

ENGINEERING SERVICES
CODE COMMITTEE
REVIEW SUMMARY

- REFERENCE: Letter dated March 16, 1999 from Chris Kates, DOHSM Navajo Area Indian Health Service.
- ISSUE: Stored items in the following three rooms were noted to be closer than 18-inches from the fire sprinkler head (item no 7 in the letter).
- Medical Record Room (1 W), X-ray Record Room (GE48) in the building 2000 and Outpatient Pharmacy Room (Building 3000)
- LOCATION: Gallup Indian Medical Center (GIMC), Gallup, NM
- BACKGROUND: The Pharmacy building 3000 is business 1ccupancy. It is attached to the building 2000 (the main hospital) by one wall less than 30-ft. in length. Both buildings are fully sprinklered by quick response sprinkler heads.
- The Pharmacy building 3000 was reduced in size by several hundred square feet during design to save space. This causes a lack of storage space. The staff has augmented the storage space by installing several high shelves that reduce the clear space under the sprinkler head. The shelving layout is functional for their use.
- Other arrangements of the shelving, to put them exactly spaced between the sprinkler heads, would greatly reduce the functionality of the space for its intended purpose.
- DISCUSSION: Stored items in the three rooms were noted to be closer than 18-inches from the fire sprinkler head. NFPA 13 (1996 edition) section 4-6.5.2 state: "Continuous or noncontinuous obstructions less than 18-in. (457 mm) below the sprinkler deflector that prevent the pattern from fully developing shall comply with this section."
- NFPA 13 (1996 edition) section 4-6.6 state: "The clearance between the deflector and the top of storage shall be 18 in. (457 mm) or greater."
- NFPA 13 (1996 edition) table 4-6.5.4 provides different horizontal distance between deflector and floor mounted obstruction versus different minimum vertical distance below deflector. For example if the horizontal distance between the deflector and the storage area is more than 18 in. to 24 in. than the clearance between the deflector and the top of the storage area is 12-1/2 in. For more than 3 in. horizontal distance, minimum vertical distance is 18 in.
- INTERPRETATION: Installation of additional sprinkler heads would minimize the obstruction to discharge but it will cost more, which is not justifiable. (The costs of redesigning the whole sprinkler system and the installation of new sprinkler heads by certified consultant to comply with NFPA 13). A waiver is not granted. All items stored too close to the sprinkler heads shall be moved to provide the required 18 in. clear space. Other arrangements of the shelving should be considered.

SIGNATURES:

<input checked="" type="checkbox"/> Concur	<input type="checkbox"/> Do Not Concur	DATE: 5-10-99	NAME: /Cathy S. Smith/ Cathy S. Smith, P.E. TX #66856
<input checked="" type="checkbox"/> Concur	<input type="checkbox"/> Do Not Concur	DATE: 5-25-99	NAME: /Joseph L. Bermes/ Joseph L. Bermes, R.A, WA #007191
<input checked="" type="checkbox"/> Concur	<input type="checkbox"/> Do Not Concur	DATE: 5-20-99	NAME: /James L. Crawford, Sr./ James L. Crawford, Sr. P.E., WA #0021414
<input checked="" type="checkbox"/> Concur	<input type="checkbox"/> Do Not Concur	DATE: 5-10-99	NAME: /Steven Raynor/ Steven E. Raynor, P.E. TX #77171
<input checked="" type="checkbox"/> Concur	<input type="checkbox"/> Do Not Concur	DATE: 5-10-99	NAME: /Suresh Shah/ Suresh K. Shah, P.E. OK #13259