

National Construction Safety Team Act, Requirements and Discussion

NCST Advisory Committee Meeting

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Implementing Procedures

Interim Final Rule published in Federal Register January 30, 2003

- Covered collection, preservation, and protection of evidence collected and information created
- Comment period closed March 3, 2003
- Two comments received
- Final Rule published May 7, 2003

Proposed Rule under review at DoC

- Covers other major implementing procedures

Final Rule

Collection of Evidence

- Public voluntarily provide
- Written requests from or negotiations by Lead Investigator and NIST Counsel
- Subpoena under the signature of Director
- NIST may hold public hearing

Entry and Inspection

- Permission granted voluntarily
- Written permission requested from or negotiations by Lead Investigator and NIST Counsel
- Written notice of inspection authority by the Director
- Director seeks assistance from Justice to enforce

Final Rule

Information Created

- May not be used as evidence in any suit or action for damages

Protection of Information

- Evidence collected and information created will not be released until the final report is issued
- If determined by the Director, voluntarily-provided safety information will not be released if that would inhibit the voluntary provision
- If determined by the Director, information will not be released that might jeopardize public safety

Current Thinking on Proposed Rule

- ❑ General
- ❑ Preliminary reconnaissance
- ❑ Building failure
- ❑ Conditions for establishing a Team
- ❑ Size and composition of a Team
- ❑ Typical tasks in an investigation

General

- ❑ Historically in the U.S., building failures that have “resulted in substantial loss of life or that posed significant potential for substantial loss of life” have occurred less than once per year. This is likely to continue except for terrorist acts.
- ❑ The number of fatalities considered to be “substantial” will depend on the nature of the event, its impact, its unusual character, historical norms, and other pertinent factors.

Preliminary Reconnaissance

- ❑ NIST may conduct a preliminary reconnaissance at the site of a building failure to gather information that the Director will use in deciding whether to deploy a Team.
- ❑ It may include inspection of the site and interviews of eye witnesses, survivors, and first responders.

Building Failure

A building failure may involve one or more of:

- Structural system
- Fire protection (active or passive) system
- Multiple-occupant (crowd) behavior or evacuation (egress or access) system
- Air-handling system
- Building control system
- Emergency response system
- Emergency communication system

Conditions for Establishing a Team

1. The event was:
 - a major failure due to an extreme natural event (earthquake, hurricane, tornado, flood, etc.)
 - a fire resulting in major damage/destruction and/or spread beyond the building of origin
 - a major building failure at significantly less than its design basis
 - an act of terrorism or other event with a Presidential declaration of disaster and activation of the Federal Response Plan
2. An investigation will likely result in knowledge needed to reduce public risk and economic losses from future building failures.

Size and Composition of a Team

Size

- Five or less if narrowly focused on one technical issue
- Twenty or more if the breadth spreads across several technical issues

Composition

- Lead investigator will be a NIST employee
- Team members may be experts in civil, mechanical, fire, forensic, safety, architectural, and materials engineering, and specialists in emergency response, human behavior, and evacuation

Typical Tasks in an Investigation

- ❑ Identify technical issues and hypotheses requiring investigation
- ❑ Collect data from building owner and occupants, local authorities, contractors, suppliers, emergency responders, and other witnesses
- ❑ Collect and analyze physical evidence
- ❑ Determine the conditions in the building(s) prior to the event
- ❑ Reconstruct the event using computer models to identify the most probable technical cause(s)
- ❑ Conduct small and full-scale experiments
- ❑ Examine the impact of alternate building/system/equipment design
- ❑ Analyze emergency evacuation and occupant responses
- ❑ Analyze relevant building practices
- ❑ Identify specific areas in codes, standards, and practices that may warrant revision
- ❑ Identify research or other actions required to prevent future building failures

NCST Meeting on Interagency Collaboration

July 31, 2003

Purpose: To provide information on the Act and NIST plans for implementation and to explore collaboration with other federal agencies.

NCST Meeting on Interagency Collaboration

July 31, 2003

Attendees

- Alcohol, Tobacco and Firearms
- Army Corps of Engineers
- National Research Council
- National Institute for Occupational Safety and Health
- Chemical Safety Board
- Defense Threat Reduction Agency
- Department of Homeland Security/FEMA
- U.S. Fire Administration
- Environmental Protection Agency
- Federal Bureau of Investigation
- National Science Foundation
- National Transportation Safety Board
- Occupational Safety and Health Administration

Proposed Possible Collaboration with NIST

- Provide experts for reconnaissance
- Provide experts for Teams
- Provide informal consultation to Teams
- Support Team investigations with contracted experiments/studies
- Make relevant training available to potential Team members
- Enable NIST interaction with Search and Rescue and Law Enforcement

Most Promising Collaborations

- ❑ FBI (training, access to sites)
- ❑ ATF (educating ATF organization about NCST, access to sites)
- ❑ CSB (wealth of learning experiences to share, tri-party agreement with ATF)
- ❑ NTSB (use NIST staff member on future NTSB investigation)