MEETING AGENDA
High Rise Building Safety Advisory Committee

March 22, 2012
Teleconference/Web Meeting

1. Call to Order. Call the meeting to order by Chair, Jim Quiter, at 11:00 a.m. on Thursday, March 22, 2012.

2. Introduction of Attendees. For a current committee roster, see pg. 02.


4. Approval of Minutes. Approve the minutes of the 2011 October 26-27 meeting. See page 04.


6. Review/discuss SFPE Draft Guidelines for Designing Fire Safety in Very Tall Buildings. To view the current draft available for review by the public, please visit: http://www.sfpe.org/SharpenYourExpertise/SFPETaskGroupandCommitteeDocumenta tion.aspx


   - Sustainability
   - Glossary of Terms (High-Rise Building Terminology)
   - Blast Impact on Building and Life Safety
   - Conceptual Approaches to High-Rise Building Safety
   - Coordination within and between Organization of High-Rise Building Safety Efforts
   - New High-Rise Technologies
   - Sky Bridges
   - International High-Rise Building Safety Strategies
   - High-Rise Requirements for Existing Buildings

9. Other Business.

10. Next Meeting.

11. Adjournment.
# Address List

**High Rise Building Safety Advisory Committee**

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Date</th>
<th>Firm/Association</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kristin Bigda</td>
<td>HRB-TAC Chair</td>
<td>03/15/2012</td>
<td>Arup</td>
</tr>
<tr>
<td>James R. Quiter</td>
<td>HRB-TAC Chair</td>
<td>9/30/2004</td>
<td>Arup</td>
</tr>
<tr>
<td>Geoff Craighead</td>
<td>HRB-TAC Chair</td>
<td>7/19/2005</td>
<td>Universal Protection Service</td>
</tr>
<tr>
<td>Jon D. Magnusson</td>
<td>HRB-TAC Principal</td>
<td>9/30/2004</td>
<td>Magnusson Klemencic Associates</td>
</tr>
<tr>
<td>John P. Miller</td>
<td>HRB-TAC Principal</td>
<td>4/22/2005</td>
<td>Los Angeles City Fire Department</td>
</tr>
<tr>
<td>Steven M. Nilles</td>
<td>HRB-TAC Principal</td>
<td>9/30/2004</td>
<td>Goettsch Partners</td>
</tr>
<tr>
<td>Sally Regenhard</td>
<td>HRB-TAC Principal</td>
<td>9/30/2004</td>
<td>The Skyscraper Safety Campaign</td>
</tr>
<tr>
<td>Jake Pauls</td>
<td>HRB-TAC Principal</td>
<td>9/30/2004</td>
<td>Jake Pauls Consulting Services in Building Use &amp; Safety</td>
</tr>
</tbody>
</table>

**Society Positions:**

- **SE:** Safety to Life Correlating Committee
- **L:** Los Angeles City Fire Department
- **U:** American Public Health Association

**Contact Information:**

- **Phone/Cell:**
- **Fax:**
- **Email:**
<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Date</th>
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<tbody>
<tr>
<td>James P. Shea</td>
<td>U</td>
<td>3/1/2011</td>
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<tr>
<td>HRB-TAC Principal</td>
<td>HRB-TAC</td>
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<tr>
<td>Tishman Speyer</td>
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<tr>
<td>45 Rockefeller Plaza</td>
<td></td>
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<tr>
<td>New York, NY 10111</td>
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<td></td>
</tr>
<tr>
<td>Phone/Cell: 212-588-8619</td>
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<tr>
<td>Fax: 212-479-8619</td>
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<td></td>
</tr>
<tr>
<td>Email: <a href="mailto:jshea@tishmanspeyer.com">jshea@tishmanspeyer.com</a></td>
<td></td>
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</tr>
<tr>
<td>William A. Stewart</td>
<td>E</td>
<td>3/19/2007</td>
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<tr>
<td>HRB-TAC Principal</td>
<td>HRB-TAC</td>
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<tr>
<td>Toronto Fire Services</td>
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<tr>
<td>4330 Dufferin Street</td>
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<tr>
<td>Toronto, ON M3H 5R9</td>
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<tr>
<td>Metropolitan Fire Chiefs-IAFC/NFPA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phone/Cell: 416-338-9051</td>
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<tr>
<td>Fax: 416-338-9060</td>
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<td></td>
</tr>
<tr>
<td>Email: <a href="mailto:wstewart@toronto.ca">wstewart@toronto.ca</a></td>
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<tr>
<td>Charles R. Jennings</td>
<td>C</td>
<td>12/1/2006</td>
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<tr>
<td>HRB-TAC Alternate</td>
<td>HRB-TAC</td>
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<tr>
<td>John Jay College of Criminal Justice</td>
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<tr>
<td>City University of New York</td>
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<td>229 Nelson Avenue</td>
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<tr>
<td>Peekskill, NY 10566</td>
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<tr>
<td>The Skyscraper Safety Campaign</td>
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<tr>
<td>Principal: Sally Regenhard</td>
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<tr>
<td>Phone/Cell: 212-237-8000</td>
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<tr>
<td>Fax: 914-422-6373</td>
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<td></td>
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<tr>
<td>Email: <a href="mailto:cjennings@jjay.cuny.edu">cjennings@jjay.cuny.edu</a></td>
<td></td>
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</tr>
<tr>
<td>HRB-TAC Staff Liaison</td>
<td>HRB-TAC</td>
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<tr>
<td>National Fire Protection Association</td>
<td></td>
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<tr>
<td>1 Batterymarch Park</td>
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<tr>
<td>Quincy, MA 02169-7471</td>
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<tr>
<td>Phone/Cell: 617-984-7791</td>
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<tr>
<td>Fax: 617-984-7110</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Email: <a href="mailto:kcollette@nfpa.org">kcollette@nfpa.org</a></td>
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Meeting Minutes

High Rise Building Safety Advisory Committee

October 26-27, 2011 Meeting
Portland Marriott Downtown Waterfront
1401 S.W. Naito Parkway
Portland, OR

1. Call to Order. The meeting was called to order by Chair Jim Quiter at 8:30 a.m. on Wednesday, October 26, 2011 at Portland Marriott Downtown Waterfront.

2. Introduction of Attendees.

<table>
<thead>
<tr>
<th>NAME</th>
<th>COMPANY</th>
</tr>
</thead>
<tbody>
<tr>
<td>James Quiter, Chair</td>
<td>Arup Rep. Safety to Life Correlating Committee</td>
</tr>
<tr>
<td>Kristin Collette, Staff</td>
<td>NFPA</td>
</tr>
<tr>
<td>Jon Magnusson, Principal</td>
<td>Magnusson Klemencic Associates Rep. National Council of Structural Engineers Association</td>
</tr>
<tr>
<td>John Miller, Principal</td>
<td>Los Angeles City Fire Department</td>
</tr>
<tr>
<td>Jack Murphy, Principal</td>
<td>Fire Safety Directors Association of Greater New York</td>
</tr>
<tr>
<td>Jake Pauls, Principal</td>
<td>Jake Pauls Consulting Services in Building Use &amp; Safety Rep. American Public Health Association</td>
</tr>
<tr>
<td>James Shea, Principal</td>
<td>Tishman Speyer</td>
</tr>
<tr>
<td>William Stewart, Principal</td>
<td>Toronto Fire Services Rep. metropolitan Fire Chiefs – IAFC/NFPA</td>
</tr>
</tbody>
</table>

The following committee members were not in attendance:

<table>
<thead>
<tr>
<th>NAME</th>
<th>COMPANY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geoff Craighead, Principal</td>
<td>Universal Protection Service</td>
</tr>
<tr>
<td>Steven Nilles, Principal</td>
<td>Goettsch Partners Rep. Council on Tall Buildings &amp; Urban Habitat</td>
</tr>
</tbody>
</table>
3. **Review of Agenda.** Chair Quiter reviewed the agenda with the committee.

4. **Approval of Minutes.** The minutes of the May 16, 2011 meeting were approved with no modifications.

5. **Development of NFPA 1, NFPA 101 and NFPA 5000 proposals relating to high rise buildings.** Past committee work related to NFPA 1, NFPA 101 and NFPA 5000 was reviewed and discussed to determine if there were any unresolved issues remaining which the committee wanted to further pursue. The committee agreed that Charles Jennings would review the committee’s past proposed change related to egress path monitoring and develop a new proposal to be submitted to NFPA 101 and NFPA 5000. Mr. Jennings will prepare the proposal and send it to Kristin which will then be sent out to the committee for ballot.

6. **Review of Guidelines to Develop an Emergency Action Plan For All-Hazard Emergencies.** The committee fully reviewed the current draft of the EAP Guide and addressed all comments submitted on the draft by committee members. A final revision timeline was set. 1. Kristin Collette will send a cleaned up version of the draft to Jack Murphy. 2. Mr. Murphy will incorporate additional changes and missing text and return the draft to Kristin by 12/31/11. 3. Ms. Collette will arrange for other technical staff at NFPA to review the draft by the end of February. 4. Ms. Collette will submit the draft to the NFPA editorial department with a return date of April 1 to address at the committee’s next conference call.

7. **Other Business.**
   
   a. Robert Solomon briefed the committee on the ASME task groups on elevators for occupant evacuation, a Fire Protection Research Foundation project on elevator messaging strategies, a NIST evacuation study, and In-Building Radio Communication Systems. See attachment Pg. 4.

   b. Chair Quiter updated the committee on the progress of the SFPE high rise building guide. A draft of the document should be available in late winter/early spring and will be distributed to the committee for review and comment if necessary.

   c. Chief Stewart presented to the committee on the Wellesley Street high rise apartment fire. If you would like a copy of this presentation please email Chief Stewart at wstewart@toronto.ca

   d. Mr. Murphy presented to the committee on eBIC (an electronic Building Information Card). See attachment Pg. 6.

   e. **Future topics for discussion and action by the committee:** The committee discussed many topics of interest for additional discussion and/or action. These included sustainability, continued work with the NFPA glossary of terms including high rise building terminology, blast impact on building and life safety, conceptual approaches to high rise building safety, coordination within and between organizations of high rise building safety efforts, new high rise technologies, sky bridges, international high rise building safety strategies, and high rise requirements for existing building.

8. **Scheduling of Next Meeting.** The next meeting of the committee will be held in early spring to discuss the final draft of the EAP Guide and plan for the 2012 year. The meeting will be held by
a web/teleconference. The committee is encouraged to review the topics listed in Minutes item 7(e) and consider ways that the committee can address these issues.

9. **Adjournment.** The meeting was adjourned at 12:00 pm on Thursday, October 27th by Chair Quiter.

Enclosures

Meeting Minutes Prepared By:

Kristin (Collette) Bigda
UPDATE
ASME DEC 2010
NIST High Rise Study
FPRF Elevator Messaging Strategy

ASME Elevator Symposium
December 2010-Orlando
Update Since MAR 2004 Conference
Occupant Evacuation Elevators
Fire Service Access Elevators

Occupant Evacuation Elevators
- Strategy of Provisions
- More protected and logical use of elevators
- Works with basic standard operating procedures for fire departments.
- Goal is to protect
  - Staging area
  - Elevator and associated machinery
  - Power supplies

Fire Service Access Elevators
- Strategy of Provisions
- More protected and logical use of elevators
- Works with basic standard operating procedures for fire departments.
- Goal is to protect
  - Staging area
  - Elevator and associated machinery
  - Power supplies

NIST Study- High Rise Evacuation Experience
- Observe 20 buildings total
  - Office - 9
  - Assisted Living - 2
  - Courthouse - 2
  - Residential - 1
- Information Collection
  - Video
  - Survey
  - Observation

NIST Study- High Rise Evacuation Experience
http://www.nist.gov/el/fire_research/building-occupant-evacuation.cfm
- Working to get information data sets wrapped up by May 2012
Elevator Messaging

- New rules in codes
- What do we say going forward?
- How do we say it?
- How often do we say it?

Elevator Messaging

- Literature review
  - Transportation/Traffic
  - Airline Industry
  - Amusement Parks
- Methods
  - Verbal
  - Visual
    - Fixed signs
    - Text Displays

Questionnaire on Emergency Evacuation Procedures

<table>
<thead>
<tr>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>This survey is being conducted by the National Institute of Standards and Technology (NIST), an agency of the U.S. Department of Commerce, in order to improve the emergency procedures for this building. We ask that you complete this survey about your participation in the evacuation that occurred on [insert date]. Completing this questionnaire is voluntary, and your assistance is greatly appreciated to help improve the safety of the building occupants. Please return this questionnaire to [insert address].</td>
</tr>
</tbody>
</table>

SECTION 1: Please answer the following questions about the time period between being alerted (e.g., from the initial alarm) to the incident in this building and entering the stairwell/evacuation area.
Building Information for Emergency Preparedness

Electronic Building Information Card / eBIC

The Last Tactical Mile for Building Intelligence

© 2010 – 2011 All Rights Reserved

Emergency info continuum:

No information about structure or contents?

eBIC provides decision based knowledge, pre-incident planning info via dispatch and other database items, etc.

Guess based on information gathered at similar buildings to this one?

Guess based on personal knowledge gained from visiting the building or personal size-up?

What type of Construction?

eBIC will help you read the building as if you saw it built.

Today, eBIC is compliant with the

NFPA 1620 Standard for Pre-Incident Planning 2010 Edition

How it Works (see boxes on card)

Creating an eBIC
Easily printed, stored and updated with a click of a mouse.

Building Imagery with a Goggle Bubble for

✓ FPS / Out-of-Service / Impairment Reporting System

✓ MSDS
✓ NFPA 704 Placard
✓ Current Weather Conditions
✓ Citywide Tracking

HAZMAT Citywide Tracking

Building Information for Emergency Preparedness

Fire Protection Systems / Out-of-Service

Snap Shot of: Building Vertical Risers
1st Due Fire Companies

List the 1st alarm fire units assigned to this address for an incident response:

- Lengthy hose line stretch (2 extra apt packs / SB to 5th floor)
- Forcible entry (window & door gates 1st floor / All 4 sides)
- Ladder placement (Aerial Side-A & B)
- Limited apparatus access (Side-C & D)

General Operations for: (Refer to standard fire department operational procedures except as noted for the premises.)

**Fire Dept. Tactical Considerations**

**FIELD OPERATIONS GUIDE FOR:**
- 1st alarm assignments
- Emergency vehicle access
- Safety & precautions
- Special instruction for operations
- Additional building information

**eBIC Blue-Line Information**

**Aiding Dispatchers**
Providing up to date building intelligence to 1st Due Fire Units
MEMORANDUM

TO: HRB SAC Members

FROM: Charles Jennings, Alternate

SUBJECT: Proposed Language for Resubmission of Stairwell Monitoring and Suggestions on After-Action Reporting

DATE: February 21, 2012

This memo reports on actions I agreed to pursue following our last meeting in Portland, OR.

Stairwell Monitoring
After reviewing the committee submittal and the subsequent comments, I have nothing to offer short of resubmitting our original proposed language on this matter. I believe that our reasoning was clear, well-supported, and appropriate. I will defer to the other committee members to see if they had any suggestions to strengthen our proposal in this area.

After-Action Protocol
In the area of after-action reporting, I offer the following suggestions. I believe we should encourage after action reporting, and have identified two forms that might be of use.

I would suggest the following language as Appendix material for the life safety code.

Emergency plans are a critical component of assuring life safety in high-rise buildings. Life safety is the result of an interaction of technical and social systems within the building and in the community. Gathering information to evaluate the performance and effectiveness of emergency plans is important for verifying system performance and as a basis for improvement. Such reports should be retained by the building and used to inform the process for revision of the building emergency plan.

Following any drill or actual emergency or reported emergency occurring in the building, an after-action report should be prepared by building management to document the function of the building’s life safety hardware, procedures, and occupant emergency organization.

For ordinary drills and reported emergencies, a short form should be completed. The purpose of this short form is to identify areas of success and areas for improvement.

For actual emergencies in the building, where there is major occupant movement, damage, or casualties, a long form should be used. The long form includes specific questions concerning the event, as well as performance of life safety systems. It also identifies improvements in areas such as training, maintenance, interaction with local emergency response organizations, or occupant management. The reports from these significant events shall be shared with the local emergency response organization.

I have attached two forms to facilitate after action reporting – one is a very rudimentary “hotwash” form from FEMA, the second is a more involved form I developed based on a model from the State of California. I would suggest that the forms and language be placed in the appendix.
This form is to be used by the Facilitator to conduct the Hot Wash for the exercise Determined Accord tabletop exercise (TTX). Use this form to record the top three strengths and the top three items requiring improvement as observed during the exercise.

Additional comments and discussions recorded during the Hot Wash will be recorded on in the comments section of the form.

Upon completion of the exercise, combine this form with the Participant Questionnaires, the completed AAR/IP, and attendance rosters. This post exercise packet is used as support documentation in Test, Training, and Exercise (TT&E) files and the Corrective Action Program.
# HOT WASH REPORT FORM

**Exercise Determined Accord**

## DATE:

<table>
<thead>
<tr>
<th>Name:</th>
<th>Evaluated Organization:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Email:</td>
<td>Staff/Section:</td>
</tr>
<tr>
<td>Telephone:</td>
<td>Role in Exercise:</td>
</tr>
</tbody>
</table>

**List the top three (3) organizational strengths:**

1.)

2.)

3.)
<p>| | | |</p>
<table>
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<tbody>
<tr>
<td>1.)</td>
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<td>2.)</td>
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<td>3.)</td>
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## GENERAL INFORMATION

<table>
<thead>
<tr>
<th>Information Needed</th>
<th>Text goes in text boxes below.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Address of Building/Complex:</strong> include other addresses of the building</td>
<td></td>
</tr>
<tr>
<td><strong>Building Manager:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Emergency Action Plan Leader:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Completed by:</strong></td>
<td></td>
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<tr>
<td><strong>Date report completed:</strong></td>
<td></td>
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<tr>
<td><strong>Phone number:</strong></td>
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<tr>
<td><strong>Email address:</strong></td>
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</tr>
<tr>
<td><strong>Dates and Duration of event:</strong></td>
<td>(Beginning and ending date of event - using mm/dd/yyyy and start and end time)</td>
</tr>
<tr>
<td><strong>Hazard or Exercise Scenario:</strong>*</td>
<td>*Fire alarm, medical emergency, drill, civil disaster, exercise, or other/specify.</td>
</tr>
</tbody>
</table>

For any events causing loss or injury, attach incident reports from local emergency services

### Emergency Reporting/Information Management

<table>
<thead>
<tr>
<th>Overall Assessment of Function (check one)</th>
<th>Satisfactory</th>
<th>Needs Improvement</th>
<th>Not Applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>If “needs improvement” please briefly describe improvements needed:</strong></td>
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<tr>
<td>Transmission of Alarm</td>
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<tr>
<td>Confirmation, Additional Information Given to 9-1-1 Center</td>
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<tr>
<td>Liaison Established to Emergency Responders</td>
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<tr>
<td>Other</td>
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### Occupant Behavior/Action

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<th>Not Applicable</th>
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<tr>
<td><strong>If “needs improvement” please briefly describe improvements needed:</strong></td>
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<tr>
<td>Procedures</td>
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<td>Training</td>
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<td>Compliance with Direction</td>
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<td>Other</td>
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### Fire/Life Safety Technology and Equipment

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<th>Not Applicable</th>
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<tbody>
<tr>
<td><strong>If “needs improvement” please briefly describe improvements needed:</strong></td>
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<tr>
<td>Detection</td>
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<tr>
<td>Occupant Notification</td>
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<tr>
<td>Public Address</td>
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<tr>
<td>Suppression Systems: Standpipe, Sprinkler, or other Systems</td>
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<tr>
<td>Support Systems: Smoke Control, Access Control, etc.</td>
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</tbody>
</table>
### Stairwells

<table>
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<tr>
<th>Elevators</th>
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### Building Occupant Emergency Team

<table>
<thead>
<tr>
<th>Overall Assessment of Function (check one)</th>
<th>Satisfactory</th>
<th>Needs Improvement</th>
<th>Not Applicable</th>
</tr>
</thead>
</table>

If “needs improvement” please briefly describe improvements needed:

- Procedures
- Training
- Personnel
- Equipment
- Communications

### Building Staff Emergency Response Organization

<table>
<thead>
<tr>
<th>Overall Assessment of Function (check one)</th>
<th>Satisfactory</th>
<th>Needs Improvement</th>
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</table>

If “needs improvement” please briefly describe improvements needed:

- Procedures
- Training
- Personnel
- Equipment
- Facilities

### Emergency Services

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<th>Satisfactory</th>
<th>Needs Improvement</th>
<th>Not Applicable</th>
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</thead>
</table>

If “needs improvement” please briefly describe improvements needed:

- Emergency Reporting
- Pre-Arrival Communication
- On-Scene Communication
### Response/Performance Assessment Questions

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Were procedures established and in place for responding to the event?</td>
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<tr>
<td>2. Were procedures used to organize initial and ongoing response activities?</td>
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<tr>
<td>3. Was the Building EAP used to manage the response?</td>
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<tr>
<td>4. Were announcements made using the public address system?</td>
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<tr>
<td>5. Were occupants evacuated or relocated during this event?</td>
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<tr>
<td>6. Did any occupants self-evacuate?</td>
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<tr>
<td>7. Was there a full building evacuation?</td>
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<td>8. Was there a partial building evacuation?</td>
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<td>9. Was there an in-building relocation?</td>
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<tr>
<td>10. Were elevators used by local emergency services during the event?</td>
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<tr>
<td>11. Were elevators used by Occupants during the event?</td>
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<tr>
<td>12. Did elevators function as designed?</td>
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<tr>
<td>13. Other (fill-in)</td>
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<td>14. Other (fill in)</td>
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</table>

### Additional Questions

15. What response actions were taken by your building emergency team? Include such things as occupant notification, evacuation, contact with Occupant Emergency team, etc. **Describe response activities in some detail.**

___________________________________________________________________________________
___________________________________________________________________________________
___________________________________________________________________________________
___________________________________________________________________________________
___________________________________________________________________________________

16. As you responded, was there any part of the Building’s Emergency Action Plan that did not work? If so, how would (did) you change the system to meet your needs?

___________________________________________________________________________________
___________________________________________________________________________________
___________________________________________________________________________________
___________________________________________________________________________________
HRBSAC

Guidelines to Develop an Emergency Action Plan

For All-Hazard Emergencies

NATIONAL FIRE PROTECTION ASSOCIATION

High-Rise Building Office Occupancy

Guidelines to Develop an Emergency Action Plan

For All-Hazard Emergencies

NOTICE IS HEREBY GIVEN PURSUANT TO THE AUTHORITY VESTED IN the Authority Having Jurisdiction (AHJ) that the (name of local municipality) hereby promulgates the above rule. The entire rule is underlined to indicate that it is new.
GUIDELINES TO DEVELOP

EMERGENCY ACTION PLANS FOR

ALL-HAZARD EMERGENCIES

STATEMENT OF PURPOSE

The Statement of Purpose recommends that the Authority Having Jurisdiction (AHJ) adopt standards, procedures and requirements for the orderly evacuation of occupants from any high-rise office building, including evacuation of persons necessitated by an explosion, biological, chemical or hazardous material incidents or releases, either within the facility or in the adjacent area, natural disasters or other emergency, or the threat thereof, and also to assist the Building Management and Tenants in developing an Emergency Action Plan (EAP) for the building.

The existing procedures for limited evacuations in the event of a fire in a high-rise office building (evacuation of fire floors, above and floors below the fire) have proven effective in protecting building occupants in ordinary circumstances. Further evaluation of various other emergency conditions have resulted in the need for additional life safety procedures other than fire are required to attempt to protect the occupants of office buildings in the event of an All-Hazard Emergency.

(Kristin - include routine and extraordinary events)

The rule being promulgated requires that each high-rise office building subject to the requirements of the rule prepare an EAP, submit it to AHJ for review and acceptance, and implement the EAP within the time frames as set forth by the AHJ.

The guide recommends that owners of office buildings develop procedures for a Fire Emergency and All-Hazard Emergencies. Such actions for these events include: Remain-in-Place, In-Building Relocation, Partial and Total Building Evacuation, in response to various all-hazard emergency scenarios. The rule grants owners broad latitude in developing such plans, as is necessary given the site-specific nature of these plans, but does set forth specific guidelines and requirements for the form and content of the EAP.

The guide also recommends the designation of a Fire and Life Safety Director to be responsible for the implementation of the EAP Plan. The Fire and Life Safety Director must be the Fire and Life Safety Director of the building, as designated in the building’s EAP Plan, and must receive additional training and an AHJ certification in areas relevant to the duties of the Fire and Life Safety Director.
The Fire and Fire and Life Safety Director will be responsible for arranging and overseeing periodic EAP Drills that are to be conducted. A fire drill must be separate and apart from an EAP All-Hazard Drill. The Fire and Life Safety Director will also be responsible to educate and train-building occupants with respect to the procedures to Remain-in-Place, In-Building Relocation, Partial and Total Building Evacuation. The education of building occupants will be critical to the successful implementation of the EAP Plan, as building occupants must understand the reasons for complying with the procedures that have been developed for their safety. Equally important, the successful implementation of an EAP requires formal coordination with local emergency response organizations in an integrated context.

SECTION 1 – DEFINITIONS

**All-Hazard Drill**: A training exercise by which building occupants are familiarized with and/or practice the procedures for Remain-in-Place, In-building Relocation, Partial Evacuation or Total Building Evacuation, in accordance with an EAP Plan.

**All-Hazard Emergency**: An all-hazard emergency is an emergency other than fire such as a natural or a man-made emergency; the emergency may include, but not limited too, flooding, tornado, hurricane, utility failure, bomb threats, chemical or biological threats, earthquake, workplace violence, an event in the neighboring area, and/or the threat thereof, a declaration of emergency by a lawful authority, that requires implementation of a building’s EAP Plan to help ensure the safety of the building occupants, etc.

**Assembly Area**: A designated area outside of a building to which building occupants are directed to report

**Authority Having Jurisdiction (AHJ)** – An organization, office, or individual responsible for enforcing the requirements of a code or standard, or for approving equipment, materials, an installation, or a procedure.

**Building Liaison - The** individual responsible for the coordination of activities within a building.

**Building occupants** - All persons in the building, including office employees, building personnel and visitors.

**Competent Person** – A person suitably trained and qualified by knowledge with a supervisory level experience within the fire service or within an Office of Emergency Management and is provided with the necessary instructions, so as to enable the required life safety task(s) and/or threats to the building to be carried out in an appropriate manner.

**Code Black** – An announcement, over the building fire alarm voice annunciation system, for an ALL-HAZARD EMERGENCY followed by specific instructions for a particular type of emergency incident and evacuation mode, as directed by the Fire and Life Safety Director
Guidelines to Develop an Emergency Action Guide (3/15/2012)

**Deputy Fire and Fire and Life Safety Director:** One or more employees designated by the owner as qualified and trained to perform the duties of such position in accordance with the requirements of this section.

**Facility Emergency Action Plans (EAP):** A plan of designated actions by employers, employees, and other building occupants to ensure their safety from fire and other emergencies. [1620, 2010]

**EAP Drill:** A training exercise by which building occupants are familiarized with and/or practice the procedures for remaining-in-place, in-building relocation, partial evacuation or evacuation, in accordance with an Emergency Action Plan.

**Fire Command Center: (FCC)** – A system that provides a voice/alarm dedicated manual or automatic, or both, facilities for originating and distributing voice instruction, as well as alert and evacuation signals pertaining to a fire and/or all-hazard emergency to the building occupants.

**Fire Command Center:** The principal attended or unattended location where the status of the detection, alarm communications, and control systems is displayed and from which the system(s) can be manually controlled.

**High-Rise Building:** - A building where the floor of an occupied story is greater than 75 ft. (23m) above the lowest level of fire department vehicle access.

**In-Building Relocation:** The controlled movement of building occupants from an endangered area of a building to an in-building relocation area within the same building in response to an All-Hazard Emergency as designated by the (AHJ).

**In-Building Relocation Area:** A designated area within a building to which building occupants may be relocated in accordance with the EAP Plan as designated by the (AHJ).

**Incident Commander:** The individual responsible for all incident activities, including the development of strategies and tactics and the ordering and the release of resources. [472, 2008]

**Life Safety Floor Warden:** A building staff member or a tenant trained to perform assigned duties in the event of a fire emergency.

**Fire and Life Safety Director:** A competent person designated by the owner to perform duties of such position, and who possesses the required training and qualifications, as set forth in this section.

**Life Safety Staff:** The individuals identified in an EAP Plan as responsible for the implementation of such plan, including but not limited to the Fire and Life Safety Director, Deputy Fire and Life Safety Director, Life Safety Wardens, Deputy Life Safety Wardens and members of the Life Safety Response Team.

**Multi-Occupancy:** An occupancy in which two or more classes of occupancy exist in the same building or structure and where such classes are intermingled so that separate safeguards are impracticable.

**Neighboring Buildings:** Buildings subject to the provisions of this plan, that are located on either side of a city street, , unless separated by a barrier to movement, such as a restricted access roadway, railway, etc.

**Occupant Accountability:** A system or process to track building occupants and resources at an incident scene.

Comment [k1]: Do we include ‘facility’? this is the term used by NFPA 1620. If yes, Kristin to change term throughout document

Comment [k2]: This is the definition from NFPA 72, 2012

Note: NFPA 101 uses “emergency command center”
Outside Safe Refuge Area: Refer to Assembly Area

Owner: The owner or lessee of the building, or other person or entity having charge thereof.

Partial Building Evacuation: The emptying of a building of some but not all building occupants in response to an All-Hazard Emergency as designated by the (AHJ).

Personal Emergency Evacuation Plan: An individual’s evaluation of their evacuation capabilities and the effect on building evacuation.

Regular Business Hours: Times of the day and days of the week during which a building will normally be occupied and business conducted, and in all circumstances when the building is occupied by more than one hundred persons above or below the street level or more than a total of five hundred persons in the entire building.

Remain-in-Place: The precaution of directing building occupants to remain inside the building, at their work locations, in a heightened state of readiness and alert. There is no evacuation of building occupants in response to an All-Hazard emergency as designated by the (AHJ).

Situation Status Report: Is providing updated information to the building occupant with an awareness that is relative with an emergency situation. A report should be made at 15-20 minute intervals or as directed by the Incident Commander.

Situation Awareness: Being aware of what is happening around you and understanding what that information means to you now and in the future.

Support Member: Personnel assigned to the EAP Response Team to perform specific duties, including those people who have specific technical knowledge or skills or who have been given specific assignments that indirectly support the efforts to mitigate an all-hazard incident.

Total Building Evacuation: The emptying of a building of all building occupants in response to an All-Hazard Emergency as designated by the (AHJ).

SECTION 2 – RESPONSIBILITIES

A. Owner

(1) General.

(i) The owner of a building should cause an EAP Plan to be prepared for such building, and periodically reviewed and amended, in accordance with the provisions and subdivisions of the EAP Plan. The EAP Plan should include a Building Emergency Information Card as set forth in Part-D Pre-Incident Planning.
The owner of a building should consult with the owners of Neighboring Buildings in connection with the preparation of the building’s EAP Plan, when conducting a Partial Evacuation, Total Building evacuation or when such a drill evacuates onto a public street.

(2) Appointment of Building Emergency Response Team.

(i) The owner of a building should appoint a Fire and Fire and Life Safety Director, and Deputy Fire and Life Safety Directors, Life Safety Floor Wardens, Deputy Life Safety Floor Wardens, and support response team members to respond when an All-Hazard Emergency exist. All are to be designated in the EAP Plan in accordance with the provisions and subdivisions, with the authority, duties and qualifications set forth therein.

(ii) Building Emergency Response teams will practice any allocated tasks and duties appertaining to the evacuation of building occupants.

(3) EAP Plan Filing, Acceptance, Training and Recordkeeping

(i) The owner of a building should cause an EAP Plan to be filed with the AHJ, and have acceptance obtained from, the AHJ.

(ii) The owner of a building should cause educational materials to be distributed, and EAP Drills conducted, in accordance with the provisions of the EAP Plan. All building emergency response personnel who may be required to assist with the evacuation of staff or visitors must be given appropriate training and suitable equipment to carry out the task.

(iii) The owner of a building should cause recordkeeping to be maintained in accordance with the provisions of the EAP Plan

(iv) Under the direction of the building owner, all building occupants and employers of building occupants should comply with the directions of the Fire and Life Safety Director and Life Safety Staff upon implementation of the EAP Plan, and otherwise fulfill their obligations in accordance with the provision of this section

B. Building Occupants and Employers

(1) Building Occupants

(i) Building occupants should comply with the directions of the Fire and Life Safety Director and Life Safety Staff upon an announcement that the building EAP has been implemented, including a fire evacuation, and all-hazard evacuations such as Remain-in-Place, In-Building Relocation, Partial Evacuation or Total Building Evacuation.

(ii) Building occupants should familiarize themselves with the requirements of the building EAP Plan, and cooperate with and participate in EAP Drills.
(iii) Building occupants should request an exemption from the Fire and Life Safety Director if participation in an EAP Drill would cause injury or serious hardship.

(iv) Building occupants should report any incident or suspicious activity that poses to affect the health, safety or security of any building occupants or damage to building property.

(v) Building occupants with functional needs are encouraged to identify themselves via the Personal Emergency Evacuation Plan.

(2) Employers

(i) Employers of building occupants should promptly provide orientation training sessions and distribute to building employees the materials regarding the building EAP provided to the employer by the owner.

(ii) Employers of building occupants should comply with the provisions of the building EAP and instruct their employees who are building occupants to do so.

(iii) Employers of building occupants should assign or allow responsible employees to serve as Life Safety Floor Wardens, Deputy Fire and Life Safety Floor Wardens and members of the Building Emergency Response Team, and require such employees to conscientiously perform their duties under the building EAP.

(iv) Employers of building occupants should establish and maintain a system of assigning responsibility for accounting for employees present in the building, consistent with the EAP.

(v) Employers of building occupants should establish an Incident Reporting and Investigation for any building related issue that should be reported to the building owner.

C. Fire and Life Safety Staff

(1) Fire and Fire and Life Safety Director (FLSD) and Deputy Fire and Fire and Life Safety Director (DFLSD) Duties

(i) An FLSD should be on-duty during normal business hours or when the building is occupied by more than one hundred persons above or below the street level or more than a total of five hundred persons in the entire building. When the FLSD is not on-duty, the DFLSD should perform the LSD duties.

(ii) When an All-Hazard Emergency occurs the FLSD should communicate a Code-Black Incident to building occupants by activating the building fire alarm voice communication. Specific instructions will be given for a particular type of emergency evacuation mode, *(i.e. Describe the*
Guidelines to Develop an Emergency Action Guide (3/15/2012)

type of incident: Police Action, Unknown Odor exterior to the building, at this time we are shutting down the air in-take vent to the building, etc.)

(ii) The Fire and Life Safety Director should be given sufficient stated authority, powers of sanction and resources to take responsibility for the day-to-day safety management of the building and to ensure that essential repairs or maintenance are carried out, such as, but not limited to:

1) Maintaining access and egress routes
3) Monitor changes to the building (alterations and new construction projects) so as to ensure temporary life safety measures are in place
4) Provide supervision, monitoring and instruction to construction contractor and sub-contractors on the premises
5) Monitor any construction, alteration and demolition projects for welding, cutting and burning so as to issue building HOT Work permits
6) Ensuring compliance with local building and fire code

(iv) Liaison with the Incident Commander (IC)
1) Provide a briefing to the IC of the current situation awareness upon his/her arrival to the incident.
2) Establish a working location at the FCC
3) Attend planning meetings as required
4) Provide input on the building resources
5) Cooperate fully with the IC and Command staff on the building involvement at the incident
6) Oversee the well-being and safety of the Life Safety Staff assigned to the incident.
7) Advise the IC of any building needs or requirements

(v) Maintain at the building Fire Command Center
1) A pre-incident Building Information Card (3 sets, laminated and/or in electronic form) should be available to First Responders:

Comment [k3]: See comments in definitions
i. Building Information Card, in the format set forth in NFPA 1620, should be maintained at the building’s Fire Command Center, and at the local AHJ communication center with the capability of being in an electronic format so as to provide the first responder with critical building information on their initial response and to further support an incident action plan. (See NFPA 1620, Standard on Pre-Incident Planning)

2) Copy of Building EAP (see Appendix XX)

3) Master Building Keys

4) Current as-built drawings:

5) Floor Layout & Fire Wall Separations
   a. Stair Configuration; Return or Scissor

6) Sprinkler & Standpipe Risers

7) Fire Extinguishing Systems

8) HVAC Zones

9) Electrical Plans

10) Plumbing Plans

11) Personal Emergency Evacuation Plans with Master List

   (vi) Training of building emergency response staff.

   (vii) Initial FLSD Situation Status Report: Provide updated information to the IC with an awareness that is relative with the situation at hand.

   1) A voice communication through the public address system should be made at 15-20 minute intervals or as directed by the Incident Commander.

(2) Certification Program for Fire and Life Safety Director in conjunction with the AHJ

________  (i) A Fire and Life Safety Director or Deputy Fire and Life Safety Director Certification Program will be issued by the AHJ to a qualified applicant for a designated building, to certify that the holder has completed necessary and appropriate training relevant to the duties and responsibilities of the Fire and Life Safety Director pursuant to this section, and has demonstrated knowledge of the designated building, its systems and occupants, necessary to the performance of the duties of the Fire and Life Safety Director at such building.

The National Incident Management System (NIMS) course on Incident Command System (ICS-100 Level) serves as a baseline training program that primarily discusses the preparedness roles within the National Response
Guidelines to Develop an Emergency Action Guide (3/15/2012)

Framework (NRF) for government agencies and the private sector. This training will provide a consistent nationwide framework and approach that will enable both the public sector (Federal, State, and Local), and the private sector, (building owner, business, etc.) to work together to prepare for, prevent, respond to, recover from, and mitigate the effects of incidents regardless of the incident’s cause, size, location, or complexity.

The private sector by integrating the NIMS Liaison Role into their emergency preparedness plan will be able to provide real-time building information to First Responders during an emergency incident and be able to better understand their role within the NIMS command structure.

The learn more about ICS 100 training for the emergency preparedness role go to obtain the ICS-100 course materials or take the course online go to http://www.training.fema.gov/EMIWeb/IS/is100.asp

(ii) Examinations. Applicants for a Fire and Life Safety Director Certification Program should take and pass a required examination as mandated by the AHJ. The examination should be conducted at the building to demonstrate candidates skill sets for which the certificate is being issued.

(3). Fire and Life Safety Floor Wardens and Deputy Fire and Life Safety Floor Wardens

(i) The tenant or tenants of each floor should, upon request of the owner or person in charge of the building, make responsible and dependable employees available for designation by the Fire and Life Safety Director as support members for the position of Life Safety Floor Warden and Deputy Life Safety Floor Warden.

(ii) Each floor of a building should be under the direction of a designated Life Safety Floor Warden for the evacuation of occupants in the event of fire. He should be assisted in his duties by a Deputy Life Safety Floor Warden. A Deputy Life Safety Floor Warden should be provided for each tenancy. When the floor area of a tenancy exceeds 7,500 square feet, a Deputy Life Safety Floor Warden should be assigned for each 7,500 square feet of part thereof.

(4.) Building Emergency Response Team

(i) The EAP Plan should designate the members of a Building Emergency Response Team(BERT). The BERT Team should consist of the following: building property manager, chief engineer, HVAC engineer, electrician, plumber mechanic, elevator mechanic, director of security (or, in their absence, their qualified designees), and other building personnel, office employees or other building occupants designated to assist in the implementation of the EAP, including persons assigned to assist building occupants that require assistance to participate in the plan. The Fire and Fire and Life Safety Director and Deputy Fire and Fire and Life Safety Directors should not be designated as BERT members.
(ii) Training. All Building Emergency Response Team members should receive training in the EAP Plan from the Fire and Life Safety Director. Such training should consist of not less than an initial two-hour training session and an annual one-hour refresher session thereafter.

(iii) Members of the Building Emergency Response Team should perform their designated assignments, as set forth in the Emergency Action Plan or as directed by the Fire and Life Safety Director; and

(iv) In the event of an all-hazard emergency, immediately report to the designated locations, as set forth in the EAP Plan or directed by the Fire and Life Safety Director, to be ready to undertake their designated assignment.

(S) AHJ

(i) Set up program to certify FLSDs and DFLSDs (refer to purpose)
 SECTION 3 – SUGGESTED RESPONSES TO ALL-HAZARD BUILDING EMERGENCIES

A. General. Emergency Action Plans (EAPs) should consider man-made threats, building incidents, and natural disasters that may impact the life safety of building occupants.

a. Man-made incidents. Some of these man-made incidents may include, but are not limited to:

   i. Bombs and bomb threats
   ii. Weapons of Mass Destruction
      1. Chemical
      2. Biological
      3. Radiological/Nuclear
   iii. Workplace Violence

b. Building Incidents. Some of these building incidents may include, but are not limited to:

   i. Building system failures
   ii. Elevators
   iii. Emergency Power Systems
   iv. Flooded Building
   v. Medical Emergency
   vi. Utility Disruptions
   vii. Adjacent Building Fire

c. Some of these natural disasters may include, but are not limited to:

   i. Earthquakes
   ii. Hurricanes
iii. Tornadoes
iv. Tsunamis
v. Volcanoes
vi. Flash Flooding
vii. Snow and Ice Storms
viii. Extreme Heat

B. The AHJ should be contacted for specific procedures relative to emergency protocols. Common protocols should include notifying proper authorities, 9-1-1, the FLSD and the building management.

Section 4 Occupant Evacuation Strategies

Various potential threats to a building may require best practice emergency management so as not to delay people in starting to move to a safe area. It is essential that there is an effective means of initiating and controlling the evacuation of a high-rise building where large number of people could be at risk.

The evacuation can be phased with different parts of the building to be evacuated in controlled phase sequences with the original incident floor and/or zone affected being evacuated first. The Fire and Fire and Life Safety Director will announce a directive message as to which type of Code Black evacuation mode will be used. The following are the types of sequenced evacuation:

SEQUENCED EVACUATIONS

(Replace table below with Table A.4.8.2.1(3) from NFPA 101, 2012)

<table>
<thead>
<tr>
<th></th>
<th>Managed Sequence</th>
<th>Unmanaged Sequence</th>
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</thead>
<tbody>
<tr>
<td>Remain-in-Place (No Evacuation)</td>
<td>No-movement Remain-In-Place upon direction</td>
<td>No-movement Remain-In-Place per prior instruction</td>
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</table>
### Partial Evacuation

<table>
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<tr>
<th>Managed or controlled partial evacuation</th>
<th>Unmanaged or uncontrolled partial evacuation</th>
</tr>
</thead>
<tbody>
<tr>
<td>• In-building relocation on same floor</td>
<td></td>
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<tr>
<td>• In-building relocation to different floors</td>
<td></td>
</tr>
<tr>
<td>• Occupants of some floors leave building</td>
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</table>

### Total Evacuation

<table>
<thead>
<tr>
<th>Managed or controlled total evacuation</th>
<th>Unmanaged or uncontrolled total evacuation</th>
</tr>
</thead>
</table>

### A) All-Hazard Evacuations for:

**1) Remain-in-Place (No Evacuation)**

1. The Remain-in-Place provisions of the EAP Plan should be based on an analysis of the circumstances in which such action would best ensure the safety of building occupants, and the manner in which it (Remain-In-Place no evacuation necessary at this time) could best be implemented in the building.

2. The EAP Plan should set forth the actions that would be taken in the event of Remain-in-Place, including, but not necessarily limited to, those in regard to the following building components or systems:

   - access to and egress from the building, including entrances, exits and stairwells;
   - elevator operation;
ventilation system operation, including air handling equipment, heating, ventilation and air conditioning equipment and smoke management systems;

- windows that open;
- interior doors, including fire doors;
- electrical, natural gas, steam and other utility operations; and
- fuel oil storage systems and associated pumps and piping

2) In-Building Relocations

(1) The in-building relocation provisions of the EAP Plan should be based on an analysis of the circumstances in which such action would best ensure the safety of building occupants, and the manner in which it could best be implemented in the building.

(2) The EAP Plan should:

(i) set forth the number of building occupants on each floor;

(ii) designate the In-Building Relocation Areas to which building occupants could be relocated, and, for each such in-building relocation area, identify:

- the type of area (such as an, interior office, conference room, file room or mechanical room);
- the floor and its exact location thereon;
- the type of protection it offers;
- the maximum number of building occupants each relocation area can accommodate; and
- whether it affords access to water, lavatories and/or other facilities, equipment or supplies, including any pre-positioned equipment or supplies.

(iii) designate the route by which building occupants would be directed to in-building relocation areas if such areas are on a different floor, and identify the stairwells and (if applicable) elevators to be utilized, and their capacity; and
(iv) set forth the actions that would be taken with respect to building components or systems in the event of an in-building relocation, including the building locations and systems, and

(v) the procedures by which employers of building occupants will account for their employees after an in-building relocation is complete

3) Partial Evacuation and Total Evacuations

(1) The evacuation provisions of the EAP Plan should be based on an analysis of the circumstances in which such action would best ensure the safety of building occupants.

(2) The EAP Plan should identify the safest and most efficient means of evacuating persons from the building or designated floors or areas thereof. Priority should be given to building occupants on floors or other areas of the building most at risk of harm, and, in the designation of exit routes, to the avoidance of congestion.

(3) The EAP Plan should:

(i) set forth the number of building occupants on each floor, including an estimate of the number of visitors, if any, on a typical day;

(ii) identify the location of exits, stairwells and (if to be utilized) elevators, and their capacity; and

(iii) set forth the actions that would be taken with respect to building components or systems in the event of a partial evacuation or evacuation, including the building locations and systems.

(4) The EAP Plan should designate:

(i) primary designated exit routes for the evacuation of each floor or other area of the building, and alternative exit routes in the event that the primary designated routes cannot be used;

(ii) whether building occupants will be directed to leave the area by any safe means (other than in circumstances that preclude such action, such as contamination), or directed to one or more assembly areas that:

(A) are at a safe distance from the building (preferably a distance from the building not less than the height of the building);
(B) are sufficient in number and size to accommodate the building occupants that will be assigned to report to such assembly area; and

(C) allow for the continuous movement of building occupants away from the building to their assembly areas;

(D) provide alternate locations in the instance that the preferred assembly area has been compromised

(iii) the procedures by which employers of building occupants will account for their employees after a partial evacuation or total evacuation is completed

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(d) Accommodations for Persons with Disabilities. There are five general categories of disabilities recognized in the Fair Housing Act Design Manual. Most accessibility standards and design criteria are based on the needs of people defined by one of the following five general categories:

- **The Five General Categories of Disabilities**
  - Mobility impairments
    - Wheelchair users
    - Ambulatory mobility disabilities
    - Respiratory impairments
  - Visual impairments
  - Hearing impairments
  - Speech impairments
  - Cognitive impairments

- **The Four Elements of Evacuation Information That People Need**
  - Notification (What is the emergency?)
  - Way finding (Where is the way out?)
  - Use of the way (Can I get out by myself, or do I need help?)
    - Self
    - Self with device
    - Self with assistance
  - Assistance (What kind of assistance might I need?)
    - Who
  - What
The EAP should include an EAP Plan Building Registry (SEE APPENDIX) that includes all Personal Emergency Evacuation Plans completed by individuals with a disability for all spaces in a facility that are commonly used by the individuals. The registry will include a list for the usual floor location of each regular occupant who has voluntarily self-identified that they need assistance and the type of assistance required to participate in an EAP evacuation. This information must be kept confidential and must be stored at the FCC but must be provided to the emergency authorities upon arrival to the building in the event of an emergency if so required by local law.

☐ Such voluntary self-identification may be the result of a permanent or temporary condition and may be withdrawn solely at the discretion of the individual.

☐ The Fire and Life Safety Director will visit each registrant to customize actions and tasks outlined in the EAP Plan to meet the individual needs, conditions, and circumstances.

☐ The EAP should designate and describe the location of all areas of refuge to assist those to understand their primary and secondary possibilities.

☐ For each voluntary self-identified individual who needs assistance, the EAP Plan will provide for Support Team Member(s) to train and to assist such occupant during implementation of the EAP evacuation or drill.

☐ Training sessions must be made accessible so that all persons in need of critical information may receive such information in order to act upon it in accordance with the desired outcomes.

☐ Designate an accessible area of refuge.

☐ Ask the voluntarily self-identified person who they would like to have as a 'Support Team' (at least four [4] individuals or more) who would assist the individual with a disability during a drill or emergency.

☐ If emergency Evac-Chairs for a person with a disability are installed place near a designated stair riser such as a fire/smoke tower or a pressurized stairwell.
(5) Accountability

a. Accountability Re-Assembly Post
   i. The floor warden should verify that the floor has been evacuated by all occupants.
   ii. Tenants should consider establishing a post-incident communication plan with their staff.

b. Incident Reporting and Investigation
   i. Establish an incident reporting system to be followed immediately after the all-clear for any emergency is given
   ii. Investigation to establish root causes and create a lessons learned document that seeks to prevent the re-occurrence of a similar incident

(6) Building Re-Population (under construction) The plan should include means of reoccupying the building after clearance from the AHJ and the FLSD. The plan may need to include phased reoccupation consistent with building configuration and capacities.

During an emergency evacuation the FLSD may track what floor(s) have been evacuated and provide the situational awareness to the First Responder upon their arrival at the building. See table XXX in appendix

Section 5: Self-Control Management

Fear is a sudden, unreasoning terror, often spreading quickly and often accompanied by mass flight. Attempting to reason with such a group may be futile, but it is possible to control the group by effective leadership of a dedicated Fire and Life Safety Director.

SELF-CONTROL DETERRENTS
1. Inform personnel what is expected of them in an emergency, training, experience and knowledge are key factors in preventing panic.

2. Exemplify strong, competent leadership

3. Eliminate physical causes for panic.

SELF CONTROL ANTIDOTES

1. Provide assurance that First Responders are taking action. Exert positive leadership. Reassure the group by giving information and instructions calmly.

2. Eliminate unrest

3. Dispel rumors

4. Identify troublemakers and prevent them from spreading discontent and fear.

5. Demonstrate decisiveness

6. Suggest positive actions

7. Indicate what to do, rather than what not to do

Section 6: EAP drills and occupant education

1. EAP Drills:

A. Description:

B. General. The building owner should conduct EAP Drills on a regular basis, during regular business hours, in accordance with the requirements of this section, to familiarize all building occupants with the various procedures for a total evacuation, partial evacuation, in-building relocation and remaining-in-place, and the reasons for implementing each type of action.

C. Types. EAP Drills should consist either of instruction, or stairwell familiarization, or both, as follows:

(1) Instructional Drills. Such drills should serve to familiarize building occupants with the requirements and procedures of the EAP Plan by means of informational sessions approved by the Fire and Life Safety Director, and may include the use of video presentations or other educational materials. Such sessions should address
implementation of the EAP Plan both during regular business hours, and at other times, when Life Safety Floor Wardens and other EAP Staff may be absent from the building. Such sessions may be conducted by any qualified person, at any appropriate location, including but not limited to stairwell entrances or in-building relocation areas.

(2) Stairwell Familiarization Drills. Such drills should serve to familiarize building occupants with the process of building relocation or building evacuation via building stairwells. A stairwell familiarization drill should require building occupants to enter a building stairwell and be escorted down several levels during which time stairwell safety features and safe evacuation procedures should be reviewed.

D. Scope. EAP Drills (involving instruction, stairwell familiarization, or both) may be conducted on all floors simultaneously, or by individual floor or groups of floors.

E. Frequency. EAP Drills should be conducted on a regular basis, as follows:

(1) At least two EAP Drills should be conducted annually for the initial first two years after the date of the EAP acceptance, the first of which should be conducted within six months of such date of acceptance. A rotation of the EAP drills within the first two-year period should be inclusive of a drill for: Full Building, Partial Building, In-Building Relocation and Remain-In-Place to familiarize the occupants with the various types of all-hazard emergency movement modes.

(2) Beginning in the third year, from the date of the EAP acceptance, an EAP Drill should be conducted on each floor of the building at least once a year and an EAP Drill in which all floors participate simultaneously, should be conducted at least once every three years. The AHJ may require additional drills for local compliance.

F. Participation. All building occupants resent on the affected floors at the time the EAP Drill is conducted, including visitors, should be required to participate in such drill.

G. Conduct of Drills. EAP Drills may be conducted in conjunction with fire drills or as required by the local (AHJ), provided these drills highlight the differences between the hazards.
referenced in the EAP plan, and the appropriate actions to be taken by building occupants upon implementation of each plan.

H. Full Building Evacuation Drills. A full building evacuation drill should be conducted at least once every three years.

I. Notifications. Any owner undertaking a full building evacuation drill should:

   a. Notify the local (AHJ) not less than 72 hours in advance of any full building evacuation drill;

   b. Notify the owners of Neighboring Buildings not less than 72 hours in advance of any full building evacuation drill. The owner of a Neighboring Building, upon receipt of such a notification, should notify the occupants of such Neighboring Building of the drill, to prevent the evacuation from causing alarm; and

   c. Provide not less than 72 hours advance notification to the other AHJ Departments of any full building evacuation drill, and make any necessary arrangements with such agencies for such drill.

J. The obligations of owners of buildings and employers of building occupants pursuant to this section should not be construed to apply to building occupants who are visitors in the building, except that visitors should be required to participate in any EAP Drill being conducted at the time of their visit.

Section 7: EAP Tabletop Exercise

1. EAP Tabletop Exercise:

   a. General. An EAP tabletop exercise is a simulated interactive exercise that helps to test the capacity of an organization to respond to a simulated event. The exercise tests simulated multiple functions of an organization operational plan. It is a coordinated response to a situation in a time pressured, realistic simulation that involves several agencies.

   Tabletop exercises lend themselves to low-stress discussion of coordination and policy. They provide good environment of problem solving coordination, as well as an opportunity to acquaint key public sector and response personnel with one another in their mutual responsibilities. A tabletop is
designed to encourage discussion and problem solving, its successes largely measured by the group participation. A well-conducted tabletop is good preparation for a function exercise.

It is a recommendation to conduct an annual tabletop exercise so as to facilitate an analysis of the building support teams in an emergency situation. The tabletop exercise simulates an emergency situation in an informal stress-free environment. It is designed to elicit constructive discussion as participants examine and resolve problems based on existing Types of All-Hazard Emergencies in the EAP Plan and identify where those plans need to be refined.

The tabletop exercise will focus on the coordination, integration and interaction of the organization’s policies, procedures, roles and responsibilities before, during or after the simulated event. It places emphasis on communication between the agencies participating in the exercise. This type of exercise will require much more planning, preparation, and coordination than a simple tabletop exercise.

The value and benefit of a tabletop exercise comes from bringing representatives from all of the agency roles in the exercise together to participate in the exercise.

b. Format. The exercise begins with reading a short narrative, which sets the stage for the imaginary disaster. Then the facilitator, stimulate discussion by either or both of two approaches:

(1) Problem statement to various participants, either individually or by agencies. Recipients of problem statements then discuss the action they might take in response.

(2) Simulated messages, which are more specific than problem statements. In either instance, introduction of the problem should generate a discussion – focusing on roles, plans and coordination, the effect of discussion on other agencies, and the like.

c. Leadership/Roles: A facilitator leads the tabletop discussion. He/she decides who gets a message, calls on others to participate, asks questions and guided the participants toward sound decisions.

d. Participants: This depends on the objective. The exercise can involve many people or agencies, anyone who can learn form or contribute to the discussion as planned, all agencies with a policy, planning, or response role. Participants respond to messages or problems as they would in a real emergency.

e. Facilities: The exercise requires a large conference room, where participants can surround a table. Often maps, charts, packets, of material add to the realism.
f. Time: One to two hours, but can be longer.

2. For additional information on table top exercises, refer to NFPA 1600, Standard on Disaster/Emergency Management and Business Continuity Programs, 2010 edition.

SECTION 8: Updating and Reviewing EAP (in progress)

Section 9: References (Kristin will update further)

Emergency Planning from

- National Fire Code of Canada
- NFPA Glossary of Terms
- NFPA Employee Fire and Life Safety
- NFPA 1620 Standard for Pre-Incident Planning (2010)
- NFPA 101 Code and Annex
- City of Los Angeles
- City of New York
- City of Portland
- City of San Francisco
- City of Denver
- City of Jersey City
- City of Austin
- City of Cincinnati
- British Standard - Fire Precautions in Design, Construction and Use of Buildings
- National Organization for the Disable
- Rand Public Safety & Justice – Individual Preparedness & Response to WMD
- SFPE Handbook Chapter on Human Behavior
- NFPA Handbook Chapters
Appendix A – Sample of Open Letter to Tenants

TO: Occupants of (insert name or address of building)

RE: ALL-HAZARD EMERGENCIES for (insert name or address of building)

We are providing you with a Building Emergency Package to assist with emergency procedures for (name and address of building). The effectiveness of the building Emergency Action Plan (EAP) depends on you being familiar with the emergency procedures for a fire incident and all-hazard emergencies for man-made incidents such as utility disruptions, bomb threats, workplace violence, a medical emergency, and natural incidents such as a hurricane, tornado, earthquake, flash flooding, etc.

For these reasons, periodic EAP drills will be conducted. It is not necessary in all drills to actually evacuate, but one drill should be evacuated annually to give experience to the building occupants.

In the following material you will find a description of the emergency equipment, systems, warning devices; and evacuation procedures as well as specific evacuations for the various All-Hazard Emergencies (Code Black).

On each floor level in the elevator lobby there is a floor layout denoting locations and routes for accessing exits off the floor. Posted at each stairwell are the names of the Life Safety Floor Warden Team, who will assist you during an emergency evacuation. As with any building fire and/or all-hazard emergency you will be directed by the Fire and Life Safety Director.

Provide the following information:

- Name of Company: ______________________________________________________
- Floor or Floors Occupied: ______________________________________________
- Name of Primary Contact Person: _________________________________________
- Telephone: ______________________ Email: ______________________

The number employees on the floor during:

- 8:00 AM to 5:00 PM __________________________
- 5:00 PM to Midnight __________________________
☐ Midnight to 8:00 AM
☐ Weekends

Please note, if any employee is a person with a disability, we encourage him/her to contact the Fire and Life Safety Director at xxxx (insert phone number or contact information) to see how best we can best assist him/her during an evacuation.

Please return the information requested within ten (10) working days of receiving this letter. If you have any questions, please contact me at xxxx (insert phone number or other contact information).

Sincerely,

(Name of Fire and Life Safety Director)

cc: Property Management
Appendix B - Building Record of Persons with Disabilities

<table>
<thead>
<tr>
<th>Floor</th>
<th>Number of Occupants with Disabilities</th>
<th>Phone or other Contact Information</th>
<th>Assistance Required (Temp or Perm)</th>
<th>Monitor Names</th>
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</table>
## Appendix C - Occupant Tracking Table

<table>
<thead>
<tr>
<th>OCCUPANCY FLOOR &amp; LOAD</th>
<th>FLOOR EVACUATION STATUS</th>
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<tr>
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</tr>
<tr>
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</tr>
<tr>
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</tr>
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<td>1211 / 75</td>
<td>✓</td>
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<td>1111 / 135</td>
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