Reclamation Building Seismic Safety Program

Guideline No. 1

Handbook for the Seismic Evaluation of Buildings: A Prestandard (FEMA-310)

Procedures for Nonstructural Components—Evaluation Checklists

Fire Suppression Piping (NFPA-13)

Date: July 1, 2000 (Editorially Revised March 15, 2007)

Background: Within FEMA-310, chapter 4, *Evaluation Phase (Tier 2)*, section 4.8, *Procedures for Nonstructural Components*, subsection 4.8.13, *Piping*, the component statement titled *Fire Suppression Piping* reads as follows: "Fire suppression piping shall be anchored and braced in accordance with NFPA-13 (NFPA, 1996)." This statement need not be evaluated for buildings in regions of moderate seismicity being evaluated to the LS.

The anchoring and bracing criteria for fire suppression piping can be found in the National Fire Protection Association (NFPA-13), 1999 Edition, chapter 6, *Hanging, Bracing, and Restraint of System Piping*, page 13-68.

Currently, per FEMA-310, table 3-2, page 3-6, and as restricted in the checklist item, this checklist statement would need to be determined for buildings located in seismic zones: Low for IO, Moderate for IO, and High for LS and IO.

Policy: If the inspector elects not to evaluate this component due to piping complexity, hidden piping, no accessibility, or any other reason, the evaluator should answer "non-compliant (N/C)" to the nonstructural checklist item. This should be reflected in FEMA-310, Report Sections 6.2 and 9.2, and should include the following statement:

- ► *Piping - Fire Suppression Piping (FEMA-310, Subsection 4.8.13.1)*

This nonstructural checklist item was not verified because it was outside of the level of expertise of the assigned evaluator and should be thoroughly investigated by qualified sprinkler piping design personnel.

Note: IO = Immediate Occupancy Performance Level
LS = Life Safety Performance Level