

(3) Preserve evidence related to a criminal act that may have caused the building failure;

(4) Not impede and coordinate its investigation with any search and rescue efforts being undertaken at the site of the building failure;

(5) Coordinate its investigation with qualified researchers who are conducting engineering or scientific research (including social science) relating to the building failure;

(6) Cooperate with State and local authorities carrying out any activities related to a Team's investigation;

(d) In performing these duties, in a manner consistent with the procedures set forth in this part, a Team may:

(1) Enter property where a building failure being investigated has occurred and take necessary, appropriate, and reasonable action to carry out the duties described in paragraph (b) of this section;

(2) Inspect any record, process, or facility related to the investigation during reasonable hours;

(3) Inspect and test any building components, materials, and artifacts related to the building failure; and

(4) Move records, components, materials, and artifacts related to the building failure.

#### **§ 270.106 Conflicts of interest related to service on a Team.**

(a) Team members who are not Federal employees will be Federal Government contractors.

(b) Contracts between NIST and Team members will include appropriate provisions to ensure that potential conflicts of interest that arise prior to award or during the contract are identified and resolved.

### **Subpart C—Investigations**

#### **§ 270.200 Technical conduct of investigation.**

(a) *Preliminary reconnaissance.* (1) An initial assessment of the event, including an initial site reconnaissance, if deemed appropriate by the Director, will be conducted. This assessment will be done within a few hours of the event, if possible. The Director may establish and deploy a Team to conduct the preliminary reconnaissance, using the criteria established in § 270.102 of this part, or may have information gathered at the site of a building failure without establishing a Team.

(2) If the Director establishes and deploys a Team to conduct the preliminary reconnaissance, the Team shall perform all duties pursuant to section 2(b)(2) of the Act, and may perform all activities that Teams are

authorized to perform under the Act and these procedures, with a focus on gathering and preserving evidence, inspecting the site of the building failure, and interviewing of eyewitnesses, survivors, and first responders. Collections of evidence by a Team established for preliminary reconnaissance are investigatory in nature and will not be considered research for any purpose. At the completion of the preliminary reconnaissance, the Team will report its findings to the Director in a timely manner. The Director may either determine that the Team should conduct further investigation, or may direct the Team to immediately prepare the public report as required by section 8 of the Act.

(3) If the preliminary reconnaissance is conducted without the establishment of a Team, the leader of the initial assessment will report his/her findings to the Director in a timely manner. The Director will decide whether to establish a team and conduct an investigation using the criteria established in § 270.102 of this part.

(b) *Investigation plan.* (1) If the Director establishes a Team without ordering preliminary reconnaissance, establishes a Team after preliminary reconnaissance, or establishes a Team to conduct preliminary reconnaissance and subsequently determines that further investigation is necessary prior to preparing the public report required by section 8 of the Act, the Director, or his/her designee, will formulate a plan that includes:

(i) A brief description of the building failure;

(ii) The criteria upon which the decision to conduct the investigation was based;

(iii) Supporting effort(s) by other organizations either in place or expected in the future;

(iv) Identification of the Lead Investigator and Team members;

(v) The technical investigation plan;

(vi) Site, community, and local, state, and Federal agency liaison status; and

(vii) Estimated duration and cost.

(2) To the extent practicable, the Director will include the most appropriate expertise on each Team from within NIST, other government agencies, and the private sector. The NCST Advisory Committee may be convened as soon as feasible following the launch of an investigation to provide the Director the benefit of its advice on investigation Team activities.

(c) *Investigation.* (1) The duration of an investigation that proceeds beyond preliminary reconnaissance will be as little as a few months to as long as a few

years depending on the complexity of the event.

(2) Tasks that may be completed during investigations that proceed beyond preliminary reconnaissance include:

(i) Consult with experts in building design and construction, fire protection engineering, emergency evacuation, and members of other investigation teams involved in the event to identify technical issues and major hypotheses requiring investigation.

(ii) Collect data from the building(s) owner and occupants, local authorities, and contractors and suppliers. Such data will include relevant building and fire protection documents, records, video and photographic data, field data, and data from interviews and other oral and written accounts from building occupants, emergency responders, and other witnesses.

(iii) Collect and analyze physical evidence, including material samples and other forensic evidence, to the extent they are available.

(iv) Determine the conditions in the building(s) prior to the event, which may include the materials of construction and contents; the location, size, and condition of all openings that may have affected egress, entry, and fire conditions (if applicable); the installed security and/or fire protection systems (if applicable); the number of occupants and their approximate locations at the time of the event.

(v) Reconstruct the event within the building(s) using computer models to identify the most probable technical cause (or causes) of the failure and the uncertainty(ies) associated with it (them). Such models may include initial damage, blast effects, pre-existing deficiencies and phenomena such as fire spread, smoke movement, tenability, occupant behavior and response, evacuation issues, cooperation of security and fire protection systems, and building collapse.

(vi) Conduct small and full-scale experiments to provide additional data and verify the computer models being used.

(vii) Examine the impact of alternate building/system/equipment design and use on the survivability of the building and its occupants.

(viii) Analyze emergency evacuation and occupant responses to better understand the actions of the first responders and the impediments to safe egress encountered by the occupants.

(ix) Analyze the relevant building practices to determine the extent to which the circumstances that led to this building failure have regional or national implications.