

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.

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