## **Chapter 6 -- FIRE PROTECTION AND PREVENTION\***

#### Sec. 6-1. Definitions.

The following words shall have the meanings given herein:

**BUREAU OF FIRE PREVENTION** means the fire department of the city.

CHIEF OF THE BUREAU OF FIRE PREVENTION means the fire chief of the city.

**CODE** means the original code as hereinafter defined, as modified and amended by provisions of this chapter.

**CORPORATION COUNSEL** means the city attorney of the city.

**CURRENT CODE** means most recent up to date codes, as modified by addendums.

**INSPECTOR** means a fire prevention inspector appointed under provisions of this chapter.

**MUNICIPALITY** means the city of Barre. (Ord. No. 1980-5, 5-27-80; (Ord. No. 1983-1, 1-13-83)

## Sec. 6-2. Fire prevention code adopted by reference.

There is hereby adopted for the purpose prescribing regulations governing conditions hazardous to life and property from fire and explosion, the Fire Prevention Code current edition recommended by the National Board of Fire Underwriters adopted and approved by the Department of Labor and Industry Fire Prevention Division of the State of Vermont. (Ord. No. 1980-5, 5-27-80)

Additionally, the City of Barre shall hereby adopt and enforce the Fire Prevention Code (NFPA 1) and the Life Safety Code (NFPA 101) as published by the National Fire Protection Association and as adopted and enforced by the Vermont Department of Labor and Industry. (Ord. No. 1999-1, 7/16/99)

### Sec. 6-3. reserved.

**Editor's note--**pursuant to Ord. No. 1983-1, adopted Jan. 13, 1983, Sec. 6-3, relative to applicability of the fire prevention code, has been deleted.

## Sec. 6-4. Right of entry for inspections.

(a) The fire chief or any fire prevention inspector may, at all reasonable hours, enter any building not actually and lawfully used as a residence; after notifying any occupant or owner or agent of said owner thereof, for the making of any inspection required to ascertain compliance with provisions of this code, to make investigations required under provisions of this code, to inspect

before granting a permit and thereafter to ascertain compliance with terms of a permit or to investigate any complaint of noncompliance with the provisions of this chapter.

(b) The fire chief or any fire prevention inspector may enter any premises for the purpose of investigating a fire or to determine the cause thereof. In construing this section the word "building" shall include all structures and lands in and on the lot on which a building stands.

### Secs. 6-5--6-7. Reserved.

**Editor's note--**Sections 6-5--6-7, relative to permits, have been deleted pursuant to Ord. No. 1983-1, adopted Jan. 13, 1983.

## Sec. 6-8. Construction of approval; persons with authority to approve.

Whenever in the fire prevention code it is provided in substance that anything must be done to the approval of or subject to the direction of anyone or any agency of the city, or must be approved by an officer of the city, this shall be construed to give such person or agency only the discretion of determining whether the rules and standards established by this code have been complied with. No. such provision shall be construed as giving any officer or agency discretionary powers as to what such rules or standards shall be, or power to require conditions not prescribed by the code or to enforce code provisions in an arbitrary or discriminatory manner. The word "approved" shall mean accepted by the officer administering this chapter or other officer herein empowered, as meeting the rules and standards established in this code.

# Sec. 6-9. Blasting permit; bond required.

Before a permit to do blasting shall be issued, the applicant for such permit shall file a bond, with sureties, or an insurance policy, deemed adequate in each case by the council, which bond shall become available for the payment of any damages arising from the permitted blasting.

## Sec. 6-10. Explosives or blasting agents; manufacture prohibited; exceptions.

The manufacture of explosives or blasting agents is prohibited within the municipality. This shall not apply to hand loading of small arms ammunition.

### Sec. 6-11. Same--Storage prohibited; exceptions.

The storage of explosives and blasting agents is prohibited within the city, except at terminals of common carriers while in course of transit or awaiting delivery to a consignee, and except for temporary storage for use in connection with approved blasting operations; provided, however, this prohibition shall not apply to wholesale and retail stocks of small arms ammunition, explosive bolts, explosive rivets or cartridges for explosive-actuated power tools in quantities involving less than five hundred (500) pounds of explosive material.

#### Sec. 6-12. Same--Limitation on storage and use; approval of fire chief and council required.

The fire chief, with approval of the council, may limit the quantity of explosives or blasting agents to be permitted in any location, giving due regard to location, manner of storing or use, and hazards created to safety of lives and property.

# Sec. 6-13. Fireworks display; permit required; fee.

Permits for display for fireworks within the municipality, shall be granted only in accordance with the provision of state law. The fee for the permit shall be designated by the city council and upon adoption of the rates the council shall publish in the local newspaper the rate change thirty (30) days prior to the effective date of the rate change. The fee is payable in advance of issuance of such permit. If the permit is not granted the fee shall be returned to the applicant. (Ord. No.1989-4, 6-6-89, Ord. 2005-1, 8/18/05)

# Sec. 6-14. Storage of waste or rags.

When waste or rags are used in connection with dipping operations, approved waste cans or metal containers required by any other ordinance for disposal of similar materials, shall be provided and all impregnated rags and wastes deposited therein immediately after use.

## Sec. 6-15. Storage of flammable liquids.

The storage of Class I and II flammable liquids in aboveground tanks outside of buildings is prohibited within the fire limits described in Section 4-2.

## Sec. 6-16. New bulk plants prohibited outside industrial zone.

No new bulk plants shall be constructed outside the industrial zone as defined in the zoning ordinance of the city.

### Sec. 6-17. Bulk storage prohibited outside industrial zone.

Bulk storage of liquefied petroleum gas is prohibited outside the industrial zone defined in the zoning ordinance of the city.

#### Sec. 6-18. Administration and enforcement.

- (a) This chapter shall be administered and enforced by the fire department under supervision of the fire chief.
- (b) The fire chief shall detail such members of the fire department as he may deem appropriate, from time to time, as fire prevention inspectors. He shall prepare an inspection schedule from time to time for said fire prevention inspectors, and submit the same to the director of the department of buildings and housing for approval. Thereafter, in carrying out the schedule the inspectors shall be under direction of the fire chief.
- (c) The fire prevention inspectors shall be within the department of buildings and housing, as

provided by charter, and shall be under the general supervision of the director of said department, but only for the purpose of coordinating and minimizing inspections required to be made under this chapter and other city ordinances, to the end that no person shall be subjected to more inspections of any kind other than a reasonable minimum.

(d) A special report on fire prevention inspections shall be included in the monthly report of the fire department to the council.

## Sec. 6-19. Modifications and appeals.

- (a) The council shall have power to modify any of the provisions of the fire prevention code upon application in writing by the owner or lessee, when there are practical difficulties in the way of carrying out the strict letter of the code, provided that the spirit of the code shall be observed, public safety secured, and substantial justice done. Such modifications shall not be granted until the officers of the fire department have been given written notice, and a hearing before the council if any so request.
- b) A person who is aggrieved by an order, or decision of the fire chief or a fire prevention inspector, may appeal to the council within twenty (20) days from the date of the order or decision. Such appeal shall be in writing. In such case the decision of the council shall be final. However, in accordance with provisions of the charter, such person may, in lieu of appeal to the council, appeal as provided in Sections 3107 through 3109 of Title 24, V.S.A.
- (c) When under general law a municipality is prohibited from adopting an ordinance inconsistent with the provisions of rules and regulations published by a state official, and such rules and regulations are legally in force, any provisions inconsistent therewith in this chapter shall be null and void and of no effect, but the fire chief and the fire prevention inspectors, if so empowered under state law, may enforce such rules and regulations in the city.

### Sec. 6-20. Violation; penalties.

- (a) Any person who shall violate any of the provisions of the code, or who shall violate or 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 of 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 a decision made on appeal, shall, severally for each and every such violation and noncompliance respectively, be guilty of a misdemeanor, and upon conviction thereof shall be fined as provided by law. The imposition of a fine for any violation shall not excuse the violation or permit it to continue, and all such persons shall be required to correct or remedy such violations or defects within a reasonable time; and when not otherwise specified, each ten (10) days that prohibited conditions are maintained shall constitute a separate offense.
- (b) The application of the preceding subsection (a) shall not be held to prevent the enforced removal of prohibited conditions.

#### Sec. 6-21. Fire Alarm Ordinance and fees.

- (a) The fee for the permit shall be designated by the city council and upon adoption of the rates the council shall publish in the local newspaper the rate change thirty (30) days prior to the effective date of the rate change. Fees will be assessed for the one time attachment for new customers and a monthly change will be billed yearly. (Ord. No. 2005-1, 8/18/05)
- (b) Inspection of the City of Barre Fire Alarm Ordinance as adopted in its entirety may be seen at the City Clerk's Office at City Hall between 8:30 A.M. and 5:00 P.M. (Ord. 1993-3, 7/10/93)

Minimum requirements for the installation of a master fire alarm box or auxiliary systems connected to fire alarm headquarters via municipal circuits in the City of Barre are as follows.

(c) GENERAL. The Master fire Alarm Box protecting a property shall be Local-Energy type, shall be located outside the building protected and must be in a location that is easily accessible.

The entire installation, including all material to be connected to the municipal fire alarm circuits, must be new or approved, must be furnished and installed by the owner of the property protected, and the complete installation shall be his, for as long as the equipment is connected to the municipal fire alarm circuit.

In the event that trouble or faults develop in any part of the private system, it shall be the prerogative of the Fire Department of the City of Barre to disconnect any part or all, of the private system from the municipal circuits. And, in the event that this procedure takes place, the owner or agents of the property shall be notified, providing they have furnished this department with the proper addresses and telephone numbers where they can be reached.

- (d) MASTER BOX. The Master Box shall be of the local energy type with the following features:
  - Non-interference
  - Quick Succession
  - Automatic Grounding under open circuit conditions
  - Telegraph Key
  - Tap Bell
  - Test Panel
  - Flush Mounted box shall be weatherproof
  - Lock and Key-Barre City specification
  - Code Wheel Index-Barre City specification
- (e) SUPERVISORY PANEL. A master box supervisory and reset panel must be installed with the private system and shall be located within a reasonable distance from the Master Box. The supervisory panel may be incorporated in the control panel for the internal system.
- (f) WIRING. All wiring from the municipal circuit to the Master Box, and from the Master Box to the supervisory panel and associated equipment, shall be approved for operation at 600 volts. It must be installed in conduit or approved tubing, and conform to the requirements of the

National Electrical Code. Also, NFPA pamphlet 72 and 73. All wiring beyond the supervisory panel must be of an approved type for the equipment used and shall be inspected and approved by the Superintendent of Fire Alarm, or his designated agents, before connection is made to the municipal circuits.

- (g) ONE OR MORE BUILDINGS. In an installation where the fire-protective system is installed in more than one building, or more than one floor and where the system is connected to one Master Box, an enunciator shall be installed on the inside of the buildings adjacent to the Master Box. This enunciator shall identify the location of the originating signals.
- (h) LOCAL ENERGY SYSTEMS. In the installation of private systems operating from Local Energy, the system shall be designed so that the accidental loss of operating current will not operate the tripping mechanism of the Master Box. If batteries are used, these batteries will be the secondary, storage type battery. This type unit shall have built-in provisions for trickle charge on the battery cabinet.

The use of primary batteries, or dry batteries is not acceptable.

- (i) WATERFLOW DETECTORS (SPRINKLER SYSTEMS). Waterflow detectors installed in wet sprinkler systems must have incorporated in them an approved retard device which will prevent false signals from being sent to the fire alarm headquarters on such occasions as low water pressure, or pressure surges in the risers.
- (j) CONNECTION TO MUNICIPAL CIRCUITS. In areas where the private system is to be connected to a municipal circuit of the aerial construction type, the owner of the property shall bring two #12 solid core copper wires from the Master Box to a point on the outside of the building designated by the Superintendent of fire Alarm. These wires shall be enclosed in rigid conduit and shall be brought to an appropriate dead end device close to the weather cap. This device shall not be less than sixteen feet above the ground level and shall be securely fastened to the building. In areas where it is more expedient to wire using the underground method, the owner shall install rigid conduit, 2" or larger, from a point designated by the Fire Alarm Superintendent to a point near the location of the Master Box or to the Master Box itself.

The system owner shall be responsible for all wire and costs associated with making the connection from the outside weather-head to the nearest point of connection of the municipal fire alarm circuit.

Final cut-over connection of the system shall be made by City of Barre Fire Alarm employees or under their supervision.

Any alternate plans of wiring the fire alarm service connection from the street to the building shall be discussed with the Fire Alarm Superintendent prior to installation.

(k) LIGHTNING ARRESTER. A lightning arrester meeting the specifications of the City of Barre shall be installed near the weather-head and connected to a suitable ground. State of the art compact type lightning arresters may be placed in the master box itself as an acceptable

means of protection.

(l) GROUNDING. Both the master box and the lightning arrester must be grounded as follows: A common ground for both devices is acceptable. Ground wires shall not be run in the same conduit with the fire alarm wires.

An enclosed # 8 copper wire or equivalent shall be used to connect the ground terminal of the Master Box to a suitable ground in order to provide mechanical strength, or if enclosed in a metal pipe, a # 12 solid copper wire may be used. Suitable grounds are:

- 1. An underground metallic water piping system.
- 2. A ground rod not less than 1/2 inch in diameter and 8 feet long into permanently moist soil.
- 3. The resistance of a ground connection shall not exceed 25 ohms
- (m) RED LIGHTS. A red light of no less than 24 watts shall be mounted above the master fire alarm box. There shall be no switch on this light unless it is connected to a night light circuit that is turned on every night for all night.
- (n) TESTING. Master Boxes will be tested for operation during the regular procedure of this work and they will be tested no less than once every six months. The master box must be available for test during all normal working days and hours. The auxiliary equipment attached to this master box will <u>not</u> be tested by the Barre City Fire Department and will be considered to be part of the owners responsibility in maintenance of their system. However, whenever any system is worked on or tested, either internal system or sprinkler system, the Barre City Fire Department will be notified prior and will send a person to plug the system out when requested and to reset the master box when all work is complete.
- (o) PLANS. Plans or prints shall be submitted for approval to the Fire Chief or Superintendent of Fire Alarm prior to all installations, along with the form attached to this set of standards.
- (p) REQUIREMENT FOR CONNECTION. The requirement for connection to the municipal fire alarm circuit shall be governed by the State of Vermont fire Prevention Division of the Department of Labor and Industry. It shall also be administered by the City of Barre Fire Chief when calling for a decision by the Authority Having Jurisdiction.

These requirements shall follow State of Vermont Fire Prevention Division Directive 90-3. This can be found as an appendix to this set of standards.

- (q) LIABILITY. The City of Barre, or any of its employees, shall under no circumstance to held liable for the failure of any of the equipment to operate during the transmission of an alarm to the Fire Alarm Console, but it is understood that this department will do all that is possible to render trouble free reliable service.
- (r) APPENDIX TO THIS SET OF STANDARDS. This directive supersedes the November 9, 1988 directive 89-2. NFPA 101 1988 edition provides requirements for emergency forces notification under section 7-6.4 and 7-7.2.3 for fire alarm and sprinkler systems, and as specified

in the occupancy chapter.

Please find attached a summary of where emergency notification is required from NFPA 101 as broken down by occupancy chapter.

As required by these sections, fire alarm and sprinkler systems must be connected in a manner to automatically notify outside assistance. In reality, as Vermont is a rural state with few fire departments capable of handling and receiving direct alarms, each installation needs to be looked at on it's own merit. The connection must be by the best means available.

Listed in order by the most acceptable to least acceptable connection method:

- 1. Fire Department Master Box.
- 2. Leased direct line to the Fire Department.
- 3. Leased direct line to the Police Department or dispatching agency for the Fire Department.
- 4. Approved Central Station.
- 5. Proprietary System.
- 6. Recognized remote station.
- 7. Digital dialer connected to approved remote station.
- 8. Tape Dialer.

For full time departments with the capability to receive master alarm boxes or direct alarm lines, then the connection must be made to the Fire Department and the building owner does not have the option to use a less effective connection. However, with a rural volunteer fire department it may very well be acceptable to use an alternative, as listed above, in order of priority.

Section 7-6.4 is enforced by the Fire Prevention Division, but you should coordinate closely with the local Fire Department to insure their concerns are met.

The following is a chart of required alarms or sprinkler systems for new or existing buildings with related Sections listed:

New/ Existing	Occupancy	Alarms Required	Section	Sprinkler Required	Section
New	Assembly			yes	8-3.5.1
New	Day Care Ctr. (when more than 100 clients)	yes	10-7.3.4.4		
Existing	Day Care Ctr. (when more than 100 clients)	yes	11-7.3.4.4		
New	Health Care	yes	12-3.4.3.2	yes	12-3.5.1
New	Ambulatory Health Care	yes	12-6.3.4.4	yes	12-6.3.5
Existing	Health Care	yes	13-3.4.3.2	yes	13-3.5.2
Existing	Ambulatory Health Care	yes	13-6.3.4.4		
New	Correctional	yes	14-3.4.3.2	yes	14-3.5.1
Existing	Correctional	yes	15-3.4.3.2	yes	15-3.5.2
New	Hotel Dorm High-rise	yes	16-3.4.3.4	yes	16-3.5.2
Existing	Hotel Dorm	yes	17-3.4.3.2		
New	Apartment			yes (option 4)	18-3.5.5
					18-3.5.7
Existing	Apartment			yes	19-3.5.5
	Small Board & Care			yes (impractical)	21-3.3.5.2
	Large Board & Care	yes	21-3.3.4.6	yes (impractical)	21-3.3.5.2