. is inspected, maintained and serviced to the satisfaction of the controlling authority-
    - (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 controlling authority.

#### **47. Amendment to certificate of registration**

- (12) The controlling authority may amend any certificate of registration on application by the holder.

#### **48. Cancellation of certificate of registration**

- (13) The provisions of section 39, read with the necessary changes, apply to any cancellation by the controlling authority of a certificate of registration.

#### **49. Renewal of certificate of registration**

- (14) Any application for the renewal of a certificate of registration must be submitted to the controlling authority at least 30 days prior to the expiry date of the certificate.

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

- (15) No certificate of registration contemplated in section 39, or any other authorization contemplated in these by-laws is required in respect of flammable liquid in a fuel tank
- a. of any motor vehicle; and
  - b. of any stationary engine if the volume of the fuel tank does not exceeds 1000 liters.

## **51. Record of certificate of registration**

- (16) 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.
- (17) **Any person who fails to comply with the provisions of this section or who alters a certificate of registration or who attempts to alter the certificate or permits the certificate to be altered is guilty of an offence.**

## **52. Supply of dangerous goods**

- 1) No person may
  - a. supply more dangerous goods than the quantities referred to in section 39 (1) of these by-laws to any unregistered premises or have them supplied or permit them to be supplied.
  - b. deliver or supply more dangerous goods than the quantity specified in the applicable certificate of registration or dangerous goods of a group other than that specified in such certificate of registration to any premises or person or have them delivered or supplied or permit them to be delivered or supplied.
- 2) No person may handle any container containing a dangerous good in a manner that will damage or may damage that container or permit the container to be damaged.
- 3) **Any person who fails to comply with the provisions of this section is guilty of an offence.**

## **53. Exemptions**

- (1) Notwithstanding anything to the contrary in these by-laws-
  - a. flammable liquids are not deemed to be stored, handled, or transported whenever the liquids are, for normal use, in the fuel tank of a motor vehicle.
  - b. flammable liquids are not deemed to be stored, handled or transported if the liquids are in the fuel tank of a stationary vehicle engine: Provided that the volume of the fuel tank does not exceed 1 100 litres and the fuel tank is surrounded by a liquid-proof retaining wall: Provided further that the fuel tank must be capable of containing the maximum proposed quantity of liquid, plus 10% of the volume of the tank.
- (2) **Any person who fails to comply with the provisions of this section is guilty of an offence.**

#### **54. Renewal of spraying permits and/or certificates of registration**

- (1) Any holder of a certificate of registration or spraying permit must, at least one month prior to the expiry date of the permit, submit an application for renewal of the certificate or permit to the Service on the prescribed form, which must be accompanied by the fees prescribed in Annexure I to these by-laws: Provided that the Service may require further, additional and/or amended plans of the premises in question for the purposes of renewal.
- (2) The period of validity will be only twelve calendar months, calculated from the date of issue of the original certificate.
- (3) Any person who fails to comply with the provisions of this section is guilty of an offence.**

#### **55. Temporary storage of dangerous goods**

- (1) The controlling authority may grant a temporary certificate of registration for a period of not more than (6) six months to any person who, for bona fide reasons, requires more dangerous goods on the premises than the quantities in section 39 (1) of these by-laws: Provided that
  - a. if the dangerous goods are required for, or in connection with, excavations, construction work and road construction, the quantity must be limited to 12000 liters.
  - b. an application is submitted on the prescribed form, accompanied by the fees prescribed in Annexure I to these by-laws, together with the plans required by section 38 of these by-laws; and
  - c. the duration of the temporary storage is at the discretion of the controlling authority, but not exceeding 12 months.
- (2) Any person whose application for a temporary storage tank is approved must ensure that it comply with the applicable South African National Standard.

Provided that the storage tank must be capable of containing the maximum proposed quantity of liquid, plus 10% of the volume of the tank.

- a. provision is made for the run-off of any possible rainwater from the retaining walls or retaining embankments.
  - b. the storage tank is not erected within 5m of any erf boundary, building, excavation, road, open flames and/or driveway.
  - c. no source of ignition or potential ignition is brought within 5m of the storage tank.
  - d. symbolic signs prohibiting smoking and open flames, at least 200mm x 300mm in size, are affixed to all sides of the temporary installation; and
  - e. a minimum of two 9kg dry chemical powder type fire extinguishers are installed within 5m of the temporary installation.
  - f. HAZMAT signs must be provided on the tanks.
- (3) Any person who fails to comply with the provisions of this section is guilty of an offence.**

## 56. Delivery of dangerous goods

- (1) Any person delivering dangerous goods to any supplier or user
  - a. may not, while delivering, let any delivery hose lie on or across a pavement or on or across a public road.
  - b. may not, while delivering, let any delivery hose lie on or across a pavement, public road or other premises, or go through or over a building or have it lying there.
  - c. must ensure that, while delivering, a 9kg dry chemical fire extinguisher is always ready,
  - d. must ensure that, during the transferral of dangerous goods, the delivery vehicle is physically earthed with the storage facility to which the dangerous goods are being transferred.
  - e. must ensure that, while delivering, the delivery vehicle is in such a position that it can be removed quickly and easily in the event of an emergency without exacerbating the situation; and
  - f. must ensure that no dangerous good is transferred from a delivery vehicle to a facility that is leaking or broken.
  - g. Where delivery is done with a road tanker, as defined by the Road Traffic Act provision shall be made as to ensure that the delivery vehicle does not require to reserve in any situation.
- (2) The owner of any device connected with or used for a delivery of a dangerous good must ensure that the device is designed for the specific purpose and is in safe and good working condition.
- (3) The person in charge of any delivery process of a dangerous good must take reasonable precautionary measures to ensure that no dangerous good is spilled during delivery on any surface when the substance is transferred from a delivery vehicle to a storage tank.
- (4) No person may transfer any dangerous goods to a motor vehicle, aircraft, vessel, ship, or boat while the power source thereof is in operation or permit the substance to be transferred.
- (5) No person may transfer a dangerous goods to an aircraft unless and until the aircraft has been earthed with the transferral device by means of an earth cable.
- (6) **Any person who fails to comply with the provisions of this section is guilty of an offence.**

## 57. Prohibition of certain actions

- (1) Any person who stores, uses, or handles dangerous goods on premises or has them stored, used or handled or permits them to be stored, used or handled on the premises may not-
  - a. perform any act or action, or have any act or action performed that may reasonably result in or cause a fire or an explosion; and
  - b. perform any act or action, or have any act or action performed or permit any act or action to be performed that may reasonably obstruct the escape to safety of any human being or animal during an emergency situation.
- (2) No person may dump any dangerous goods into any borehole, pit, sewer, drain system or surface water, or permit any dangerous good to be dumped in or spilled into any borehole, pit sewer, drain system or surface water.
- (3) No person may dump any dangerous good in any manner other than by having the substances removed or permitting the substances to be removed by an organization that is fully equipped to do so.
- (4) No person may light, bring, or use, within 5m of any area where, to his/her knowledge, dangerous goods are stored, used, or handled, any fire or anything else that produces or is capable of producing an open flame or permit the fire to be lit, brought or used within 5m of such area.
- (5) No person may use any device in connection with dangerous goods in any basement level in a building, excluding a gas welding device and/or gas cutting device for the sole purpose of welding and/or cutting connection with the maintenance of that building, or have the device used or permit the device to be used in any basement level.
- (6) No person may, while there is another person in or on a bus (except for the driver of the bus, or any other person in charge of the bus), fill the fuel tank of that bus, or have it filled or permit it to be filled, or transport any dangerous good in or on such bus, except in the fuel tank, or have it transported or permit it to be transported.
- (7) Deliver or supply or allow delivering or supplying of 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.
- (8) Any person who fails to comply with the provisions of this section is guilty of an offence.**

## 58. No Smoking

- (1) The owner of a building must, in areas where flammable and/or explosive dangerous goods are used, stored and handled, display symbolic signs prohibiting smoking and open flames, as the case may be. These signs must conform with SANS 1186 and of the appropriate size as specified by the Service and must be displayed prominently in appropriate places.
- (2) Any owner who fails to comply with the provisions of subsection (1) is guilty of an offence.**



## 59. Fire-fighting equipment and mitigating agents

- (1) Notwithstanding anything to the contrary in these by-laws, the person to whom the certificate of registration in terms of section 39 of these by-laws and/or spraying permit must comply with the required sections of these by-laws has been issued must ensure that all premises to which such certificate of registration and/or spraying permit applies are equipped with
  - a) portable fire extinguishers, as specified in SANS 1567 (carbon dioxide type), SANS 810 (dry chemical type), SANS 1573 (foam type) and SANS 1571 (transportable type), of a minimum capacity of 9 kg or 9 liter, as the case may be, in a ratio of one fire extinguisher to every 100m<sup>2</sup> or part of it: provided that the controlling authority is of the opinion that exceptional hazards or risks necessitate a larger number of fire extinguishers, the Service may require that more fire extinguishers, in a consequential smaller ratio than the ratio stated above, be installed;
  - b) hose reels as specified in SANS 543 (hose reels), connected to a water supply as reflected in Part W of SANS 100400, enabling each hose reel to maintain a flow of 0,5 liters per second at a work rate of 300kPa;
  - c) fire hydrants, with couplings as specified in SANS 1128, Part II (Fire-fighting equipment Couplings), in a ration of at least one to every 1000m<sup>2</sup> or part of it; and
  - d) approved sprinkler systems in accordance with SANS 10087, SANS 10089 and SANS 10131.
- (2) Fire-fighting equipment must be inspected and maintained by a registered person in accordance with the provisions of SANS 0105 and SANS 1475 at least once every twelve months to the satisfaction of the service.
- (3) If fire-fighting equipment is not positioned prominently, the position of the equipment must be indicated by symbolic safety signs in accordance with the specifications of SANS 1186 and to the satisfaction of the controlling authority.
- (4) Any person who fails to comply with the provisions of this section is guilty of an offence.**

## 60. Reporting of fires, accidents and dumping

- (1) The occupier of any premises must immediately report any fire, accident or dumping involving dangerous goods on the premises that has caused damage to property, the ecology of the environment or injury to human beings or animals to the controlling authority.
- (2) Any person who fails to comply with the provisions of this section is guilty of an offence.**

## **61. Storage tanks and devices that have become obsolete**

- (1) The owner or user of any storage tank and/or related device that has become obsolete must, in accordance with the provisions of section 63 of these by-laws, the tank, installation or device or have the tank or device removed, in order to render the tank safe
- (2) 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 controlling authority 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 controlling authority 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 controlling authority, 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.
- (3) 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 controlling authority, fill the underground tank with liquid cement slurry.
- (4) **Any person who fails with the provisions of this section is guilty of an offence.**

## **62. Access to storage tanks for repairs and maintenance**

- (1) No person may enter or permit any other person to enter any storage tank which contained Group III dangerous good, unless that person is wearing an effective self-supporting breathing apparatus or until such tank has been de-aerated and made free of gas and fumes, as provided for in SANS 10089, Part I, as amended.
- (2) No person may enter any storage tank which contained Group III dangerous good unless that person is attached to a rescue rope controlled by a responsible person who is at all times taking appropriate measures to ensure the safety and welfare of all persons involved.
- (3) **Any person who fails to comply with the provisions of this section is guilty of an offence.**

### **63. Installation, erection, removal, and demolition**

- (1) In addition to any other applicable legislation, any person who intends to erect, install, remove, demolish, extend or change any delivery pump, storage tank, storeroom, spraying room, gas installation, storage facility, fire protection arrangement and floor layout in respect of premises or anything connected with the premises, or have any of the above erected, installed, removed, demolished, extended or changed, must notify the controlling authority of his/her intentions at least three working days prior to the commencement date and estimated completion date.
- (2) Any failure to act as contemplated in subsection (1) will ipso facto cancel the certificate of registration and/or spraying permit, as the case may be, in so far as such failure is connected with the matter, as well as any other authorization, including an exemption granted in terms of these by-laws: Provided that the provisions of this section are not applicable whenever
  - a. anything is removed temporarily for carrying out repairs or in connection therewith.
  - b. any above ground or underground equipment and/or parts of the equipment are replaced; and,
  - c. any above ground or underground storage tanks are replaced with tanks of the same capacity.
- (3) No structure, installation or building may, after completion of the action referred to in subsection (1), be erected again on the premises in question, unless application for the approval of plans, as contemplated in section 45 of these by-laws, is made again.
- (4) After completion of the structure, building or installation, application must be made again for a certificate of compliance, spraying permit and/or certificate of registration in accordance with the provisions of Part IV, DANGEROUS GOODS, of these by-laws.
- (5) Any person who fails to comply with the provisions of this section is guilty of an offence.**

## 64. Group I Dangerous Goods

### Control of fireworks

#### Use of fireworks prohibited in certain circumstances

- 64.1 (1) Unless so authorized in terms of **section 38.4**, no person may use fireworks
- a. within 500 meters 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 authorized in terms of section 38.4, 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. Human Rights Day from 19h00 to 22h00;
  - e. Freedom Day from 19h00 to 22h00;
  - f. Guy Fawkes Day from 19h00 to 22h00;
  - g. Christmas Eve from 19h00 to 22h00; and
  - h. Day of Goodwill from 19h00 to 22h00.
  - i. On Special Events from 19h00 to 22h00
- (4) No person may allow any minor under his/her control to use, light or ignite fireworks in contravention of subsection (1), (2) or (3).

## **Fireworks displays prohibited unless authorized**

64.2 (1) No person may present fireworks display unless

- a. authorized to do so by the controlling authority as contemplated in section 64.4;
- b. authorized to do so by the South African Civil Aviation Authority(SACAA) and the Chief Inspector of Explosives.
- c. the display is at all times under that person's supervision and control;
- d. the controlling authority 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 meters 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. pyrotechnics is always present and responsible for the use of fireworks at the display.

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

64.3 (1) Any person who wishes to present a fireworks display must apply to the controlling authority for authorization 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.
- (3) The application, prescribed fee and accompanying documentation must be submitted to the controlling authority at least 14 days before the date of the proposed fireworks display.

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

64.4

- (1) If the controlling authority 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 supervision and control of an official designated by the Council.

## Dealing in fireworks

64.5

- (1) No person may deal in fireworks unless
  - a. that person holds the required fireworks license in terms of the Explosives Act; and
  - b. has the written authority of the controlling authority.
- (2) Any person who wishes to obtain the written authority of the controlling authority to deal in fireworks as contemplated in subsection (64.5)(1)(b), must
  - a. complete an application in the form and manner determined by the controlling authority; and
  - c. submit it to the controlling authority together with the prescribed fee at least 30 days before the authority is required by the applicant.
- (3) The Controlling authority 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.
- (4) All Group I dangerous goods (explosives) must be handled, used, stored and transported in accordance with the provisions of SANS 0228, 0229, 0232, of the Explosives Act, 1956, and the Hazardous Substances Act, 1973, and any regulations made under these Acts, as the case may be
- (5) The legislation rests with SAPS (specifically the Chief Inspector of Explosives).
  - a) The Council does not issue any license but must submit a recommendation to the Chief Inspector of Explosives, where it is indorsed by the Fire Inspector of controlling authority indicating that there are no outstanding requirements.
  - b) The owner/occupant must comply with Section 39 of these by-laws and such certificate is valid for a period of not exceeding one calendar year.
- (6) Fireworks display must be approved by the Controlling Authority and;
  - a. subjected to the requirements as approved.
  - b. an application must be done at the Fire Service
  - c. the application form must be accompanied by the proof of payment fees as prescribed in these By-laws; an
  - d. the application must be submitted for processing to the office of the Fire Service at least fourteen (14) working days prior to the display.
- (7) No fireworks of any form or kind will be displayed on pavements, hawkers spots and anywhere not regulated in these by-laws.
- (8) **Any person who fails to comply with the provisions of this section is guilty of an offence.**

## 65. Group II Dangerous Goods

### Portable Containers

- (1) All portable metal containers and related devices for Group II Dangerous Goods must be manufactured, marked, maintained, filled and stored in accordance with the provisions of SANS 019, SANS 0228, SANS 0229 and SANS 0238, as the case may be.
- (2) All portable containers for liquid petroleum gas must be stored, filled and/or installed in accordance with the provisions of SANS 0228, SANS 0229, SANS 0238, SANS 019 and SANS 10087, Parts I to VIII, as the case may be.
- (3) All portable containers for Group II dangerous goods must at all times be transported, stored and/or installed in a vertical position.
- (4) 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.
- (5) Every flammable liquid container must be labelled and marked with words and details indicating the flammable liquid contained as well as any hazard associated with the flammable liquid.
- (6) 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.
- (7) Any empty flammable liquid container must be stored in a storeroom.
- (8) Notwithstanding the provisions of subsection (4) the controlling Authority 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 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.
- (9) When the quantity of flammable and combustible liquids to be stored is more than 100 litres of class I and/or more than 210 litres of class II and class III A combined, such flammable and combustible liquids must be stored in a store room.
- 10 All bulk containers for Group II Dangerous Goods must be designed, manufactured, maintained and installed in terms of the provisions on the Occupational Health and Safety Act, 1993 (Act 85 of 1993), and any regulations made under the Act; SANS 10019, SANS 10087, Part III; and the provisions of the National Building Regulations and Building Standards Act, 1977, and any regulations made under the Act, as the case may be.

### Manifold Installations

11

- a) No Group II Dangerous Good may, for any reason whatsoever, be used, stored, handled or installed indoors in any manifold installation or otherwise on any premises.
- b) The provisions of this section are not applicable to the storage, handling, or installation of a portable liquid petroleum gas container of a maximum water capacity of 45 litres inside a detached private dwelling-house (H4 occupancy classification in terms of Regulation A20 of the National Building Regulations), on condition that the container is used solely for bona fide residential purposes:  
Provided that liquid petroleum gas will only be permitted indoors on condition that the prospective user is sufficient natural ventilation in the room that may be caused by a leakage or potential leakage of the gas and/or by a negligent action in respect of the use of the gas will be so neutralized as not to be within the recognized explosive limits for the gas in accordance with SANS 10087 codes.
- (i) Any person who furnishes proof, as contemplated in subsection (5)(b), must be an approved professional engineer or other registered competent person and, in terms of Regulations A19 of the National Building Regulations, be appointed by the owner or occupier of the building in question.
- (ii) Scientifically based detailed calculations and tests must be the basis of such proof.

(12) No person may, without the permission of the Controlling Authority, use, handle, display or apply any hydrogen-filled portable containers, hydrogen devices and/or

b. hydrogen balloons indoors, for whatever purpose.

d. In enforcing this subsection, the concept of hydrogen gas includes any gas compound containing hydrogen gas, unless the non-flammable nature and/or non-explosiveness of the gas compound can be certified scientifically.

The provisions of section 65(5)(b) of these by-laws are applicable *mutatis mutandis* to this subsection.

(13) Whenever any person uses acetylene welding devices and/or cutting devices indoors, the devices must be used strictly in accordance with the requirements of SANS 0238: Provided that



the Controlling Authority may prescribe fire protection requirements concerning the installation, storage and use of the devices.

(14) The installation within the area of underground pipelines for any Group II Dangerous Goods and branches or manifolds of pipelines, as the case may be, is *mutatis mutandis* subject to the provisions of section 44, 45, 46, 52, 54, 56 and 58 of these by-laws.

### **Underground pipelines**

- (15) Any underground pipeline for a Group II Dangerous Good must comply with the following requirements:
- a) The owner of the pipeline must provide fire hydrants, of which the required delivery of each individual fire hydrant must be at least 1600 liters per minute at a work pressure of 300 kPa, and these fire hydrants must be parallel to the pipeline at every pump station within the area. The owner must maintain the fire hydrants in a working conditions at all times.
  - b) The owner of the pipeline must provide sufficient cathodic protection for the pipeline and maintain the cathodic protection in a working condition at all times.
  - c) The pipeline must be marked with markers approved by the Chief Fire Officer and must be maintained in a functional condition at all times by the owner of the pipeline.
  - d) The installation and extension of the pipeline and/or branches to consumer s premises, and the maintenance of the pipeline within the area, must in toto be done according to a recognized standard approved by the Chief Fire Officer.
  - e) No construction work above or below the ground may be done within 16m of the pipeline reserve, unless the construction company is in possession of written authorization to do so, which authorization has been issued by the controlling authority and the owner of the pipeline.

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

- 16) (1) No person may use handle or store liquified petroleum gas in any quantity exceeding that stipulated in Annexure V unless
- a) the person is in possession of a certificate of registration contemplated in section 24; and
  - b) the use, handling and storage of the liquefied petroleum gas complies with the requirements of SANS 10087, Parts 1, 3, 7 and 10.

2 Liquid petroleum gas may only be used, handled or stored within the property boundaries and in compliance with the safety distance stipulated in SANS 10087, Parts 1, 3, 7 and 10.

(3) Any storage of liquid petroleum gas cylinders at any service station for retail purposes must comply with SANS 10087, Part 7.

(4) No liquid petroleum gas cylinder may be used, handled or stored at any public exhibition or demonstration without prior written permission of the Controlling Authority.

- (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**

- 17) (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 Controlling Authority; and
  - c. prominently in places where the signs can be clearly observed.
- (2) No person may disregard or allow to be disregarded any prohibiting or a symbolic sign displayed in terms of subsection (1).

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

- 18) 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 Controlling Authority.
- 19) **Any person who fails to comply with the provisions of this section is guilty of an offence.**

## 66. Group III Dangerous Goods

### Tank Manufactures

- (1) No person may install, use or utilize or attempt to install, use or utilize any storage tank for the underground storage of Group III Dangerous Goods, unless the tank has been manufactured in accordance with the provisions of SANS 1535.
- (2) **Any person who installs, uses or utilizes or attempts to install, use or utilize any underground storage tank which does not comply with the requirements of SANS 1535, is guilty of an offence.**

## 67. Installation of storage tanks

- (1) Any storage tank for group III Dangerous Goods must be installed in accordance with the provision of SANS 10400, SANS 10089, Parts I, II, and III, SANS 10131, SANS 0108 and SANS 086, as the case may be: Provided that
  - a. all storage tanks installed indoors must be installed in accordance with the provisions of SANS 10131, Parts I, II and III, as the case may be;
  - b. all pumps and filling devices installed indoors must be in a purpose-built, registered premises;
  - c. temporary installations must be approved and for not more than six months.
  - d. no aboveground tanks classification as Class II and III in SANS 10131 Part I will be allowed in urban areas, except if it is a bulk depot according to SANS 10089 Part I.
  - e. no aboveground tank with classification as Class II will be allowed in rural areas unless it's been approved by the existing zoning of the land used in terms of the Town planning scheme for resale purposes.
  - f. a maximum of three BTF tanks will be allowed, as contemplated in subsection (1) (e);
  - g. additional safety distances for aboveground tanks with classification, Class III according to SANS 10131 for diesel in rural areas (farms) will be 15 meters from any boundary fencing, building, open flames and any other inflammable liquid stores.
  - h. all installations, as contemplated in subsection (1)(a) and (g), as the case may be, are subject *mutatis mutandis* to the provisions of section 39 and section 40 of these by-laws, as the case may be; and
- (2) The installation within the area of underground pipelines for any Group III dangerous goods, and branches or manifolds of pipelines, as the case may be, is *mutatis mutandis* subject to the provisions of sections 44, 45, 46, 52, 54, 56 and 58 of these by-laws.

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

- (3) 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 SANS 10131 and SANS 10089, Part I;
    - (ii) at least 3.5 meters 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 SANS 0232, Part 1.
- (4) Any electrical installation associated with the storage tank must comply with SANS 0108 and SANS 10089, Part 2.

### **Underground storage tanks for flammable liquids**

- (5) 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 SANS 10400, SANS 10089, Part 3 and SANS 10131.
- (6) **Any person who fails to comply with the provisions of this section is guilty of an offence.**

***Note: No aboveground tank used to store diesel in rural areas may be used for resale purposes. If used for diesel resale it will be deemed a filling station and must comply with SANS 10089, Part 3.***

## Chapter 8

### Construction of vehicles, as well as transportation and transport permits.

#### 68. Service transport for flammable substances

1) The owner of any vehicle used for transporting flammable substance in the area must have a valid transport permit issued by the Controlling Authority in terms of the SANS Standards 1398, 1518, 10228, 10230, 10231, 10232 and 10233 for transporting flammable substance and in accordance with the National Road Traffic Act: Provided that-

- a. each vehicle for which such a permit has been issued must comply with the provisions of section 68 of these by-laws.
- b. the application form, provided for in Annexure IV to these By-laws and obtainable from the Service, must be completed correctly and in full;
- c. the application form must be accompanied by the fees prescribed in Annexure II to these by laws; and
- d. the application must be submitted for processing to the registration office of the Service at least five days (excluding Saturdays, Sundays and public holidays) prior to the proposed test date.
- e. ensure that the transport permit is available in the vehicle for inspection at all times.

2) The transport permit must-

- a) indicate the date of issue and the date of expiry.
- b) be valid for a period of twelve months from the date of issue.
- c) indicate the name, in block letters, of the issuing officer and bear the officer signature.
- d) indicate a year-linked serial number,
- e) indicate the group and quantity of dangerous goods to be transported.
- f) indicate the registration number of the vehicle in question.

#### Requirements of transport permits

3) A transport permit

- a) must not be issued by the Controlling Authority 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 numbers.

## **Cancellation of transport permit**

(4) The provisions of section 46, read with the necessary changes, apply to any cancellation of a transport permit by the Controlling Authority

5) The Service may send a reminder for renewal of the transport permit to the owner of the vehicle(s). A transport permit holder who has not received a reminder is not indemnified from possible prosecution.

### **Design, construction, maintenance, and repair of road tankers**

6) Every person who design, construct, maintains or repairs any road tanker for the transportation of dangerous goods must-

- (1) a. comply with the provisions of SANS 0189, SANS 1398, SANS 0233, SANS 10087, Part 6, SANS 10089, Part 1, SANS 0230 and SANS 1518, as the case may be; and
- b. ensure that the road tanker is labelled in a manner that complies with the provisions of SANS 0232 and any applicable law.

### **Design, construction, maintenance and repair of other vehicles**

7) Every person who designs, constructs, maintains or repairs any vehicle for the transportation of dangerous goods, except a road tanker, must ensure that the vehicle-

- (1) 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, each with its own suspension system, excluding any trailer forming part of an articulated vehicle.
- b. is equipped with-
  - (i) a safety edge or safety railing-
    - (aa) at least 1 meter 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 SANS 314;
  - (iv) at least 2 static-free wheel blocks

- (v) a power insulating switch, excluding the ignition switch, situated in close proximity to the vehicles 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.

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

- 8) (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 SANS 810 and maintained in accordance with SANS 0105 and SANS 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.
- (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**

- 9) (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 is specified on attached Annexures to any premises that are not registered as contemplated in section 61.
- (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 and the provisions of SANS 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.
- (7) Any person who fails to comply with the provisions of this section, or who alters or attempts to alter a transport permit or who permits it to be altered, is guilty of an offence.**



## Chapter 9

### Storeroom for dangerous goods

#### 69. Requirements for storerooms

##### Capacity

- (1) The certificate of registration issued for any storeroom for dangerous goods as contemplated in section 46 of these by-laws must indicate the group and the largest quantity of dangerous goods which may be kept in the storeroom.

##### Danger notices in storeroom

- (2) No person may use any storeroom or permit any storeroom to be used for Group III Dangerous Goods, unless-
  - a. symbolic safety signs prohibiting open flames and smoking, at least 290mm x 290mm in extent, manufactured in accordance with the provisions of SANS 1186, are affixed at the storeroom; and

##### Display of certificate of registration

- (3) The certificate of registration for storeroom, with the contents of the certificate clearly visible, must be kept and maintained in a legible condition in a weatherproof container on the outside of a door normally used as the entrance to the storeroom.

##### Construction of flammable liquid storerooms

#### (Excluding storerooms in recognized bulk depots and bulk installations)

- (4) The construction of any storeroom must be in accordance with the requirements of the General Safety Regulations of the Occupational Health and Safety Act and the following requirements:
  - 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) is not situated within 5 meters of any adjacent building or boundary of the premises; or
      - (bb) adjoins a higher wall with no opening within 10 meters above and 5 meters on either side of the storeroom.

## Doors

- (5) Any storeroom must be equipped with Class B-type fire doors, manufactured and installed in accordance with SANS 1253: Provided that-
- a. the said doors must open to the outside and have a lock or locks as approved by the Controlling Authority.
  - b. whenever the distance to be covered from any storeroom is 4m or more, the storeroom must have at least two Class B type fire doors, which doors must be installed as far from each other as is practicable: and
  - c. if it is built according (4)(c)(ii) (aa) and (bb) the door can be of non-combustible material.
  - d. any door providing access to a storeroom must at times be capable of being opened easily from the inside without the use of a key.

## Windows

- (6) All window frames must be manufactured of steel and must-
- a. be fitted with wire woven glass with a minimum thickness of 8mm; and
  - b. have window panels with a maximum size of 450mm x 450mm: Provided that no window must be capable of being opened.

## Catch pit

- (7) Any storeroom must be designed and constructed so that the floor of the storeroom is recessed below the level of the door sill to form a catch pit: Provided that-
- a. the catch pit formed by such recessed floor or sill must have a capacity capable of accommodating the total quantity of dangerous goods able to be stored in the storeroom, plus 10%, with a maximum height of 450mm;
  - b. if required by the Controlling Authority the catch pit must be covered at door sill level with strong, stable, non-combustible and oxidation-free grill, which grill must serve as a floor on which corrosion-free shelves and/or the contents of the storeroom must be placed and an access hatch for cleaning purposes must be placed in a suitable position on the grill floor; and
  - c. the catch pit must, at its lowest level, have a non-corrosive drainage valve for cleaning purposes and for the product recovery.

## Ventilation

- (8) Any storeroom must be so designed and constructed to ensure that the collection of fumes of flammable liquids is effectively ventilated, whether naturally or mechanically, in all parts of the storeroom. The fumes must be released into the open air at a place or places where fumes are not likely to come into contact with any source of ignition, which may ignite such fumes.

### Natural ventilation

(9) The owner or person in charge of any storeroom must effectively ventilate the storeroom at a minimum cycle of 30 total air changes per hour by installing non-combustible airbricks, at least 140mm x 215mm in extent, with non-corrosive gauze wire of which the nominal opening diameter must be at least 0.5mm: Provided that the airbricks are-

- a. provided in at least three external wall; and
- b. positioned 100mm above the level of the sill and 100mm below the roof and more than 450mm apart.

### Mechanical ventilation

(10) Whenever natural ventilation as contemplated in subsection (9) cannot be effected and the depth of the sill level exceeds 300mm, the owner or the person in charge of a storeroom must equip the storeroom with a mechanical inlet and outlet ventilation system designed and installed for this purpose: Provided that-

- a. the capacity of the system must be able to change the cubic air content in the storeroom at least 30 times an hour.
- b. the vanes of the system must be manufactured from static-free material;
- c. the fumes must be released into the open air and the outlets must not be within 5m of any opening of a building or erf boundary.
- d. all ventilators must be attached firmly to the inside of the walls;
- e. the bottom ventilators must be affixed as close as possible to the level of the sill; and
- f. all ventilation openings and/or air duct openings must be installed in the opposite wall, 100mm above the level of the sill to ensure cross-ventilation in conjunction with the said mechanical ventilator.
- g. with all ventilation or air duct openings in the external wall opposite the mechanical ventilator installed 100 mm above the level of the sill to ensure effective cross-ventilation; and 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**

- (11) The owner or person in charge of a storeroom must ensure that-
- a. all electrical apparatus, fittings and switchgear used or installed in any storeroom are protected and installed in accordance with the equipment of the appropriate classification for the particular area in terms of the provisions of SANS 10108;
  - b. all switchgear, distribution boxes, fuses, and any other electrical equipment not in compliance with the provisions contained in SANS 10108 must be situated outside that storeroom and positioned so as not to come into contact or possibly come into contact with fumes escaping from the storeroom.
  - c. all metal parts and electrical fitting and any device in or in connection with a storeroom are earthed effectively with each other and the storeroom.
  - d. switches actuating any mechanical ventilation system are situated outside the storeroom.
  - e. any mechanical ventilation system is on at all times during occupation, except whenever the system is switched off for repairs and/or replacement purposes: Provided that if the mechanical ventilation system breaks down, the system must be repaired without delay, and if the system breaks down irreparably, the system must be replaced without delay; and
  - f. whenever any storeroom is not staffed, all electrical apparatus and fittings, with the exception of the mechanical system, are switched off.

### **Electrical installations installed by qualified electricians**

- (12) All electrical installations must be installed and certified by a suitably qualified electrician: Provided that the certificate must be submitted to the Service for record purposes immediately after installation.

### **Storerooms constructed from other, non-combustible materials**

- (13) Notwithstanding the provisions of this section, a storeroom may be constructed from other, non-combustible materials: Provided that-
- a. the storeroom is not constructed within 3meters of any other building and/or the boundary of the premises;
  - b. the storeroom is surrounded with liquid-proof retaining walls or embankments that are capable of accommodating the quantity of dangerous goods able to be stored in the storeroom, plus 10%, and
    - (i) the floor of/or space within these retaining walls or embankments is also liquid-proof to prevent ecological contamination; and
    - (ii) where the storage is affected outside a flammable liquid storeroom, this is allowed when the storage is not within 15m of any ignition source.

### **Unauthorized access**

- (14) 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. uses any storeroom or allow it to be used for any purpose other than for the use, handling or storage of flammable substances.
  - c. allows 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.

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

- (15) 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 65mm 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 mm high, displaying the words foam inlet.

### **Shelving in storerooms**

- (16) 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.

### **Mixing and decanting rooms**

- (17) The owner or person in charge of any premises where quantities of flammable liquids exceeding those stipulated in Annexure IV 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.

### **Hand tools must be intrinsically safe**

- (18) The owner or person in charge of any flammable substance storeroom must ensure that any hand tool used in the storeroom is intrinsically safe.
- (19) **Any person who uses a storeroom or permits a storeroom to be used and does not comply with the provisions of this section is guilty of an offence.**

## 70. Keeping and handling dangerous goods in storeroom

- (1) Any storeroom referred to in section 71 of these by-laws may be used for keeping any Grouped Dangerous Goods, with the exception of Group I Dangerous Goods (explosives), as defined in section 2 (1) of the Dangerous Goods Act, 1973: Provided that-
  - a. all chemically reactive Dangerous Goods must be separated from each other by means of compartmental liquid-proof fire partition walls to the satisfaction of the Service, which fire partition walls must extend the bottom of the catch pit to 1m above the highest stack of each group inside the storeroom.
- (2) Notwithstanding the provisions of section 46 of these by-laws, any Grouped Dangerous Good contemplated in this section, with the exception of Group I Dangerous Goods (explosives), may also be stored, and kept in terms of SANS 10263: Provided that any storeroom will be subject mutatis mutandis to the provisions of sections 44, 45 and 46 of these by-laws, as the case may be.
- (3) **Any person who fails to comply with the provisions of this section is guilty of an offence.**

## Chapter 10

### Spray-painting matters and spraying permits

#### 71. Registration of spray-painting rooms

##### Spraying prohibited without spraying permit

- (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 71.2.
  - b. the spraying, coating, plating or epoxy-coating as the case may be is conducted in a spraying room approved by the Controlling Authority on premises registered for that purpose.

##### Application for spraying permit

- (2) any person who wishes to obtain a spraying permit must-
  - a. complete and submit to the Controlling Authority an application form for such permit in the form and manner determined by the Council; and
  - b. pays the prescribed fee.

##### Cancellation of spraying permit

- (3) The provisions of section 39, read with the necessary changes, apply to the cancellation by the Controlling Authority of any spraying permit.

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

- (4) 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

- (5) 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 woven 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 SANS 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 2.5mm.
  - (ii) the framework of the entire structure, including any door, must be clad on both sides with sheet metal with a minimum thickness of 1.3mm.
  - (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**

- (6) 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**

- (7) (1) Any electrical apparatus, light, fitting, and switch gear installed or used in a spraying room must be installed and used in accordance with SANS 0108.
- (2) Any switch gear, distribution boxes, fuse, and other electrical equipment, except equipment as contemplated in SANS 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 Controlling Authority without delay.

### **Location of spraying rooms**

- (8) (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 mm 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 mm 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 71(5)(c), may border a fire partition wall.

#### **Access to spraying rooms**

- (9) 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 mm wide x 2000 mm 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 meters; 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**

- (10) 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 meters 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 meters 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**

- (11) (1) A fire damper manufactured and installed in accordance with SANS 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**

- (12) 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 meter above any roof on the premises;
  - b. 4 meters above the ground level; and
  - c. 5 meters from any opening of a building situated on or adjacent to the spraying room.

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

- (13) (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 SANS 1186; and
  - b. of dimensions at least 290mm x 290mm.

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

- (14) 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 SANS 10087, Part 1; and
  - b. the requirements of these By-laws.

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

- (15) 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 45.13.
  - 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**

- (16) (1) Every spraying room must be equipped with
- a. at least one 9kg dry chemical fire extinguisher installed on the inside of the spraying room; and
  - b. at least one 9kg 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 SANS 543
- a. that is connected to a water supply as contemplated in SANS 10400, 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 300kPa.

- (17) No person may spray, coat, plate or epoxy-coat any vehicle, or parts of a vehicle, or any other articles, objects or buildings, or part thereof, or permit them to be sprayed, coated, plated or epoxy-coated, whether indoors or outdoors, with a Group III Dangerous Good or with liquid compounds of a Group III Dangerous Good, or with any Dangerous Good, unless such person is in possession of a spraying permit in accordance with the requirements of Annexure II of these By-laws.

#### **Prohibition of certain actions**

- (18) No person may use or handle Dangerous Goods, or permit Dangerous Goods to be used or handled, on unregistered premises, unless a member is satisfied that the Dangerous Goods will be used or handled in a place and in a manner that will ensure that-
- a. no Dangerous Good or fumes come or are able to come into contact with any fire, flame or naked light, or any other source of ignition which is likely to set the Dangerous Good or fumes alight; and
  - b. the escape of human beings or animals is not hampered or hindered in the event of a fire or an emergency situation.

#### **Display and conditions of spraying permit**

- (19) (1) A spraying permit is issued on the following conditions:
- a. The spraying permit must at all times be displayed prominently in a weatherproof container on the premises in a place designated by a member.
  - b. The spraying permit must be legible at all times.
  - c. The number of spraying rooms and/or spraying booths must be indicated on the spraying permit.
  - d. A serial number must be indicated on the spraying permit.
  - e. The spraying permit must reflect the period of validity and the date of expiry: Provided that the period of validity will, be from the date of issue for a period of twelve months.
  - f. The spraying permit is not transferable from premises to premises.
  - g. In the case of reconstructing, the spraying permit is, subject to the provisions of section 44 of these By-laws, transferable from control to control or from owner to owner on the same premises: Provided that-
    - a. application must be made for transfer to the Service on the prescribed form; and
    - b. if the trade name of the premises changes, the holder of the spraying permit must ensure that the change is immediately brought to the

attention of the Service.

- h. The Controlling Authority must be in possession of a set of approved plans referred to in section 45 of these By-laws.
  - i. The spraying permit will not be issued or renewed unless the prescribed application form has been completed in full and has been submitted to the Controlling Authority.
  - j.
    - (i) Any person who is legally in possession of a spraying permit must apply to the Controlling Authority in writing on the prescribed form if that person wishes to amend the number of spraying rooms and/or spraying booths, according to need.
    - (ii) The fees prescribed in Annexure I to these By-laws must accompany an application. The Controlling Authority will grant the spraying permit only if the proposed amendments comply with the relevant provisions of these By-laws.
    - (iii) Whenever the Controlling Authority approves such an application, the person concerned must hand the spraying permit to the Controlling Authority to be amended.
- (2) The Chief Fire Officer may send a reminder for the renewal of registration to the owner or occupier of registered premises. An owner or occupier who has not received a reminder is not indemnified from possible prosecution.
- (3) The holder of a spraying permit or certificate of registration must ensure that he/she is always in possession of a valid spraying permit and/or certificate of registration.
- (20) Any person who fails to comply with the provisions of this section, or who alters a spraying permit or attempts to alter a spraying permit or permits a spraying permit to be altered is guilty of an offence.**

## **72. Construction and design of spray-painting rooms**

- (1) The construction of a spraying room and/or spraying booth must be in accordance with the following requirements:
- a. the floor must be of concrete;
  - b. the walls must be of brick and/or concrete;
  - c. the roof must be of reinforced concrete;
  - d. the doors must be Class B type fire doors as contemplated in SANS 1253.
  - e. the window frames must be of steel and have window panels that cannot be opened, which panels must be a maximum size of 450mm x 450mm and fitted with wire woven glass with a minimum thickness of 8mm.

- (2) The provisions of subsection (1) are not applicable to the erection of a spraying room and/or spraying booth if, in terms of the design thereof, the room or booth complies with the following requirements:
- a. The framework of the entire structure, including the door assemblies, must have a sturdy steel profile with a minimum wall thickness of 2,5mm.
  - b. The framework, including any doors, must be clad on both sides with sheet metal with a minimum thickness of 1,3mm.
  - c. If the sheet metal is joined, the joins and/or joints of the sheet metal so joined, including any door assembly forming an integral part of the whole, must be fume-, flame- and liquid-proof.
  - d. The floor must be of concrete or metal.
  - e. The window must be of steel with window panels that cannot be opened, which panels must be a maximum size of 450mm x 450mm and fitted with wire woven glass with a minimum thickness of 8mm.
  - f. All materials used must have a fire integrity grading of at least 60 minutes.
- (3) The unit formed through the combination of components referred to in subsection (1) and (2), including any services constituting an integral part of the unit or required in the unit, must be constructed, installed and finished so that all surfaces are smooth to prevent any furring which may hamper the ventilation, washing and cleaning processes.
- (4) A prefabricated unit is suitable only if such a unit is evaluated by the SANS or CSIR and is found to be suitable for the particular intended purpose.

#### **Location of and access to a spraying room**

- (5) a. Notwithstanding the door(s) granting for motor vehicles or other objects to be sprayed in any spraying room, a spraying room must have at least two hinged doors for the purposes of escaping, which doors must-
- (i) open to the outside.
  - (ii) be at least 800mm x 2000mm in extent.
  - (iii) be positioned on opposite sides, provided that, whenever there is any object in the spraying room for processing, the distance to be covered to any of the doors may not exceed 4m; and
  - (iv) be fitted with locking mechanisms that can be opened easily from the inside without the use of a key.
- b. Any spraying room must be located so that it is at all times separated from other activities and/or areas by means of an escape opening of at least 1200mm wide, which escape opening must at all times be kept free of any obstruction, refuse or combustible materials.

- c. If any activity and/or process which is operated adjacent to a spraying room may pose a probable fire danger to the spraying room, the said escape opening of 1200mm must be identified by fire partition walls with a fire resistance of at least 60 minutes, and the height of these walls must be at least 300mm higher than the roof of the spraying room.
- d. Any spraying room contemplated in subsection (2) may be erected indoors and outdoors against firewalls: Provided that no more than two sides of the spraying room may border the firewalls.

#### **Water floors**

- (6) a. A spraying room may have a sunken water-filled floor covered at the level of the sill by a sturdy, stable, non-combustible and corrosion-free grill that is capable of bearing the weight of the heaviest object in the spraying room.
- b. The water in the sunken floor must be circulated through an effective non-combustible and cleanable filtering system by means of a closed-circuit pump circulation system of non-corrosive metal pipes with a suitable diameter and wall thickness.

#### **Electrical equipment**

- (7) All electrical apparatus, lights, fittings and switchgear used or installed in any spraying room must be protected and installed in accordance with the provisions for equipment of the appropriate type for the particular area in terms of SANS 10108.
- (8) All switchgear, distribution boxes, fuses, and any other electrical equipment not in compliance with the provisions contained in SANS 10108 must be situated outside the spraying room and positioned so as not to come into contact or possibly come into contact with fumes escaping from the spraying room.
- (9) Switches actuating any mechanical ventilation system must be situated outside the spraying room.
- (10) All metal parts and electrical fittings and any device in or in connection with a spraying room must be earthed effectively with each other and the ground.
- (11) An accredited person must install and certify all electrical installations: Provided that a copy of the certificate must be submitted to the Controlling Authority for record purposes immediately after installation.

#### **Mechanical ventilation**

- (12) (1) Any spraying room must be equipped with a mechanical inlet and outlet ventilation system designed and installed for this purpose: provided that-
  - (i) the capacity of the system must be able to change the cubic air content in the spraying room at least 30 times an hour or at a flow rate of 0.5m/s.



- (ii) The vanes of the system must be manufactured from static-free materials.
- (iii) the fumes must be released into the open air and the outlets must not be within 4.5m of any of a building or erf boundary.
- (iv) all ventilators must be attached firmly to the inside of the walls.
- (v) the bottom ventilators must be affixed as close as possible to the level of the floor; and
- (vi) all ventilation openings and/or air duct openings must be installed in the opposite wall, door(s) or roof to ensure cross-ventilation in conjunction with the said mechanical ventilation system.
- (vii) every spray room shall have at least one of its doors fitted with an un- open able strengthened, shatterproof glass inspection window no larger than 450mm x 450mm.

#### **Fire dampers, fire detectors and fire alarms**

- (13) (1) A fire damper must be affixed in front of any air purification filter, or any part of a filter forming an integral part of ventilation system, on the inside of the spraying room, which fire damper must be manufactured and installed in accordance with the provisions of SANS 193: Provided that the fire damper must-
- (i) close automatically by means of a sensor that is suitably located and actuated by a rise of more than 10°C in the predetermined working temperature.
  - (ii) be so installed that the damper will remain in position even if the air duct distorts during a fire; and
  - (iii) be provided with any overriding fusible link.
- (2) The sensor contemplated in subsection (12)(1)(i) must also-
- (i) be 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 whenever there is a rise of more than 10°C in the predetermined working temperature inside the spraying room; and
  - (ii) activate a visual and audible alarm inside and outside the spraying room.

### **Positioning of ventilation outlets**

- (14) All outlet openings must be designed and positioned so as to release all fumes into the open air at a place at least 1m above a roof or 3.6m above the ground level and at least 4.5m from any opening of a building.
- (15) The ventilation system must function whenever any activities related to spray-painting take place in the spraying room.

### **Display of signs prohibiting open flames and smoking**

- (16) No person may use any spraying room or permit any spraying room to be used, unless and until symbolic signs prohibiting open flames and smoking, at least 290mm x 290mm in extent, manufactured and installed in accordance with the provisions of SANS 1186, are affixed to the inside and outside of all doors of the spraying room.

### **Maintenance of spraying rooms**

- (17) All spraying rooms must be maintained at all times in accordance with the provisions of this section and the manufacturer's specifications. Proof of such maintenance must be provided upon request from a member.

### **Unauthorized access**

- (18) No person may enter a spraying room or permit any other person to enter a spraying room without the express permission of the owner and/or occupier or any other responsible person in charge of the spraying room.

### **Abuse of spraying room**

- (19) No person may-
  - a. use any spraying room or permit any spraying room to be used for any purpose other than for practicing or exercising activities related to spray-painting in the spraying room;
  - b. employ any other person in a spraying room or permit any other person to work in the spraying room unless the mechanical ventilation system is on; and
  - c. place any obstruction or hindrance, or have any hindrance or obstruction placed or permit any hindrances or obstruction to be placed in the escape openings or in front of any doors of the spraying room.

### **Provision of fire-fighting equipment**

- (20) Any spraying room must have a 9kg dry chemical fire extinguisher on the outside, which must be installed in a position determined by the Controlling Authority.
- (21) All spraying rooms must be protected by a fire hose reel referred to in section 59(1)(b) of these bylaws.

### **Drying kiln/heating devices**

- (22) Whenever any manifold installation of a Group II Dangerous Good forms an integral part of the heating of a spraying room, the manifold installation must be in accordance with the provisions of SANS 10087, Part 1, and the relevant provisions of these by-laws will apply mutatis mutandis in the application of this section.
- (23) **Any person who fails to comply with the provisions of this section is guilty of an offence.**

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## **Chapter 11 Animals**

### **73. Handling of animals during emergencies**

- (1) Provision must be made for the professional handling of animals during an emergency on any premises, but particularly at zoological gardens, feedlots, stable, research institutions, veterinary practices and/or places of veterinary science study: Provided that the Service may-
  - a. authorize a suitable qualified person to handle and/or put down the animals during an emergency situation, as the case may be; and
  - b. recover all costs involved in the matter from the owner or the institution responsible for the care of the animals.
- (2) **Any person who fails to comply with the provisions of this section is guilty of an offence.**

## **Chapter 12 Penalties**

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

- (1) Any person who:—
  - (a) contravenes any of the provisions of this By-law or fails to comply therewith, or
  - (b) contravenes or fails to comply with any order made hereunder or any notice served in connection herewith, is guilty of an offence and liable to a maximum fine or imprisonment as prescribed in the Fire Brigade Services Act.
- (2) The imposition of a penalty for any contravention may not excuse the contravention nor must the contravention be permitted to continue.
- (3) The controlling authority must instruct a person found guilty to correct or remedy the contravention or defect concerned within a time period specified by the controlling authority.

## **Chapter 13 General**

### **75. Operation of these by-laws in relation to other laws**

The provisions of these By-laws are in addition to and not a substitution for any other law which is not in conflict or inconsistent with these By-laws.

### **76. Regulations**

- (1) The Municipality may make regulations not inconsistent with these by-laws, prescribing –
- a. any matter that may or must be prescribed in terms of these by-laws; and
  - b. any matter that may facilitate the application of these by-laws.

### **77. Repeal of By-Laws**

Any by-laws relating to community fire safety adopted by the Municipality or any erstwhile municipal council now comprising an administrative unit of the Municipality will be repealed from the date of promulgation of these by-laws.

### **78. Short title**

These By-laws are called Community Fire Safety By-laws. Their provisions come into operation on a date fixed by proclamation in the Government Gazette.