

## Sprinkler System Freeze-Up Prevention

As Winter descends upon the State, it is important to spend some time thinking about the importance of protecting municipal properties from freeze-up losses associated with water pipes and sprinkler pipes. Although water losses from frozen pipes are costly, tremendously inconvenient, and often the result of weather extremes, each year we experience a number of losses that might have been prevented with some basic maintenance.

Below we talk about the importance of properly maintaining Dry Sprinkler Systems specifically as it relates to preventing freeze-up of pipes. Please note this is only one aspect of an overall Sprinkler Maintenance & Inspection Protocol.

### Draining Dry Pipe Sprinkler Systems:

The improper, incomplete, and inadequate draining of dry pipe sprinkler systems is a major maintenance issue that causes significant water damage every winter. The bottom line is that properly trained technicians should be performing this work. This is not an area to cut corners or work on a system without being completely qualified.

While dry pipe sprinkler systems are intended to be filled with compressed gas (usually air) and not have water in them, problems often arise when these systems have accumulated water in them that is not properly evacuated. This water can be due to condensation, piping being improperly sloped, and/or water being left in the system after previous testing.

In addition to verifying the slope of dry pipe sprinkler piping (recommended at least every 5 years), the proper draining of a dry pipe sprinkler system should include:

1. Identifying all low points on the dry pipe system
2. Identifying drains (often drum drips) at each low point
3. Properly evacuating all water from each low point drain
4. Repeating the draining efforts periodically as needed to evacuate additional accumulated water
5. Document each of the attempts to drain each low point location

### References, Codes, & Standards:

Fire sprinkler systems shall be inspected, tested, and maintained in accordance with the applicable codes and standards. Specifically, that work shall comply with NFPA 25 (“The Guide for the Testing, Inspections, and Maintenance of Fire Sprinkler Systems”). This document is not intended to replace that reference or to be a complete list of the necessary work, but is intended as an overview to guide the owners of these types of systems to identify and utilize appropriately trained and qualified individuals to perform this vital work.

## Options for photo

