

ARTICLE 11 RESIDENTIAL FIRE SPRINKLER SYSTEMS

11-1 DEFINITION; APPLICABILITY:

11-1-1 Residential fire sprinkler systems consist of: (a) service connections to the water service line downstream of the meter, (b) all pumps, piping, sprinkler heads, and appurtenant facilities.

11-1-2 An automatic fire sprinkler system shall be installed in one and two family dwellings and townhomes built or moved into the District when South Metro Fire Rescue Authority, its successor, or any fire authority or entity with lawful jurisdiction, has provided the District with written notice that such installation is required for the particular dwelling.

11-2 OPERATION: Residential fire sprinkler systems are installed for fire protection for the property on which they are installed and are not to be used for any other purpose.

All fire service openings will be kept closed and sealed, except in the case of fire. No water shall be used from the Residential fire sprinkler system pipes, except to extinguish fires.

11-3 CONNECTION AND METERING: No unmetered residential fire sprinkler system is permitted. Residences using a residential fire sprinkler system shall not connect the fire sprinkler system directly to the District main but shall have a combination domestic water service line and fire service line. A valve shall be required at the main, and additional valves must be installed on each of the service branches, including the Residential fire sprinkler system service line, so that each line may be controlled independently. The combination domestic water service and fire service line shall be metered accordance with District requirements for all domestic water service lines.

11-4 DESIGN AND PLAN REVIEW: No Residential fire sprinkler system shall be installed without prior plan review and approval by the District. Plans for a new Residential fire sprinkler system or modification or addition to an existing system shall be submitted to the District and shall include details of size, type and location of the connection, fire line(s), pump(s), standpipe(s), sprinkler heads, backflow prevention valves, and any other system components and features in accordance with the District's Technical Specifications.

11-4-1 Residential fire sprinkler system service connections, piping and appurtenances design, installation, inspection and maintenance shall comply with NFPA 13D Installation of Sprinkler Systems in One and Two Family Dwellings and Mobile Manufactured Homes, 2002 2013 Edition (Copyright 2012 by National Fire Protection Association Inc.), and with any and all specifications and standards adopted by the District. USE OF DOMESTIC SERVICE FOR WATER SUPPLY TO

AUTOMATIC FIRE SPRINKLER SYSTEMS THAT DO NOT COMPLY WITH NFPA 13D IS PROHIBITED.

11-4-2 All residential fire sprinkler lines shall have a minimum protection of an approved double check valve for containment of the system. All glycol, ethylene, propylene, and other chemical antifreeze systems shall have an approved Reduced Pressure Zone assembly for containment.

11-4-3 Plans must include a proposed installation and testing schedule for the residential fire sprinkler system, including the backflow prevention valves for such system. Tests will be conducted in accordance with A.S.S.E. and/or U.S.C.-C.C.C. and H.R. performance standards and field test procedures as directed by the Colorado Department of Public Health and Environment.

11-4-4 All costs for design, plan review, installation, maintenance, repair, and testing are to be borne by the Property Owner.

11-4-5 For residential structures for which a fire sprinkler system is required, installation of the water service line will not be allowed until a fire sprinkler submittal has been received, reviewed, and approved by the District.

11-5 INSPECTION: The District will require inspection of all residential fire sprinkler systems, including containment system installations. Approval and inspection by the District shall not assure adequacy of operation or protect the user or owner from damage resulting from the system failure. The Property Owner and user will retain all such liability as a condition of service.

11-6 TESTING AND MAINTENANCE: At least once per year, it will be the duty of the Property Owner where any backflow prevention or other containment device is installed to have a certified inspection or test made of those devices. In those specific instances where the District deems the hazard to be great enough, certified inspections or tests at more frequent intervals may be required. These inspections or tests shall be at the expense of the Property Owner and shall be performed by a certified technician approved by the Colorado Department of Public Health and Environment.

11-6-1 As necessary, the containment devices shall be repaired or replaced at the expense of the customer whenever the containment devices are found to be defective. Records of all such inspections, tests, repairs or replacement shall be kept by customer and the District.

11-6-2 Existing containment devices shall be sealed by the technician performing the inspection or test at the completion of the inspection or test.

11-6-3 All testing equipment used in testing of containment devices shall be checked for accuracy at least annually, and proof of compliance shall be submitted to the District upon request.

11-6-4 The District retains the right to inspect or test the installation and operation of any containment device at any time to assure proper operation.

11-7 ENFORCEMENT: The requirements of this Article 11 shall be administered and enforced pursuant to applicable provisions of Colorado law, the District's Regulations, and the applicable Plumbing Code.