

**REPORT OF THE VIRGINIA DEPARTMENT  
OF HEALTH, THE BOARD OF HOUSING AND  
COMMUNITY DEVELOPMENT AND THE VIRGINIA  
FIRE SERVICES BOARD IN COOPERATION  
WITH THE VIRGINIA HOSPITAL ASSOCIATION ON**

**Means and Methods  
To Enhance Hospital  
Fire Safety**

**TO THE GOVERNOR AND  
THE GENERAL ASSEMBLY OF VIRGINIA**



**SENATE DOCUMENT NO. 14**

**COMMONWEALTH OF VIRGINIA  
RICHMOND  
1993**



COMMONWEALTH of VIRGINIA  
DEPARTMENT OF  
HOUSING AND COMMUNITY DEVELOPMENT


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January 12, 1993

**MEMORANDUM**

TO: The Honorable L. Douglas Wilder and the Honorable Members of the 1993 Virginia General Assembly

FROM:  James W. Roncaglione

SUBJECT: Senate Joint Resolution No. 128

The 1992 General Assembly, by Senate Joint Resolution No. 128, requested the Virginia Department of Health, the Board of Housing and Community Development, and the Virginia Fire Services Board in cooperation with the Virginia Hospital Association to develop means to enhance fire prevention and fire safety procedures in Virginia hospitals, and recommend methods of providing fire sprinkler protection at the lowest possible costs.

Enclosed for your review and consideration is the report that has been prepared in response to this Resolution.

For further information the contact person is Jack A. Proctor, Deputy Director/State Fire Marshal, Division of Building Regulation, Department of Housing and Community Development, The Jackson Center, 501 North Second Street, Richmond, Virginia 23219-1321, Telephone Number (804) 371-7150.

:bmd

Enclosure



## **PREFACE**

Senate Joint Resolution 128 of the 1992 General Assembly Requested the Virginia Department of Health, the Board of Housing and Community Development, and the Virginia Fire Services Board in cooperation with the Virginia Hospital Association to develop means to enhance fire prevention and fire safety procedures in Virginia hospitals, and recommend methods of providing fire sprinkler protection at the lowest possible costs.

A committee, titled "The Hospital Fire Safety (SJR 128) Task Force", was formed, from representatives from the requested groups, to respond to the Resolution with the Department of Housing and Community Development serving as staff.

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## EXECUTIVE SUMMARY

- I. Senate Joint Resolution No. 128 - 1992
- II. Virginia Department of Health, Board of Housing and Community Development, Virginia Fire Services Board, Virginia Hospital Association
- III. Develop means to enhance Fire Prevention and Fire Safety Procedures in Virginia Hospitals
  - A. Patient/Staff Ratios
  - B. Hospital Staff Fire Emergency Plan Training
- IV. Recommend Methods of providing Fire Sprinkler Protection in Virginia Hospitals
  - A. Existing Water Supplies
  - B. Asbestos Abatement
  - C. Hook-up Fees
- V. Recommendations
  - A. Amend Law and Regulations
    - 1. Require Fire Emergency Plans
    - 2. Require Annual Fire Safety Inspection
    - 3. Clarify Fire Official Qualifications
    - 4. Provide for Alternate Retrofit Fire Sprinkler Systems
    - 5. Allow seven (7) years for sprinkler installation if mandated by General Assembly
  - B. No change to Water Supply Hook-up Fees

## INTRODUCTION

Senate Joint Resolution 128 of the 1992 General Assembly resolved:

"That the Virginia Department of Health, the Board of Housing and Community Development, and the Virginia Fire Services Board in cooperation with the Virginia Hospital Association be requested to develop means to enhance fire prevention and fire safety procedures in Virginia hospitals.

These deliberations should include, but not be limited to:

1. A review of regulations which establish minimum staffing ratios for hospitals to ensure proper implementation of approved fire emergency plans;
2. A determination that hospital licensure regulations, particularly those governing hospital staffing ratios and staff training, are adequate to permit proper implementation of approved hospital fire emergency plans; and
3. An examination of current education and training on fire prevention and fire safety procedures provided to member hospitals of the Virginia Hospital Association.

The study shall also recommend methods of providing fire sprinkler protection at the lowest possible cost taking into consideration existing water supplies, the effects of possible (asbestos) abatement and hook-up fees.

All agencies of the Commonwealth shall provide information and assistance in the development of these proposals." See Appendix A.

In response to this request, a task force entitled "The Hospital Fire Safety (SJR 128) Task Force" was formed which subdivided into two subcommittees, the Staffing Ratios, Education and Training Subcommittee and the Fire Sprinkler Protection Subcommittee. A list of the membership is attached to this report as Appendix B.

## REPORT

### I. Report of the Staffing Ratios, Education and Training Subcommittee:

#### A. Issue : Staffing Ratios

**Background:** The term "staffing ratios" means something entirely different to the Department of Health Licensure and Certification Division, the Virginia Hospital Association and general hospital personnel than what was intended by the phrase when used previously in similar studies (e.g. SJR 185 - 1991). The term "staffing ratios" to health care professionals is indicative of the number of staff and their respective level of medical expertise needed on a given unit of a health care facility to provide the appropriate care (based on patient acuity); whereas, the building and fire code professionals meant by establishing minimum staffing ratios to provide a sufficient number of trained individuals to be available as "first responders" (in a worst case scenario) to meet the needs of the patients in an emergency situation such as fire or other disaster.

**Findings:** Although SJR 128 requested the deliberations include 1) a review of regulations which establish staffing ratios for hospitals to ensure proper implementation of fire emergency plans, and 2) a determination that hospital licensure regulations, particularly those governing hospital staffing ratios and staff training, are adequate to permit proper implementation of approved fire emergency plans; the subcommittee found that none of the applicable regulations establish minimum staffing ratios *per se* to ensure proper implementation of hospital fire emergency plans.

All of the applicable regulations [Joint Accreditation of Hospitals Organization (JCAHO), Department of Health -- Licensure and Certification, Health Care Financing Administration (HCFA), and the Statewide Fire Prevention Code] require that there be established a fire emergency plan. None of these regulations require a specific minimum number of staff to be present at any given time; although the inherent expectation is that there will always be sufficient trained staff present to properly implement an approved fire emergency plan. It was the consensus of the subcommittee that there were too many variables to be considered to develop a generic guideline which would work for all hospitals.

**Recommendation:** That appropriate amendments be made to the Code of Virginia and the Virginia Statewide Fire Prevention Code to require hospital administration personnel to work cooperatively with the fire official having jurisdiction in the establishment, implementation and subsequent revisions of the fire emergency plan. See Appendix C for suggested amendments (underlined text indicates proposed changes).

#### B. Issue: Education and Training

**Findings:** The education and training on fire prevention and fire safety procedures provided within member hospitals of the Virginia Hospital Association appears too widely varied and too little known for this subcommittee to appropriately judge their adequacy. It was agreed that there was also inconsistency in the oversight of this education and fire prevention training as well as inconsistent and infrequent fire inspections in a number of hospitals,

again, primarily because there was a perception that since they were accredited by JCAHO, that these hospitals were not within the purview of their jurisdiction. There was also some confusion within the state and local fire service community as to who should be inspecting the hospitals for compliance with the Statewide Fire Prevention Code.

**Recommendations:**

1. Require annual fire safety inspections of all hospitals subject to licensure
2. Require hospital annual fire safety inspections be performed by qualified fire inspectors and to be coordinated by State Fire Marshal's Office
3. Require inspection to incorporate Life Safety Code requirements
4. Require inspection reports to be filed with the State Fire Marshal's Office and the State Fire Marshal forward copy to appropriate licensing agency
5. Require the annual inspection include review of:
  - a. Fire drill report
  - b. Evacuation plan
  - c. Staff training in fire emergency procedures
6. Require the evacuation plan and employee training comply with Life Safety Code
7. Establish minimum qualifications for individuals that enforce the Statewide Fire Prevention Code

**II. Report of the Fire Sprinkler Protection Subcommittee:**

**A. Issue: Existing Water Supplies**

**Background:** The hospital survey data collected for the SJR 185 - 1991 report indicated that 45 of the 71 unsprinklered general inpatient hospitals have adequate water from their existing standpipe systems to supply a sprinkler system, 14 indicated they did not and the other 12 had insufficient information to determine their status. Seventeen of the 71 indicated that they would need the installation of a new fire pump to supplement the system if a full NFPA 13 sprinkler system were installed, and 21 others gave no indication one way or the other. Two of the psychiatric hospitals indicated that they would require the installation of fire pumps.

**Findings:** The majority of the hospitals have standpipe systems adequate to supply a sprinkler system. An adequate water supply could be defined as one which can supply 18 gallons per minute (gpm) at 15 pounds per square inch (psi) to one quick response sprinkler head, or 26 gpm at 15 psi to two quick response heads, where more than one is required, for a duration of 10 minutes. Such a system could be supplied from the existing water supply, with minimal extra cost to the facility.

**Recommendation:** If the General Assembly requires all existing hospitals to be equipped



with a retrofit sprinkler system, it is the recommendation of the Task Force that the Board of Housing and Community Development adopt and promulgate an alternate retrofit sprinkler system standard which will provide sprinkler protection to all areas where patients are housed overnight, and be connected to an adequate water supply.

**B. Issue: Asbestos Abatement**

**Background:** Hospital survey data gathered for the SJR 185 - 1991 Report to the General Assembly included cost estimates for the installation of fire sprinkler systems in existing hospitals. The total cost estimated for sprinklering 49 of the 71 unsprinklered general inpatient hospitals was 64 million dollars. Included in those cost estimates was a figure of 35 million dollars, for asbestos removal.

**Finding #1:** If asbestos abatement of some type (not necessarily removal) is already required, only the cost directly associated with the installation of sprinklers could be considered as part of the cost estimate unless asbestos abatement is performed solely for the purpose of compliance with sprinkler system installation requirements.

**Finding #2:** Some sprinkler systems may be installed in existing buildings with very little disturbance to asbestos. For example, one type resembles crown molding that conceals the sprinkler pipes. Using such systems could greatly minimize the amount of asbestos abatement required.

**Finding #3:** Each existing hospital with asbestos has a different set of variables to consider and would require sufficient time to develop a plan to include both the asbestos abatement, if required, and the installation of the sprinkler system protection.

**Recommendation:** If the General Assembly mandates sprinkler protection for existing hospitals, it is recommended that unsprinklered facilities be granted 180 days to submit an action plan to the State Fire Marshal's Office, and that a time frame of up to seven years be permitted for compliance with the new standards.

**C. Issue: Hook-up Fees**

**Background:** Localities were contacted to determine current connection fees, stand-by charges, and other costs associated with water supplies for sprinkler systems. Additionally, the subcommittee invited representatives of the waterworks industry to provide input. A copy of the position of the Virginia Section of the American Water Works Association, Water Utility Committee is included in this report as Appendix E.

**Finding #1:** Locally, utilities have taken different positions on fire suppression service metering costs. Some systems charge a small monthly fee to read the meters, some charge a standby or availability fee, some charge for water used for fire service. There are numerous concepts of setting rates to provide for revenues and expenses.

**Finding #2:** Locally, water service for fire suppression systems are handled in various ways. Some utilities require a detector meter that identifies unauthorized use, but allows full fire flow without metering. A few utilities allow for undetected water flow on fire water

services. Additionally, bond issue requirements of a local utility sometimes prevent giving away water or services.

**Finding #3:** An alternate retrofit sprinkler system supplied from existing water supplies would not add the substantial costs to a hospital that the installation of a full NFPA 13 system would, since much of the costs enumerated above (for hook-up, stand-by fees, etc.) are already in place. Neither the Virginia Section of the American Water Works Association nor the Virginia Hospital Association has any objections to the use of existing water systems to supply a retrofit sprinkler system designed to protect each area where patients are housed overnight, as described in Recommendation II-A.

**Recommendation:** None. Hook-up fees would not be effected by connecting to existing water supplies.

APPENDIX A

1992 SESSION

SENATE JOINT RESOLUTION NO. 128  
AMENDMENT IN THE NATURE OF A SUBSTITUTE  
(Proposed by the Senate Committee on Rules  
ON FEBRUARY 10, 1992)

(PATRON PRIOR TO SUBSTITUTE-SENATOR WALKER)

*Requesting the Virginia Department of Health, the Board of Housing and Community Development, and the Virginia Fire Services Board in cooperation with the Virginia Hospital Association to develop means to enhance fire prevention and fire safety procedures in Virginia hospitals.*

WHEREAS, the Commonwealth is fortunate to have many outstanding hospitals offering excellent health care services; and

WHEREAS, Virginia hospitals must protect the populations to which such services are provided; and

WHEREAS, that protection includes fire prevention, fire emergency plans, fire safety procedures and fire protection systems; and

WHEREAS, data indicate that the majority of fire in health care facilities are caused by use of smoking materials; and

WHEREAS, the Virginia Department of Fire Programs' data indicate that the five fires in Virginia health care facilities causing injuries in 1987-1988 were begun by smoking materials, and no deaths resulted; and

WHEREAS, only two of the health care facilities without sprinkler systems which were reviewed by the Board of Housing and Community Development pursuant to SJR 185 of the 1991 Session reported any fire injury within the last five years, and in both instances, injuries were caused by patients setting their clothing on fire with cigarettes; and

WHEREAS, as of January 1, 1992, 70 of Virginia's 120 hospitals prohibit smoking in compliance with the standards of the Joint Commission on Accreditation of Healthcare Organizations which will require such a prohibition in all hospitals by December 31, 1993, thus minimizing the danger of fires in hospitals; and

WHEREAS, the Board did find some evidence of inadequately trained hospital staff to respond to fire emergency conditions; and

WHEREAS, many existing hospitals were not required by the Board of Housing and Community Development's regulation to be equipped with fire suppression systems; and

WHEREAS, it has been determined that the cost of retrofitting existing hospitals to current standards would be prohibitive; and

WHEREAS, the Virginia Fire Services Board feels that there is a potential for large loss of life due to fire in hospitals unprotected by fire suppression systems; now, therefore, be it

RESOLVED by the Senate, the House of Delegates concurring, That the Virginia Department of Health, the Board of Housing and Community Development, and the Virginia Fire Services Board in cooperation with the Virginia Hospital Association be requested to develop means to enhance fire prevention and fire safety procedures in Virginia hospitals.

These deliberations should include, but not be limited to:

1. A review of regulations which establish minimum staffing ratios for hospitals to ensure proper implementation of approved fire emergency plans;
2. A determination that hospital licensure regulations, particularly those governing hospital staffing ratios and staff training, are adequate to permit proper implementation of approved hospital

fire emergency plans; and

3. An examination of current education and training on fire prevention and fire safety procedures provided to member hospitals of the Virginia Hospital Association.

The study shall also recommend methods of providing fire sprinkler protection at the lowest possible cost taking into consideration existing water supplies, the effects of possible abatement and hook-up fees.

All agencies of the Commonwealth shall provide information and assistance in the development of these proposals.

The Department of Health and the cooperating Boards and the Virginia Hospital Association shall report their findings and recommendations to the Governor and the 1993 Session of the General Assembly as provided in the procedures of Legislative Automated Systems for the processing of legislative documents.

**APPENDIX B  
HOSPITAL FIRE SAFETY (SJR 128) TASK FORCE  
MEMBERS**

Board of Housing and Community Development

- 1 Mr. James W. Roncaglione  
Chairman  
9807 Bridleridge Court  
Vienna, Virginia 22180
  
- 1 Mr. Jules L. Elliott, P.E.  
Post Office Box 194  
Fredericksburg, Virginia 22404
  
- 2 The Honorable James W. Robinson  
Vice Chairman  
Box 187  
Pound, Virginia 24279

Virginia Fire Services Board

- 2 Mr. Julian H. Taliaferro  
Chief, Charlottesville Fire Dept.  
203 Ridge Street  
Charlottesville, Virginia 22901
  
- 1 Mr. Steven D. Eanes  
Henry County Fire Marshal  
Post Office Box 7  
Collinsville, Virginia 24078
  
- 2 Mr. James M. Henderson, Jr.  
Fire Administration  
City of Newport News  
549 Allens Mill Road  
Grafton, Virginia 23692

Dept. of Mental Health, Mental Retardation  
and Substance Abuse

- 2 Joan Tucker, Manager  
Licensure Operations  
P. O. Box 1797  
Richmond, Virginia 23214

Virginia State Health Department

- 1 Mr. Thomas Gray, Project Manager  
Water Programs  
Virginia Department of Health  
Main Street Station  
1500 E. Main Street, Suite 214  
Richmond, Virginia 23219

Virginia State Health Department (Cont'd)

- 2 Ms. Deborah Little, Director  
Licensure and Certification  
Virginia Department of Health  
3600 Centre, Suite 216  
3600 W. Broad Street  
Richmond, Virginia 23230
  
- 2 Ms. Stephanie Sivert, Asst. Director  
Licensure and Certification  
Virginia Department of Health  
3600 Centre, Suite 216  
3600 W. Broad Street  
Richmond, Virginia 23230
  
- 1 Mr. David Taylor, Supervisor  
Licensure and Certification  
Virginia Department of Health  
3600 Centre, Suite 216  
3600 W. Broad Street  
Richmond, Virginia 23230

Virginia Hospital Association

- 1 Mr. Daynon Wheeler  
Director of Engineering  
St. Mary's Hospital  
5801 Bremo Road  
Richmond, Virginia 23226
  
- 2 Mr. Steve Ennis  
Director of Safety  
Mary Washington Hospital  
Fredericksburg, Virginia 22401
  
- 1 Mr. Morris Reece  
Vice President  
Roanoke Memorial Hospital  
Post Office Box 13367  
Roanoke, Virginia 24033
  
- 1 Mr. Calvin Wilkinson  
Engineering Dept.  
St. Mary's Hospital  
5801 Bremo Road  
Richmond, Virginia 23226

- 1 - Fire Sprinkler Protection Subcommittee
- 2 - Staffing Ratios, Education and Training Subcommittee

APPENDIX C  
PROPOSED AMENDMENTS  
VIRGINIA STATEWIDE FIRE PREVENTION CODE

1. Delete Section F-102.2:

~~F-102.2. Qualifications: The local government shall establish qualifications for the local fire official and assistants.~~

~~Note: It is recommended that the fire official have at least five years of fire prevention experience. The certification programs offered by the Department of Housing and Community Development, Department of Fire Programs, and ETS/NFiPA should be considered when establishing qualifications.~~

2. Add new Section F-102.2:

F-102.2 Qualifications: The fire official shall have at least five years of experience as a licensed professional engineer or architect, fire inspector, contractor or superintendent of fire related building construction, with at least three years in responsible charge of work, or shall have any combination of education and experience which would confer equivalent knowledge and ability. The fire official shall have a general knowledge of sound engineering practice in respect to the design and construction of buildings, the basic principles of fire prevention, the accepted requirements for means of egress and the installation of elevators and other service equipment necessary for the health, safety and general welfare of the occupants and the public. The local governing body may establish additional qualification requirements.

F-102.2.1. Certification: The fire official shall be certified in accordance with part VI of the Virginia Certification Standards for Building, Fire and Amusement Device Inspectors, Blasters and Tradesmen within three years after the date of employment.

Exception: An individual employed as the fire official in any locality in Virginia prior to April 1, 1994 shall be exempt from certification while employed as the fire official in that jurisdiction. This exemption shall not apply to subsequent employment as the fire official in another jurisdiction.

F-102.2.2 Qualifications of technical assistants: A technical assistant shall have at least three years of experience in construction. Any combination of education and experience which would confer equivalent knowledge and ability shall be deemed to satisfy this requirement. The local governing body may establish additional qualification requirements.

F-102.2.3 Certification of technical assistants: Any person employed by, or under contract to, a local governing body for determining compliance with the SFPC shall be certified in their trade field within three years after the date of employment, in accordance with Part VI of the Virginia Certification Standards for Building, and Fire and Amusement Device Inspectors, Blasters and Tradesmen.

Exception: An individual employed as the fire inspector in Virginia prior to April 1, 1994 shall be exempt from certification while employed as the technical assistant in that jurisdiction. This exemption shall not apply to subsequent employment as a technical assistant in another jurisdiction.

3. Add new Section F-102.3.1:

F-102.3.1. Hospitals: The authority having jurisdiction shall make annual inspections of all hospitals licensed or subject to licensure pursuant to Chapter 5 (§ 32.1-123 et seq.) of Title 32.1 and Chapter 8 (§ 37.1-179 et seq.) of Title 37.1. and provide a copy of the inspection report to the State Fire Marshal's Office.

4. Add new Section F-704.1.1:

F-704.1.1 Hospitals: The administrative personnel of every hospital licensed or subject to licensure pursuant to Chapter 5 (§ 32.1-123 et seq.) of Title 32.1 and Chapter 8 (§ 37.1-179 et seq.) of Title 37.1 shall work cooperatively with the fire official in the initial formulation, implementation and any substantive revisions to the evacuation plan for purposes of correlation and coordination of effort. The evacuation plan shall comply with the requirements of Section 31-4.2 of NFIPA 101, *Life Safety Code*(1991 et seq.) listed in Appendix A.

5. Amend Section F-704.5 to read as follows:

F-704.5 Employee training: Employees shall be instructed in life safety procedures and devices in accordance with the applicable sections of NFIPA 101, *Life Safety Code*(1991 et seq.) listed in Appendix A.

6. Add to Appendix A.

NFIPA National Fire Protection Association  
Battery March Park  
Quincy, MA 02269

101-91 Life Safety Code

## APPENDIX D

### SECTION 101.91 LIFE SAFETY CODE

#### 31-4.2 Procedure in Case of Fire.

31-4.2.1 For health care occupancies, the proper protection of patients requires the prompt and effective response of health care personnel. The basic response required of staff shall include the removal of all occupants directly involved with the fire emergency, transmission of an appropriate fire alarm signal to warn other building occupants, confinement of the effects of the fire by closing doors to isolate the fire area, and the execution of those evacuation duties as detailed in the Facility Firesafety Plan. See Appendix A for a more detailed suggested emergency plan.

31-4.2.2 A written facility firesafety plan shall provide for:

- (a) Use of alarms.
- (b) Transmission of alarm to fire department.
- (c) Response to alarms.
- (d) Isolation of fire.
- (e) Evacuation of area.
- (f) Preparation of building for evacuation.
- (g) Extinguishment of fire.

31-4.2.3 All facility personnel shall be instructed in the use of and response to fire alarms; and, in addition, they shall be instructed in the use of the code phrase to ensure transmission of an alarm under the following conditions:

- (a) When the individual who discovers a fire must immediately go to the aid of an endangered person.
- (b) During a malfunction of the building fire alarm system.

Personnel hearing the code announced shall first activate the building fire alarm using the nearest manual alarm station and shall then immediately execute their duties as outline in the firesafety plan.



## **APPENDIX E**

### **STATEMENT CONCERNING FIRE SERVICE WATER CONNECTIONS**

#### **Virginia Section, American Water Works Association, Water Utility Committee**

The Board of Housing and Community Development in Senate Document No. 7 reported in 1991 on The Feasibility and Need for Requiring Certain Facilities to be Equipped with Fire Suppression System. The report contains a recommendation that the General Assembly enact legislation to prohibit local water utilities from: 1) requiring water meters on sprinkler systems and 2) charging any water service available at no charge.

The 1991 General Assembly allowed that localities, at their option, could require utilities to make this service available at no charge.

The Housing and Community Development Board is still considering this matter and has asked the Virginia Section of the American Water Works Association to express its views on this matter.

**POSITION:** The Section position, simply stated, is that all customers should pay for the service provided to them.

The concept of providing free taps, free meters and free water to any customer class, merely shifts the cost burden to other customers. Locally, utilities have taken different positions on fire suppression service metering costs. Some systems charge a small monthly fee to read the meters, some charge a standby or availability fee, some charge for fire water used.

The AWWA has long felt that utilities should operate as a business. No matter whether the water system is publicly or privately owned, the costs of providing the service should be reflected in rates that allow self-sufficient operation. There are numerous concepts of setting rates that provide for revenues and expenses to meet. Any service provided must be reflected in rates either directly to the customer or indirectly paid by other customers. It is the Section position that each customer should pay for the service provided to them.

Locally fire services are handled in various ways. Some utilities require a detector meter that identifies unauthorized use, but allows full fire flow without metering. Compound meters are sometimes used that registers small or large flows with any flow being billed. Few utilities allow for undetected water on fire services. A detector meter is to prevent unauthorized use, either of a deliberate or accidental nature. In short, the issue becomes a local one and should remain that way. Internally, bond issue requirements of a local utility sometimes prevent giving away water or services.

Backflow preventers are required by state regulations on health care facilities and other types of users. These costs must also be recovered within the rate structure. AWWA Standard M-14 on sprinkler systems no longer recommends unmetered sprinkler systems.

The AWWA and Virginia Section of AWWA strongly support the use of sprinklers to save lives and save property damage. The Virginia Section does not support free service to customers. We support a strong utility system supported by fair, adequate rates and charges.