

ORDINANCE NO. 3548

AN ORDINANCE to amend and reordain Article B (FIRE PREVENTION) of Chapter 2 (FIRE PROTECTION AND PREVENTION) of Title 4 (PUBLIC SAFETY) of The Code of the City of Alexandria, Virginia, 1981, as amended.

THE CITY COUNCIL OF ALEXANDRIA HEREBY ORDAINS:

Section 1. That Article B of Chapter 2, Title 4 of The Code of the City of Alexandria, Virginia, 1981, as amended, be and the same hereby is amended and reordained to read as follows:

Article B
Fire Prevention

Sec. 4-2-11 Title.

This article shall be known as the Fire Prevention Code of the City of Alexandria, Virginia.

Sec. 4-2-12 Adoption of Virginia Statewide Fire Prevention Code.

There is hereby adopted and incorporated, as if fully set out in this article, the Virginia Statewide Fire Prevention Code, as promulgated in 1991 and as thereafter amended by the Virginia Board of Housing and Community Development, except such portions of the Virginia Statewide Fire Prevention Code as are deleted, modified or amended by section 4-2-21 of this article.

Sec. 4-2-13 Same--official copy.

One copy of the Virginia Statewide Fire Prevention Code and the ordinances adopting deletions, modifications and/or amendments thereto shall be manually signed on its cover by the mayor and the fire marshal and shall be filed and kept at all times in the office of the city clerk.

Sec. 4-2-14 Definition of fire official, fire marshal and code official.

Whenever the terms "fire official," "fire marshal" and "code official" are used in this article or the Virginia Statewide Fire Prevention Code, they shall mean the city's fire marshal, any deputy fire marshal in the city or any other city employee authorized to enforce the provisions of this article.

Sec. 4-2-15 Duties of the fire marshal and deputy fire marshals.

(a) The fire marshal, all deputy fire marshals, and other authorized employees of the city shall enforce the provisions of this article.

(b) The city manager shall appoint the fire marshal and deputy fire marshals.

(c) The chief of the fire department of the city may designate any members of the fire department as deemed necessary as temporary fire inspectors to make fire safety inspections pursuant to this article.

(d) (1) The fire marshal and deputy fire marshals are hereby authorized to exercise and they shall have, in addition to such other powers and duties as may be prescribed by law, all powers and duties set forth in chapter 3, title 27 (section 27-30, et seq.) of the Code of Virginia (1950), as amended. Said powers include, but are not limited to, the authority set forth in sections 27-34.2 and 27-34.2:1 of the Code of Virginia to arrest, to procure and serve warrants of arrest, and to issue summons in the manner authorized by general law for violations of this article and related fire prevention and fire safety ordinances.

(2) The authority granted in this section shall not be exercised by the fire marshal or any deputy fire marshal until such person has satisfactorily completed a training course designed for local fire marshals and their deputies, which course shall be approved by the Virginia State Fire Services Commission.

Sec. 4-2-16 Unlawful boarding or tampering with fire department vehicles.

It shall be unlawful for any person, without proper authorization, to cling to, attach to, climb upon or into, board or swing upon any fire department vehicle, whether the vehicle is in motion or at rest, to sound any warning device thereon or to manipulate, tamper with or destroy any lever, valve, switch, starting device, brake, pump or any equipment, protective clothing or tool on or a part of the fire department vehicle.

Sec. 4-2-17 Tampering with fire protection devices/delaying alarm of fire.

(a) It shall be unlawful for any person to tamper with, damage, destroy, use without just cause or authorization, or hinder the use of any fire protection system or fire extinguisher installed in any building or structure within the city.

(b) It shall be unlawful for any person knowingly to delay or to cause to be delayed an alarm of fire, or to fail to report an alarm of fire to the fire department.

Sec. 4-2-18 Fire hydrants and water mains.

(a) It shall be unlawful for any person to use, tamper with, damage or destroy any fire hydrant, valve or water main within the city, except that the fire department may use fire hydrants for firefighting or training purposes, and persons who have obtained a permit as provided for in this section from the fire

marshal may use the fire hydrants in accordance with the terms of the permit.

(b) Application for a permit for use of fire hydrants shall be made to the fire marshal on forms provided for this purpose. Any permit shall be subject to the conditions and specifications imposed by the fire marshal for the purpose of protecting equipment and preventing water leakage. No permit shall be issued unless approval to use water shall first have been obtained from the Virginia-American Water Company. A separate permit shall be required for each hydrant used and each time the hydrant is used. A fee of \$50 (\$10 for charitable or nonprofit groups) will be charged for each permit issued. A permit holder shall be responsible for the costs of labor and materials for any repair or replacement needed after hydrant use. A permit must be in the possession of the actual user at the time of use.

(c) No person shall plant or erect any obstruction within four feet of any hydrant.

Sec. 4-2-19 Impersonation.

It shall be unlawful for any person falsely to use a firefighter's badge, uniform or credentials to identify, or otherwise impersonate, the fire marshal or an authorized representative.

Sec. 4-2-20 Loading and unloading of tank vehicles.

(a) It shall be unlawful for any person, during the loading or unloading of flammable and combustible liquids or liquid petroleum, to smoke, light matches or use any other flame- or spark-producing device in, on or around any tank vehicle engaged in loading or unloading operations.

(b) At any time when a tank vehicle is loading or unloading Liquefied Petroleum (LP) gas or a flammable or combustible liquid, the following procedures shall be followed.

(1) The driver shall:

a. exit from the vehicle and not return until the loading or unloading has been completed;

b. prior to any unloading, inform the receiver of the number of gallons he can deliver and obtain from the receiver the number of gallons he is capable of receiving; and

c. comply with the provisions of section F-2807.0 of the Virginia Statewide Fire Prevention Code.

(2) During such operations, the driver and/or attendant shall:

- a. extinguish all smoking materials;
- b. prevent other persons from smoking, lighting matches or other flame- or spark-producing devices or carrying any flame or lighted smoking material by informing those persons that such conduct is unlawful, if the conduct continues, immediately stop the loading or unloading operation ;
- c. be in such a position as to be able at all times to observe the delivery hose and to prevent overflow; and
- d. not leave the vehicle unattended during the loading and unloading operation.

Sec. 4-2-21 Changes in Virginia Statewide Fire Prevention Code.

The Virginia Statewide Fire Prevention Code is deleted, modified or amended in the following respects:

(1) Article 1, section F-100.0, subsection F-100.1 is amended to read:

F-100.1. Title

The regulations set forth herein, as modified and amended in section 4-2-21 of The Code of the City of Alexandria, together with the additional regulations in article B of chapter 2, title 4 of that code, shall be known as the Fire Prevention Code of the City of Alexandria, Virginia, and are herein referred to as such or as "the code."

(2) Article 1, section F-104.0, subsection F-104.9 is amended to read:

F-104.9. Fees.

A permit shall not be issued until the required fees have been paid to the director of finance of the city or as he or she shall direct. The following fees shall be charged for permits required by the designated article; provided, however, that the fire marshal may waive any fee payable by the city or its agents.

Article 3--Bonfires and other outdoor burning.....\$ 50

Non Profit or Charitable Groups.....\$ 10

Article 3--Use of open flame device to remove paint and sweating pipe.....\$ 50

Article 3--Storage of combustibile or flammable materials (in excess of 2,500 cubic feet).....\$ 50

Article 5--Installation, modification or repairing of fire protection systems.....	\$ 50
Article 8--Operation of airport, heliport or helistop.....	\$ 50
Article 9--Application of flammable finishes.....	\$100
Article 10--Bowling establishments, pin and lane refinishing.....	\$ 50
Article 11--Crop ripening or color processes.....	\$ 50
Article 12--Dry cleaning plants.....	\$ 50
Article 13--Dust producing processes.....	\$ 50
Article 14--Fumigation and thermal insecticidal fogging.....	\$100
Article 15--Timber yards and wood working plants (storage or use of more than 100,000 board feet).....	\$ 50
Article 16--Oil wells and gas production.....	\$100
Article 17--Places of assembly and education (those solely religious are exempted).....	\$100
Article 18--Semiconductor fabrication facilities and facilities using or storing hazardous production materials.....	\$100
Article 20--Vehicle wrecking yards, junk yards and waste material handling plants.....	\$ 50
Article 21--Welding or cutting, acetylene generators, calcium carbonide storage.....	\$ 50
Article 23--Combustible fibers (storage or handling)	\$ 50
Article 24--Compressed gases (use, storage or handling).....	\$ 50
Article 25--Cryogenic liquids (production, use, storage or sales).....	\$ 50
Article 26--Explosives, ammunition and blasting agents:	
Storage and transportation.....	\$ 50
Use (each site).....	\$ 50
Article 27--Fireworks display.....	\$100

Article 28--Flammable and combustible liquids (manufacture, use, transportation or storage).....\$ 50

Article 28--Placement of stationary tank temporarily out of service or back in service.....\$ 50

Article 28--Operation of service station and garages.....\$100

Article 29--Hazardous materials and chemicals (use, handling and storage).....\$100

Article 31--Magnesium (working of more than 10 pounds per day).....\$ 50

Article 32--Matches (manufacture of or storage of more than 25 cases).....\$ 50

Article 33--Organic coatings (manufacture of or use of more than 1 gallon per day).....\$ 50

(3) Article 1, section F-104.0, subsection F-104.9 is amended by adding thereto subsections F-104.9.1 and F-104.9.2 to read:

F-104.9.1. Reinspection fees.

Any of the fire protection systems listed below which fail a maintenance performance test as required by this code, and are not repaired by the time of first reinspection, will be assessed a reinspection fee of \$25 for each such retest. The fee shall be paid prior to the date and time of the retest. Systems subject to this subsection are:

- (a) Automatic and manual fire alarm systems;
- (b) Fire pumps performance test;
- (c) Halon system concentration test;
- (d) Standpipe system hydrostatic test;
- (e) Sprinkler system hydrostatic test;
- (f) Fire hydrant hydrostatic test;
- (g) Fire service water main hydrostatic test; and
- (h) Suppression systems, regardless of type.

F-104.9.2. Period of validity for permits.

All permits, except those for bowling alley resurfacing or otherwise dated, shall be valid for a period of one year from the date of issuance and must be renewed at that time. A separate permit is required for each resurfacing operation at bowling alleys. For explosive and blasting agent use and for burning sites, a new permit must be obtained for each new site that is used subject to annual renewal.

(4) Article 3, section F-301.0, subsection F-301.1 is amended to read:

F-301.1. General.

No person shall kindle or authorize to be kindled any fire outside a building, on any public or private property, except as specifically permitted and under the conditions specified by the air pollution control code of the city.

(5) Article 3, section F-301.0, subsection F-301.3 is amended to read:

F-301.3. Permit required.

If, under the requirements of the city's air pollution control code (city code section 11-1, et seq.), a bonfire or controlled burning is allowed, a permit for each fire shall be obtained from the fire marshal. This permit requirement does not apply to campfires, fires used for the cooking of food, the training of firefighters under the direction of the chief of the fire department or fires set by a public health or safety officer where a health or fire hazard cannot be abated by any other means.

(6) Article 3, section F-301.0, subsection F-301.3.1 is amended to read:

F-301.3.1. Location restrictions.

No person shall kindle or authorize to be kindled any permitted fire except in the location as may be authorized by the air pollution control officer and the fire marshal.

(7) Article 3, section F-301.0, subsection F-301.4.2 is amended to read:

F-301.4.2. Bonfire materials.

Fuel for permitted fires shall be only those allowed by the city's air pollution control code.

(8) Article 3, section F-301.0 is amended by adding a new subsection F-301.11 to read:

F-301.11. Endangering other property.

No person shall kindle or authorize to be kindled or maintain any fire in such a manner that it constitutes a danger to public health and safety as determined by the fire marshal.

(9) The title to section F-303.0 is amended to read:

F-303.0. Torches for removing paint and sweating pipe joints.

(10) Article 3, section F-303.0, subsection F-303.2, is amended, and a new subsection F-303.3 is added to such section, to read:

F-303.2. Permit required.

A permit shall be obtained from the fire marshal for using a torch or other flame-producing device to remove paint or to sweat pipe in any building or structure.

F-303.3. Sweating pipes.

Any person using a torch or other flame-producing device for sweating pipe joints in any building or structure shall have in the immediate vicinity where the sweating is done one approved fire extinguisher or water hose connected to a working supply. Combustible material in close proximity to the work shall be protected against ignition by shielding, wetting or other approved means. In all cases, a fire watch shall remain in the vicinity of the sweating operation for one-half hour after the torch or flame-producing device has been used.

(11) Article 3, section F-305.0 is amended by adding thereto a new subsection F-305.5 to read:

F-305.5. Handling readily combustible materials.

No person making, using, storing, having charge of or having under his control in a building any combustible excelsior, rubbish, sacks, bags, litter, hay, straw or other combustible waste material shall fail or neglect at the close of each day to cause all such material, which is not compactly baled and/or stacked in an orderly manner, to be removed from the building or stored in suitable vaults or in metal or metal-lined and covered receptacles or bins. The fire marshal shall require suitable baling equipment to be installed in stores, apartment buildings, factories and other buildings where accumulations of paper and waste material are not removed at least every second day.

(12) Article 3, section F-306.0 is amended by adding a new subsection F-306.4:

F-306.4. Storage or display in roofed-over malls.

No combustible goods, merchandise or decorations shall be displayed or stored in a roofed-over mall unless approved by the fire marshal.

(13) Article 3, section F-308.0, subsection F-308.2.1 is amended to read:

F-308.2.1. Unauthorized seal removal.

It shall be a violation of this code for any person to continue the use of any device or appliance which has been sealed or ordered sealed under section F-308.2 of this code, unless written authority to remove the seal is given by the fire marshal. The removal or breaking of the seal shall also be deemed a violation of this code.

(14) Article 3 is amended by adding thereto a new section F-319.0 to read:

F-319.0. Storage, display or repair.

It shall be unlawful to store, display or repair in or on a building or structure, or any part thereof, any vehicle, tool or equipment that has a fuel tank containing a flammable or combustible liquid or a liquefied petroleum gas as a source of fuel, unless the building or structure is built in accordance with the requirements of the Uniform Statewide Building Code and this code; provided, that this section shall not apply to single-family dwellings unless the storage, display or repair is conducted as a business which is in compliance with all applicable provisions of The Code of the City of Alexandria.

(15) Article 5, section F-500.0 is amended by adding thereto new subsections F-500.4.5, F-500.7 and F-500.7.1 to read:

F-500.4.5. Certification of systems.

A written certification that the fire protection system has passed its required maintenance tests, as required by this code or referenced standards, shall be forwarded to the fire marshal within ten days of passing such test. A copy of this written certification shall be maintained on the premises by the owner or owner's agent.

F-500.7. Notification.

The fire marshal shall be notified in advance of any test, repair, alteration, modification or other action which diminishes the capacity or function of any fire protection system, regardless of whether the system is required by the building code, this code or other law or ordinance.

F-500.7.1. Fire Watch.

A fire watch shall be established whenever any fire protection system is unable to provide the protection for which it was designed. This fire watch shall be maintained until the system has been restored to normal operation.

(16) Article 5, section F-501.0 is amended by adding thereto a new subsection F-501.6 to read:

F-501.6. Tampering.

It shall be unlawful for any person to tamper with, damage, destroy, or use without just cause or authorization any fire protection system or fire extinguisher installed in any building or structure within the city.

(17) Article 5, section F-501.0 is amended by adding thereto a new subsection F-501.7 to read:

F-501.7. Fire control rooms.

All buildings equipped with a fire control room shall keep in that fire control room an operations procedure book. The contents of the book must be approved by the fire marshal. The book shall be placed in the fire control room in a manner and location approved by the fire marshal. The owner shall maintain the book and update it when needed.

(18) Article 9, section F-900.0, subsection F-900.2 is amended to read:

F-900.2. Permit required.

A permit shall be obtained from the fire marshal for spraying or dipping operations included within the scope of this article utilizing any amount of flammable or combustible liquids on any working day.

(19) Article 17, section F-1701.0 is amended by adding thereto a new subsection F-1701.2.3 to read:

F-1701.2.3. Acceptable alternate.

As an alternative to the field test as described in Subsection F-1701.2, the fire marshal may accept certification, by an affidavit or affirmation, that the fabric is flame resistant. The owner shall cause a copy of the certification to be kept on the premises where the public assembly is located. The certification shall attest to the following information on the flame resistance of the fabric:

(1) The name and address of each owner of the place of assembly;

(2) The date the fabric was last treated with a flame resistance solution;

(3) The trade name or a description of the chemical used in the treatment;

(4) The name of the person or firm treating the fabric; and

(5) The name of the testing agency and the test standard by which the fabric was tested;

(20) Article 26, section F-2601.0 is amended by adding thereto a new subsection F-2601.3 to read:

F-2601.3. Reports.

The fire marshal shall immediately be notified of the loss or theft of any explosives. This notification shall be immediately followed by a letter to the fire marshal giving complete details as to type, amounts and manufacturer of the explosives, and all other relevant facts.

(21) Article 26, section F-2602.0 is amended by adding thereto a new subsection F-2602.9 to read:

F-2602.9. Class II magazines.

Class II magazines may be used for temporary storage of explosives at the site of blasting operations where the amount constitutes not more than one day's supply for use in current operations. All explosives not used in the day's operation shall be returned to a Class I magazine at the end of the work day for overnight storage. In no case shall a Class II magazine be used for overnight storage. Class II magazines shall be allowed only in I-2 zones.

(22) Article 26, section F-2602.0 is amended by adding thereto a new subsection F-2602.10 to read:

F-2602.10. Records.

Daily records shall be kept as to the amount of explosives received from a supplier and the amount delivered to the magazine. Also, a daily record shall be kept as to the amount of explosives removed from the magazine for daily use and the amount returned. This record will be kept within the magazine so that, on inspection of the magazine, an inventory for all explosives can be made. The inventory for all explosives

shall be separated as to the different types stored and used. Forms for these records shall be approved by the fire marshal.

(23) Article 26, section F-2607.0, subsection F-2607.2 is amended to read:

F-2607.2. Personnel.

The handling and firing of explosives shall be performed by a person possessing a permit to use explosives and having a certification from the Commonwealth of Virginia as a blaster. Documentation of this certification shall accompany any permit application for blasting within the city. A certified blaster on a job site may use other persons in the handling and firing of explosives if such persons act while under the blaster's direct supervision, and if they are 21 years of age or older. A person shall not handle explosives while under the influence of narcotics or intoxicants. A person shall not carry lighted smoking material or matches while handling explosives or while in the vicinity thereof. An open flame shall not be used in the vicinity of explosives.

(24) Article 27 is amended to read;

Article 27. Fireworks.

Section F-2700.0. General.

F-2700.1. Scope.

(a) This article shall apply to fireworks as hereinafter defined in F-2700.2:

(b) Nothing in this article shall be construed to prohibit any resident wholesaler, dealer or jobber to sell at wholesale any fireworks as are not herein prohibited; or the sale of any kind of fireworks provided they are to be shipped directly out of the state, in accordance with the Department of Transportation (DOT) regulations covering the transportation of explosives and other dangerous articles; or the use of fireworks by railroads or other transportation agencies for signal purposes or illumination; or the sale or use of blank cartridges for a show or theater or for signal or ceremonial purposes in athletics or sports or for use by military organizations. Such wholesalers, dealers, and jobbers shall store their supplies of fireworks in accordance with section F-2604.0.

F-2700.2. Definitions.

"Fireworks" shall mean and include any combustible or explosive composition, or any substance or combination of substances or articles prepared for the purpose of producing a visible or an audible effect by combustion, explosion,

deflagration or detonation and shall include blank cartridges, toy pistols, toy cannons, toy canes or toy guns in which explosives are used, the type of balloons which require fire underneath to propel them, firecrackers, torpedoes, skyrockets, model rockets, Roman candles, Daygo bombs, sparklers or other devices containing any explosive or flammable compound, or any tablets or other devices of like construction and any devices containing any explosive; except that the term "fireworks" shall not include auto flares, paper caps containing not in excess of an average of twenty-five hundredths (.25) of a grain of explosive content per cap manufactured in accordance with the DOT regulations for packing and shipping as provided therein, and toy pistols, toy cannons, toy canes, toy guns or other devices for use of the caps, the sale and use of which shall be permitted at all times. Pyrotechnics (special fireworks) shall comply with the applicable provisions of article 26.

F-2700.3. Manufacture, sale and discharge of fireworks.

(a) The manufacture of fireworks is prohibited within the city.

(b) It shall be unlawful for any person to store, offer for sale, expose for sale, sell at retail, use or explode any fireworks except as otherwise provided in subsections (c) through (f) of subsection F-2700.3.

(c) The fire marshal shall adopt rules and regulations for the granting of permits for supervised public displays of fireworks. The permits shall be issued upon application to the fire marshal after approval of the chief of police and the filing of a bond by the applicant as provided in subsection F-2700.4. Every such display shall be handled by an experienced and competent operator approved by the fire marshal and the chief of police and shall be of such composition, character and so located, discharged or fired as will, in the opinion of the fire marshal after proper inspection and of the chief of police, not be dangerous or hazardous to any property or person.

(d) Applications for permits shall be made in writing at least 30 days in advance of the date of the display. After the permit has been granted, sale, possession, use and distribution of fireworks for display purposes shall be lawful for that purpose only. No permit granted hereunder shall be transferable.

(e) The sale, possession, use and distribution of fireworks for display purposes shall be conducted so as to be safe to persons and property. Evidence that the sale, possession, use and distribution of fireworks for display purposes has been conducted in accordance with the applicable provisions of this chapter of the city code and the applicable standards contained in appendix A shall be evidence that such

sale, possession, use and distribution of fireworks for display purposes provides safety to persons and property.

(f) The fire marshal shall adopt rules and regulations for the use of model rockets. The design, construction and use of model rockets shall be safe to persons and property. Evidence that the design, construction and use of model rockets is in accordance with the applicable provisions of this chapter of the city code and the applicable standards contained in appendix A shall be evidence that any design, construction and use provides safety to persons and property.

F-2700.4. Bond and responsibility for fireworks display required.

(a) The fire marshal shall require a bond from the permittee in a sum not less than \$1,000,000 conditioned on compliance with the provisions of this article.

(b) Before any permit for a pyrotechnic display shall be issued, the person, firm or corporation making application therefor shall furnish proof of the responsibility to satisfy claims for damages to property or personal injuries arising out of any act or omission on the part of the person, firm or corporation or any agent or employee thereof in such amount, character and form as the fire marshal determines to be necessary for the protection of the public.

F-2700.5. Disposal of unfired fireworks.

Any fireworks that remain unfired after the display is concluded shall be immediately disposed of in a manner safe for the particular type of fireworks remaining.

F-2700.6. Seizure of fireworks.

The fire marshal shall seize, take, remove or cause to be removed at the expense of the owner all fireworks offered for sale, stored or held in violation of article 27.

(25) Article 28, section F-2800.0, subsection 2800.3 is amended by adding thereto a new subparagraph 8 to read:

8. A person subject to this article shall not use any building, shed or enclosure for the purpose of servicing or repairing a motor vehicle therein without securing a permit from the fire marshal.

(26) Article 28, sections F-2801.0, F-2806.0 and F-2809.0 and certain subsections thereof are amended to read:

Article 28. Flammable and combustible liquids.

F-2801.2 Fire safety requirements.

Containers, tanks, equipment and apparatus and all piping, fittings and appliances used or intended to be used for the storage, handling, use or movement of flammable or combustible liquids shall be constructed and tested in accordance with NFPA 30 listed in appendix A and approved by the fire marshal. It is required for any storage facility comprised of any number of tanks above or below ground with a total capacity of 5,000 gallons or more that there be prepared and maintained on site a plan for product spill prevention control and countermeasures certified by a professional engineer registered in the Commonwealth of Virginia and approved by the fire marshal. The certification of the professional engineer shall be that the plan is in substantial compliance with the spill prevention control and countermeasures plan requirements of the Environmental Protection Agency contained in part 112, subchapter D chapter I of title 40, Code of Federal Regulations. Such a plan approved by the Environmental Protection Agency may be submitted to the fire marshal in lieu of one certified by a professional engineer.

F-2801.9. Spills and leaks.

Flammable and combustible liquid spills and leaks shall be promptly reported to the fire marshal. The owner, tenant or other person in control of the premises when a spill or leak occurs is responsible for taking effective countermeasures to contain the spill, clean up the flammable or combustible liquid and dispose of the waste in an approved manner. Upon notification that the city is not satisfied such person has the capability and intention to perform those tasks needed, that person shall have a reasonable opportunity considering the nature of the emergency then existing to choose, and to so inform the city of the choice, to contract for the containment, clean-up and disposal needed or to join the city in a contract for such work and in either instance pay the entire cost of the work. If the owner, tenant or other person in control of the premises fails to respond to the notification from the city concerning that person's lack of capability or intention to undertake effective countermeasures, the city will proceed without delay as the emergency requires and charge to the owner, tenant or other person in control of the premises the entire cost of containment, clean-up and disposal as a fee owed to the city.

F-2806.0. Underground tank storage.

F-2806.2. Location.

Underground tanks for the storage of flammable or combustible liquids shall be located at least five feet (1.53 m) from any wall, foundation or property line. The top of flammable liquid tanks shall be below the lowest floor level of any

building within 20 feet (6.10 m) of said tanks. Tanks shall not be located in or under any building unless said building and tank installation are constructed in accordance with the building code and NFIPA 30 listed in Appendix A. A distance of at least one foot (30.48 cm) shall be maintained between underground tanks in multiple tank installations. Storage tanks installed below or under a building shall not have any loads from the building foundation system transmitted to the tank.

F-2806.2.1. Special conditions.

The fire marshal may require greater separations or may limit the storage capacity when the installation is subject to severe exposure hazard or topographical conditions when necessary for the safety of the general public.

F-2806.2.2. Standards.

Storage tanks, venting, piping and metering devices installed after the effective date of this provision shall be in accordance with the recommended standards of the National Fire Protection Association and the American Petroleum Institute.

F-2806.2.3. Tank protection.

Underground flammable or combustible liquid storage tanks shall be set on a firm foundation and surrounded with at least six inches (15.24 cm) of noncorrosive inert material such as clean sand or gravel well tamped in place. Tanks, and the six inches (15.24 cm) of protective material, shall be covered with a minimum of two feet (0.61 m) of earth, or shall be covered with 18 inches (45.72 cm) of earth on top of which shall be placed a slab of reinforced concrete not less than four inches (10.16 cm) thick. When underground tanks are or are likely to be subjected to vehicular traffic, they shall be protected against damage by at least six inches (15.24 cm) of reinforced concrete or eight inches (20.32 cm) of asphaltic concrete. The reinforced concrete or asphaltic concrete protective cover shall extend at least one foot (30.48 cm) horizontally beyond the outline of the tank. When tanks are located in an area that may be subject to flooding or corrosion, applicable precautions shall be used in accordance with NFIPA 30 listed in Appendix A. All storage systems installed after the effective date of this regulation must be protected against corrosion by either: (1) A properly installed and maintained cathodic protection system which has been engineered by a member of the National Association of Corrosion Engineers or supplied by the original tank manufacturer and approved by Underwriters' Laboratories, Inc., or impressed current type; or (2) Noncorrosive material of construction such as special alloys, fiberglass reinforced plastic tanks and coatings. All tanks of these types must be approved for general use by Underwriters' Laboratories, Inc., or by Factory Mutual, or

a member of the National Association of Corrosion Engineers for the precise location.

All storage systems protected by a cathodic protection system must have a test system installed to take structure-to-soil potential measurements which must be taken at one-year intervals. The measurements must be recorded and kept at the facility for reasonable inspection by personnel of the administration. All storage systems protected by impressed current systems must be designed so that the impressed current source cannot be deenergized, even in the event that the facility is closed.

F-2806.5.1. Vent piping.

Vent pipes from underground tanks storing flammable or combustible liquids shall be so located that the discharge point is outside of buildings, higher than the fill pipe opening and not less than 12 feet (3.66 m) above the adjacent ground level. Vent pipes shall discharge only upward in order to disperse vapors. Each tank shall be vented through piping adequate in size as specified in NFIPA 30 listed in Appendix A, to prevent blow-back of vapor or liquid at the fill opening while the tank is being filled. Threaded joints and connections shall be liquidtight with suitable lubricant or piping compound.

F-2806.5.2. Fill piping.

Fill piping passing through concrete shall be located in sleeves, mastic or the equivalent to protect against settlement, frost action and vibration. Welded or screwed joints or approved connectors shall be used. Threaded joints and connections shall be made liquidtight with a suitable lubricant or piping compound. Fill pipes shall terminate within six inches (15.24 cm) of the bottom of the tank. Fill piping shall be of adequate size to prevent blow-back or spillage of oil in accordance with the recommended standards of the American Petroleum Institute and NFIPA.

F-2806.10.3. Tank testing and monitoring.

All underground flammable and combustible liquid storage tanks, with the exception of those used for storing home heating fuel at one and two family structures with a capacity of 1,000 gallons or less, shall be tested and monitored in accordance with section 2806.10.2 and Virginia Regulation 680-13-02: underground storage tanks; technical standards and corrective action requirement, as published by the Virginia State Water Control Board.

F-2806.10.4. Testing and monitoring.

All underground flammable and combustible liquid storage tanks, unless exempted by F-2806.10.3. above, regardless of size, shall be subject to testing and monitoring as outlined in items 1 through 10 below, Virginia Regulation 680-13-02, and as may be prescribed by the American Petroleum Institute standards, and the NFIPA.

(1) All tanks shall be strength tested before they are placed in service in accordance with the applicable provisions of the code or standard under which they were built. The American Society of Mechanical Engineers (ASME) code stamp, American Petroleum Institute (API) monogram, the label of the Underwriters' Laboratories, Inc., (UL) or the Underwriters' Laboratories of Canada (ULC) or an approved equivalent identification label on a tank shall be evidence of compliance with the strength test.

(2) Before tanks are placed into the hole they shall be tested with not less than three psi (20.69 kPa) or more than five psi (34.48 kPa) air pressure. All leaks or deformations shall be corrected in a manner approved by the fire marshal before the tanks are placed into the hole. Mechanical caulking is not permitted for correcting leaks in welded tanks.

(3) After the tank is set in the excavation and all lines are connected, another air test shall be conducted. This test must be conducted before the lines and the tank are covered over and before the tank is filled with product.

(4) When the vertical length of the fill and vent pipes is such that when filled with liquid the static head imposed upon the bottom of the tank exceeds 10 psig (68.95 kPa), the tank and related piping shall be tested hydrostatically to a pressure equal to the static head thus imposed. In special cases where the height of the vent above the top of the tank is excessive, the hydrostatic test pressure shall be specified by the fire marshal.

(5) Periodic tests of underground tank storage systems may be required by the fire marshal in accordance with the authority granted under section F-102.7 of this code to determine that leakage has not occurred.

(6) Two permanent monitoring wells shall be installed in opposing corners of the tank field on all new installations after the effective date of this regulation. These wells shall extend to a minimum depth of two feet below the bottom of the tanks in the tank field. These wells shall be a minimum of four inches schedule 40 PVC screen pipe or equivalent and shall be flush with covering surface and covered with standard metal cover and gravel packed to prevent clogging. The screened section shall have a minimum size of .025 inch.

(7) All buried tanks installed after this regulation is effective shall have provisions for taking direct measurements of readings of content level by the stick method. Liquid levels of storage tanks shall be measured by the operator each day of operation and compared with pump meter readings taken on receipt of the product. These records shall be kept in a log book and be available for reasonable inspection by the fire marshal and/or his representative. Loss of product above normal evaporation (one half of one percent of pump meter sales readings) shall be reported immediately to the fire marshal. Records shall be retained for two years. This period shall be extended upon request of the fire marshal. High liquid level gauges or alarm systems as well as pump cut-off devices shall be installed by the owner or the authorized operator in all oil storage tanks wherever in the judgement of the fire marshal there is a possibility that product may be lost by overflowing. Since these emergency devices can fail to operate, their use for spill prevention purposes shall be considered only as auxiliary and supplementary to the use of personnel engaged in a transfer of fill operation.

(8) When an unusual variation is encountered, a verification of the operator's inventory records shall be obtained, and if a loss of product is indicated, a test for tightness on the underground tank shall be performed in accordance with the standards set forth in the National Fire Protection Associations Standard No. 329 for a final test. The fire marshal will order a final test when there is evidence of a loss of product. The final test shall be conducted on all storage systems prior to a change of ownership. When a final test is performed the following information must be kept on file at the facility until such time as another test is performed and shall be made available for reasonable inspection by the fire marshal or his representative upon reasonable request:

- (a) commercial name of the test equipment;
- (b) the name of the testing company;
- (c) the name of the test operator;
- (d) the data accumulated by the test; and
- (e) the results of the test for tightness of the underground tank.

When leakage is indicated from a storage system during the final test the operator of the test must immediately report the test results to the fire marshal's office.

(9) All storage systems will be tested in accordance with the schedule found in Virginia Regulation 680-13-02.

(10) Before each filling of existing storage tanks which have provisions for measurement of contents and storage tanks installed after the effective date of this provision, the liquid level shall be gauged and the measurement shall be recorded in writing. The gauging records shall be maintained and made available to the fire marshal upon demand.

F-2806.10.5. Tank closure.

All underground storage tanks, not exempted by F-2806.10.3, permanently removed from service shall have a site assessment in accordance with Virginia Regulation 680.13.02. A copy of this assessment must be submitted to the fire marshal, and to the Virginia Water Control Board if it so requires. A minimum of three soil samplings should be obtained to complete this assessment. Previously used tanks which are removed from the ground shall not be reinstalled unless the original manufacturer certifies that they are suitable for service. The manufacturer's written certification must be kept on file at the facility and available for inspection by the fire marshal.

F-2809.0. Tank vehicles.

F-2809.3. Maintenance.

Tank vehicles operating within the city while in transit into or out of the city shall be maintained in accordance with the federal regulations contained in 49 CFR 390 through 397. Part 397-3 of 49 CFR requires that all motor vehicles carrying hazardous materials comply with state and local laws, ordinances and regulations, unless the regulations of the U.S. Department of Transportation apply and are more strict. Pursuant to the authority granted in section 18.2-278.4 of the Code of Virginia (1950), as amended, any duly sworn law enforcement officer of the city, including fire marshals, may halt any tank vehicle which is observed to have a condition or characteristic which indicates that there exists a violation of city, state or federal regulations governing the transportation of hazardous materials. The vehicle may be detained long enough to determine if the permits required for transporting hazardous materials have been obtained, if the cargo is secure, and if the observed condition, or characteristic, presents an immediate threat of a transportation related spill or other catastrophic event. The tank vehicle may resume operation if the it is found to be in good repair and free of leaks in accordance with NFIPA 385. If that finding is not made, the vehicle shall not be detained any longer than necessary for the official to determine that arrangements for the repair of the vehicle where situated or for its removal to a safe place and repair there, whichever in the judgment of the official is appropriate, are made. Upon refusal of the operator to make arrangements required by the official, the vehicle shall be impounded by the official and held until the repair is made or it is certain it will be made.

Sec. 4-2-22 Modifications.

The fire marshal shall have the power to modify any of the provisions of the fire prevention code upon application in writing by the owner or lessee, or his duly authorized agent, when there are practical difficulties in carrying out the strict letter of this code, provided that the spirit and intent of this code shall be observed and the public safety and welfare assured. The particulars of the modification when granted shall be entered upon the records of the department and a signed copy shall be furnished to the applicant.

Sec. 4-2-23 Appeals.

Any person aggrieved by an order, decision or interpretation of the fire marshal in the administration and enforcement of any provision of this code may appeal to the city council; provided, the applicant shall, within 30 days from the date of the order, decision or interpretation appealed from file in the office of the city clerk a signed, written notice of appeal setting forth a brief statement of the reasons therefor. In the event an appeal is filed, the city council shall schedule at least one public hearing on the matter. The city council may affirm, reverse or modify the decision of the fire marshal. An appeal shall not stay the effect of the fire marshal's order, decision or interpretation unless and until so allowed by the city council or, when there are more than 30 days from the date of the appeal until the next regularly scheduled meeting of the city council, by the city manager.

Sec. 4-2-24 Penalties and injunctions.

(a) Any person, firm or corporation who shall violate any of the provisions of the fire prevention code or who shall fail to comply therewith, or who shall violate or fail to comply with any order made thereunder, or who shall build in violation of any detailed statement, specifications or plans submitted and approved thereunder or any certificate or permit issued thereunder and from which no appeal has been taken, or who shall fail to comply with such an order within the time fixed therein, shall separately for each and every such violation and noncompliance respectively, be guilty of a violation of this article, and shall, upon conviction, be punished by imprisonment not to exceed 30 days or by a fine not to exceed \$500 or both. Each day that a violation continues, after a service of notice as provided for in this code, shall be deemed a separate offense.

(b) Violations of the provisions of this code may, notwithstanding or in addition to any other remedy or penalty provided for, be restrained, prohibited or enjoined by an appropriate proceeding instituted in a court of competent jurisdiction by the city attorney.

Section 2. That this ordinance shall become effective upon the date and at the time of its final passage.

PATRICIA S. TICER
Mayor

Final Passage: December 14, 1991