The Evacuation Process: Lessons Learned

C: Andrea Houtkin

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1.0. Introduction

The evacuation process has always seemed to be a process that needed neither preparation nor explaining. We saw, unfortunately, during the World Trade Center event that without additional planning and process, evacuating can seem to be more complicated and unfortunately more dangerous than we could imagine.

Although the evacuation process seems simple enough: " Leave the building through the nearest stairwell," it is made further complicated by the severity of the event, the emotional state of those who are evacuating, available leadership at the time of the event, lack of communication and direction, building issues, the loss of electricity and lights and any ensuing damage that may cause obstruction.

With the heightened concerns of ' dirty bomb' and possible nuclear explosions, the evacuation process is no longer defined by this single statement and now requires some thought and a fundamentally unbreakable process.

This article results from several years of working with people who evacuated the Trade Towers on 9/11/01 as well as working with Building Management of various high-profile buildings in New York as we tried to determine " best planning" to support and facilitate the evacuation process in both a non-catastrophic and catastrophic event.

Lessons Learned

1. Create all required Disaster Recovery processes and procedures.
2. Create the Crisis Management team and process.
3. Ensure direction and communication to Staff.
4. Be Prepared with the appropriate tools.
5. Empower your staff to make their own decisions regarding their safety.
6. Create Assembly points to fit the trigger.
7. Respect the Firm's Staff Accountability process.
8. Create processes and procedures for Families and Friends.

2.0. The Evacuation Process: A multi-faceted Approach

The evacuation process is comprised of the following process entities and tools:

1. Definition of Catastrophic and Non-Catastrophic Event

2. Definition of the relevant Disaster Recovery Scenario(s) for the Firm

3. Tools: Desk-kits, Crisis Management tools and Corporate stores and Staff Educational Program to the Basic rules of evacuation

4. Building Management evacuation processes and procedures

5. Firm-specific evacuation processes and procedures

6. The Assembly Points

7. The Crisis Management Team, their membership, roles and responsibilities and decision criteria

8. The Staff Accountability Process: Communicating your status to Management

9. City Agencies' and Office of Emergency Management processes and procedures

10. The Human Resource Process

11. The Communications Process

12. The Disaster Recovery Invocation Process

Although the evacuation process contains underlying processes and procedures as well as a considerable amount of education and planning, it must be communicated in as simple terms as possible. An example of an evacuation process is presented on the following page. Although it is comprised of only four steps, each step took a considerable amount of planning, execution and training.

We will discuss each process entity and tool in the next chapters to provide some guidelines with the creation of your Firm's evacuation plan.

HOUTKIN & ASSOCIATES
TECHNICAL PROJECT MANAGEMENT
PROCESS ENGINEERING

EVACUATION PROCESS

1. Leave your desk immediately and take only essential personal belongings. If it is unsafe to leave the building, stay inside and follow bio-chemical/radiation procedures.

2. Exit via the nearest stairwell and walk single-file, to the Lobby.

3. After exiting the building, Leave the area immediately.

YOUR OPTIONS:

➢ Go to the Assembly Point. Present your card to your Manager or member of the Crisis Management Team. Always go to the primary Assembly point first (Plan A) unless:

Directed otherwise by Management

Your Access to the primary Assembly point is obstructed

WHY?

So Management can account for the fact that you exited the building

For Medical attention, if required

To receive direction from Management

➢ Go in the opposite direction of the danger.

When able, **call 1-877-FIRMDR** and leave your status on the Firm's Emergency Voice Mail option or send a **text message to:** safe@FIRMDR.com

Plan A: Bryant Park

Plan B: 1633 Broadway Paramount Plaza
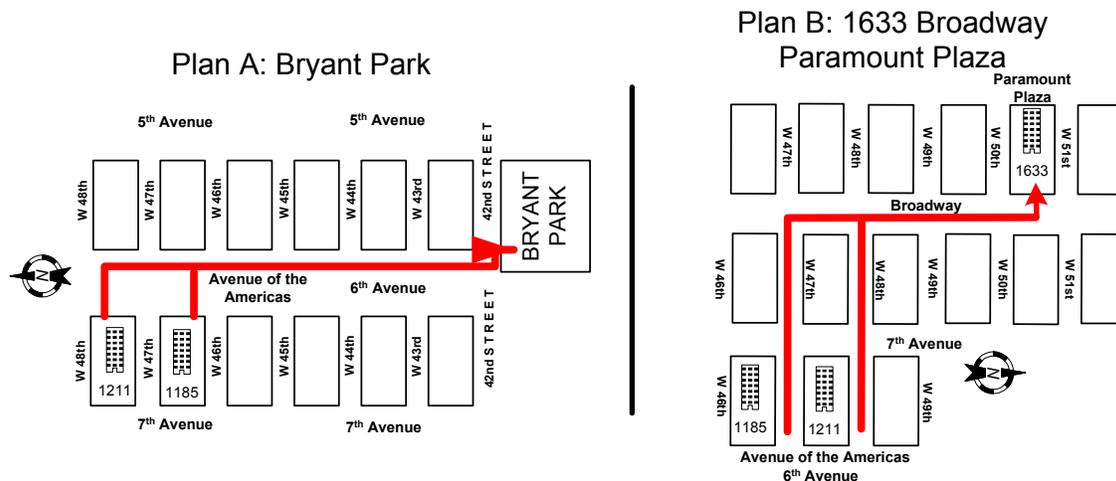
4. Do not speak with anyone outside of the Firms' Community regarding the event or Firm status

Here is the process with supporting processes and procedures.

EVACUATION PROCESS

What criteria should staff use to evacuate? Under what circumstances do they make their own decision or wait for Management direction?

Lesson One: Create all required Disaster Recovery processes and procedures
Lesson Two: Create the Crisis Management team and process.
Lesson Three: Ensure direction and communication to Staff.

1. Define the difference between Catastrophic and Non-Catastrophic events. Section 3.0.
2. Define the Disaster Recovery Scenarios for the Firm. Section 4.0.
3. Create the Crisis Management Team, Roles/Responsibilities, Decision Criteria and related Processes Section 5.0.

1. Leave your desk immediately and take only essential personal belongings.

How quickly should they leave the desk? Are they permitted to make one more phone call? Save a file? Re-synch with their PDA? Where should they keep their belongings so that they may find them quickly while under stress? Has the Firm provided necessary tools for safe evacuation?

Lesson Four: Be Prepared with the appropriate tools

1. Emergency tools and corporate stores. Section 6.0
2. Create bio-chemical/radiation procedures (Section 4.0.)

2. Exit via the nearest stairwell and walk single-file, to the Lobby.

Lesson Five: Empower your staff to make their own decisions regarding their safety

Does every member of the Firm know where every exit is? From every floor? Do they know which exits go to the Lobby? To the Street? What do they do if they are wearing uncomfortable shoes? Do they stay with injured or frightened staff members until help arrives?

What if a 'dirty bomb' goes off. When do we put on our gas mask and goggles?

1. Tips on Evacuating a Building. Section 7.0
2. Building Management Evacuation Processes and Procedures. Section 8.0.

3. After exiting the building, Leave the area immediately. If it is unsafe to leave the building, stay inside and follow bio-chemical/radiation procedures.

Why should they go to the Assembly point? Which Assembly point should they go to? Should they go home if they can? If there is a concern of a Dirty bomb, do they know where to go? Do they know how to identify their Firm's area in the Assembly point? How many options are provided to Staff once they leave the building? Where do they seek medical attention if they choose not to go to the Assembly point?

How many different ways can Staff communicate with Management to let them know that they are safe? How can staff family find out the status of their family members?

Are contingency plans in place with the Firm's departments so that staff know their roles and responsibilities in case of both a catastrophic or non-catastrophic event?

Is the Human Resource process in place? Are there good relations with building management to ensure information regarding missing staff?

Lesson Six: Create Assembly points to fit the trigger.
Lesson Seven: Respect the Firm's Staff Accountability process.
1. Building Management Evacuation Processes and Procedures. Section 8.0.
2. The Assembly Point. Section 9.0.
3. The Staff Accountability Process. Section 10.0.
4. City Agencies' and Office of Emergency Management processes and procedures. Section 11.0.
5. The Human Resource Process. Section 12.0.

YOUR OPTIONS:

➢ Go to the Assembly Point. Present your business card to your Manager or member of the Crisis Management Team. Always go to the primary Assembly point first (Plan A) unless:

Directed otherwise by Management

Your Access to the primary Assembly point is obstructed

WHY?

*So Management can account for the fact that you exited the building*

For Medical attention, if required

To receive direction from Management

Quick accountability, safes the lives of First Responders

➢ Go in the opposite direction of the danger.

When able, **call 1-877-FIRMDR** and leave your status on the Firm's Emergency Voice Mail option or send a **text message to**: safe@FIRMDR.com

Plan A: Bryant Park

Plan B: 1633 Broadway Paramount Plaza

4. Do not speak with anyone outside of the Firms' Community regarding the event or Firm status

How can you ensure that staff will not speak to the press or competitors in the field. Are the Communications prepared and in-place for a quick and speedy turn-around of communications soon after a Disaster?

1. Speaking to the Press. Section 13.0.

3.0. Defining Catastrophic and Non-Catastrophic Events.

Lesson One: Create all required Disaster Recovery processes and procedures

Step 1 in our evacuation process suggests that staff " **Leave your desk immediately and take only essential personal belongings."** However, before we can even engage with Step 1, we have to provide guidelines for staff. Do they wait for direction or do they follow their instincts and evacuate – and worry about whether it was not required or not, after – when they know that they are safe? Let's look at Lesson 4:

Lesson 4: In the worst case, follow your instincts. In the face of danger, empower your staff to make their own decisions regarding their safety.

The best way to support this initial question is to define events as either catastrophic and non-catastrophic? A catastrophic event is defined by an audible or felt impact to the building, an impact to the buildings on either side of the building, the smell of smoke and visible smoke or fire. In a catastrophic event, the building is no longer safe to inhabit and the physical safety of staff is clearly at risk.

In a non-catastrophic event, there is no impact to the physical safety of the staff or the building. The building is safe to inhabit or safe to inhabit until after evacuation has occurred.

How does this translate as an initiating point to the evacuation process? Simply put, in a catastrophic event there may not be initiating direction provided by the Crisis Management Team – simply because their may not be time for the Crisis Management Team to meet and make their decision as to whether to evacuate staff or not. In most cases, the evacuation process begins immediately after the event has occurred. In cases of catastrophic events that cannot be seen, heard or smelled by staff (bio-chemical infiltration or receipt of bomb, for example) building management would initiate evacuation of the building through the public address system. Again, there would not be enough time for particular members of the Crisis Management Team to be contacted and the team to meet to make a decision as to whether to evacuate or not.

In a non-catastrophic event, the trigger to the evacuation process is a communication from the Crisis Management Team. In this situation, there is clearly time to make the decision and contact staff regarding the Team's direction. More than not, the trigger event could be an impending storm or hurricane, a local yet large civil event that could impact staff's ability to travel with ease, a water leak in the building, work in the building to resolve either a power or environmental problem, scheduled power-downs, system upgrades, etc.

4.0. Firm-Specific Disaster Recovery Scenarios

After empowering the staff with the decision regarding their safety, it is important to define the Firm's specific Disaster Recovery scenario. The scenario is the root to the Firm's specific Disaster Recovery process. Once these scenarios are defined, evacuating staff will have guidelines as to how the Firm may approach Disaster Recovery invocation. As always, staff should take Management direction and not automatically assume invocation, but wait and use the tools that the Firm has utilized to communicate its decisions. Either way, the Scenarios provide the process they are to follow when Management direction is define, but at a distance.

4.1. The Scenarios.

The Disaster Recovery industry accepts these general scenario definitions.

4.1.1. Scenario 1: Denial of Physical access.

In this situation, staff is not permitted into the building, however, there is no physical damage to the computing environment. Users may access the production computing environment from some remote facility.

4.1.2. Scenario 2: Full Loss of Physical Assets.

Complete or Partial Loss of Building, Loss of Company Data Center Assets.

Loss of Computing Facilities due to Fire, Water Damage.

In this situation, there is direct physical damage to the Company's computing facility. Risk must be defined based on loss of systems and direct impact to the mission critical business process to determine whether to invoke the Disaster Recovery site or not.

Loss of Computing Facilities due to Malicious intent

In this situation, there is direct physical damage to the Company's computing facility. Risk must be defined based on loss of systems and direct impact to the mission critical business process to determine whether to invoke the Disaster Recovery site or not.

Complete loss or Damage to the physical building.

In this situation, there is direct physical damage to not only the Company's computing facility but the building as a whole. The primary focus is safety and accountability of staff, then whether to invoke the Disaster Recovery site or not.

4.1.3. Scenario 3: Shelter-In-Place.

In this scenario, evacuation is not an option. Staff must stay inside until otherwise directed by city and/or state.

4.2. Important Points to Consider with Regards to the Disaster Recovery Scenario

Note Bene 1: Defining the Disaster Recovery scenarios for your firm can support the immediate evacuation process by having a place for staff to go to, but it will not support the Disaster Recovery process unless the planning, design and deployment of real estate for additional staff seating as well as technical requirements, including: infrastructure services, basic application requirements and system requirements is performed.

Note Bene 2: Invocation of the Disaster Recovery process is costly and increases risk to the normal operating procedures of the Firm. Invocation should be the last ditch effort made in the face of a Disaster Recovery scenario.

Note Bene 3: If the Firm maintains more than one building within proximity to each other, it is crucial that one building does not become a single point of failure due to the fact that it is now the only building that maintains all of the technical assets. A third production site or a Disaster Recovery site is required.

4.3. Examples.

Let us look at one examples to understand how you would created scenarios for your Firm.

How do these scenarios overlay onto your Firm? Are there new scenarios that must be defined as a backdrop to defining the requirements for the Disaster Recovery solution? Most importantly, is the seating and technology built out to support your Firm's response to these scenarios.

4.3.1. Examples of Scenarios 1 and 2.

In the case of hypothetical Firm 1, there are 2 Buildings that are geographically juxtaposed (within a few blocks of each other), with business distributed between them accordingly:

FIRM I
Geographically juxtaposed

Campus LAN

Building 1

Building 2

Back-Office Operations
Technology
    Infrastructure
    Back-Office Development
    Desktop
    SAN
    NAS
    NT Environment
    (Infrastructure Services)
    (Application Servers)
    Application Script Servers
Finance Group
Human Resources
Product Control

Front Office Trading
Secondary Data Center
    Mainframe
    UNIX Environment
Firm/Branch Office Executive Floor
Technology Front Office Development
Trade Control
Risk Management

If a Scenario 1 (Denial of Physical Access) event should occur to any one of the buildings, the Businesses could possibly use the other building to continue working *as long as long as the technology environment can support it and if the event is resolved within the period of one business day*[1]

If a Scenario 2 (Full Disaster Recovery) event should occur to any one of the buildings, the Businesses could possibly use the other building to continue working *as long as*

▪ *the second building is not impacted (this has a period of time associated to it as one would have to wait until the Disaster Event has fully completed);*

▪ *the physical environment has the appropriate number of additional seats;*

▪ *the technology environment can support the additional staff and functionality;*

▪ *if there is a third production site or a Disaster Recovery site that could temporarily act as a production site.*

Before 9/11, we would see a deployment of the backup of each building's technology in the other building, outsourcing to a third-party data management group or reliance on the backup/restore tape process. After 9/11 and last year's distribution of the Federal Reserve and Security and Exchange Commission's best practice paper, disaster recovery sites or split-production environments need to be anywhere from 60-100 miles from the production site. So, having two buildings within the same geographical area can no longer be considered as a solution for any Scenario 2 (Full Disaster Recovery) event.

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[1] At the close of a business day, the Data Centers would need to being to perform the batch process and general maintenance, which could impact the next day's business. If these functions could not be performed by end of the business day, the Disaster Recovery site may need to be invoked or the Business will have to transfer the performance of their mission critical functions to another Branch.

So, this Firm can only use each of its buildings in a limited Scenario I event or Scenario 2 event only if the proper planning and deployment occurs to support the additional staff and functionality and only if there is a third site to ensure that neither building becomes a single source of failure.

4.3.1.1. Planning .

1. In order to support Scenario 1, each building may need to be able to support staff with regards to medical and psychological needs depending on how catastrophic the event was.

2. Planning and deployment of additional seating is required in order to support additional staff/business functions from the other building.

3. Contingency Plans for those functions resident in each building is required as only mission critical functions should be deployed at the non-impacted building.

4. A third production site or Disaster Recovery site (engaged as a third production environment) could resolve the time to ready the impacted mission critical functions.

5. Plan the technology environment so that infrastructure services (domain controllers for authentication; dns; wins; dhcp) are available in both buildings as well as a third production site, if possible. It is important that the Disaster Recovery site not be invoked unless it is absolutely required.

6. Plan the technology environment so that mission critical systems are available from both buildings as well as a third production site, if possible. It is important that the Disaster Recovery site not be invoked unless it is absolutely required.

7. A Crisis Management team and related processes and procedures is necessary in order to set business direction and continue communications with the Firm's Community members.

8. Relations with the Building Management are required to understand their approach to evacuation and communications with local and state authorities.

4.3.1.2. Evacuation Direction.

Even in a baseline Scenario I, all staff should evacuate to the Assembly point for these reasons:

- Staff Accountability

- Receipt of Medical Attention, if required

- Management Direction

If a Firm has two buildings within close proximity, Staff should not automatically bypass the Assembly point to go to the non-impacted building for these reasons:

- The second building may succumb to the same trigger that impacted the first building.

- The second building may not be able to provide for medical or psychological injury.

- The second building may not be able to support everyone from impacted building (seating and working capacity).

- The staff members may not perform mission critical functions for the Firm. Only those staff members who perform mission critical functions for the firm should be working in cases of Scenario I where invocation of the contingency plan is performed.

4.3.2. Example of Scenario 3.

In both Scenarios 1 and 2, evacuation is the first process that members of the Community follow – with due reason. However, during the blackout of August 14th, 2003, many Corporate staff did not evacuate or chose to return to their building once it was realized that the event was more non-Catastrophic than Catastrophic, e.g. Terrorism was not the instigator and it was clear that there would be no physical damage or direct loss of life. Many building manager permitted those who had security access to their buildings to stay but the message was clear: this was the choice of the individual.

A dirty bomb scenario requires a mix of Scenarios 2 and 3. It may be safer for those who are in a building that is hit with an explosive to leave immediately to avoid further injury. However, since the knowledge of whether the bomb was ' dirty' may not be immediate and Staff may evacuate without Crisis Management direction, the evacuation process could impact Staff safety. In this case the process requires: 1) additional tools to avoid direct contact (ingestion/touching/inhalation) with radiation particles; 2) an enclosed place for staff to avoid dispersed and airborne material; 3) a ' dirty bomb' educational program.

As well, for those buildings that were not immediately impacted by the bomb, it is recommended that staff stay indoors. However, further research with Building Managers is required in order to better understand whether this would be supported or whether environmental processes would force staff out of the building.

The primary concern for those evacuating is identification of the root cause of the disruption. This is the best argument for fitting out the Community with proper tools in advance as well as a clear process and direction from the building management. With both items responded to, Staff can at least protect themselves as part of the evacuation process, no matter what they find out later from City and State officials.

4.3.2.1. Planning.

1. In order to support Scenario 3, each building may need to be able to support staff with regards to medical and psychological needs depending on how catastrophic the event was. Corporate stores may have to be expanded to handle the worst-case scenario.

2. Planning and deployment of additional seating is required in order to support additional staff/business functions from the other building, should they be there before the event took place.

3. Technical resources may be an issue if maintenance is required and sheltered technical resources, if any, are not available or cross-trained. This situation needs to be monitored in case Disaster Recovery invocation is required to maintain the business mission critical functions.

4. Contingency Plans for those functions resident in each building is required as only mission critical functions should be deployed in a Disaster Recovery event.

5. A Crisis Management team and related processes and procedures is necessary in order to set business direction and continue communications with the Firm Community members who are outside of the building.

6. Relations with the Building Management are required to understand their approach to Shelter-in-Place and communications with local and state authorities.

4.3.2.2. Evacuation Direction.

In Scenario 3, staff cannot or choose not to evacuate. It is recommended that staff congregate for these reasons:

- Staff Accountability

- Receipt of Medical Attention, if required

- Management Direction

- General information that may come into the Crisis Management Team

- Receipt of Corporate stores for their comfort: sleeping paraphernalia; food, light, first aid.

4.3.3. Anomalies

In case of a dirty bomb, additional safety-related instructions should be followed by Staff whether they are evacuating, choose to remain inside (if they suspect this kind of scenario) or if they are outside during an explosion.

Staff should be taught how to handle themselves in a 'dirty' bomb scenario in addition to the basic and fundamental evacuation processes and procedures. They will undoubtedly ask you how they will know if a bomb was 'dirty' or not. It could take the police and fire department 24 hours to determine this along with the kind of radiation and related levels. Please remind staff:

Preparation and knowledge are the keys to combating terrorism and maintaining personal safety in the face of adversity. There is no harm in putting on the appropriate mask and goggles and following other 'dirty bomb' related processes or procedures as a safety measure. In the worst case, they have taken care of themselves.

Table I: Actions to Take in Case of a 'Dirty Bomb' Scenario	
If Outside During the Blast	**If Inside During the Blast**
1. Do not panic.	1. Do not panic.
2. Cover mouth and nose with either a facemask or an alternative material for the initial period of fallout, leave the immediate area and go inside the nearest building.	2. Cover mouth and nose with either a facemask or an alternative material for the initial period of fallout.
3. Do not take public or private transportation.	3. Prevent entry of radioactive dust by shutting off ventilation systems and sealing doors or windows. Maintain some filtered airflow for breathing.
	4. Stay inside until authorities say otherwise. If you must leave, follow the evacuation process.
	5. Use stored food and drinking water.
	6. Do not eat local fresh food or drink water from open water supplies.
In All Cases	
1. If possible, remove clothes, place them in a plastic bag and seal it. Give the bag to the Police. Take a shower using soap and shampoo.	
2. Seek local news for advisories from emergency response and health authorities.	
3. Treat (clean and cover) open wounds until medical help is available.	
4. Seek medical help if radioactive material was released.	
5. Only take stable iodine (e.g. potassium iodide) tablets when so directed and only take direction from competent authorities.	

A summary of those actions recommended by the United States Nuclear Regulatory Commission, the World Health Organization and the Center for Disease

5.0. Crisis Management Teams: The Core of the Process

Lesson Two: Create the Crisis Management team and process.
Lesson Three: Ensure direction and communication to Staff.

The Crisis Management Team is one of the most important aspects to the Evacuation process. Granted, in a catastrophic event, or in those cases of hairline-trigger responses to any event as a result of the events of 9/11, the first point of contact either before or after evacuating the building is with the Crisis Management Team.

5.1. Membership

The Crisis Management team membership should come from the following areas:

1. All heads of revenue generating or businesses in the Firm (1 per Business).

2. Head of Back Office Operations, if a financial institution.

3. Branch, Firm Head or Manager

4. Physical Security (with relations with Building Management

5. Finance Group or Accounting (Taxes; Payroll; T&E; Regulatory Reporting)

6. Technology Head

7. Deputees for the Primaries

8. Satellite membership: Human Resources and Marketing

9. Business Continuity/Disaster Recovery as Facilitator

5.2. Decisions

The Crisis Management Team has four major decisions to make:

5.2.1. When to evacuate staff in a non-catastrophic situation
5.2.2. Staff Accountability and communication to the Fire Department, Police and Building Management
5.2.3. If and when to invoke the Disaster Recovery process
5.2.4. If and when to return to production business processes and procedures

5.3. Specific Roles and Responsibilities Per EMT Member. Control

5.3.1. Preparatory Activities.

Responsibility	Responsible
Maintenance of Communication Tool between Members of the Team and Management	ALL
Arm Bands used as a way for staff to find the Team in the Assembly point	ALL
DeskKits for all staff including Team members	ALL
Availability at Assembly Point	ALL

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Effort for initial Communication in DR event	ALL
Maintenance of the Crisis Team Calendar	ALL
SIM card contact information maintenance	ALL

5.3.2: Process-Related Activities.

Responsibility	Responsible
Maintenance of Crisis Management Process	The Team and Business Continuity/Disaster Recovery Head as facilitator
Flag Owners	Team Members
Staking an area in the Assembly Point:	Deputees
• Staff Accountability at Assembly Point • Assessing Staff Accountability • Communicating Staff Accountability to Team members with building management relationship	Physical Security
Calling the DR number and checking the DR email account for messages from dislocated staff	One Person
Contact with Building Management for Ambulance, Hospital Requirements	Physical Security
Contact with Police and Fire Department	Physical Security
Contact with Third Party DR Site, if utilized	Technology
Evaluation. Invoke?	ALL
Invocation with the DR site and site readiness	Technology
Leaving direction message on the DR number	Technology Representative
Begin Call Tree Process to Management	ALL
Contact with global office or global headquarters	Branch, Firm Head or Manager
Contact with Branch Offices	Branch, Firm Head or Manager
Contact with Human Resources	Branch, Firm Head or Manager
Contact with global business office	Business Head
Contact with global or branch Operations	Back-Office Operations
Contact with global or branch IT and Systems	Technology
Contact with Local Marketing/Press Contact with global Market/Press Final Approval on Releases to the Press	Branch, Firm Head or Manager Branch/Firm Marketing
Access to 23rd Floor Store Room for blankets, pillows, etc.	4 Team Members – Cross-discipline
Contact to Families regarding injured, missing or Dead	Branch, Firm Head or Manager Human Resources

6.0. Emergency Tools and Corporate Stores

Lesson Four: Be Prepared with the appropriate tools

6.1. Emergency Tools

6.1.1. Crisis Management Team. (Each Member)

- Crisis Management Team Call Tree
- Crisis Management Wallet Card of Process Steps and Call Tree Numbers
- Communications Device that can perform cellular, wireless calls and email/text messaging
- Flag with the Firms Colors or Discretely Identifiable Symbol
- Arm Band with the Firms Colors or Discretely Identifiable Symbol

6.1.2. Firm Community at Large (Each Member)

- Emergency Wallet Card of Process Steps and Call Tree Numbers
- Communications Device that can perform cellular, wireless calls and email/text messaging
- Departmental Wallet Card (Call Tree)
- Desk Kit (Items provided by the Corporation)
  - General mask
  - Goggles
  - Light stick
  - Flashlight with batteries
  - Personal Water Source
  - Whistle
  - Small First Aid Kit
  - Vinyl gloves
  - Mylar Blanket
- Desk Kit (Items provided by Staff)
  - Alternate Food source (to be checked every 3-6 months depending on the type)
  - Personal medication requirements
- Desk Kit with additional tools for a ' dirty bomb' (provided by the Corporation)

  Since it is difficult to immediately determine the type and level of radiation, it is important that the Corporation ensure additional tools to the existing desk-kit or evacuation kit:
  - Proper masks (N-94) and goggles to support the evacuation process.
  - Soap and Shampoo (small bottles)
  - Plastic bags

- Desk Kit with additional tools for a ' dirty bomb' (provided by Staff)

  o Extra shirt or sweater, socks, shoes and pants

6.2. Corporate Tools

6.2.1. Firm-Specific Emergency Number with Voice Mail Capabilities

6.2.1.1. Many people would prefer not to go to the Assembly point. This is legally their choice. Providing various way to communicate with the Firm resolves this issue.

6.2.1.2. Voice mail permits dislocated staff an opportunity to inform the Firm of their status and whereabouts.

6.2.2. Firm-Specific Public Domain Name: Email and Web-Site

Create a firm-specific domain name for use in receiving email and as a web site. This tool will resolve several very important concerns regarding staff accountability, one of the most difficult processes in severe disasters. Accounting for staff can save lives (injured staff, police and firemen), permits the business to recover with less risk in a more timely manner and permits people to communicate when they would otherwise not be able to:

6.2.1.3. Many people would prefer not to go to the Assembly point. This is legally their choice. Providing various way to communicate with the Firm resolves this issue.

6.2.1.4. If cellular or telephone voice service is not available, text messaging (cellular) or email (PDA) service may still be available

6.2.1.5. The Corporate email environment or intranet may not be available. The Internet may be the only way to communicate.

6.2.1.6. The Firm can list those staff that have been accounted for on the web site.

6.2.1.7. Family, friends may be able to access the site on a regular basis keeping the Firm' s primary voice lines open and less taxed.

6.2.1.8. Firm-specific emergency public email address for text messages or email.

6.2.1.9. Firm-related external web site for listing accountable staff and other communications (password-enabled)

6.3. Corporate Stores

- Plastic bags or bio-hazard bag

- T-Shirts or sweat shirts

- Sweat pants

- Socks

- Soap

- Extra water for washing

- Drinking water

- Shampoo

- Antacids or Magnesium sulfate

- Blankets or sleeping bags, pillows

- Larger first aid kits

    o Vinyl gloves

    o First Aid Book

- Defibrillator

- CPR kit

- Whistles

- Portable radio with batteries and one solar or wind-up powered radio

- Flash-lights with batteries

- Extra cellular phone or computer with cellular; wireless or text-messaging capabilities

- Location of city reception centers and congregate care centers

- Potassium iodide (under lock and key), but only if notification is received from city and/or local emergency management offices. Please refer to the New York State of Emergency Management website for their policy regarding the use of KI – Potassium Iodide in case of a radiation event.[2]

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[2] "New York State Radiological Emergency Preparedness Plan. "The State Office of Emergency Management Website. http://www.nysemo.state.ny.us/PIO/publicsafety/radiologicalprepare.htm#stayingindoors

7.0. Tips on Evacuating a Building

Lesson Five: Empower your staff to make their own decisions regarding their safety

Believe it or not, people require some training in the actual process of evacuation. The point of evacuation is to leave as quickly, safely and as a quietly as possible.

Step 1. Leave your desk immediately and take only essential personal belongings. If it is unsafe to leave the building, stay inside and follow bio-chemical/radiation procedures.

As simple as this sounds, this can be the hardest and the most important step any member of staff can take. From a process perspective, it seems easy. Take only your Emergency Desk-Kit, Purse, Jacket, Wallet. But the education process is more detailed.

1. Do not save documents on your computer.

2. Do not gracefully shut-down your computer.

3. Do not perform a last synch with your PDA.

4. If on the phone, excuse yourself and hang-up immediately.

5. Learn to keep important items in one area on your desk so that they are easily and quickly reached in case evacuation is required. This includes:

    o   the Emergency Desk Kit;

    o   coat or jacket;

    o   wallet or purse;

    o   keys.

    o   Cellular phone and/or PDA

6. Do not change shoes. If you are wearing uncomfortable shoes, take them off and walk barefoot or in your sock/stockings. Do not help anyone evacuation because of their shoes. It obstructs the process.

<div align="center">Walking barefoot can save someone's life 20 floors up.</div>

7. Do not run through the building, looking for people. Go immediately to the stairwell and exit.

8. Because the general public will not know if a 'dirty bomb' has exploded, it is a good idea to ask staff to put on their masks and goggles while in the stairwell.

Step 2. Exit via the nearest stairwell and walk single-file, to the Lobby.

1.   Staff should be educated and educate themselves to all EXIT locations within the geographical confines of their Firm within any building rented, leased or owned by the Firm.

2.   Walk single-file to the Lobby to avoid obstruction at the point of egress to the Lobby. There may be a larger stairwell than the actual door to the Lobby.

<div align="center">Walking single-file down the stair and into the Lobby can avoid a stressful and potentially dangerous situation when safety is most important.</div>

8.0. Building Management Evacuation Processes and Procedures

It is crucial that the Director of Physical Security and Business Continuity meet with their Building Management to understand what processes the building will invoke in case of a catastrophic or non-catastrophic event.

Any process or procedure that is defined by the Building will impact Firm-specific evacuation procedures.

Information that is required in order to understand impact to the Firm's processes and procedures are::

1. What is building management's relation to local police. Fire departments and Office of Emergency Management should special notification be required.

    For example, if the OEM should find out before the bomb hits (they are notified by State or Fed authorities or if there is a process of negotiation), what is their process of informing building management? Will building management begin to inform the building and start immediate evacuation or wait until the situation is resolved so as not to panic anyone in the building?

2. If the building is a target and is damaged, what is their process for evacuation? How and when will you be notified to evacuate the staff?

3. If the building has been hit by a " dirty bomb" will building management announce this as part of the evacuation process?

4. What kind of emergency tools does the Building Management have on-site? Do they have Geiger counters on-site to determine whether the blast is radioactive? Does the local police, fire department?

5. Does the building maintain first aid or emergency supplies for tenants?

6. Does the building store first aid or emergency supplies for their staff? Potassium Iodide, N-94 Masks, Prussian Blue?

7. Will the building advise that staff stay in the building? Can they legally do so? Or will the building management ask all staff to leave even though there is the possibility of some radiation decontamination?

8. Does the building management have other buildings within a 10 block radius that tenants can go to for initial staff assessment?

8.1. Planning with the Corporate Insurance Provider

It is crucial that the Director of Physical Security and Business Continuity meet with their insurance provider(s) to understand their rights with regards to evacuation or inside occupancy in the case of a " dirty bomb" scenario.

9.0. The Assembly Point

Lesson Six: Create Assembly points to fit the trigger.

Step 3. After exiting the building, Leave the area immediately. If it is unsafe to leave the building, stay inside and follow bio-chemical/radiation procedures. Your options are:

➢ Go to the Assembly Point. Present your business card to your Manager or member of the Crisis Management Team. Always go to the primary Assembly point first (Plan A) unless:

Directed otherwise by Management

Your Access to the primary Assembly point is obstructed

WHY?

So Management can account for the fact that you exited the building

For Medical attention, if required

To receive direction from Management

Quick accountability, safes the lives of First Responders

➢ Go in the opposite direction of the danger.

Before 9/11, the evacuation process was simple: Leave the building and go to the Assembly point. But since 9/11 and since our country has become so litigious, we can no longer ask or request anyone to go anywhere in case of emergency. There is a concern that staff may feel that they are forced to follow a process that that could potentially put their lives in further danger.

The problems with this are:

1) someone could truly be injured and may need to be taken to a triage area or an ambulance that may be available on the way to or at the Assembly point and

2) It becomes very difficult to maintain any control over the Staff Accountability process.

9.1. The Purpose of the Assembly Point.

1. The most important reason to have an Assembly Point is to support the Staff Accountability process. This is the only way any Firm can identify: 1) who evacuated and are safe; 2) who may still be in the building; 3) and who evacuated and may be in need of medical attention.

In an emergency, it is crucial that timely reports are provided to the Police and Fire Department who would otherwise risk their lives to enter into the building to find missing staff.

2. The secondary reason is to permit Management an opportunity to provide some leadership and direction to the Staff in the midst of a Disaster event.

9.2. How Staff can find Management at the Assembly Point.

1. Each primary member should be provided a flag that discretely presents the Firm's colors or emblems. Staff should be "educated" to the flag and its purpose.

2. The flag should be easy to find so that it can be passed between primary and deputy representatives in time of Disaster.

3. Every member of the Crisis Management Team should be provided with an arm band that matches the flag. Staff should be "educated" to the arm-band and its purpose.

9.3. What actions are performed at the Assembly site.

1. Staff should stay long enough to drop off their card or present themselves to Management with a brief status as to their health and welfare.

2. Management should hold staff long enough to provide preliminary direction such as: "Try to go home and keep in touch with the Emergency Number for direction." Or "Go immediately to the Disaster Recovery site, if you can." "Call me in 1 hour via cell or text message so that I know where and how you are."

3. Injured staff should be kept stable and aggressive measures taken to find them immediate help.

9.4. Assembly Point Criteria.

1. Each company should define two Assembly Points.

2. At least one Assembly Point should be sheltered from external elements.

3. There should be two Assembly Points. Labeled A or 1 and B or 2 in the Branch or Firm-level contingency plan. Staff should always be directed to the first Assembly point unless:

   o   so directed by Management during evacuation

   o   if they are obstructed from reaching the primary Assembly Point

4. At least one Assembly Point should be sheltered from external elements.

5. One site should be reachable through evacuation from the front of the building, the second, reachable through evacuation from the back of the building.

6. Try to find a site that staff can easily be found.

7. Attempt to find a site that is close enough for injured or frightened staff to reach yet is far enough so as not to put staff in further danger

8. Factor in the numbers of people in the general area and attempt to find a site that is large enough for your Community to traverse without crowding adding additional stress to the situation.

10.0. The Staff Accountability Process

Lesson Seven: Respect the Firm's Staff Accountability process.

The Staff Accountability is self defining. What makes this process so difficult is the state of mind of those evacuating and the general state of events and order at the time of evacuation. The problem is summed up in one question: "How do we determined everyone's evacuation status when there is so much occurring, so many people evacuating, so many personal decisions made without consideration of communicating their status to anyone other than their family?

10.1. What is the Staff Accountability Process

The Staff Accountability process is defined by communicating one's evacuation status to the Firm's Crisis Management Team. Every member of the Firm's Community is responsible for performing this process as soon as evacuation occurs. It is part of the part of the evacuation process.

10.2. The Importance of Staff Accountability

The Staff Accountability process saves lives. The responsibility of the Staff Accountability process goes beyond ourselves. This means that education is key to ensuring that this part of the evacuation process is performed. Staff need to be able to consider both their own safety and the safety of others during the evacuation process. The truth of the matter is that some people will understand. Others will not.

The immediate results of the Staff Accountability process are:

1. The direct impact on lives and safety of Firemen, Police, EMS personnel and people who may still be in the building and require help. If First Responders know that they do not have to travel to certain floors, it can save their lives and permits them to focus on the safety of others who may still be in the building and require their help.

2. Immediate medical help may not be available to staff who wonder off. Staff who do not communicate their status may actually require medical or immediate psychological help. If they do not contact the Crisis Management Team, they may not receive this help when they may need it most.

3. Loss of Business. The business may suffer if those performing mission critical functions are not able to be found and channeled to the Disaster Recovery team to perform timely functions.

4. Missing and Dead information may be erroneous. The Human Resources department will need to begin compiling lists of missing and dead. The last thing any Firm needs is to do is inform Families that loved ones are missing or feared dead when they are actually alive and unable to communicate due to distress.

5. Over-use of the primary phone lines to businesses in the area from family. Without being able to determine who is alive, alive but receiving medical help, missing or dead, the business runs the risk of being overwhelmed with calls from families who have no other place to go for information. This impacts business-as-usual, further impacting the health and welfare of the business, itself.

10.3. Methods of Accounting for Staff

Because we cannot change everyone's mind-set during an evacuation, we need to create different ways for Staff to communicate back to the Firm's Crisis Management Team to determine their evacuation status and general state of physical and emotion well-being.

10.3.1. Presentation of the Business Card or Disaster Recovery Card

Teach each member of the Firm's Community to place a business card that has their department, building number and floor number printed on the back in their wallet or with their security card. Explain that all they need to do is perform "touch-tag" with a member of the Crisis Management Team at the Assembly point, by handing-off their card. Some Firms actually create a separate "Disaster Recovery Card" for this purpose.

10.3.2. Incoming Voice Mail Messages on Emergency Number

Present an option on the Firm's emergency number that permits Staff Members and Family members to leave a message regarding their evacuation status.

10.3.3. Messages left by text-messaging

Provide a public email address based on a public domain name reflecting the emergency number or "Firmdr" name. This will permit text messages from staff cellular phones to reach the Firm.

10.3.4. Messages left by email

Provide a public email address based on a public domain name reflecting the emergency number or "Firmdr" name. This will permit email messages from staff or family personal email accounts to reach the Firm.

10.4. Communicating Back.

Once the Crisis Management Team has the information they require, they can communicate back to the Firm's Community and Family in various ways:

10.4.1. Voice Mail.

Add voice-mail space for an outgoing message on the Firm's emergency number to list those who the Firm can account for – but only within the first 24 hours as this may become too unwieldy with an ever-growing listing of names.

10.4.1.1. The Benefits:

1. Families and staff are focused to a particular number created for this purpose while keeping the business lines open for business. As well, immediate information can be provided to the Families who can then focus on their Family members.

2. Any member of the Staff who may hear that a Colleague is not on the list, but who they saw on the street, may help the Crisis Management Team, and hence, the Police department find them with important information as to where they were last seen.

10.4.1.2. Preparation for the Outgoing/Incoming Message:

1. The incoming ports to the emergency phone number may need to be increased to handle increased incoming calls.

2. The "Option" format of the Emergency Number may need to be revised to ensure that incoming calls are directed on a timely basis away from the first menu so that other-emergency calls may go to their "Option" in the menu. One of the options could be:

   - "Please press 1 if you are a Staff Member or family member and are calling in to present evacuation, safety status and, if a staff member, whether you need help."

   - "Please press 2 if you are a family member and would like to leave a message for the Human Resources Department."

   - "Please press 3 to hear a listing of evacuees. Note that this message is only available until tomorrow at: 00:00. Please navigate to the website: www.firmdr.com for this information after then." Or

3. Voicemail may need to be increased to handle the incoming and outgoing messages.

4. Educate staff to share the Emergency Number with their families and explain its use with regards to hearing information and leaving messages.

5. Educate staff to share the importance of asking families to communicate their status to the Firm, if the staff is not able to do so.

6. Educate staff as to the importance of the "first 24 hours" after an event and how important it is to communicate their status.

10.4.2. Public Web and Email accounts site based on "firmdr" domain.

A public web-site and email account permits important methods of communication from the Firm to the Public as well to and from as internal Staff.

The public web-site should never print the names of those who have died. List only those who are known to evacuate and those who are missing to spark additional information from Staff or family who may know of their whereabouts.

The public web-site should pull all listing one month after the event and place general information and contact information on the website.

10.4.2.1. The Benefits:

1. The web-site can provide a listing of evacuees to the public.

2. Any member of the Staff who may see that a Colleague is on the missing list, but who they saw on the street after evacuation, may help the Crisis Management Team, and hence, the Police department find them with important information as to where they were last seen.

3. A web-site based on a public domain-name permits direct access to information when access to the Firm's intranet environment may not be available as a result of the event.

4. A public web-site with both a password-protected area and public area permits the Firm to direct both sectors to the appropriate information.

5. Focussing family and staff to a public web-site permits:

- The Firm's business number to be focused on business use.

- The firm's emergency number to be focused on the receipt of important messages between Management and Staff and the allocated voicemail to be returned to incoming message function.

- Families and friends to have a place to go for information without overwhelming the primary Firm's business number and emergency number.

10.4.2.2. Preparation for the Public Web-site:

1. Create a domain name based on the emergency phone number or "firmdr." Ensure that web-hosting and an email account is provided for the domain name.

2. Create a public and password-protected section on the web-site.

- The public section will have options for the public: listing of evacuees; press material; direction for families and friends; direction for the press.

- The private section will require use logon's and passwords as those used by staff for day-to-day access to the system. This section can p

3. Have the web-site and email account hosted by a third-party outside of the immediate area to ensure that it will be available if an event occurs within the immediate city.

4. Educate staff to share the web-site with their families and explain its use with regards to finding information.

5. Educate staff as to the use of the web-site and email account during an event in case the intranet is not available as a result of the event.

11.0. The Human Resource Process

Lesson Eight: Create processes and procedures for families and friends.

The Human Resource process is the most difficult one of all. Human Resources will be the communicating source to families regarding missing and dead staff. There are no benefits to this process.

11.1. Preparation.

1. Create a very strong Human Resource policy, process and tools. Create a primary and secondary team of Staff who are responsible for carrying out this process. Educate the Crisis Management Team to the overall and details of the process.
2. Ensure a complete and thorough understanding of how the City responds to missing and dead as well as all related processes and procedures to support the Families in the process.
3. Ensure that the Crisis Management team works closely with the City Agencies and Human Resources almost as a role of supporter and facilitator – making sure that all information communicated by the City is as accurate as possible and that:
    - The staff member is clearly identifiable.
    - That any effects are available to ensure the identity as well as returnable to the family.
    - That any remains are kept in-tact and returned to the family.
    - That all paperwork is responded to prior to a personal visit by the family to claim the remains and personal effects.
4. If it is Human Resources who works with the City and consequently makes the call to the family that a loved-one is confirmed dead, ensure that:
    - This information is correct.
    - The message is communicated by someone who is kind, understanding and tactful.
    - The complete City process is clearly delineated.
    - The complete Firm's policy and process is clearly delineated regarding any remaining monies due the Staff member, etc.
    - The Human Resource department provides a contact in case the family requires support.

12.0. Speaking to the Press

Speaking to the Press is a simple, although crucial process. Any member of the Staff unwittingly speaking to the press can potentially impact the core health and welfare of a business.

By providing a public website for as well as planning by the Branch/Firm Head and the Market department, can keep the press focused on those individuals who should present the Firm's message to the Community.

12.1. Preparation.

1. Create a very strong Communications policy, process and tools. Create a primary and secondary team of Staff who are responsible for carrying out this process. Educate the Crisis Management Team to the overall and details of the process.
2. Ensure that the Crisis Management team understand the timely concerns regarding communication to the press, who is responsible for this function, as well as who is responsible for this function in case the primary staff are not available to perform this activity and where the templates are kept and who the templates should be communicated to.
3. Educate to staff the importance of their communications to any person outside of the Firm.
4. Educate staff to the Press process – ensuring that the Firm has provided for communication to the press so that if they are confronted, they can inform the Press as to the sources available for them for information.
5. Create the public web site as presented in Section 10.0. Create a special page for the press.
6. Create various communication templates that can be "worked" by members of the secondary team or Crisis Management Team in case the Firm Head or Communications representative are not available to take care of this process.

13.0. City Agencies' and Office of Emergency Management processes and procedures

Ensure that the Corporate Physical Security Manager and/or the Business Continuity Manager is integrated into local, state agency and build management communications processes and procedures.

According to the New York State Office of Emergency Management, these three (3) policies govern the communication to the public in case of a radiological event.[3]

13.1. "Notification of Unusual Event"

This classification provides a means of early notification by the utility of local, state and federal agencies of minor events that could lead to more serious consequences. These events would result in no release of radioactivity beyond the plant boundaries requiring offsite response or monitoring unless further problems occur.

In an Unusual Event, SEMO, the Department of Health and the involved counties are notified via the RECS line; staff members are put on standby and SEMO monitors the situation.

13.2. "Alert"

Events which are in progress or have occurred involving an actual or potential decrease in the level of safety of the plant would be classified as an Alert. This event will not necessarily result in any release of radioactivity beyond plant boundaries. Any radiation releases to the environment are expected to be limited to small fractions of the Environmental Protection Agency (EPA) Protective Action Guideline (PAG) exposure level.

In an Alert, SEMO, the Department of Health and the affected counties are notified; SEMO notifies appropriate state agency staff to report to the Emergency Operations Center (EOC). Public notification may be initiated by the local chief executive. The situation is closely monitored by SEMO.

13.3. "Public Notification of a Radiological Emergency"

Prompt notification systems have been installed surrounding all nuclear power plants in New York State to alert residents within 10 miles of a plant to any emergency situation requiring them to take action. These systems are made up of a combination of sirens, tone alert radios and the Emergency Alert System (EAS).

The emergency sirens are loud, high-pitched signals. In the event of an emergency related to a nuclear power plant, the sirens would be blown continuously for at least three minutes, differentiating them from fire or other emergency sirens which sound only briefly.

A long, uninterrupted siren indicates a hazard that may require action by the public. These sirens do not mean people should leave the area or take any immediate protective actions. A siren tone indicates only that the public should turn on their radios to an Emergency Alert System station in their area. If the sirens are blown, the Emergency Alert System will be the primary source for instructions about any actions that should be taken by the public to ensure their health and safety.

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[3] [3] "New York State Radiological Emergency Preparedness Plan. "The State Office of Emergency Management Website. http://www.nysemo.state.ny.us/PIO/publicsafety/radiologicalprepare.htm#stayingindoors

Emergency Alert System messages will be updated to provide the most current and accurate recommendations from county and state health and public safety officials.

If, for any reason, one or more of the special alert sirens fail to operate in any emergency situation, backup provisions have been made for prompt route alerting. In those areas affected by siren failure, public notification will be carried out by pre-designated emergency personnel in slow moving vehicles (automobiles/helicopters) equipped with public address systems.

14.0. Summary

In summary, the lessons learned focus on missing processes and procedures, tools, as well as programs for educating staff.

14.1. Create and understand 0the appropriate procedures:

    14.1.1. Create Process and procedures

- Crisis Management Team
- Evacuation
- Staff Accountability
- Human Resources
- Family-related
- Communicating to the Press

    14.1.2. Understand Process and procedures or other Agencies

- Building Management
- City Office of Emergency
- Local Police and Fire Department

14.2. Ensure the proper tools for Staff for each Scenario:

    2.1. Crisis Management Team Tools

    2.2. Scenarios 1 and 2:

- Emergency Desk-Kits
- Change of Clothes
- Personal Medication

    2.3. Scenario 3:

- Requirements for " Shelter In Place"

14.3. Educational Programs for Staff

- Disaster Recovery scenarios
- Evacuation
- Staff Accountability
- Use of Emergency Tools
- Crisis Management Team and Process
- Assembly Point
- Human Resources
- Communicating to the Press

Article 4.01
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