

**No. 90**

**12 June 2009**

**ABAQULUSI MUNICIPALITY**

**No. 17 of 2009**

I, under powers vested in me by section 14(2) of the Local Government: Municipal Systems Act, 2000 (Act No. 32 of 2000), and after a resolution by Council in a meeting open to the public and public consultation hereby publish a set of by-laws as per schedule attached hereto.

Signed at Vryheid on this 27<sup>th</sup> day of June 2008.

**M.J. MATHENYWA**  
**MUNICIPAL MANAGER**

**FIRE PREVENTION BY-LAWS**

Be it enacted by the Council of the Abaqulusi Municipality, in terms of Section 156 of the Republic of South Africa Act No. 108 of 1996, read with section 11 of the Local Government: Municipal Systems Act No. 32 of 2000, as follows:

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## CHAPTER 1

### DEFINITIONS

#### Definitions

1. In this bylaw, unless the context indicates otherwise-

"above ground storage tank" means a tank situated above ground for the storage of a flammable liquid;

"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;

"building" means 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 or sale of any goods;
  - (iii) the rendering of any service;
  - (iv) the destruction or treatment of combustible refuse or combustible waste;
  - (v) the cultivation or growing of any plant or crop;
- (a) any wall, swimming pool, reservoir or bridge or any other structure connected therewith;
  - (b) any fuel pump or any tank used in connection therewith;
  - (c) any facilities or system, or part or portion thereof, within or outside or incidental to a building, for the provision of a water supply, drainage, sewerage, stormwater 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 100% of the contents of the tank;

"combustible material" means combustible refuse, combustible waste or any other material capable of igniting;

"combustible refuse" means any combustible rubbish, litter or other material that has been discarded;

"combustible waste" means any combustible waste material which is salvageable, retained or collected for scrap or reprocessing;

"dangerous goods" means a flammable gas, liquid or solid as contemplated in SABS 0228;

"division separating element" means a building element or component which separates one area in a building from another and has a fire resistance of not less than that required by the National Building Regulations (T1) read with the SABS 0400;

"emergency evacuation plan" means a plan specifically designed to aid in the evacuation of occupants from a building in the event of a fire or other threatening danger and assigns responsibility to various staff, indicates escape routes to be used and provides for general contingencies for a safe and quick evacuation from a building;

"emergency route" means that part of an escape route that provides fire protection to the occupants of any building and which leads to an escape door;

"emergency vehicle" means any fire, rescue or other vehicle intended for use at fires and other threatening dangers;

"escape door" means the door in an escape route, which at ground level leads directly to a street or public place or to any approved open space which leads to a street or public place;

"escape route" means the entire path of travel from the furthest point in any room in a building to the nearest escape door and may include an emergency route;

"escape route plan" means a diagram indicating the floor layout, the occupant's current position and the route of travel to the nearest primary and secondary escape routes in the building, as well as the action to be taken in the event of a fire or other threatening danger:

"Fire Brigade Services Act" means the Fire Brigade Services Act, 1987 (Act 99 of 1987);

"fire damper" means an automatic damper and its assembly that complies with the requirements contained in SABS 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 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 lanes" means the road, path or other passageway constructed or designated to allow access for emergency vehicles;

"fire protection system" 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 wall" means a wall that is able to withstand the effects of fire for a specific period of time as contemplated in the National Building Regulations (T1) read with SABS 0400;

"flammable gas" as contemplated in SABS 0228, means a gas that at 20 degrees centigrade and at 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 percentage points, regardless of the lower flammable limit;

"flammable liquid" means a liquid, or mixtures of liquids, or a liquid containing solids in solution or in suspension that give off a flammable vapour at or below 60,5 degrees centigrade;

"flammable solid" 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 substance" means a flammable liquid or a flammable gas;

"flammable store" means a store that is used for the storage of flammable liquids and complies with the criteria set out in section 46 of this by-law;

"Hazardous Substances Act" means the Hazardous Substances Act, 1973 (Act 15 of 1973);

"National Building Regulations" means the regulations promulgated in terms section 17(1) of the National Building Regulations and Building Standards Act, 1977 (Act 103 of 1977), and:

- (a) "National Building Regulations (A2)" means the provisions regulating the submission of building plans and particulars to the Council;
- (b) "National Building Regulations (A20)" means the provisions regulating the classification and designation of occupancies;
- (c) "National Building Regulations (A21)" means the provisions regulating the population of a building;
- (d) "National Building Regulations (T1)" means the provisions regulating general requirements for fire protection of a building, and
- (e) "National Building Regulations (T2)" means the provisions regulating the offences for non-compliance with the National Building Regulations (T1);

"National Road Traffic Act" means the National Road Traffic Act, 1996 (Act 93 of 1996);

"non-combustible" means a substance or material classified as non-combustible when tested in accordance with SABS 0177: Part 5;

"occupancy separating element" means a building element or component which separates one occupancy in a building from another and has a fire resistance of not less than that required by the National Building Regulations (T1) read with the SABS 0400;

"Occupational Health and Safety Act" means the Occupational Health and Safety Act, 1993 (Act 85 of 1993);

"operator" means the person responsible for the use of a motor vehicle and who has been registered as the operator of such a vehicle in terms of the National Road Traffic Act;

"owner" means:

- (a) in relation to premises, other than a building, either a natural or juristic person whose identity is determined by operation of law;
- (b) in relation to a building, either a natural or juristic person in whose name the land on which such building was or is erected or such land, as the case may be, is registered in the deeds office in question;
- (c) in relation to an installation, either a natural or juristic person in whose name a contract is entered into regarding approval, erection and maintenance of the installation; provided that such a person is not the owner mentioned in (b), and
- (d) in the event of the Council being unable to determine the identity of a person mentioned in (a), (b) and (c), any person who is entitled to the benefit of the use of such premises, building or installation or who enjoys such benefit;

"person in charge" means:

- (a) in relation to premises, either a natural or juristic person who is permanently or temporarily responsible for the management, 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 Council being unable to determine the identity of a person mentioned in (a), (b) and (c), any person who is in the opinion of the Council deemed to be in charge of such premises, building or installation;

"premises" means any building, beach, land, terrain, road, vehicle and can include a vessel, train or aircraft;

"site" means any erf, lot, plot, stand or other piece of land on which a building has been, is being or is to be erected;

"Standards Act" means the Standards Act, 1993 (Act 29 of 1993);

"storage vessel" means a pressure vessel as defined in the regulations for pressure vessels promulgated in terms of the Occupational Health and Safety Act;

"summary abatement" 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;

"tank" means a container mounted permanently or temporarily on or embodied in a vehicle and so constructed to be suitable for the containment of flammable liquid or gas cargo;

"underground tank" means a tank used or intended to be used for the storage of flammable liquid wholly sunk into and below the surface of the ground;

"vehicle" means a vehicle as defined in the National Road Traffic Act.

and any reference to an SABS Code shall refer to the relevant Code published by the South African Bureau of Standards and issued in terms of the Standards Act.

## CHAPTER 2

### FIRE PROTECTION OF BUILDINGS

#### Reporting a fire hazard and other threatening danger

2. An owner or the person in charge of any premises must, upon discovering any evidence of a fire hazard or other threatening danger pertaining to this by-law, immediately notify the Council of such fire hazard or threatening danger.

#### Access for emergency vehicles

3. (1) When, in the opinion of the Council, premises are not readily accessible from public roads it must be provided with emergency vehicle access which must -
  - (a) 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; and
  - (b) where the premises have a motorized or electronically operated gate, be equipped in such a manner that access to the premises can be gained without the use of a motor or electronic device.
- (2) Fire lanes must be provided for all premises which are set back more than 45 metres from a public road or exceed nine metres in height and are set back over 15 metres from a public road.
- (3) Fire lanes must be at least four metres in width, the position of which must be decided upon after consultation with the Council, and the area from ground level to a clearance height of four metres above the fire lane must remain unobstructed.
- (4) A cul-de-sac that is more than 90 metres 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.
- (5) The design, marking, use and maintenance of fire lanes not forming part of a public road must comply with the requirements of the Council.
- (6) It is unlawful for a person to park a vehicle in or otherwise obstruct a fire lane.

**Division and occupancy separating elements**

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

**Fire doors and assemblies**

5. (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 Council.
- (3) A fire door and assembly may not be rendered less effective through-:
  - (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.

**Escape Routes**

6. (1) No part of a fire escape route shall be obstructed or rendered less effective in any way.
- (2) A locking device, which is fitted to an access or escape door in an escape route, must be of a type approved by the Council.
- (3) Where required by the Council, 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.

### CHAPTER 3

#### FIRE SAFETY EQUIPMENT

##### Fire extinguishers

7. (1) Fire extinguishers must be provided and installed on premises as required by the National Building Regulations (T1) and (T2).
- (2) Fire extinguishers must be maintained in accordance with the requirements of the Occupational Health and Safety Regulations, SABS 1475: Part 1, SABS 1571, SABS 1573 and SABS 0105: Part I.
- (3) No person may fill, recharge, recondition, modify, repair, inspect or test a fire extinguisher in terms of SABS 1475: Part I, unless such a person is the holder of a permit issued by the South African Bureau of Standards or a certificate of competence issued by the South African Qualifications Certification Committee.
- (4) The owner or person in charge of the premises may not allow a fire extinguisher to be filled, recharged, reconditioned, modified, repaired, inspected or tested by a person not in possession of a permit or certificate mentioned in subsection (3).
- (5) Where a fire extinguisher has been filled, recharged, reconditioned, modified, repaired, inspected or tested by a person not in possession of a permit mentioned in subsection (3), the Council must instruct the owner or person in charge of such premises to have the work carried out by a person who is in possession of such a permit or certificate.
- (6) When, in the opinion of the Council, a fire extinguisher is unsafe or ineffective either by reason of deterioration, design or construction, the Council must instruct the owner or the person in charge of the premises to have the appliance inspected and tested in terms of SABS 1475: Part 1 and SABS 1571.
- (7) A fire extinguisher may not be removed from the premises for filling, recharging, reconditioning, modification, repair, inspection or testing unless the appliance is replaced temporarily with a similar appliance in good working condition.

- (8) A fire extinguisher may not be installed, dismantled, recharged, disconnected, serviced, modified, repaired or tested in an area where such action would create a danger or hazard.

#### **Testing and maintenance of fire protection systems**

8. (1) A fire protection system must be tested and maintained on a regular basis and the owner or person in charge of the premises must keep a detailed record of the test and maintenance of the system.
- (2) A person may not test a fire protection system before notifying the occupants of the premises concerned of the starting and completion times of the test, and where applicable, the parties who monitor the fire protection system.
- (3) A fire protection system designed for detecting, fighting, controlling and extinguishing a fire must be maintained in accordance with the National Building Regulations (T2).
- (4) A fire protection system may not be installed, dismantled, recharged, disconnected, serviced, modified, repaired or tested in any area where such action would create a danger or hazard.
- (5) The owner or person in charge of the premises must immediately notify the Council when the fire protection system, or a component thereof, is rendered inoperable or taken out of service and must notify the Council as soon as the system is restored.
- (6) The owner or person in charge of the premises must take all steps deemed necessary by the Council to provide alternate equipment to maintain the level of safety within the premises.

#### **Interference with fire protection systems and fire extinguishers**

9. No person shall tamper or interfere with a fire extinguisher or fire protection system, except as may be necessary during emergencies, maintenance, drills or prescribed testing.

## CHAPTER 4

### PUBLIC SAFETY

#### Attendance of a service

- 10.(1) When the Council is of the opinion that a representatives of the fire brigade service are required to be in attendance during a function in a place used for entertainment or public assembly, the Council 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) Where the entertainment or public assembly is taking place on Council property, the costs of the attendance of the representatives of the fire brigade service shall be recoverable from the organizers

#### Formulation of an emergency evacuation plan

11. (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 Council 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 Council.
- (7) The Council 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.

#### **Displaying of escape route plans**

12. The escape route plan must be displayed in a conspicuous position in any room designed for sleeping purposes.

#### **Barricading of vacant buildings**

13. The owner or person in charge of a building or portion thereof which is vacant must remove all combustible waste or refuse therefrom and lock, barricade or otherwise secure all windows, doors and other openings in the building to the satisfaction of the Council which will prevent the creation of a fire hazard caused by the entering of an unauthorized person.

### **CHAPTER 5**

#### **HOUSEKEEPING**

##### **Combustible waste and refuse**

14. (1) The owner or person in charge of the premises or a portion thereof must not allow combustible waste or refuse to accumulate in any area or in any manner so as to create a fire hazard or other threatening danger.
- (2) Combustible waste and refuse must be properly stored or disposed of to prevent a fire hazard or other danger.

##### **Combustible or flammable substances and sweeping compounds**

- 15 (1) Only water-based solutions, detergents, floor sweeping compounds and grease absorbents must be used for cleaning purposes.

- (2) The use of sawdust or similar combustible materials to soak up spilled combustible or flammable substances is prohibited.

#### **Accumulations in chimneys, flues and ducts**

16. The owner or person in charge of the premises or a portion thereof must not allow soot or any other combustible substance to accumulate in a chimney, flue or duct of the premises in such quantities or in such a manner as to constitute a fire hazard or other threatening danger.

#### **Sources of ignition**

17. (1) Smoking, the carrying of matches, the use of heating, flame-emitting devices or spark-producing equipment is prohibited in areas containing combustible or flammable substances.
- (2) Hot ashes, cinders or smouldering coals must be placed in a non-combustible container and the container must be placed on a non-combustible surface or stand.
- (3) An adequate distance, as deemed appropriate by the Council, must be ensured and maintained between combustible substances and heating or lighting equipment or other sources of ignition.
- (4) Portable heaters must be secured so that they cannot be overturned and the Council may prohibit the use of portable heaters in respect of occupancies or situations where such use or operation would present a fire hazard or other threatening danger.

#### **Smoking**

18. (1) If conditions exist where smoking creates a fire hazard on the premises, smoking is prohibited and "No Smoking" signs must be displayed as directed by the Council and the signs must comply with SABS 1186: Part 1.
- (2) No person may remove a "No Smoking" sign.
- (3) No person may light or smoke a cigar, cigarette, pipe, tobacco or other substance or ignite or otherwise set fire to other material, nor hold, possess, throw or deposit any lighted or smouldering substance in any place where expressly prohibited.



- (4) A person may not throw, put down or drop a burning match, burning cigarette, or other burning material or any material capable of spontaneous combustion or self-ignition in a public road or public place.

**Electrical fittings, equipment and appliances**

19. No person may cause or permit –
- (1) an electrical supply outlet to be overloaded; or
  - (2) an electrical appliance or extension lead to be used in a manner which is likely to create a fire hazard or other threatening danger.

**Flame-emitting device**

20. A person may not cause or permit a flame-emitting device, such as a candle, lantern or torch, but not limited thereto, to be used in a manner which is likely to create a fire hazard or other threatening danger.

**CHAPTER 6**

**FIRE HAZARDS**

**Combustible material**

21. (1) A person may not store, transport, use or display or cause or permit to be stored, transported, used or displayed, whether inside or outside any premises, any combustible material or a flammable substance in quantities or in a position or in a manner likely to cause or create a fire hazard or other threatening danger.
- (2) The owner or person in charge of any premises may not permit vegetation to grow or accumulate thereon, or other combustible material to accumulate thereon, in a manner likely to cause a fire hazard or other threatening danger.

**Lighting of fires and burning of combustible material**

22. (1) The lighting of fires and the disposal of combustible material by burning is prohibited, save in the circumstances set out in this section.

- (2) A person may light a fire or use a flame-emitting device for the purpose of preparing food or for any other domestic purpose in a manner which will not cause a fire hazard or other threatening danger or where such a fire is not precluded by any other legislation.
- (3) Burning may take place on State land, a farm, a small holding, or land within a proclaimed township that is not utilised for residential purposes provided that the prior approval is obtained from the Council.

## CHAPTER 7

### FLAMMABLE SUBSTANCES

#### Storage and use of a flammable substance

23. (1) Prior to the construction of a new installation or the alteration of an existing installation, whether temporary or permanent, for the storage of a flammable substance, the owner or person in charge of the installation must submit a building plan to the Council, in accordance with the National Building Regulations, and a copy of the approved plan must be available at the site where the installation is being constructed.
- (2) Prior to the commissioning of an above ground or underground storage tank installation, liquid petroleum gas installation or associated pipework, the owner or person in charge of the installation must ensure that it is pressure-tested in accordance with the provisions of the National Building Regulations (T1), SABS 0131: Parts 1 and 2, SABS 089: Part 3 and SABS 087: Parts 1,3 and 7 (whichever is applicable) in the presence of the Council.
- (3) Notwithstanding subsection (2), the Council may require an existing above ground or underground storage tank installation, liquid petroleum gas installation or associated pipework, to be pressure-tested in accordance with the provisions of the National Building Regulations (T1).
- (4) The Council must be notified at least 48 hours prior to the pressure test.
- (5) The owner or person in charge of the premises may not store or use:
  - (a) a flammable gas in excess of 19 kilogram, or
  - (b) a flammable liquid of a danger group (i), (ii), (iii) or (iv) in excess of 200 litres, unless he or she has obtained a flammable substance certificate from the Council.

**Flammable substance certificate**

24. (1) The owner or person in charge of the premises, who requires a flammable substance certificate mentioned in section 23(5), must submit an application to the Council.
- (2) The Council must refuse to issue the flammable substance certificate if the premises do not comply with the requirements of the National Building Regulations (T1) as well as additional requirements set out in this by-law, and where the Council is of the opinion that the non-compliance of the premises can be remedied, the Council 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 usage of the premises and the issuing of the certificate.
- (4) A flammable substance certificate must be renewed annually, on or before the date as indicated on the flammable substance certificate, and whenever the quantity or class of the flammable substance requires to be changed.
- (5) Premises must be used in accordance with any conditions specified in the flammable substances certificate and when in the opinion of the Council, a flammable substance is stored or utilised for any process in a manner which is hazardous to life or property, or an installation is unauthorised, an order may be issued for the removal of the flammable substance or installation from the premises.
- (6) A supplier may not supply flammable substances to the owner or person in charge of the premises, unless the owner or person in charge of the premises is in possession of a valid flammable substance certificate issued by the Council.
- (7) A flammable substance certificate is valid only:
- (a) for the installation for which it was issued;
  - (b) for the state of the premises at the time of issue, and
  - (c) for the quantities stated on the certificate.
- (8) The flammable substance certificate must be available on the premises for inspection at all times.

**Permanent or temporary above ground storage tank for a flammable liquid**

- 25(1) A temporary above ground storage tank other than that at a bulk storage depot is permitted, at the discretion of the Council, on the merit of the situation, provided that the following requirements are complied with:
- (a) if it has a capacity not exceeding 9 000 litres and is not used for the storage of flammable substances with a flash point below 40 degrees centigrade;
  - (b) to be on the premises for a period not exceeding six months;
  - (c) the entire installation must comply with SABS 0131: Part 1 or SABS 0131: Part 2 whichever is applicable, and
  - (d) written application together with a plan must be forwarded to the controlling authority at least 14 days prior to the erection of the tank and prior written permission must be obtained from the Council for the erection of the tank.
- (2) Notwithstanding section 28(1), if a larger capacity above ground storage tank is required or the tank is to be a permanent installation, an acceptable rational design based on a relevant national or international code or standard must be submitted to the Council for approval in terms of the National Building Regulations (T1).
- (3) The design requirements and construction of a permanent tank must be in accordance with relevant national or international recognised codes.
- (4) The rated capacity of a permanent or temporary tank must provide sufficient ullage to permit expansion of the product contained therein by reason of the rise in temperature during storage.
- (5) A permanent or temporary tank must be erected at least 3,5 metres from boundaries, buildings and other flammable substances or combustible materials.
- (6) A permanent or temporary tank must be located on firm level ground and the ground must be of adequate strength to support the mass of the tank and contents.
- (7) A permanent or temporary tank must have a bund wall.

- (8) Adequate precautions must be taken to prevent spillage during the filling of a tank.
- (9) Sufficient fire extinguishers, as determined by the Council, must be provided in weatherproof boxes in close proximity to a tank.
- (10) Symbolic safety signs depicting "No Smoking", "No Naked Lights" and "Danger" must be provided adjacent to a tank, and the signs must comply with SABS 1186: Part 1.
- (11) The flammable liquid in the tank must be clearly identified, using the Hazchem placards listed in SABS 0232: Part 1.
- (12) An electrical or an internal combustion-driven pump must be equipped and so positioned as to eliminate the danger of the flammable liquid being ignited.
- (13) The electrical installation associated with the above ground storage tank must comply with SABS 0108 and SABS 089: Part 2.

#### **Underground storage tank for a flammable liquid**

26. The installation of underground storage tanks, pumps, dispensers and pipework at service stations and consumer installations must be in accordance with National Building Regulations (T1) read in conjunction with SABS 0400, SABS 089: Part 3 and SABS 0131: Part 3.

#### **Bulk storage depot for flammable substances**

27. The handling, storage and distribution of flammable substances at bulk depots must be in accordance with the National Building Regulations (T1), read in conjunction with SABS 089: Part 1.

#### **Small installations for liquefied petroleum gas**

28. Liquefied petroleum gas installations involving gas storage containers of individual water capacity not exceeding 500 litres and a combined water capacity not exceeding 3 000 litres per installation must be installed and handled in accordance with SABS 087: Part 1.

#### **Liquid petroleum gas installation in mobile units and small non-permanent buildings**

29. A liquid petroleum gas installation in mobile units and small non-permanent buildings shall be in accordance with SABS 087: Part 2.

**The fuelling of forklift trucks and other LP gas operated vehicles**

30. The fuelling of forklift trucks and other LP gas operated vehicles shall be in accordance with SABS 087: Part 8.

**The storage and filling of refillable liquid petroleum gas containers**

31. Storage and filling sites used for refillable liquid petroleum gas containers of capacity not exceeding 9kg must be in accordance with SABS 087: Part 7.

**Bulk storage vessel for liquid petroleum gas**

32. The layout, design and operation of installations for the storage of a bulk liquid petroleum vessel and allied facilities must be in accordance with the National Building Regulations (T1), read in conjunction with SABS 087: Part 3.

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

33. (1) If an above ground or underground tank installation, liquid petroleum gas installation or associated pipework 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 was erected must:
- (a) within seven days of the cessation, notify the Council in writing thereof;
  - (b) within 30 days of the cessation, remove the flammable substance from the installation and render it safe;
  - (c) within six months of the cessation, remove the installation including any associated pipework, from the premises entirely, unless the controlling authority otherwise instructs, and
  - (d) restore a public footpath or roadway, which has been disturbed by the removal to the satisfaction of the Council within a period of seven days of the completion of the removal of the installation.
- (2) If the removal of an underground tank installation detrimentally affects the stability of the premises, the owner or person in charge of the installation must apply in writing to the Council to fill the tank with liquid cement slurry.

**Reporting accidents**

34. If an accident occurs which involves a flammable substance and results in a fire, an explosion, spillage or loss of a flammable substance, as well as personal injury or death, the owner or person in charge of the premises must immediately notify the Council.

**Flammable stores**

35. (1) The construction of a flammable store must be in accordance with the National Building Regulations (T1) read in conjunction with SABS 0400.
- (2) The floor must be of concrete construction or other impermeable material and must be recessed below the door level or incorporate a sill.
- (3) The recess or sill must be of such a depth or height that in the case of spillage it will be capable of containing the quantity of flammable liquid, as indicated on the flammable substance certificate and an additional 10% of the quantity mentioned on the certificate.
- (4) Notwithstanding the National Building Regulations (T1) read in conjunction with SABS 0400:
- (a) the roof assembly of a flammable store must be constructed of a concrete slab capable of providing a two-hour fire resistance when it forms part of another building;
- (b) the ventilation of a flammable store must be achieved by the use of bricks located in the external walls at the ratio of one air brick nominally above the sill level and one air brick located in the top third of the wall per 5 m<sup>2</sup> of wall area or part thereof, so that vapour cannot accumulate inside the store;
- (c) the air bricks must be covered both internally and externally with closely-woven, non-corrodible wire gauze of at least 1 100 meshes per metre, and
- (d) the wire gauze must be held in position by metal straps, a metal frame or cement.
- (5) When required by the Council, the flammable store must be ventilated by a mechanical ventilation system approved by the Council and must comply with the following requirements:

- (a) the ventilation system is to be intrinsically safe, provide 30 air changes per hour and must operate continuously;
  - (b) the fan extraction point must be nominally above sill level and must discharge through a vertical metal duct terminating at least 1 metre above roof height or at least 3,6 metres above ground level, whichever is the greater;
  - (c) ducting material that is external to the store, but communicates with the remainder of the building, must be fitted with a fire damper of two-hour fire resistance at the point of exit from a flammable store, and
  - (d) the ducting must be as short as possible and must not have sharp bends.
- (6) Notwithstanding the National Building Regulations (T1) read in conjunction with SABS 0400, a flammable store door must be constructed of material with a fire resistance of two hours, provided that all relevant safety distances are complied with, and the door must open outwards.
  - (7) When required by the Council, a flammable store door must be a D-class fire door, which complies with SABS 1253.
  - (8) Notwithstanding the National Building Regulations (T1) read in conjunction with SABS 0400, artificial lighting in the flammable store must be by electric light having vapour-proof fittings wired through seamless steel conduit and the switches operating the lights must be located outside the store.
  - (9) No other electrical apparatus may be installed in the flammable store.
  - (10) A flammable store must be provided with a foam inlet consisting of a 65 millimetre male instantaneous coupling and mild steel pipework leading to the inside thereof and the foam inlet must be identified by means of a sign displaying the words "Foam Inlet" in 100 millimetre block letters.
  - (11) Racking or shelving erected in the flammable store must be of non-combustible material.
  - (12) The flammable store must be identified by the words, "Flammable Store-Bewaarplek vir Vlambare Vloeistowwe-Isitoro Indawo Yokugcina Izixhobo Ezithatha Lula Umlilo", and the permissible quantity allowed within the flammable store, indicated in 100 millimetre block letters on both the inside and outside of all doors communicating directly with the store.



- (13) The owner or person in charge of a flammable store must ensure that the flammable store doors are kept locked when the store is not in use.
- (14) A person shall not enter a flammable store or cause or permit it to be entered without the permission of the owner or person in charge of the premises.
- (15) Sufficient fire extinguishers, as determined by the Council, must be mounted on the external wall of the flammable store in a conspicuous and easily accessible position.
- (16) Any hand tool used in the flammable store must be intrinsically safe.
- (17) A person may not use or permit a flammable store to be used for any purpose other than that indicated on the flammable substance certificate, unless the store is not in use as a flammable store and the Council has been notified in terms of the following procedure:
  - (a) within seven days of the cessation, notify the Council in writing thereof;
  - (b) within 30 days of the cessation, remove the flammable substance from the flammable store and render it safe, and
  - (c) within 30 days of the cessation, remove all signage.
- (18) Subject to the provisions in this section, the Council may call for additional requirements to improve the fire safety of a flammable store.

#### **Container handling and storage**

36. (1) All flammable substance containers must be kept closed when not in use.
- (2) A person may not extract flammable liquids from a container of a capacity exceeding 20 litres, unless the container is fitted with an adequately sealed pump or tap.
- (3) Flammable liquid containers must be labelled and marked with words and decals, which indicate the flammable liquids contained therein as well as the hazard of the liquids.
- (4) Flammable substance containers must be declared gas or vapour-free by a competent person before any modification or repairs are undertaken.

- (5) All flammable substance containers must be manufactured and maintained in such a condition as to be reasonably safe from damage and to prevent leakage of flammable substances or vapours therefrom.
- (6) An empty flammable liquid container must be placed in a flammable store.
- (7) Where a flammable store is not available for the storage of empty flammable liquid containers, the Council may permit such storage in the open, provided that:
  - (a) the storage area must be in a position and of sufficient size which in the opinion of the Council, will not cause a fire hazard or other threatening danger;
  - (b) the storage area is well ventilated and enclosed by a wire mesh fence and:
    - (i) the fence supports are of steel or reinforced concrete;
    - (ii) has an outward opening gate that is kept locked when not in use, and
    - (iii) when the floor area exceeds 10 m<sup>2</sup> an additional escape gate is installed, fitted with a sliding bolt or other similar locking device that can be opened from the inside without the use of a key;
  - (c) the storage area is free of vegetation and has a non-combustible firm level base;
  - (d) a two metre distance around the perimeter of the fenced area is clear of grass, weeds and similar combustible materials;
  - (e) when the storage area has a roof, the construction of the roof and supporting structure must be of non-combustible material;
  - (f) open flames, welding, cutting operations and smoking is prohibited in or near the storage area and signage is prominently displayed on the fence and complies with SABS 1186: Part 1, and
  - (g) fire-fighting equipment is installed as determined by the Council.
- (8) An empty flammable liquid container must be securely closed with a bung or other suitable stopper.

### **Spray rooms and booths**

37. A spray room, booth or area designated for the application of a flammable liquid must be constructed and equipped in such a manner as to comply with the General Safety Regulations promulgated in terms of the Occupational Health and Safety Act.

### **Liquid petroleum gas containers**

38. (1) A liquid petroleum gas container must be manufactured, maintained and tested in accordance with SABS 087: Part 1 and SABS 019.
- (2) A liquid petroleum gas container must be used and stored in such a manner as to prevent damage or leakage of liquid or vapour therefrom.
- (3) A liquid petroleum gas container of a capacity not exceeding nine kilogram must be filled and stored in accordance with SABS 087: Part 7.

## **CHAPTER 8**

### **GENERAL PROVISIONS**

#### **Indemnity**

39. The Council is not liable for damage or loss as a result of, but not limited to, bodily injury, loss of life or loss of or damage to property or financial loss, or consequential loss, which is caused by or arises out of or in connection with anything done or performed or omitted in good faith in the exercise or performance of a power, function or duty conferred or imposed in terms of this by-law.

#### **Offences and penalties**

40. Any person who -
- (a) contravenes or fails to comply with any provisions of these by-laws;
  - (b) fails to comply with any notice issued in terms of these by-laws;
  - (c) fails to comply with any lawful instruction given in terms of these by-laws; or

- (d) obstructs or hinders any authorised official in the execution of his or her duties under these by-laws –

shall be guilty of an offence and shall be liable on conviction to a fine not exceeding R15 000 or imprisonment for a period not exceeding 6 months or both.

#### **Enforcement provisions**

41. Any authorized official of the Council may –

- (1) enter any premises at any reasonable time to inspect the premises for compliance with this by-law;
- (2) summarily abate any condition on any premises which is in violation of any provision of this by-law and which presents an immediate fire hazard or other threatening danger and to this end may-
  - (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.

#### **Authority to investigate**

42. The Council has the authority to investigate the cause, origin and circumstances of any fire or other threatening danger.

#### **Failure to comply with provisions**

43. (1) When the Council finds that there is non-compliance with the provisions of this by-law a written notice must be issued and 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) Nothing in this by-law prevents the Council or any authorized official from taking immediate action to take immediate corrective action in respect of any fire or other threatening danger found on any premises and to recover any costs incurred from the owner.

**Repeal of existing By-laws**

44. The Council's existing Fire Fighting by-laws are hereby repealed.

**Short title and commencement**

45. These by-laws shall be called the Fire Fighting By-laws, 2009, and shall come into operation on 12 June 2009.