

ARTICLE 9. PRIVATE FIRE-PROTECTION SYSTEMS

9.10 Purpose and General Requirements

Private fire-protection systems provide additional on-site protection to large buildings, tall structures, and basements with limited accessibility and high-risk systems such as warehouses, hotels, hospitals, etc. Such private fire-protection facilities may consist of an automatic sprinkler system, in-house hose connection(s), on-site fire hydrant(s), or a combination of either two or all three of these devices.

Generally, a private fire system is completely independent of the customer's internal water system. For billing purposes a common system may be employed, providing it is controlled by a fire-line or similar meter to measure all water used, including water for testing and firefighting.

9.20 Request and Contract for Service

A Commercial Service Request Form (see Appendix N) and an executed Private Fire Protection Agreement (see Appendix M) shall be made for private fire-protection service. The request may be made at the District office. In executing the contract, the applicant agrees to abide by all applicable provisions of these Policies including the following specific requirements:

1. The applicant, shall make no installation of a private fire-protection system, or alterations, additions or connection without the prior submission of plans and approval of engineering calculations by the District.
2. The District shall have the right to conduct a cross-connection inspection on the premises at any time.
3. The applicant must install and maintain the system in such a manner as to prevent leakage, waste and backflow into the District's system. (See Article 7 for related requirements.)
4. The applicant must install and maintain any and all necessary devices, as specified by the District, to protect the District's system from inadequate pressures that may occur during the utilization of fire protection systems.
5. Where such system is unmetered, no water shall be used from any hydrant or connection except to fight fire or for official fire insurance inspection and testing purposes. Where water is wasted or used for unauthorized purposes, the District reserves the right to

estimate the consumption or install a meter at the customer's expense and to bill the customer the established rate for such water usage. (Appendix B)

6. Violation of any of the above requirements or other applicable provisions of these Policies may result in the termination of the contract for this service.
7. The applicant must assume all responsibility for the condition and sufficiency of the fire supply main on the applicant's property and must indemnify and hold harmless the District from any and all claims for loss or damage caused by fire or any other cause relating to the existence of the fire-protection service.
8. The District must have full access at all reasonable times for the purpose of inspecting the fire protection system.
9. If the fire protection system is to be used for testing or training, the applicant must obtain District approval at least 24 hours in advance. The applicant must allow the observance of any testing and/or training by District personnel.

9.30 Charges

Charges are applicable to all unmetered connections supplying fire protection sprinkler systems, building hose connections and/or on-site private fire hydrants. (See Appendix B)

9.40 Installation, Modification and Connection Requirements

Engineering calculations and plans showing the site piping, valving, vault construction, booster pumps, and required backflow-prevention equipment are required to be submitted to the District for approval prior to installation or revision of a private fire-protection system. The connection to serve a private fire-protection system shall not be made by the District until all charges, as outlined in Appendix A, and all of the above requirements have been received and approved by the District and the specified vault construction requirements have been met. No piping shall be covered, nor pits constructed or covered, prior to an inspection by the District.

9.50 Private Fire-Service Liability / Disclaimer

While the District attempts to provide water pressure and flow rates generally adequate for fire protection needs where feasible, the District makes no guarantee that specific pressures and flows will exist at any time

or be maintained. The District performs no fire-fighting service and is not an insurer against loss or damage by fire; consequently, it does not assume liability for any such damages.

9.60 Private Fire-Protection Systems

The District requires approved backflow prevention devices to maintain the integrity of the distribution system and to comply with DHEC regulations. Any fire service connection supplied with water from the District shall have an approved backflow prevention device installed. The type of backflow prevention device and degree of protection shall be determined by the District. An approved reduced-pressure backflow prevention device shall be required for any fire system with corrosion inhibitors or antifreeze compounds in the system.

The customer is responsible for installation, testing, and maintenance of backflow prevention devices. (Refer to Article 7 for details)

9.70 Private Fire Protection Systems with Booster Pumps

The District must approve all fire booster pumps in order to maintain the integrity of the distribution system and to comply with DHEC regulations. The applicant will not permit the installation of any pump which pumps directly from the District's water system without prior written permission and approval of the District. The applicant must furnish the District with fire pump specifications, pump curves, and all other required information prior to the installation of the pumps.

Fire booster pumps must have a device to monitor suction pressure and throttle the output of the pump to maintain the suction pressure above the appropriate pressure to maintain at least a minimum of twenty-five (25) pounds per square inch within the affected area of the District's distribution system. In no case shall the pressure drop below twenty (20) pound per square inch within the affected area.

The District will use its current hydraulic model to determine the impact of the proposed fire booster pumps on the distribution system under a worse case scenario.

9.80 Private Fire Protection Systems with Fire Protection Storage Tanks

The District must approve all ground or elevated fire protection storage tanks, associated pumps, piping, and appurtenances in order to maintain the integrity of the distribution system and to comply with DHEC regulations. The applicant will not permit the installation of any storage tank or associated pump which pumps directly from the District's water system without prior written permission and approval of the District. The

applicant must furnish the District with storage tank specifications, inlet and outlet piping details, fire pump specifications (if applicable), pump curves, and all other required information.

Fire storage tanks shall have properly sized air vents. The applicant shall not allow these vents to be plugged or removed. The applicant must request written permission of the District prior to filling the storage tanks. Filling of the tanks shall be done in such a way as not to negatively impact the District's distribution system.