

U.S. Fire Administration / National Fire Academy

Coffee Break Training

Topic: Sprinkler Problems

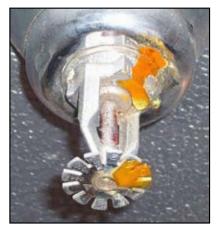
Learning objective: The student shall be able to identify the minimum requirements for annual sprinkler inspections.

Today's photograph illustrates what may be an impending problem: a water leak or sprinkler failure that will result in significant and unexpected damage to the contents of this walk-in freezer.

The orange hue in the water droplets suggests this is a problem with the iron pipe connecting the sprinkler, and not the sprinkler itself, but that can be determined only by closer inspection and repair or replacement.

NFPA 25, Standard for the Inspection, Testing and Maintenance of Water-Based Fire Protection Systems, requires that sprinklers be inspected annually as part of the overall sprinkler system inspection process. Here are some critical items the inspector must check:

- Sprinklers must not show signs of leakage; must be free of corrosion, foreign materials, paint, or physical damage; and must be installed in the proper orientation in accordance with their listing. Any sprinkler suffering from those conditions must be replaced.
- Glass bulb sprinklers must be replaced if the bulbs have lost their fluid contents.



- Unacceptable obstructions to spray patterns must be corrected.
- The supply of spare sprinklers must be inspected annually for the proper number and type of sprinklers and a sprinkler wrench for each type of sprinkler.

Some of the material in this document is used with permission from NFPA 25, Standard for the Inspection, Testing and Maintenance of Water-Based Fire Protection Systems, Copyright © 2002, National Fire Protection Association.