



**CHARLOTTE FIRE DEPARTMENT
FIRE MARSHAL'S OFFICE
500 DALTON AVE
CHARLOTTE, NC 28206**



Code/Procedural Interpretation

CFD Interpretation: Sprinkler System Upgrade for Change in Storage

Date: October 21, 2014

Code Reference: NFPA 13, 1978 North Carolina Building Code, & ruling from the Chief Fire Code Consultant of the State Fire Marshal's Office

Subject: Does an old fire sprinkler system have to be upgraded to protect a change in commodity type or storage height in warehouse buildings designed and constructed for storage prior to 1978?

Interpretation:

The 1972 edition of NFPA 231 was the first edition to address sprinkler requirements for high-piled storage, and that standard would be the earliest enforceable in North Carolina via the 1978 North Carolina Building Code.

1. An existing warehouse with storage heights ***greater than 12 feet*** that was constructed prior to 1978, as long as the provisions of NFPA 13 that were in effect at the time were met and are being maintained, then no upgrade is required.
2. If an existing warehouse stored at heights less than 12 feet, and is converted to high-piled storage, then it must meet the sprinkler requirements in effect at the time of conversion from standard storage to high-piled storage.

Note: If a storage warehouse previously used for general storage is now converted to hazardous materials storage, and the material amounts exceed those allowed for control areas, then this is a change of use from Group S to Group H, and regardless of year built, the system is required to comply with all applicable provisions of NFPA 13, and the North Carolina Fire and Building Codes.