

## NEW YORK CITY FIRE DEPARTMENT

Notice of Opportunity to Comment on the proposed amendment of 3RCNY §25-01 entitled  
“Storage and Use of Liquefied Petroleum Gases”

NOTICE IS HEREBY GIVEN PURSUANT TO THE AUTHORITY VESTED IN the Fire Commissioner of the City of New York by Section 489 of the New York City Charter and Sections 27-4099 and 27-4100 of the New York City Administrative Code and in accordance with the requirements of Section 1043 of the New York City Charter that the New York City Fire Department intends to amend the above rule. New material is underlined and material to be deleted is [bracketed].

A public hearing will be held on \_\_\_\_\_ at 9:30 a.m. in the Auditorium at Fire Department Headquarters, 9 MetroTech Center, Brooklyn, New York. Persons seeking to testify are requested to notify Assistant Council Catherine Byrne at New York City Fire Department, Bureau of Legal Affairs, 9 MetroTech Center, Brooklyn, New York 11201-3857. Persons who request that a sign language interpreter or other form of reasonable accommodation for a disability be provided at the hearing are requested to notify Ms. Byrne at the foregoing address by \_\_\_\_\_.

Written comments regarding this rule may be sent to Ms. Byrne on or before \_\_\_\_\_ at the above address. All written comments and a summary of oral comments received at the hearing will be available for public inspection, within a reasonable time after receipt, between the hours of 9:00 a.m. and 5:00 p.m., at the office of Ms. Byrne.

The Notice of Opportunity to Comment, Proposed Rule and Statement of Basis and Purpose will be available on the Fire Department Internet Home Page at:

[www.nyc.gov/fdny](http://www.nyc.gov/fdny)

§25-01 Storage and Use of Liquefied Petroleum Gases

(a) Applicability

(1) This section shall apply to the storage and use of LPG, except:

(i) outdoor storage and use for private, non-commercial barbecues within the lot line of a one-family or two-family dwelling when such storage and use does not exceed two (2) containers, each with a maximum capacity of twenty (20) pounds of LPG.

(ii) storage and use in connection with pyrotechnic special effects.

(2) This section shall not apply to the transportation of LPG, which is governed by the provisions of 3 RCNY §40-06.

(3) All LPG storage and use governed by this section shall comply with the general prohibitions and the plan approval and permit issuance, supervision and certificate of fitness, and general storage and use requirements set forth in subdivisions (c), (d), (e) and (f) of this section. Outdoor and indoor LPG storage shall be in facilities that comply with the requirements for such facilities set forth in subdivisions (g) and (h) of this section. Stationary LPG installations shall comply with the requirements for such installations set forth in subdivision (i) of this section. LPG storage and use for the special applications set forth in subdivision (j) of this section (on construction sites, for emergency indoor repairs, for manhole operations, on motor vehicles, for mobile cooking uses, in commercial establishments, for hot air balloon tethering operation, on moored vessels, and at street festivals, fairs, bazaars, carnivals and similar outdoor events) shall additionally comply with the applicable requirements of that subdivision. Certain LPG facilities and installations existing on the effective date of this section shall be exempt from certain requirements of this section, as set forth in subdivision (k) of this section.

(b) Definitions. For purposes of this section, the following terms shall be defined as follows:

**Certificate of Fitness.** The certificate of fitness issued by the Department for LPG storage and use.

**LPG.** Liquefied Petroleum Gases, i.e., any liquefied hydrocarbon gas composed predominantly of propane, propylene, butane, isobutane, and/or butylenes.

(c) General Prohibitions. It shall be unlawful to:

(1) store or use LPG in any container with a capacity greater than 100 pounds.

(2) store or use LPG below grade except as provided in subdivision (j) of this section.

(3) store LPG in any outdoor or indoor storage facility, or store or use LPG for a stationary LPG installation, that has not been approved by the Department.

(4) store or use LPG without a permit when such storage or use exceeds the quantities set forth in subdivision (d) of this section.

(5) store or use in, or bring or allow into, any residential occupancy or on any lot containing a building used for a residential occupancy, any LPG container with a capacity greater than sixteen and four tenths ounces (16.4 oz.), except as provided in subdivisions (j) and (k) of this section.

(6) store or use in, or bring or allow into, any non-residential building, any LPG container with a capacity greater than sixteen and four tenths ounces (16.4 oz.), except as provided in subdivisions (h), (j), and (k) of this section.

(7) store on the roof of any building any LPG container with a capacity greater than sixteen and four tenths ounces (16.4 oz.).

(8) use on the roof of any building any LPG container with a capacity greater than sixteen and four tenths ounces (16.4 oz.), except as provided in subdivisions (j) and (k) of this section.

(9) store or use LPG in or on motor vehicles, except as provided in subdivision (j) of this section [and] or temporary storage incidental to transportation or as a fuel for generating motive power for a motor vehicle.

(10) store or use LPG for a stationary LPG installation in any area where access to natural gas from a public utility is available, except as provided in subdivision (k) of this section.

(11) store or use LPG in any equipment used or previously used for natural gas, except as may be authorized in writing by the Department on an emergency basis.

(12) store or use LPG as a refrigerant in a refrigerating system.

(13) store or use LPG for space heating or water heating, except as provided in subdivisions (j) and (k) of this section.

(14) fill containers with LPG[,] or transfer LPG in any state from one container to another[, or withdraw LPG in liquid form from a LPG container].

(15) store or use LPG in or for any appliance that withdraws or utilizes LPG in a liquid form except as provided in subdivision (j) of this section.

(16) use non-metallic pipe, tubing and components for any installation, appliance or equipment using LPG, except as provided in subdivision (j) of this section.

(d) Plan Approval and Permit Issuance

(1) All LPG storage in outdoor or indoor storage facilities shall be in facilities approved by the Department. All LPG storage and use for stationary LPG installations shall be for installations approved by the Department. Plans for such facilities and installations shall be submitted to the Department and Department plan approval obtained prior to any LPG storage or use.

(2) A LPG permit shall be obtained from the Department for the storage or use of LPG in quantities exceeding a total water container capacity of eight (8) cubic feet, or in a container with a water capacity exceeding one and one-half (1½) cubic feet, or the storage for sale LPG in quantities exceeding 500 standard cubic feet, or in a container exceeding a total water capacity of two and one-half (2½) cubic feet. The following table sets forth, by container capacity and size, the minimum number of containers requiring a LPG permit for storage or use, or for storage for sale, respectively:

LPG Capacity	Container Dimensions		Container water capacity (cubic feet)	Min. No. of Containers Requiring Permit	
	outside diameter (inches)	length (inches)		use and storage for use	storage for sale
10 oz.	3	9 ¾	0.024	334	93
13.4 oz.	2¼	10½	0.032	251	70
14.1 oz.	varies	varies	0.034	236	66
16.4 oz.	4¼	6¼	0.051	156	57
2 lbs.	4¼	13¼	0.077	104	30
5 lbs.	9 3/8	12½	0.192	42	12
10 lbs.	12 1/8	14½	0.384	21	6
13½ lbs.	9 1/8	21 1/8	0.529	16	5
18 lbs.	12 1/8	19 5/8	0.687	12	4
20 lbs.	12 1/8	20 1/8	0.769	11	3
33½ lbs.	12 1/8	27 3/8	1.282	7	2
35 lbs.	14 7/8	21	1.330	7	2
40 lbs.	12 1/8	31¾	1.538	1	2
43½ lbs.	12 1/8	33¾	1.667	1	2

60 lbs.	12 1/8	46	2.300	1	1
100 lbs.	14 11/16	50½	3.832	1	1

(3) A LPG permit shall be obtained from the Department for the storage or use of LPG in conjunction with any street festival, fair, bazaar, carnival or similar outdoor event when the total amount of LPG to be stored or used in conjunction with the event exceeds a water container capacity of eight (8) cubic feet.

(4) A LPG permit shall not be issued by the Department for a stationary LPG installation located in an area where access to natural gas from a public utility is available, except as provided in subdivision (k) of this section. Any LPG storage and use pursuant to a permit issued after the effective date of this section for a stationary LPG installation located in an area where access to natural gas from a public utility is not available shall be discontinued and all LPG containers removed from the premises within five years of the date such access becomes available, and no such permit shall be renewed beyond such five-year period.

(5) Applications for plan approval and/or issuance of a LPG permit shall be made by or on behalf of the person who will be storing or using the LPG, except that in the case of street festivals, fairs, bazaars, carnivals and similar outdoor events, application shall be made by the sponsor of the event. Applications shall be submitted to the Department's Bureau of Fire Prevention at Fire Department Headquarters prior to any LPG storage or use, and shall include such information and documentation as the Department may prescribe, including but not limited to a completed application form, a plan showing the design and location of the installation or storage facility, and a non-refundable plan review fee of forty dollars (\$40).

(6) Applications for LPG installations other than on construction sites shall include a copy of the altered building application or other documentation filed with and approved by the New York City Department of Buildings or other agency having jurisdiction over the installation.

(7) Upon completion of any stationary LPG installation, an affidavit executed by the installer or licensed plumber responsible for the installation shall be submitted to the Bureau of Fire Prevention at Fire Department Headquarters certifying that the installation conforms to the requirements of this section.

(e) Supervision and Certificate of Fitness

(1) [Any]Except as provided in subdivision (j) of this section, any storage or use of LPG in quantities requiring a permit shall be under the general supervision of a person holding a certificate of fitness.

(2) [All]Except as provided in subdivision (j) of this section, all connecting and disconnecting of LPG containers with a capacity [equal to or] greater than sixteen and four tenths ounces (16.4 oz.) to and from appliances, equipment or components shall be performed by a person holding a certificate of fitness. When such connecting and disconnecting is performed by a LPG supplier or distributor a card or tag shall be conspicuously posted at the premises identifying the name and address of the supplier or distributor, the name of the certificate of fitness holder, and the number and expiration date of the certificate of fitness.

(f) General Storage and Use

(1) Except as otherwise provided in this section, LPG shall be stored and used in compliance with the requirements of National Fire Protection Association Standard 58 of 1998.

(2) All appliances, equipment and components used for the storage or use of LPG shall be approved or listed by a nationally recognized testing laboratory.

(3) All equipment and appliances used for the storage or use of LPG shall be maintained and operated in accordance with the manufacturer's specifications.

(4) Only metallic pipe, tubing and components shall be used for LPG installations, appliances and equipment, except as provided in subparagraphs (2)(v), (3)(ii), (4)(iv), [and] (9)(iv), and (10)(vi) of subdivision (j) of this section. Where use of non-metallic hoses is allowed by this section, such hoses shall be protected from twisting, abrasion and damage by proper installation and maintenance.

(5) Storage and use of LPG in quantities exceeding twenty five hundred (2,500) standard cubic feet of gas (approximately 300 pounds) constitutes a high hazard occupancy as set forth in Article 3 of Subchapter 3 of the New York City Building Code. Any such quantities of LPG shall be stored and used in compliance with the Building Code requirements applicable to high hazard occupancies, except as provided in paragraph (j)(2) and subdivision (k) of this section.

(6) LPG containers shall be stored in an upright position and secured to prevent movement.

(7) LPG containers shall not be stacked or stored on shelves.

(8) All connection and disconnection of LPG containers for use shall be performed outdoors, except as otherwise authorized by this section. Where LPG use is allowed indoors, all connection and disconnection of LPG containers shall be performed in a well-ventilated area.

(9) LPG containers connected for use shall be adequately supported and braced in an upright position, except on forklifts or other material handling equipment when they shall be installed in accordance with the manufacturer's specifications.

(10) LPG containers connected for use shall be placed on a firm and non-combustible foundation.

(11) LPG appliances, equipment and components shall be maintained at all times in a gas-tight condition. Any appliance, equipment or component which is not in a gas-tight condition shall be removed from use and promptly repaired or lawfully disposed of.

(12) Each time a connection is made to a LPG container, or a leak is suspected, the connection shall be tested by the application of a soap solution or its equivalent to joints, valves and fittings. Open flames shall not be used to test connections or leaks.

(13) LPG containers shall be protected at all times from the effects of weather and physical damage.

(14) LPG shall be stored and used only if all safety devices on the appliances and equipment are operable. Such devices shall not be disconnected or defeated. Any appliance or equipment with a safety device that is inoperable shall be removed from use and promptly repaired, or disposed of in a lawful manner.

(15) Any empty LPG container that at any time previously has been filled with LPG shall be treated as though it contains LPG, and shall be stored and used in the same manner as a full LPG container, including storage in a storage facility in accordance with this rule. Damaged or otherwise unusable LPG containers shall be promptly removed from the premises and disposed of in a lawful manner.

(16) A copy of the LPG permit authorizing the storage and/or use of LPG shall be posted at or near every LPG installation or storage facility, and shall be available for inspection upon request of a Department representative at every site where LPG is in use.

(17) Danger signs complying with United States Occupational Safety and Health Administration requirements, as set forth in Section 1910.145(D) of Part 1910 of Title 29 of the Code of Federal Regulations, shall be conspicuously posted at each LPG installation, storage location or use site. Such signs either shall be at least ten (10) inches by fourteen (14) inches in size and shall bear the wording "DANGER -- FLAMMABLE GAS -- KEEP FIRE OR FLAME AWAY -- NO SMOKING" in lettering at least two inches high. The word "Danger" shall be in white on a red oval bordered in white which shall be on a black background at the upper part of the sign. The other required wording shall be in black on a white background in the lower part of the sign.

(18) LPG containers shall not be moved unless the container's valves are closed, except when the container is mounted on a motor vehicle for use as a fuel for motive power.

(19) LPG containers shall not be rolled or dragged on their side or rims. LPG containers shall only be moved by lifting and lowering, by hand or with equipment designed for such purposes.

(20) LPG containers shall not be dropped or thrown from any height.

(21) LPG containers with a capacity of twenty (20) pounds shall be provided with transportation plugs that secure gas-tight the container's outlet valve connection.

(g) Outdoor Storage Facilities

(1) Except as otherwise provided in this section, all LPG containers shall be stored outdoors in a facility that conforms to the requirements of this subdivision. All outdoor LPG storage facilities shall be:

- (i) not more than fifty four (54) square feet in area;
- (ii) protected from vehicle impact;
- (iii) protected from theft, tampering or unauthorized use by a metal open fence enclosure at least six (6) feet in height, secured by a locked gate opening outward, or by a lockable ventilated metal locker of a type for which a Certificate of Approval has been issued by the Department. Such fence enclosure or locker shall be mounted on and secured to a substantial concrete pad at grade level, which pad shall be constructed to prevent accumulation of rain and snow;
- (iv) located in a well ventilated area. There shall be a minimum clearance of ten (10) feet from any surrounding walls more than eight (8) feet high on at least three sides of the outdoor storage facility;
- (v) directly accessible from the street. LPG containers being delivered to or taken from an outdoor storage location shall not be brought into or through any building or other structure; and
- (vi) equipped with at least one 10-B-C rated fire extinguisher in a protective enclosure. Such fire extinguisher shall be affixed to the outside of the storage facility or placed at another readily accessible location not more than thirty (30) feet from the facility.

(2) No more than twenty five hundred (2,500) standard cubic feet of LPG (approximately 300 pounds) shall be stored in an outdoor LPG storage facility.

(3) No outdoor storage facility shall be located on a lot containing any building used for residential purposes.

(4) No outdoor storage facility shall be located within:

(i) five (5) feet of any building opening, including any door, openable window, intake or exhaust vent;

(ii) ten (10) feet of the nearest lot line, sidewalk or building on an adjoining lot, except as follows:

(A) twenty (20) feet of any building of wood frame construction;

(B) fifty (50) feet from any building occupied as a multiple dwelling; and

(C) one hundred (100) feet of the lot line of any property occupied for educational, health care or religious purposes, place of public assembly, or other place of public gathering;

(iii) ten (10) feet of any parked motor vehicle;

(iv) ten (10) feet of any combustible material;

(v) fifteen (15) feet of any vent or fill line of any flammable or combustible liquid storage tank;

(vi) twenty (20) feet of flammable gas storage;

(vii) twenty (20) feet of any aboveground flammable or combustible liquid storage tank; and

(viii) one hundred (100) feet of any subway entrance or exit, vent or other opening.

(h) Indoor LPG Storage

(1) Except as provided in subdivision (k) of this section, indoor storage of any LPG container with a capacity greater than sixteen and four tenths ounces (16.4 oz.) is prohibited in any residential occupancy and in any building where an outside storage location for such LPG container is available.

(2) All indoor storage of LPG containers with an individual capacity greater than sixteen and four tenths ounces (16.4 oz.) authorized by this rule shall be stored in a separate room that conforms to the requirements of this subdivision. Any such room shall be:

- (i) constructed in compliance with the New York City Building Code;
  - (ii) constructed of walls, floors and ceilings having at least a two (2) hour fire resistance rating;
  - (iii) constructed with an access door that opens directly to the outdoors;
  - (iv) used for no other purpose; and
  - (v) equipped with at least one 10-B:C rated fire extinguisher. Such fire extinguisher shall be affixed to the outside of the storage room or placed at another readily accessible location not more than thirty (30) feet from the room entrance.
- (3) No such room shall:
- (i) be located at the property line adjoining a multiple dwelling, building occupied for educational, health care or religious purposes, place of public assembly, or other place of public gathering; and
  - (ii) have ventilation openings located within five (5) feet of any building opening, including any doors, openable windows and intake and exhaust vents.
- (4) All delivery and pick-up of containers to or from an indoor LPG storage facility shall be through the outdoors access door only, not through the building.

(i) Stationary LPG Installations

- (1) All LPG containers connected for use in a stationary installation shall be stored outdoors.
- (2) A single, accessible, safely-located, and conspicuously-marked shutoff valve shall be provided wherever LPG piping enters a building or structure.
- (3) A single, accessible, safely-located and conspicuously-marked shutoff valve shall be provided for each appliance connected to a LPG container.
- (4) All new and repaired LPG piping shall be tested at one and one half (1½) times normal working pressure but not less than 3 pound per square inch gauge, using air or inert gas. There shall be no drop in the shut-in pressure for a period of 30 minutes.
- (5) When LPG is piped indoors, a sign at least ten (10) inches high and fourteen (14) inches wide shall be conspicuously posted at the entrance to the building and shall bear the wording “ Danger-LPG Piping”.

(6) Metal pipe straps, hangers, or band shall be suitable for the size of pipe and of such strength and quality that the piping cannot be accidentally dislodged. Spacing of hangers shall not exceed six (6) feet for one half (½) inch pipe, eight (8) feet for three quarter (¾) and one (1) inch pipe, and ten (10) feet for one and one quarter (1¼) inch or larger pipe.

(7) No LPG container connected for use shall be located within:

(i) five (5) feet of any building opening, including any door, openable window or intake or exhaust vent;

(ii) five (5) feet of the nearest lot line, sidewalk or building on an adjoining lot, except as follows:

(A) ten (10) feet of any building of wood frame construction;

(B) fifty (50) feet from any building occupied as a multiple dwelling; and

(C) one hundred (100) feet of the lot line of any property occupied for educational, health care or religious purposes, place of public assembly, or other place of public gathering;

(iii) five (5) feet of any parked motor vehicle;

(iv) five (5) feet of any vent or fill line of any flammable or combustible liquid storage tank;

(v) ten (10) feet of any combustible material;

(vi) twenty (20) feet of any flammable gas storage;

(vii) twenty (20) feet of any aboveground flammable or combustible liquid storage tank; and

(viii) one hundred (100) feet of any subway entrance, exit, vent or other opening.

(8) At least one 10-B:C rated fire extinguisher shall be provided whenever LPG is connected for use. The maximum travel distance to the extinguisher shall be thirty (30) feet from the work location.

(j) Special Storage and Use

(1) All storage or use of LPG for the applications set forth in this subdivision shall be in compliance with the respective requirements of this subdivision, in addition to the requirements set forth in subdivisions (c), (d), (e), (f) and (i) of this section.

(2) Construction sites

(i) A site-specific permit shall be obtained for LPG storage and use on a construction site, except that a city-wide LPG permit may be obtained for tar kettle and torch operations where no reserve storage is needed and LPG containers are removed from the site at the end of each workday, and the construction work requiring LPG use is to be completed within thirty (30) days of commencement.

(ii) Except as provided in subparagraph (iv) of this paragraph, all LPG for use on construction sites shall be stored in outdoor storage facilities that comply with the requirements of subparagraphs (1)(ii), (1)(iii) and (1)(iv) of subdivision (g) of this section. No construction site storage facility shall:

(A) have a capacity exceeding twenty five hundred (2500) pounds of LPG in any single facility or a total capacity at any construction site of five thousand (5000) pounds of LPG;

(B) be within fifty (50) feet of any other LPG storage facility;

(C) be within twenty five (25) feet of the building under construction;

(D) be within fifty (50) feet of any aboveground flammable or combustible liquid storage tank;

(E) be within fifty (50) feet of any combustible material;

(F) be within fifty (50) feet of any building occupied as a multiple dwelling;

(G) be within one hundred (100) feet of any subway entrance, exit, vent or other opening; and

(H) be within one hundred (100) feet of the lot line of any property occupied for educational, health care or religious purposes, place of public assembly, or other place of public gathering.

(iii) Each construction site storage facility shall be equipped with at least one 40-B:C rated, wheeled, fire extinguisher. Such fire extinguisher shall be kept outside of the storage facility or placed at another readily accessible location not more than thirty (30) feet from the facility.

(iv) LPG containers may be stored inside an unoccupied building under construction where no allowable outdoor location is available, provided that

such containers are stored on the ground floor at a location acceptable to the Department that is as far as possible but in no event less than ten (10) feet from any flue, stairwell, or elevator shaft, and the amount of LPG so stored is acceptable to the Department but in no event exceeding a total of 2,500 pounds. The maximum quantity of LPG allowed in one storage location shall not exceed 1250 pounds. One additional storage location within the same building may be allowed if a minimum of 70 feet separation between storage locations is provided.

- (v) Notwithstanding the provisions of paragraph (16) of subdivision (c) of this section, non-metallic hose may be used at a construction site where flexibility is required for such operation and provided:

[(A) The construction activity does not allow use of a stationary LPG appliance, necessitating a flexible connection between the appliance and the LPG container;

(B) The length of the hose does not exceed thirty (30) feet; and

(C) The hose is designed for a working pressure of not less than two hundred and fifty (250) pounds per square inch when the construction activity is being performed outdoors, or three hundred and fifty (350) pounds per square inch when it is being performed inside a building.]

(A) The length of the hose shall be as short as practical; and

(B) The hose shall be fabricated of materials that are resistant to the action of LPG both as liquid and vapor and designed for a working pressure of 350 pounds per square inch.

- (vi) Tar kettle and torch operations

(A) LPG heaters for tar kettles shall be operated under the personal supervision of a person with a certificate of fitness.

(B) All torch operations shall be performed by a person holding a certificate of fitness.

(C) It shall be unlawful for any person to operate, maintain or use a kindled tar kettle or torch in any building, except that torches may be used for emergency indoor repairs in accordance with paragraph (3) of this subdivision, or on the roof of any building, except a roof of non-combustible construction.

(D) Fire guards holding a Certificate of Fitness For Fire Guard Duty issued by the Department shall be on continuous duty during any torch

operations on the roof of a building. There shall be one fire guard on the roof for each torch operator, and there shall be at least one fire guard on the floor or level below the torch operation. Such fire guards shall not be assigned any duties other than to remain alert and guard against fire and shall be alert to sparks, the transmission of heat, and the potential ignition of combustible material. Such fire guards shall be responsible for ensuring that fire extinguishing equipment is readily accessible from the time torch operations are commenced until an hour after such operations are completed.

- (E) A fire guard holding a Certificate of Fitness for Fire Guard Duty issued by the Department shall inspect all areas exposed to the effects of torch operations after the completion of torch operations for the purpose of detecting fires. The first inspection shall be conducted one-half hour after completion of torch operations; the second inspection one hour after completion of torch operations. The fire guard shall prepare and sign an inspection report confirming the safe condition of the premises. Such report shall be submitted to and retained by the person in charge of the torch operations.
  - (F) At least one portable fire extinguisher with a minimum 2-A:20-B:C rating shall be provided for each tar kettle or torch.
  - (G) All movement of LPG containers within a building shall be performed in the following manner:
    - (1) Transportation plugs shall be installed on the LPG containers to secure gas-tight the outlet valve connection.
    - (2) The LPG containers at all times shall be moved under the personal supervision of a certificate of fitness holder. At no time shall the containers be left unattended.
    - (3) The LPG containers shall be moved to another floor of the building only by freight elevator, and such elevator shall be occupied only by those persons engaged in moving the containers. LPG containers with a capacity of twenty pounds or less may be moved in emergency stairwells if such stairwells are unoccupied.
- (vii) Curing and drying applications
- (A) The use of LPG for curing concrete, drying plaster and similar applications shall be prohibited in any occupied building, any location within fifty (50) feet of an occupied building, and any location within one hundred (100) feet of the lot line of any property occupied for

educational, health care or religious purposes, a place of public assembly, or other place of public gathering.

(B) The use of LPG for curing concrete, drying plaster and similar applications shall be under the personal supervision of a person holding a certificate of fitness. The certificate of fitness holder shall inspect the area where LPG containers and heaters are in use on not less than an hourly basis. The results of each inspection shall be recorded in a log book which shall be maintained on the premises and produced for inspection upon request of a Department representative.

(C) Heaters used for curing concrete, drying plaster and similar applications shall be placed at least six (6) feet from any LPG container or combustible material, and ten (10) feet from any tarpaulin cover. Such heaters shall only be used in a well-ventilated area and shall not be placed on unprotected wood flooring.

(D) Notwithstanding the provisions of paragraph (16) of subdivision (c) of this section, non-metallic hose may be used at a construction site where flexibility is required for such operation and provided:

(1) The length of the hose shall be as short as practical but in no case exceeding 30 feet; and

(2) The hose shall be fabricated of materials that are resistant to the action of LPG both as liquid and vapor and designed for a working pressure of 350 pounds per square inch.

(E) The total capacity of LPG containers shall not exceed 300 pounds when used in manifold to serve a heater.

(F) LPG/heater assemblies shall be provided with a fire extinguisher having a minimum 20-B:C rating located not more than 30 feet away. A travel distance of up to 50 feet may be allowed if a fire extinguisher having a minimum 40-B:C rating is provided.

(3) Emergency indoor repairs

(i) The provisions of paragraph (6) of subdivision (c) of this section notwithstanding, LPG equipment and containers may be used inside any building, except an occupied place of public assembly, for the purpose of performing emergency repairs. Such LPG use shall be subject to the following requirements:

(A) LPG use at the work site shall be limited to two (2) LPG containers, each with a capacity not greater than twenty (20) pounds;

- (B) LPG containers with a capacity greater than sixteen and four tenths ounces (16.4 oz.) shall not be left unattended;
  - (C) All LPG use shall be under the personal supervision of a person holding a certificate of fitness; and
  - (D) All LPG containers shall be removed from inside the building at the end of the work day.
- (ii) Notwithstanding the provisions of paragraph (16) of subdivision (c) of this section, non-metallic hose may be used for emergency indoor repairs where flexibility is required for such operation and provided:

[(A) The nature of the repair work requires a flexible connection between the appliance and the LPG container;

(B) The length of the hose does not exceed thirty (30) feet; and

(C) The hose is designed for a working pressure of not less than three hundred and fifty (350) pounds per square inch.]

(A) The length of the hose shall be as short as practical but in no case exceeding six (6) feet; and

(B) The hose shall be fabricated of materials that are resistant to the action of LPG both as liquid and vapor and designed for a working pressure of 350 pounds per square inch.

(4) Manhole operations

- (i) LPG containers and heaters shall not be brought into manholes or located within six (6) feet of manholes. Torch may be brought into manholes provided such operation is in compliance with the requirements of the Occupational Safety and Health Administration of the United States Department of Labor.
- (ii) LPG storage and use at each manhole work site shall be limited to two LPG containers, each with a capacity not greater than thirty-three and one-half (33½) pounds. Such LPG containers shall be removed from the work site at the end of each work day unless they are stored in a tool cart that:
  - (A) is constructed of steel;
  - (B) has a door at least one quarter inch thick that is locked at all times;

- (C) has not less than one hundred (100) square inches of fixed ventilation at the bottom with a suitable screen as a flash arrestor;
- (D) has six-inch placards bearing United States Department of Transportation designation "1075" permanently affixed to two opposite exterior walls of the tool cart;
- (E) has "No Smoking" signs permanently affixed to the tool cart in a conspicuous location;
- (F) positions the LPG containers within the cart such that container shut-off valves are unobstructed and readily accessible; and
- (G) is situated outdoors and is not located within the distances set forth in paragraph (4) of subdivision (g) of this section, except that subparagraphs (ii) and (iii) of such paragraph shall not apply.

(iii) All LPG use shall be under the personal supervision of a person holding a certificate of fitness.

(iv) Notwithstanding the provisions of paragraph (16) of subdivision (c) of this section, non-metallic hose may be used for manhole operations where flexibility is required for such operation and provided:

[(A) The task does not allow use of a stationary LPG appliance, necessitating a flexible connection between the appliance and the LPG container;

(B) The length of the hose does not exceed thirty (30) feet; and

(C) The hose is designed for a working pressure of not less than two hundred and fifty (250) pounds per square inch.]

(A) The length of the hose shall be as short as practical but in no case exceeding 30 feet; and

(B) The hose shall be fabricated of materials that are resistant to the action of LPG both as liquid and vapor and designed for a working pressure of 350 pounds per square inch.

(5) Motor vehicles equipped with LPG containers

(i) Motor vehicles equipped with LPG containers for use on the motor vehicle shall not be left unattended on any street, highway, avenue or alley; in any congested area; within fifty (50) feet of the property line of any multiple dwelling, building occupied for educational, health care or religious purposes,

place of public assembly, or any other place of public gathering; or within fifty (50) feet of any subway entrance, exit, vent or other opening.

(ii) LPG storage and use on any vehicle for the purpose of marking traffic lanes shall be limited to four (4) LPG containers.

(iii) Forklifts, tractors and similar material handling vehicles or devices equipped with LPG containers shall comply with the following requirements:

(A) LPG storage and use on such vehicles and devices shall be limited to one (1) LPG container with a capacity not greater than forty (40) pounds.

(B) Whenever LPG containers are installed in a horizontal position, the container shall be of such a design that the pressure relief valve will discharge vapor.

(C) All such material handling vehicles and devices shall be stored and used in locations with adequate ventilation.

(D) Storage and use of such material handling vehicles and devices below grade, including in a basement or cellar, is prohibited.

(E) Such material handling vehicles and devices shall not be parked, or the LPG containers replaced, near open flames or other heat or ignition sources, or near open pits, underground entrances, elevator shafts, or similar areas.

(F) Every material handling vehicle or device shall be equipped with one 2-B:C rated fire extinguisher.

(6) Mobile cooking uses. Mobile food units, as that term is defined in section 89.01(c) of the New York City Health Code (including but not limited to motor vehicles, pushcarts and stands) that are equipped with LPG containers for cooking purposes shall comply with the following requirements:

(i) LPG storage and use shall be limited to two (2) LPG containers on all types of mobile food units, and, additionally, to LPG containers with a capacity not greater than twenty (20) pounds, on mobile food units that are not motor vehicles.

(ii) No flammable or combustible liquid shall be used for cooking or any other purpose on any mobile food unit.

(iii) No mobile food unit shall store or use LPG for cooking or any other purpose within:

- (A) two (2) feet of any combustible material;
  - (B) two (2) feet of any building, except as follows:
    - (1) five (5) feet of any below-grade building opening, including any door, openable window or intake or exhaust vent;
    - (2) ten (10) feet of any building of wood frame construction;
    - (3) twenty (20) feet of any building entrance; and
    - (4) ten (10) feet of any building occupied as a multiple dwelling, or any building occupied for educational, health care or religious purposes, a place of public assembly, or other place of public gathering;
  - (C) five (5) feet of any flammable gas storage, including another mobile food unit equipped with LPG containers;
  - (D) five (5) feet of any subway vent or other opening, except a subway entrance or exit;
  - (E) ten (10) feet of any subway entrance or exit; and
  - (F) ten (10) feet of any vent or fill line of any flammable liquid storage tank.
- (iv) All mobile food units that are motor vehicles shall also comply with the restrictions applicable to vehicles equipped with LPG containers set forth in subparagraph (5)(i) of this subdivision.
- (v) Each mobile food unit that is a motor vehicle shall be equipped with at least one 20-B:C rated fire extinguisher. Each mobile food unit that is not a motor vehicle shall be equipped with at least one 2-B:C rated fire extinguisher, which shall be mounted on the mobile food unit away from the heat source.
- (7) Commercial establishments. Commercial establishments which store and use LPG for cooking and oil burner ignition shall comply with the following requirements:
- (i) LPG storage and use shall be limited to LPG containers with a capacity not greater than 16.4 ounces unless the container is connected for use in a stationary installation.
  - (ii) All LPG appliances and equipment shall be installed by a plumber licensed by the New York City Department of Buildings.

(iii) Rigid piping shall be used for all connections between LPG appliances and equipment and LPG containers.

(iv) LPG storage and use for the purposes authorized by this paragraph is subject to the prohibition set forth in paragraph (10) of subdivision (c) of this section, and shall be discontinued in accordance with the provisions of paragraph (2) of subdivision (k) of this section.

(8) Moored vessels. Residentially occupied vessels moored in marinas which store and use LPG for space heating and cooking purposes shall comply with the following requirements:

(i) LPG storage and use shall be limited to two (2) LPG containers.

(ii) All LPG appliances, equipment and components used on such a vessel shall serve only that vessel and no others.

(iii) All LPG appliances, equipment and components shall be installed either by the vessel manufacturer or by a plumber licensed by the New York City Department of Buildings.

(9) Street Festivals, Fairs, Bazaars, Carnivals and Similar Outdoor Events. LPG storage and use in connection with any street festival, fair, bazaar, carnival or other similar outdoor event shall be subject to the following requirements:

(i) LPG storage and use shall be limited to two (2) LPG containers per LPG appliance, each with a capacity not greater than twenty (20) pounds.

(ii) There shall be a person responsible for the operation of each LPG appliance. One person may not operate more than one LPG appliance.

(iii) LPG shall not be stored or used for cooking or any other purpose within the distances set forth in subparagraph (6)(iv) (iii) of this subdivision, and a separation distance of five (5) feet shall be maintained between LPG containers connected for use to LPG appliances.

(iv) Notwithstanding the provisions of paragraph (16) of subdivision (c) of this section, non-metallic hose may be used at a street festival, fair, bazaar, carnival or similar outdoor event where flexibility is required for such operation and provided:

[(A) The LPG containers, appliances and all equipment and components are stored, used and connected for use outdoors;

(B) The length of the hose does not exceed six (6) feet; and

(C) The hose is designed for a working pressure of not less than two hundred fifty (250) pounds per square inch.]

(A) The length of the hose shall be as short as practical but in no case exceeding six (6) feet; and

(B) The hose shall be fabricated of materials that are resistant to the action of LPG both as liquid and vapor and designed for a working pressure of 350 pounds per square inch.

(v) The certificate of fitness holder supervising LPG storage and use in connection with the event shall inspect each location at which LPG is being stored or used on a periodic basis sufficient to ensure compliance with the requirements of this section, but not less than once each day. Such certificate of fitness holder shall prepare a report documenting each inspection and certifying that LPG is being properly and safely stored and used at each location. The sponsor shall maintain such reports at the event site for inspection by a Department representative.

(10) Hot Air Balloon Tethering Operation. Use of LPG for hot air balloon tethering operation shall comply with following requirements:

(i) The operator shall have a Department of Transportation (DOT) Federal Aviation Administration (FAA) license to operate the hot air balloon.

(ii) The balloon shall be of a type for which a Standard Airworthiness Certificate has been issued by the FAA.

(iii) The applicant shall have obtained an Aviation Operation Hot Air Balloon Permit from the New York City Department of Business Services.

(iv) All balloon tethering operations shall be conducted at a location acceptable to the Department. In no case shall the balloon tethering operation be permitted unless a minimum of 150 feet of open space in all directions is provided when measured from the center of the balloon.

(v) Notwithstanding the provisions of paragraph (15) of subdivision (c) of this section, LPG may be withdrawn and utilized in liquid form if required by the nature of the operation.

- (vi) Notwithstanding the provisions of paragraph (16) of subdivision (c) of this section, non-metallic hose may be used where flexibility is required for such operation and provided:

  - (A) The length of the hose shall be as short as practical; and
  - (B) The hose shall be fabricated of materials that are resistant to the action of LPG both as liquid and vapor and designed for a working pressure of 350 pounds per square inch.
- (vii) The burner and fuel system shall be operated in accordance with the FAA Flight manual and manufacturer's instruction.
- (viii) The entire operation shall be under the personal supervision of a FAA license holder and a Certificate of Fitness holder. In lieu of the Certificate of Fitness requirement specified in subdivision (e) of this section, storage, handling and use of LPG may be performed and supervised by a person with credentials demonstrating his or her qualifications for such operation and that are acceptable to the Department. Such individual shall continuously monitor the area to ensure compliance with the provisions of this section.
- (ix) The storage and use of LPG including reserve shall not exceed a total of 300 pounds.
- (x) LPG cylinders shall not be left unattended. LPG cylinders shall be removed from the site at the conclusion of the operation. No overnight storage of LPG cylinders shall be permitted.
- (xi) There shall be no smoking on the balloon or within 25 feet of any LPG storage or use.
- (xii) The balloon shall be equipped with at least one (1) fire extinguisher having a minimum 10-B:C rating. The LPG storage area shall be provided with at least one (1) fire extinguisher having a minimum 10-B:C rating.
- (xiii) There shall be no storage or use of flammable or combustible liquids within 20 feet of the area established per subparagraph (iv) of this paragraph.
- (xiv) There shall be no storage or use of flammable gases within 20 feet of the area established per subparagraph (iv) of this paragraph.

(xv) Balloons shall have at least a three-point tie down to substantial immovable objects.

(xvi) All operations shall be performed only under normal weather conditions and in no case shall the prevailing wind exceed 15 miles per hour.

(k) Pre-Existing Exempt Storage and Use

(1) Exemptions. Subject to the provisions of paragraph (2) of this subdivision, LPG storage and use in or for the following existing facilities and installations shall be maintained and operated in accordance with the original approval conditions and the provisions of this section, except as follows:

- (i) The provisions of paragraph (5) of subdivision (f) and paragraph (7) of subdivision (i) of this section shall not apply to any stationary LPG installation that was issued a Department permit prior to the effective date of this section, including the stationary LPG installations described in paragraph (7) of subdivision (j) and subparagraphs (ii), (iii) and (iv) of this paragraph.
- (ii) The provisions of paragraph (5) of subdivision (c) and paragraph (5) of subdivision (i) of this section shall not apply to a LPG container installation in a residential occupancy that was issued a Department permit prior to the effective date of this section.
- (iii) The provisions of paragraph (13) of subdivision (c) of this section shall not apply to LPG storage and use for non-residential space heating or water heating when a Department permit for such storage and use was issued prior to the effective date of this section.
- (iv) The provisions of paragraphs (8) and (10) of subdivision (c) and paragraph (5) of subdivision (f) of this section shall not apply to a roof-mounted emergency generator installation that was issued a Department permit prior to the effective date of this section.
- (v) The provisions of subdivision (g) and paragraph (5) of subdivision (f) of this section shall not apply to an outdoor LPG storage facility that was issued a Department permit prior to the effective date of this section.
- (vi) The provisions of item (iii) of paragraph (2) of subdivision (h) and paragraph (4) of subdivision (h) of this section shall not apply to an indoor LPG storage facility that was issued a Department permit prior to the effective date of this section.

(2) Discontinuance of Exempt Storage and Use

- (i) The LPG storage and use authorized by subparagraphs (1)(i), (ii), (iii) and (iv) of this subdivision shall be discontinued and all LPG containers removed from the premises:
  - (A) by December 31, 2004, if access to natural gas from a public utility is available on the effective date of this rule; or
  - (B) within five years after access to natural gas from a public utility becomes available, if such access is not available on the effective date of this rule.
- (ii) Notwithstanding any other provision of this subdivision, the Department may require any facility or installation granted an exemption by this subdivision to comply with all applicable provisions of this section and may require discontinuance and removal of any facility or installation not in compliance with the provisions of this section, where the Department finds that such facility or installation has been operated contrary to the original approval conditions or poses an undue danger to public safety.

(l) Modifications. Whenever circumstances, conditions, limitations, or surroundings are unusual, or such as to render it impracticable to comply with any or all of the foregoing provisions, the Commissioner may waive or modify such provisions to such extent as he or she may deem necessary, consistent with public safety.

STATEMENT OF BASIS AND PURPOSE OF PROPOSED AMENDMENT

The proposed amendment sets forth safety requirements for the storage and use LPG for hot air balloon tethering operation. Hot air balloon tethering operation has been allowed consistent with past practice. In addition, the proposed amendment specifies the allowable quantities of LPG in a storage location and the separation distance between LPG storage locations inside an unoccupied building under construction where no allowable outdoor location is available. A provision has been added to specify the allowable quantities of LPG to be manifolded to serve a heater used for concrete curing and drying operations. It also provides specific requirements for the use of non-metallic hose consistent with NFPA 58-1998 and the use of a torch in manholes consistent with the regulations of the Occupational Safety and Health Administration. All other proposed amendments to this rule are for purposes of clarity or consistency.

If any paragraph, subparagraph or subdivision of this section shall be adjudged by any court or agency of competent jurisdiction to be invalid, such judgment shall not affect, impair or invalidate the remainder thereof, but shall be confined in its operations to the

Draft.....November 8, 2000

paragraph, subparagraph or subdivision thereof directly involved in the controversy in which such judgment shall have been rendered.